REVISED FORM-1

FOR
THE PROPOSED NEW INTEGRATED TERMINAL BUILDING AND APRON WITHIN THE EXISTING TRICHY AIRPORT, TRICHY DISTRICT, TAMILNADU

Submitted to

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE

NEW DELHI

Submitted by

AIRPORTS AUTHORITY OF INDIA

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November, 2016

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FORM-1

(I) BASIC INFORMATION

Sr. No.	Item	Details
1	Name of the project/s:	Proposed new integrated terminal building and apron within the existing Trichy airport.
2	S. No. in the schedule	Sr. No. 7 (a) under 'A' Category (Airport Project)
3	Proposed capacity/ area/ length/ tonnage to be handled/ command area/ lease area/ number of wells to be drilled	Proposed capacity: 0.49 MPPA to 3.52 MPPA Proposed Area: 60,723 sq.m
4	New/Expansion/Modernization	Expansion within the existing airport premises
5	Existing Capacity/ Area etc.	Existing Capacity: 0.49 MPPA Existing are: 11,777 sq.m
6	Category of Project i.e. 'A' or 'B'	Category A (Airport Project)
7	Does it attract the general condition? If yes, please specify.	No
8	Does it attract the specific condition? If yes, please specify.	No
9	Location:	Trichy airport, Srirangam and Trichy taluk, Trichy district, Tamilnadu. The project location map showing the study area of 10 km radius from project boundary and location map enclosed as **Annexure-I.** Site photographs are shown in **Annexure-II.**
	Plot/ Survey/Khasra No.	Survey no's 55, 68 and 69
	Village	Sathanur village of Srirangam Taluk and Kottapattu and Kilakurichi village of Trichy taluk
	Tehsil	Srirangam and Trichy taluk
	District	Trichy
	State	Tamilnadu
10	Nearest railway station/ airport along with distance in kms	Railway Station : Tiruchirapalli (3.5 Km, NW)
11	Nearest town, city, district head quarters along with distance and direction in kms	Major Town: Tiruchirapalli (4 km, N)
12	Village panchayats, Zilla parishad, Municipal corporation, local body (complete postal addresses with telephone nos. to be given)	Tiruchirapalli airport, Tiruchirapalli, Tamilnadu-620007 0431-2341810
13	Name of the applicant	Airports Authority of India, New Delhi
14	Registered Address	Airports Authority of India, Rajiv Gandhi Bavan, Safdarjung Airport, New Delhi-110003
15	Address for correspondence	

Sr. No.	Item	Details
	Name	G. Gunasekaran
	Designation (Owner/Partner/CEO)	Airport Director
	Address	Airports Authority of India Tiruchirapalli Airport, Tiruchirapalli, Tamilnadu
	Pin Code	620007
	E-mail	apdtrichy@aai.aero
	Telephone No.	0431-2341810
	Fax No.	0431-2341812
16	Details of Alternative Sites examined, if any. Location of these sites should be shown on a toposheet.	The proposed project is an enhancement of passenger handling capacity by construction of new terminal building within the existing airport premises. Hence no alternative sites were considered.
17	Interlinked Projects	No
18	Whether separate application of interlined project has been submitted	Not applicable
19	If yes, date of submission	Not applicable
20	If no, reason	Not applicable
21	Whether the proposal involves approval/clearance under: (a) The Forest (Conservation) Act, 1980 (b) The Wildlife (Protection) Act, 1972 (c) The C.R.Z Notification, 1991	No
22	Whether there is any Government Order/ Policy relevant/relating to the site	No
23	Forest land involved (hectares)	Nil
24	Whether there is any litigation pending against the project and/ or land in which the project is propose to be set up (a) Name of the Court (b) Case No. (c) Orders/ directions of the Court, if any and its relevance with the proposed project.	No

(II) ACTIVITY

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

Sr. No.	Information/Checklist Confirmation	Yes /No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	It is proposed to build two level integrated terminal building having an area of 60,723 sq.m within vacant land available in the existing airport premises. No major land use change is envisaged.
1.2	Clearance of existing land, vegetation and building?	No	Existing old terminal will be utilized as domestic passenger handling facility. No clearance of vegetation and building is envisaged.
1.3	Creation of new land uses?	No	Present land use will remain same.
1.4	Pre-construction investigations e.g., bore houses, soil testing?	Yes	Soil testing has already carried out.
1.5	Construction works ?	Yes	The proposed airport expansion includes: 1) Two level integrated terminal building having an area of 60,723 sq.m 2) Car parking (MLCP – 750 cars, Taxi- 250 cars and bus parking- 10 nos) 3) New ATC Tower cum technical block 4) Airside development – Apron for 10 nos. code C type of aircraft 5) Expansion of cargo terminal 6) Airport systems 7) City side development 8) Rehabilitation of AAI residential colony and CISF accommodation Complete details are given in Prefeasibility report.
1.6	Demolition Works ?	No	Not envisaged
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	Small area within the proposed project site will be utilized for project office/ labour camp temporarily.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	The proposed construction includes concrete & steel structures of terminal building. Filling works are involved for 1-2 m height. Cutting and filling will be adequate.

Sr. No.	Information/Checklist Confirmation	Yes /No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.9	Underground works including mining or tunneling?	No	Not required
1.10	Reclamation works?	No	Not required
1.11	Dredging?	No	Not required
1.12	Offshore structures?	No	Not required
1.13	Production and manufacturing Process?	No	Not Applicable
1.14	Facilities for storage of goods or materials?	Yes	<u>During Construction Phase:</u> • Temporary storage for construction materials; and • Storage of HSD for DG sets and other equipment/ Machinery <u>During Operation Phase:</u> • Storage of HSD for DG sets operation • Storage of ATF
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	• Suitable waste management system is in place for the disposal of solid waste which will be extended for the proposed new terminal building. • The waste oil generated due to usage of DG sets is being stored and subsequently given to the authorized hazardous waste management agencies authorized by Pollution control board.
1.16	Facilities for long term housing of operational workers?	Yes	Construction of 118 no's residential quarters, transit accommodation for AAI staff and accommodation for CISF.
1.17	New road, rail or sea traffic during construction or operation?	Yes	New 4 lane approach road to the new terminal building will be constructed
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	No	Not envisaged
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	Not envisaged
1.20	New or diverted transmission lines or pipelines?	No	Not envisaged
1.21	Impoundment, damming, culverting, realignment or other changes to the	No	Not required

Sr. No.	Information/Checklist Confirmation	Yes /No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
	hydrology of watercourses or aquifers?		
1.22	Stream crossings?	No	No streams crossings
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	Water required after expansion would be about 440 m^3/day which will be met from groundwater/borewells. Out of this 88 m^3/day will be obtained by recycling water from tertiary treatment of secondary treated wastewater STP.
1.24	Changes in water bodies or the land surface affecting drainage or run-off	No	Not envisaged
1.25	Transport of personnel or materials for construction, operation or decommissioning?	No	Existing approach road leading to the site will be utilized for the transportation of material and personal.
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not envisaged
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not envisaged
1.28	Influx of people to an area in either temporarily or permanently?	Yes	The project will lead to generation of indirect employment opportunities for the local population during both the construction and operation phases
1.29	Introduction of alien species?	No	Only local plant species shall be used for greenbelt development/ plantation/ landscaping.
1.30	Loss of native species or genetic diversity?	No	Not envisaged
1.31	Any other actions?	No	Not envisaged

2. Use of Natural resources for construction or operation of Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply).

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
2.1	Land specially undeveloped or agricultural land (ha)	No	The proposed new terminal building is planned within the airport premises.
2.2	Water (expected source & competing users) unit KLD	Yes	Water required after expansion would be about 440 m^3/day which will be met from groundwater/borewells. Out of this 88 m^3/day will be obtained by recycling water from tertiary treatment of secondary treated wastewater STP.
2.3	Minerals (MT)	No	Not Applicable
2.4	Construction material –	Yes	Expected quantities of cement, sand,

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
	stone, aggregates, and/soil (expected source - MT)		aggregate, reinforcement steel, stone blocks, glass etc. required for the building construction will be estimated during detailed engineering stage and will be procured from local suppliers
2.5	Forests and timber (source-MT)	Yes	Only from Government approved sources (if required).
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	Presently, about 1.2 MW of power is being utilized which is being met from Tamil Nadu Generation & Distribution Corporation. Existing standby source : DG Set: 3 x 1010 KVA Additionally, about 6 MW of power would be required.
2.7	Any other natural resources (use appropriate standard units)	No	Not envisaged

3.0 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	Yes	Used oil from the DG sets will be given to authorized recyclers. However, the DG sets will be used only in emergency.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Not envisaged
3.3	Affect the welfare of people, e.g., by changing living conditions?	Yes	The project will create direct and indirect employment opportunities for the local population and overall development of the area. There will be a positive change with regard to the welfare of the people.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.	No	Not envisaged
3.5	Any other causes	No	Not envisaged

4.0 Production of solid wastes during construction or operation or decommissioning (MT/month)

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	Yes	The earth work and other waste will be used for leveling within the project boundary only.
4.2	Municipal waste (domestic and or commercial wastes)	Yes	<u>During Construction Phase:</u> • Kitchen waste; • Metal scrap and empty metal drums of nonhazardous materials; and • Paper and wood scrap. <u>During operation Phase:</u> • Kitchen waste; • Metal scrap and empty metal drums of nonhazardous materials; • Paper and wood scrap; and • Empty plastic containers of nonhazardous materials etc. Suitable waste management system is in place for the disposal of solid waste which will be extended for the proposed expansion.
4.3	Hazardous wastes (as per hazardous waste management rules)	Yes	Hazardous waste generated during construction and operation phase shall be disposed as per the Hazardous Wastes Management and Handling Rules 2003 (As amended). Used oil generated during oil changes from emergency DG sets will be given to authorized agencies.
4.4	Other industrial process wastes	No	No process involved.
4.5	Surplus product	No	-
4.6	Sewage sludge or other sludge from effluent treatment	Yes	The sludge generated from the Sewage Treatment Plant will be used as manure for greenbelt development.
4.7	Construction or demolition wastes	Yes	Construction waste such as spoil, brick waste etc. will be used for leveling at the site. The hazardous wastes such as paints, solvents, wood preservatives, pesticides, adhesives and sealants will be stored in sealed containers, labeled, and disposed off as per the Hazardous Wastes Management and Handling Rules (MoEF, 2003).

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
4.8	Redundant machinery or equipment	No	Not Applicable
4.9	Contaminated soils or other materials	No	The soil will be protected from construction equipment by providing drip pans for oil collection.
4.10	Agricultural wastes	No	Maximum percentage of horticulture waste, such as dried leaves, flowers etc. shall be utilized as manure
4.11	Other solid wastes	Yes	Construction Phase: Top soil will be stacked separately and will be used for greenbelt development.

5.0 Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	DG sets will be operated only during emergency, which generate gaseous emissions of SO_2 and NO_x.
5.2	Emission from production processes	No	Not Applicable. However, aircraft emission and emissions from ground service equipment is envisaged during airport operation.
5.3	Emissions from material handling including storage or transport	Yes	Fugitive emissions are envisaged from material handling and transportation areas during the construction stage. These will be controlled by good housekeeping, sprinkling water in the dust prone areas, providing paved roads and proper fencing.
5.4	Emissions from construction activities including plant and equipment	Yes	Mostly particulate matter is envisaged during construction activities which is restricted to site area. The gaseous emissions like oxides of nitrogen and CO will be emitted during transportation.
5.5	Dust or odors from handling of materials including construction materials, sewage and waste	Yes	Construction activities may lead to temporary increase in particulate matter levels. Dust covers will be provided on trucks that would be used for transportation of materials prone to fugitive dust emissions. Water sprinkling at the construction site will be done at regular intervals to reduce spreading of dust particles.

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
			There will not be any odour generation activities.
5.6	Emissions from incineration of waste	No	Not Applicable
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Burning/ incineration of any waste is not envisaged.
5.8	Emissions from any other sources	Yes	Emissions from air traffic and vehicular traffic during operation phase of airport.

6.0 Generation of Noise and Vibration, and emissions of Light and Heat

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Minor welding activities will be involved at site would generate some noise. Some emission of light due to welding activities and noise generation due to construction activities may be there during construction phase. During operation, aircraft landing & take off will be the major generating source.
6.2	From industrial or similar processes	Yes	Noise will be generated from the vehicular and aircrafts (take-off, landing and taxiing) which is instantaneous. All the personnel working in the processing units, pump house and other noise generating activities will be provided with personal protective devices.
6.3	From construction or demolition	Yes	Negligible. No heat or light emissions are envisaged. Noise due to construction activities shall be minimal and temporary in nature.
6.4	From blasting or piling	No	Not envisaged
6.5	From construction or operational traffic	Yes	The noise levels will be <75 dB (A) and these will be fleeting noise sources. During the operation, the noise will be generated from the vehicular and air craft traffic.
6.6	From lighting or cooling systems	Yes	Insignificant noise generation is envisaged from cooling systems.
6.7	From any other sources	No	-

7.0 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea

Sr. No	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	Hazardous wastes generated during construction phase, such as paints, solvents, wood preservatives, pesticides, adhesives and sealants will be stored at site in sealed containers, labeled, and disposed off as per the Hazardous Wastes Management and Handling Act Amendment Rules (MoEF, 2003).
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	The total domestic wastewater generated from the facility will be treated in proposed STP. No wastewater will be discharged outside the airport premises.
7.3	By deposition of pollutants emitted to air into the land or into water	No	No wastewater will be discharged outside the airport. There will not be any major air emissions.
7.4	From any other sources	No	Not envisaged
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	There will not be any process emissions. The emissions are envisaged from air traffic, vehicular traffic and from DG sets which will be operated only during emergency. The facility will be developed with adequate open spaces and green belt / green cover. Thus, long term build-up of pollutants is not envisaged.

8.0 Risk of accidents during construction or operation of the project, which could affect human health or the environment

Sr. No	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc. from storage, handling, use or production of hazardous substances	Yes	The fuel oil will be stored and will be handled in a safe manner as prescribed by statutory authorities.
8.2	From any other causes	Yes	There is a possibility of construction/ operational accidents. However, all the possible precautions will be taken during construction and operation phases.

Sr. No	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
			• Slip of aircraft during take-off & landing • Traffic movement inside airport
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloud burst etc)?	No	**Earthquake:** The project area falls under seismic zone-II as per IS: 1893 (Part-1): 2002. **Flooding:** No flooding has been taken place in recent years as per the available secondary data. **Landslide:** The proposed airport site is located on a flat terrain. Hence no land sliding is envisaged. **Cloud burst:** No cloud burst has been taken place in recent years as per the available secondary data.

9.0 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

Sr. No	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
9.1	Lead to development of supporting, utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:		
	Supporting infrastructure (roads, power supply, waste or wastewater treatment, etc)	Yes	• Will be carried out to fulfill the requirement of project and facilities will be extended to public to the possible extent • Proposed project may enhance the development of the region by providing better connectivity which will provide a boost to tourism.
	Housing development	Yes	Influx of skilled/semi skilled people is anticipated and hence the housing development will take place
	Extractive industries	No	Not applicable
	Supply industries	Yes	Proposed project will have positive impact on

Sr. No	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
	Other	No	hotel industry, local handicraft, etc. No
9.2	Lead to after use of the site, which could have an impact on the environment	No	No significant impact envisaged. The air and vehicular traffic is expected to increase.
9.3	Set a precedent for later developments	No	Not envisaged
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	Not envisaged

(III) Environmental Sensitivity

Sr. No	Areas	Name/ Identity	Aerial distance (with 15-km) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	Nil	-
2	Areas which are important or sensitive of ecological reasons – wetlands, water courses or other water bodies, coastal zone, biospheres, mountains, forests	<u>Forests</u> Nil <u>Water Bodies</u> Cauveri River (7.0 km, N) Ariyar River (9.0 km, WNW) Kollidam River (10 km,N)	
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Nil	-
4	Inland, coastal, marine or underground waters	Nil	-
5	State, national boundaries	Nil	
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	Nil	
7	Defense installations	Nil	-
8	Densely populated or built-up area	Tiruchirapalli (4.0 km, N)	
9	Areas occupied by sensitive man made land uses *(hospitals, schools, places of worship, community facilities)*	Hospitals, schools, temples and other general community facilities exist in the settlements in the study area	
10	Areas containing important, high	Nil	

Sr. No	Areas	Name/ Identity	Aerial distance (with 15-km) Proposed project location boundary
	quality or scarce resources *(ground water resource, surface resources, forestry, agriculture, fisheries, tourism, minerals)*		
11	Areas already subjected to pollution or environmental damage. *(those where existing legal environmental standards are exceeded)*	Nil	
12	Areas susceptible to natural hazard which could cause the project to present environmental problems *(earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)*	The project area falls under seismic zone-II as per IS: 1893 (Part-1): 2002.	

(IV) PROPOSED TERMS OF REFERENCES FOR EIA STUDIES-Enclosed as **Annexure-III**.

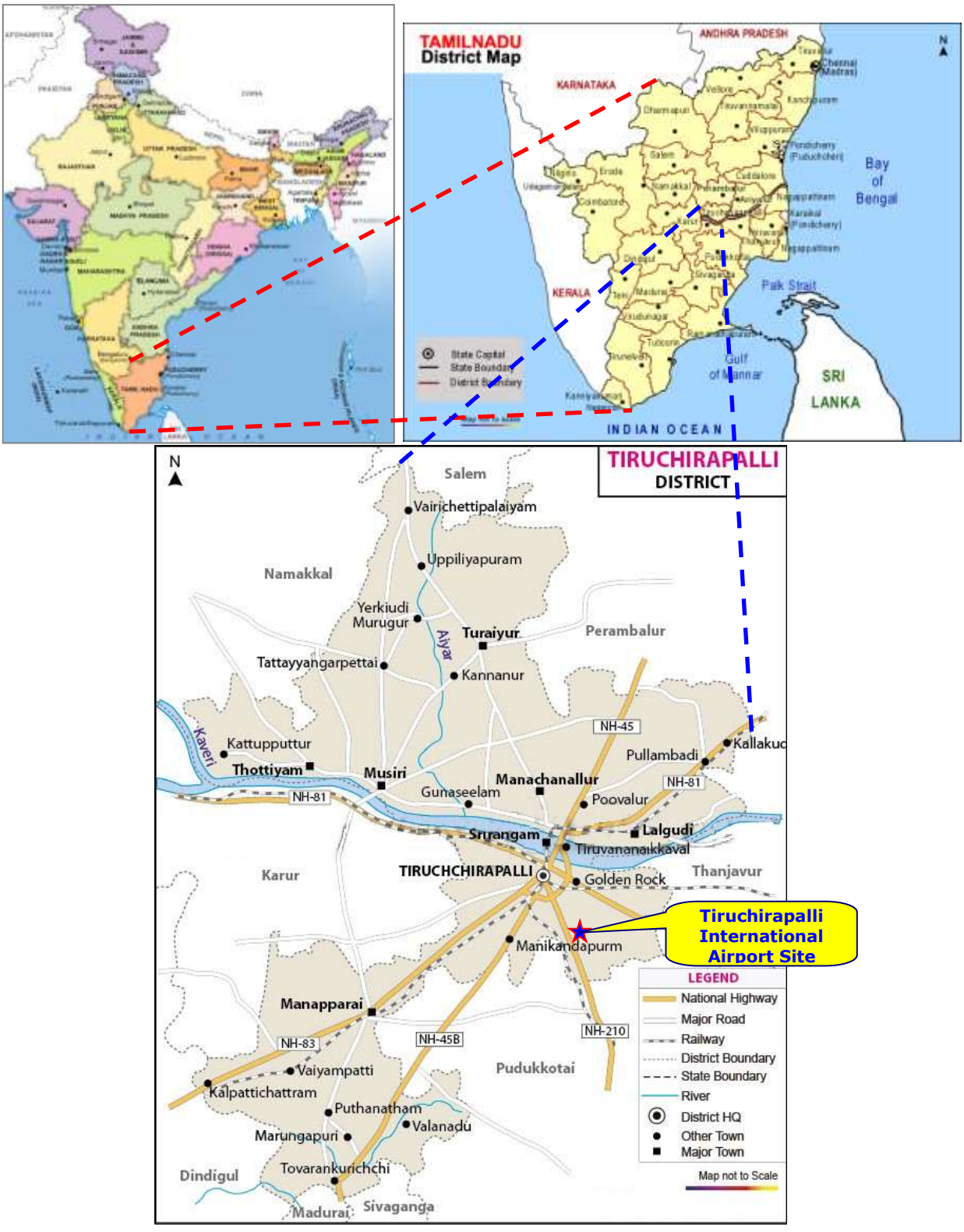
"I hereby give an undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any, to the project will be revoked at our risk and cost.

Date : 04.11.2016
Place : Trichy

Airport Director (In-ch.)
विमानपत्तन निदेशक / AIRPORT DIRECTOR
भारतीय विमानपत्तन प्राधिकरण, तिरुच्चिरापल्लि हवाई अड्डा
Airports Authority Of India, Tiruchirappalli Airport - 620 007.

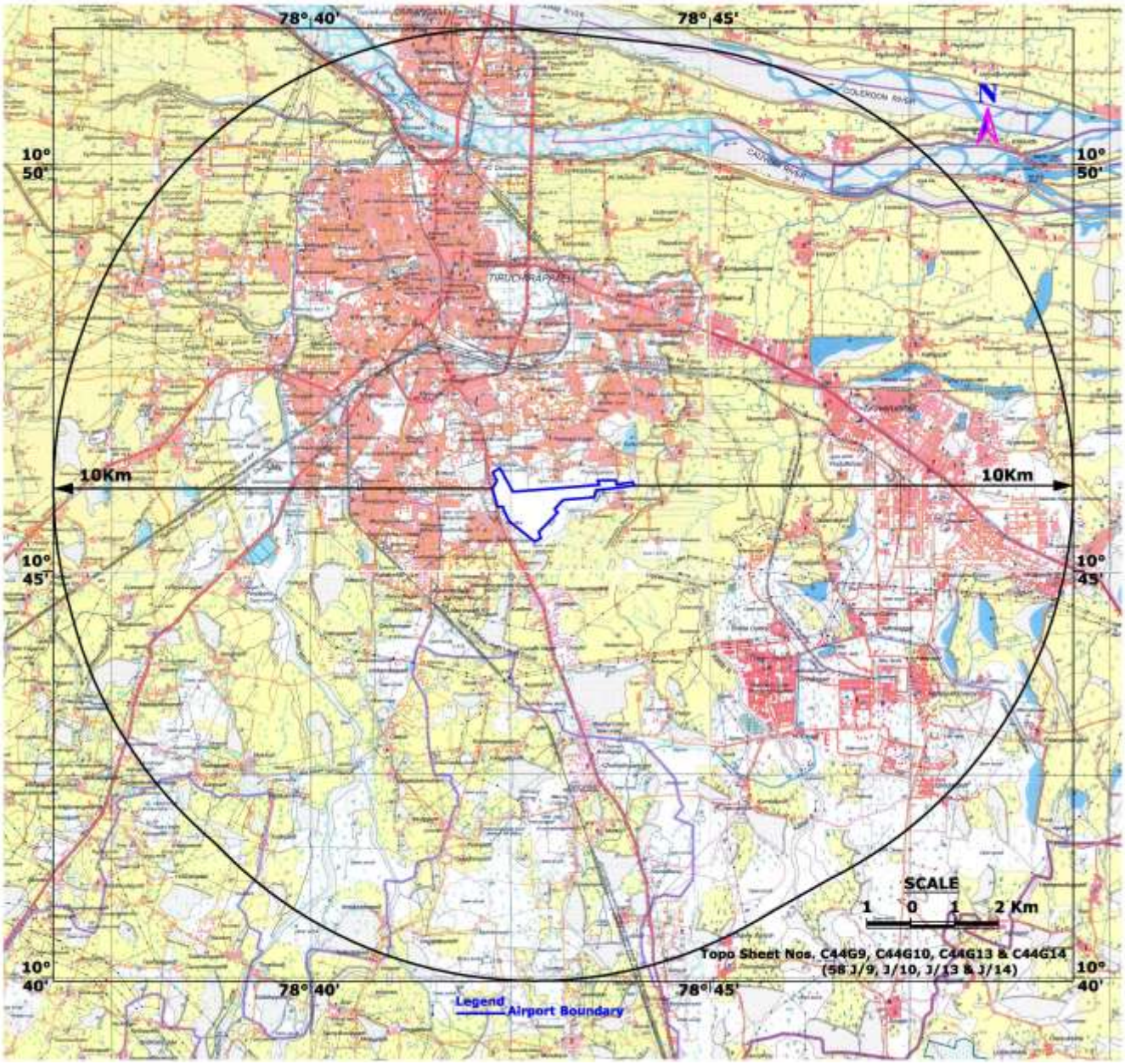
Airports Authority of India

ANNEXURE-I
INDEX MAP



Airports Authority of India

ANNEXURE-I
STUDY AREA MAP



ANNEXURE-II
SITE PHOTOGRAPHS

ANNEXURE-III
PROPOSED TERMS OF REFERENCE

Terms of Reference for the expansion project was granted by MoEF&CC vide letter No.F.No.10-3/2007-IA.III vide dated 23rd November, 2015.

PRE FEASIBILITY REPORT

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1.0 PROJECT BACKGROUND

Trichy airport serves the city of southern state of Tamilnadu in India. It is located at a distance of about 350 km from Chennai. Integrated terminal building already exists and both domestic and international flights are being operated from the existing airport. The existing terminal is in operation since 2009 and is capable of handling 200 incoming and 200 outgoing passengers at peak hours. The environmental clearance for the same was obtained vide letter no. 10-3/2007-IA.III dated 9th March 2007.

With the expected growth of traffic, there is a need to expand the capacity at the terminal building to cater better facilities to increased number of the passengers and faster movement of passengers and cargo. It is proposed to construct the integrated passenger terminal building parallel to runway 09/27 with associated apron, multilevel car park, city side ramps to reach the departure level at the first floor, as indicated in the master plan.

1.1 Project Proponent

Airports Authority of India (AAI) was constituted by an Act of Parliament and came into being on 1st April 1995. Currently, it manages a total of 125 Airports, which include 11 International Airports, 08 Customs Airports, 81 Domestic Airports and 25 Civil Enclaves at Defense Airfields.

AAI also provides Air Traffic Management Services (ATMS) over entire Indian Air Space and adjoining oceanic areas with ground installations at all Airports and 25 other locations to ensure safety of Aircraft operations.

1.2 Need for the Project

The Airports Authority of India had published data and statistics of the airport between the time period of April 2013 to March 2014. According to this data, total passenger traffic of Trichy airport is 10,15,825. There will be an increase in air traffic and more aircrafts would land if there were the required conveniences. **Table-1.1** shows the traffic statistics. From table-1.1, it can be observed that there is increment of 16.8 % passengers.

TABLE-1.1
TRAFFIC STATITICS

Trichy Airport	For the Month			For the Period		
	March 2014	March 2013	% Change	2013-14	2012-13	% Change
Passengers	93852	75224	24.8	10,15,825	870,030	16.8

2.0 PROJECT DESCRIPTION

2.1 Type of Project

AAI Trichy proposes for a new integrated international passenger terminal building parallel to runway 09/27 with associated apron, multilevel car park, city side ramps to reach the departure level at the first floor. The existing terminal building will be utilised for domestic passenger operations. Summary of the project proposal is given in **Table-2.1.**

TABLE-2.1
PROPOSED FACILITIES

Facility	Existing	Proposed	Total
Covered Area	11,777	60,723	72,500
Peak Hour Capacity	470	2900	3370
Annual handling capacity	0.49 million pax	3.03 million pax	3.52 MPPA
Saturation Year	Saturated	-	-
Apron Area	-	15580 sq.m	-
Check in Counters	12	20	32
Immigration	8+8	12+12	40
Custom counters	1+3	2+12	3+15
Security Check	2	2	4

2.2 Location

Geographically, the site is situated at the intersection of $78^0$42'15" to $78^0$44'20" E longitude and between $10^0$44'45" and $10^0$46'45" N latitude. The area is covered in Survey of India toposheet Nos 58 J/9, J/10, J/13 and J/14. The nearest railway station is Tiruchirapalli Junction, which is at a distance of about 3.5 km in NW direction. The 10 km radius study area map is given in **Figure-1**.

2.3 Details of Alternate Site

The present proposal is for new integrated passenger terminal building parallel to runway 09/27 with associated apron, multilevel car park, city side ramps to reach the departure level at the first floor. Hence, no alternative sites were examined.

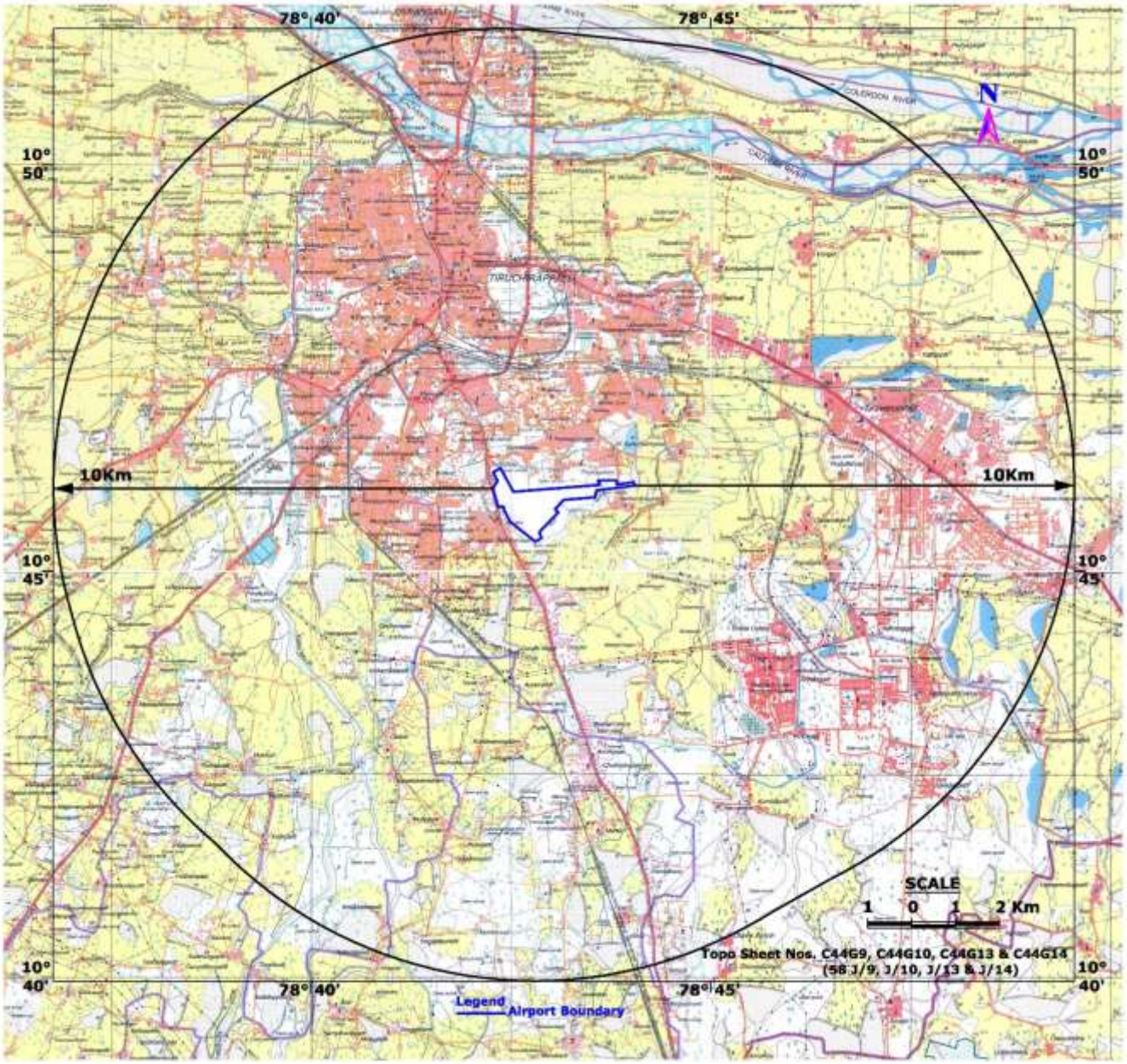

FIGURE-1
STUDY AREA MAP

2.4 Existing Project Features

Presently, the airport have following infrastructure for passenger facilitation.

A. Integrated Terminal Building

- Total Area: 11,777 sq m
- Peak hour capacity: 470 pax
- Annual handling capacity: 0.49 million pax
- Traffic during 2012-13: 0.87 million pax (building already saturated)
- Ration Intl:Dom :89:11
- No.of Aerobridges: 2

B. Apron

- Total no.of bays: 7
- Incontact bays: 3 nos (B767-400 with power in push back)
- Remote bays: 4 nos (A320-200 with power in power out)

C. Current Flight Schedule

- No.of flights handled per day: 18 nos
- No.of Intl:Dom flights 13:5
- Type of aircraft (int'l): A320/B-737-800
- Type of aircraft (Dom): ATR-72/Q-400
- Bunching of Flights: 0500 to 0610 hrs and 1430 to 1700 hrs

2.5 Proposed Facilities

2.5.1 Civil Works

- **Passenger terminal building**

  - Two level integrated terminal building with peak hour capacity of 2700 international passengers, having an area of 60,723 sqm and basement with airside corridor for new contact stands approach road & canopy for passengers facilitation. The public/passenger flow shall be so designed to pass through commercial outlets for impulsive buying.
  - In-line baggage handling system with inclined carousels for baggage claim.
  - Interior works including art work, furniture, counters etc.,

- Utility building, housing, AC plant room, electric substation, generator yard etc.,
- Additional basement to accommodate the baggage make, baggage break down area and other services.
- New 4 lane approach road to the new terminal as per the master plan.

➢ **ATC tower cum technical block**

- New ATC tower cum technical block with MET offices with HVAC system and BMS along with staff car parking etc.
- Up gradation of fire station as classified for category 10.

➢ **Airside development**

- Apron for 10 nos. Code 'C' type of aircraft with associated link taxiways, GSE area and vehicular lane.
- Provision of apron lighting & perimeter lighting.
- Isolation bay with link taxi track for A-320/A321 type of aircraft meeting DGCA CAR.

➢ **Car park**

- Multi-level car park for 750 cars
- Taxi parking for 250 taxi, 10 nos. bus parking

➢ **IT and Airports Systems**

- Provision of CUTE, CUSS, CUPPS system along with self baggage drop solution.
- Public address system and car calling systems;
- Close circuits TV room and provision of adequate numbers of close circuits TV monitors;
- Provision of flight information display system (FIDS) with adequate numbers of Plasma TV's in departure, arrival and security hold area for passenger facilitation/entertainment;
- Provision/relocation of adequate no. of X-ray machines or scanning hand/checked in baggage including provision of required numbers of ETDs, DFMDs & HHMDs as per BCAS norms;
- Provision of adequate no.of VHF FM sets (Walkie Talkis, Base Stations & Mobile stations); and
- Provision/relocation of digital EPABX system including telephone/intercom instruments, writing etc

- Provision/extension of LAN networking components (active & passive), exclusive cable raceways and cable trays for new domestic terminal buildings as well as ATC tower cum fire station cum technical block.

➢ **<u>Miscellaneous Works</u>**

- Provision of gates to segregate air side and city side area with security guard posts at the entry gate;
- Provision of STP and water treatment plant, if necessary
- Augmentation of power supply
- Provision of sub-station equipment including DG set;
- Provision of illuminated mandatory and information signage inside terminal building, kerb area, car park area and apron side etc.,
- Adequate lighting system to have required standard of illumination and all internal electrical installations including lightening protection system
- Provision of fire detection & alarm system. Provision for fire hydrants and water sprinklers system as per standards along with fire extinguishers.
- Provision of approach road & car park lighting as per standard requirements
- Expansion of cargo terminal

➢ **Existing Terminal building**

The existing passenger terminal building will be utilized for the domestic passenger operations after the proposed new international terminal building commences the operations.

➢ **Modified of existing cargo terminal**

Existing cargo terminal can be modified further to suit CUDCT. Presently, there is no domestic connectivity except for Chennai. Only in the event of better connectivity to all major cities like Mumbai, Delhi, Bangalore, Hyderabad, Ahmadabad there is scope for domestic cargo movement. Through increased regional connectivity, aircrafts if piled without any cargo capacity domestic cargo volume cannot witness huge growth. However, dedicated facility is required to cater to the normal demand.

- **Courier terminal**

It can be accommodated within the old cargo terminal building and can be expanded further depending upon future growth trajectory.

- **Cargo agent's administrative building**

  Offices for cargo agents/ handlers is proposed on the first floor of existing terminal building which will be converted to international cargo terminal after shifting of operations to new terminal building.

- **Truck/car parking**

  The existing car park in front of the existing terminal building will be suitably modified for truck /car parking

- **City side development**

Hospitality development comprising hotels for passengers, malls/ Infotainment Park and food court etc. across NH-210 by rehabilitating the existing residential colony in the city and in front of new integrated terminal building being proposed parallel to the runway.

- **Rehabilitation of AAI residential colony and CISF accommodation in wire less station plot**

The existing new AAI residential colony is situated across the NH-210 on a plot of land admeasuring 12.28 acres. There is a vacant piece of land (12.5 acres) about 2 km from airport which was earlier used for wireless station. It is proposed to relocate the existing AAI colony and CISF accommodation in this piece of land

The existing new colony has 42 nos quarters of different category. ('D' type-1 no., 'C' type-27 nos., 'B' type-13 nos. and 'A'type-1 nos) and old colony has 22 nos. quarters of different category (Engg office-8 nos., 'C' type – 5 nos., and 'B' type-9 nos.). whereas the requirement projected for residential accommodation is of total 118 quarters ('E' type – 4 nos., 'D' type -10 nos., 'C' type-56 nos. and 'B' type -48nos.)

The new residential colony is planned as a multi stored flats with stilt floor at ground level to facilitate car parking in the wire less station plot in the city. The ultimate development plan of residential colony can accommodate the present as well as further requirement of staff quarters at Trichy airport. Considering the 50% satisfaction level criteria, it is proposed to construct 90 nos. dwelling units ('E' type-2 nos., 'D' type-08 nos., 'C' type-12 nos., 'B' type – 68 nos). in addition, the existing CISF accommodation at the Airport can also be relocated to the new colony area.

Primary/ nursery school to planned in new colony along with multi purpose hall.

Master plan showing the proposed facilities is shown in Figure-2.

2.6 Water & Power Requirements

Water Requirement

Water required after expansion would be about 440 m^3/day which will be met from groundwater/borewells. Out of this, 88 m^3/day will be obtained by recycling water from tertiary treatment of secondary treated wastewater STP.

Power Requirement

Presently, about 1.2 MW of power is being utilized for the entire airport which is being met from Tamilnadu Generation & Distribution Corporation. Additionally, about 6 MW would be required after the expansion.

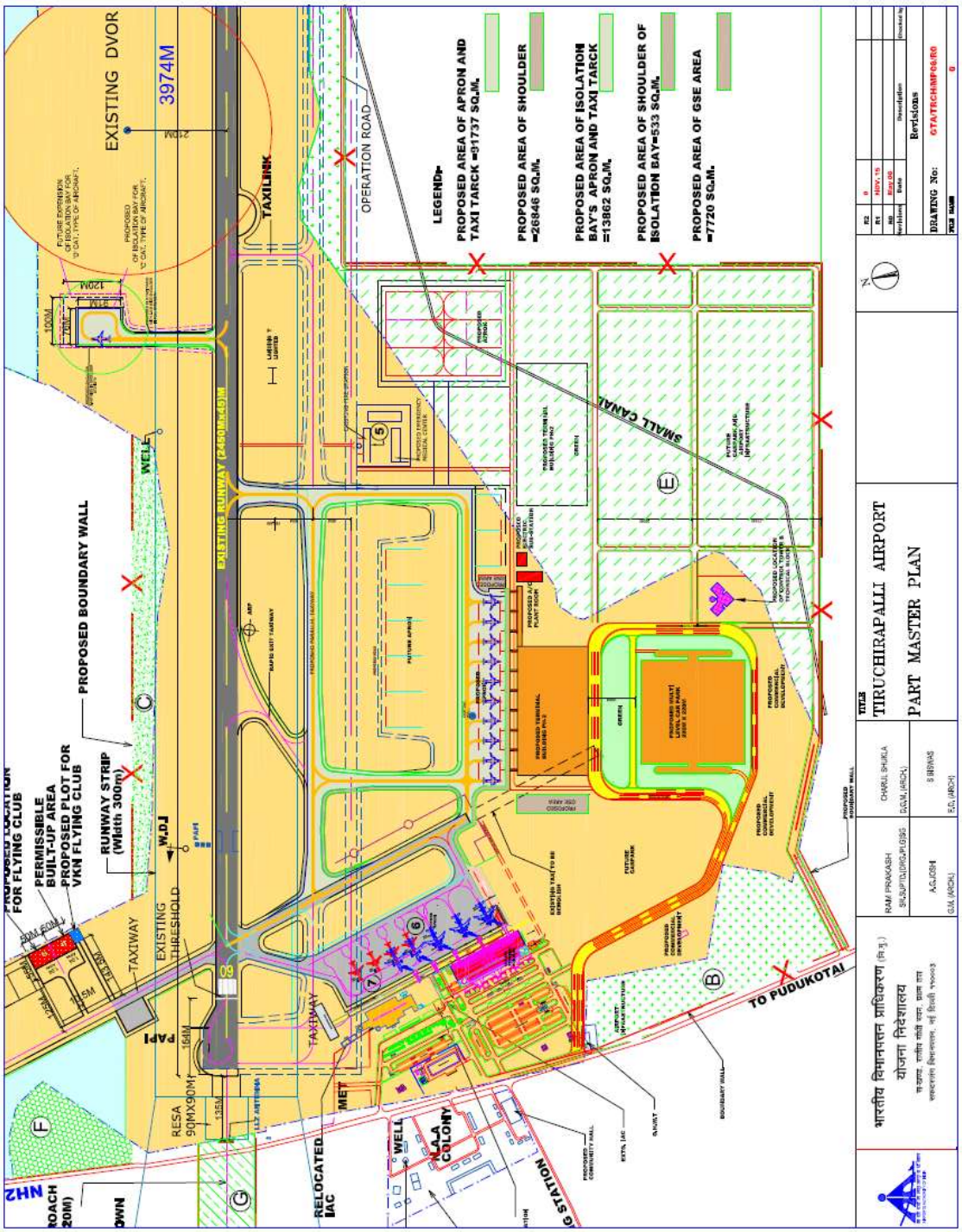

FIGURE-2
AIRPORT EXTENSION LAYOUT

2.7 Waste water Generation & management

The wastewater generation mainly consists of sanitary waste, sewage from airport terminal, flight kitchen, effluent from the workshop etc. The sewage and sanitary waste from the buildings and airport terminal will be treated in Sewage Treatment Plant (STP) comprising primary, secondary and tertiary treatment facilities. The treated wastewater from the STP will be used for air conditioning, cooling water make-up and green belt development.

It is estimated that about 350 m^3/day of wastewater will be generated from the proposed airport. The entire wastewater that is generated from the airport will be recycled and reused for non-potable purposes.

2.8 Solid Waste Management

Solid waste generated from the proposed airport mainly comprises of food waste and garbage waste. Further, small quantities of sludge from STP, medical waste and other waste will be generated. Collection and handling of domestic solid waste would be done in line with the provisions of the Municipal Solid Waste Rules 2000 (as amended).

3.0 SITE ANALYSIS

3.1 Connectivity

Trichy airport is located approximately at a distance of 3.5 km from Tiruchirapalli railway station and the State Highway is adjacent to the airport. Site can also be approached from NH-67 and Nh-45 which area about 4.5 km and 5 km respectively.

3.2 Land form, Land use & Land ownership

Entire land is already under possession of Airports Authority of India (AAI). Present proposal is for construction of new terminal building.

3.3 Topography

The topography of the land within the existing airport premises is flat terrain.

3.4 Proposed Land use pattern

Present land use remains same even after construction of the new terminal building.

3.5 Existing Infrastructure

Existing infrastructure details are given in section-2.4.

3.6 Social Infrastructure Available

The existing social infrastructure in the Trichy which is located at about 4.0 km from the site is:

- Hospital with ambulance;
- Banks;
- Post office;
- Bus station;
- Fire station;
- Secondary school;
- Police station;
- Shopping complex;
- Sports infrastructure (Stadium & Camps etc);
- Community halls;
- Cinema halls; and
- Primary health care centres.

4.0 REHABILITATION & RESETTLEMENT

The present proposal is for construction of new terminal building within the existing airport premises.

Hence, no resettlement is involved.

5.0 PROPOSED INFRASTRUCTURE

The details are discussed in Section-2.5.

6.0 PROJECT SCHEDULE & PRELIMINARY COST ESTIMATES

Preliminary estimated cost of work for Development of Airport is worked out as Rs. 951 Crores. Details are given in **Table-6.1**.

TABLE-6.1
COST ESTIMATE

Sr. No	Particulars	Cost (Rs. In Crores)
1	Terminal building	764
2	Apron, ATC tower and other buildings	187
	Total	951

7.0 ANALYSIS OF PROPOSAL

The present proposal of construction of new integrated terminal building will help in easing out congestion during peak hours particularly at Immigration area and with the equal distribution of flights the new terminal building will be able to cater passengers traffic much beyond 2025-26.