Site Inspection Report of Airport Infrastructure at Chitrakoot Airport, UP for operationalization under Regional Connectivity Scheme (RCS)

Date of Visit-21.02.2018

INDEX

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Existing Infrastructure</td>
<td>1-6</td>
</tr>
<tr>
<td>2.</td>
<td>Photographs</td>
<td>7-13</td>
</tr>
<tr>
<td>3.</td>
<td>Aircraft Characteristics and Requirements for Category 1B Airport</td>
<td>14-15</td>
</tr>
<tr>
<td>5.</td>
<td>Drawings</td>
<td>23-27</td>
</tr>
</tbody>
</table>
Development of Chitrakoot Airport (UP) for operation of flights under RCS – UDAN

(M 28, DO228-200, Beech craft 200 type – 19 Seater Aircraft-Runway codes 1B)

AAI team consisting of following officials from CNS Dte., (ATM), Structure, Electrical Engg., Civil Engg., Planning, Arch., Fire Services visited Chitrakoot Airport on 21.02.2018 along with officials from U.P. State Govt. to study existing infrastructure and recommend action plan for works required to be carried out for operation of flights under RCS-UDAN.

Existing facilities and Infrastructure at Chitrakoot Airport:
Existing airport at Chitrakoot was originally constructed by UP Civil Aviation Department. The Runway and associated pavements of aerodrome are in good condition which is suitable for General Aviation small aircraft and Helicopter during daytime in VFR conditions as no navigational aid is available. At present, there is no scheduled commercial operation at this airport, but as told by State Govt. Officials, sometimes General Aviation, non-scheduled aircraft, VIP/VVIP helicopters operates from this airport. The existing infrastructure details are as follows:

Existing infrastructure:

- Runway : 1400mX23m, Designation 06/24
- Turn Pad : Available
- Stop way/Blast Pad : 60 m Available on both side
- VFR/IFR : VFR
- Apron : 28mX58m
- No. of Parking bays : For 2 Nos. small aircraft
- Taxiway : (71.5m X15.00m)
- Terminal Building : Not Available
- ATC tower : Not Available
- Sub Station : 286 Sqm (Approx)
- VVIP Room : 258 Sqm (Approx)
- Police Station : 286 Sqm (Approx)
- Police Barracks : 380 Sqm (Approx)
- Fire Station : Under Construction
- Residential Quarters : Not Available
- Boundary Wall : 2.4 mtr.ht. with barbed wire- Available
- Availability of Electric supply : State electricity supply is available and stand by Generator is also available (but needs upgradation)
- Availability of Water Supply : Yes
- Availability of Approach road to Airport : Available (But coming in approach funnel of 06 side)
- Availability of Car Parking : Not Available
- Sewage disposal system : Soak pit Available
- Wind direction indicator (Windsock) : Not Available
- Landing Direction Indicator (T) : Not Available

Note: A secondary runway of length 2550x45m and fire station has been under construction, but the work is presently stopped as clearance is still awaited from Ministry of Environment.
Terminal Building: Presently, there is no Terminal Building or other building structure as such which can be converted into a terminal building. In view of this it is proposed to construct pre-engineered structure as Passenger Terminal Building to accommodate 20 nos. arrival passengers and 20 nos. departure passengers at a time.

1. Runway:
   1. The dimension of “Runway 06-24” is 1400 m X 23 m. The entire runway surface is made of bitumen which is good but PCN value and coefficient of friction of the existing runway is not determined/available. It is suitable for aircraft upto category 1B under VFR condition.

2. Basic Strip and Runway End Safety Area (RESA):
   1. For operations of Category 1B aircraft under VFR conditions a Runway strip of size 1460m X 60m properly levelled and graded is to be provided as per the required specifications.
   2. The sufficient land is available on either side from the runway center line center line i.e. approximate 58 m on both sides. The available runway strip is not maintained as per CAR as it’s full of wild growth, which require cleaning & grading.
   3. Low laying area is observed throughout the runway strip and in the operational area which need to be levelled.
   4. Runway End Safety Area (RESA) is not available at both the end of runway strip. Sufficient land is available on both ends for the same in the existing infrastructure. Therefore, RESA (Runway End Safety Area) of size 30m X 46m is to be provided on both the ends of runway as per the as per CAR.
   5. Drainage system is not available and proper drainage system is required as per the provision of CAR.

3. Runway marking
   1. Runway marking are faded which needs to be repainted.

4. Taxiways, Taxiway Strip & Taxiway Markings
   1. Only one taxiway is available which is connected from the apron at distance of 600 m from runway ‘06’ having a length 71.5 m and width 15 m. PCN value of Taxiway is also needs to be determined for the proposed aircraft operation.

5. Apron & Apron Markings
   1. The existing apron of size 58m X 28m is available and overall size of 70x35m is required for independent parking for 2 nos. 1B type of aircraft. It is found that Fire Station has been constructed very close to the Apron and not fulfilling the minimum mandatory clearance / distance of Fire Station from Apron due to which some part of Apron cannot be used for parking of aircraft. Therefore, for two independent parking stand extension of apron by 11m in length and 20.5m in width will be required to make them overall size of 78.5 x 39m with a sufficient PCN value.

6. Subgrade Strength and Pavement Classification Number (PCN):
   The desired PCN (Pavement Classification Number) value for operations of Category 1B type Aircraft should be more than 7.
   The PCN of the existing pavement is not known. Therefore, PCN and Subgrade Strength evaluation of the existing runway shall have to be carried out and if required, the runway, taxiway & apron may have to be strengthened to meet the desired PCN value.
7. Car Parking:
On the city side a suitable area parking area should be developed for at least 30-40 vehicles. The parking shall preferably be developed at a clear distance of minimum 100 mtr from the Terminal Building as per BCAS norms. However, as per BCAS letter dated 17/03/2017, due to land constraints in No-frill airport under RCS, BCAS has given relaxation for RCS operation that the parking can be developed at least a clear distance of minimum 20m instead of 100m from the terminal building.

8. Boundary Wall:
1. Avg. Height of existing compound wall is 2.40 m with barbed wire fencing over the top. However, to meet the Bureau of Civil Aviation (BCAS) norms, the boundary wall of 8 feet (Brick wall) height plus 1.50 feet overhang consisting of barbed wire with concertina coil shall have to be provided all around the airport operational area.

2. The provision in existing overhung barbed fencing angle is required to be made to hold the concertina coil. The concertina coil should be placed all around the boundary wall.

3. Due to grading work for secondary runway, a length of 300m (approx..) of boundary wall between primary and secondary runway has been completely merged. The same is required to be built as per BCAS requirement. In addition to this due to grading work the height of boundary wall may vary or came shorter to the standard requirement of BCAS. In view of this, wherever, it comes below 8 feet (Brick wall) height plus 1.50 feet after grading same needs to be raised according to BCAS norms.

9. Water Supply System

1. Only one bore-well is available. However, one additional bore-well with overhead/underground tank is required to fulfill the requirement of water supply system.

10. Existing Infrastructure for Electrical System

- **Availability of Power Supply:** The 11 KV HT Supply with 11 KV / 415 V transformer is required with LT metering connection from UPPCL. The 63 KVA DG Set is also required for standby power supply. The approximate 8 mtr x 10 mtr covered hall to be required for installation of AMF Panel, LT Panel and Sub-station equipment’s.

- **Availability of Internal Electrification:** State electricity supply is available and stand by Generator is also available but upgradation of the same is required as per standard requirement. The internal electrical wiring work with fitting and fixtures is available in VVIP room.

- **Availability of Water supply:** Supply of water from One No. Bore Well is available. However, two nos. Bore Well with single phase submersible pump and underground water storage tank is required to cater the water supply requirement.

- **Availability of Air Conditioning:** Air-Conditioning is available in existing VVIP rooms.
Electrical Requirements for VFR operation-

(1) The standby power supply source i.e. DG set with AMF Panel and LT Panel.
(2) Internal & External electrification as per operational requirement.
(3) Electrical fitting and fixtures i.e. Fan, LED Light fitting in existing terminal building.
(4) Air-Conditioning of existing terminal building for passenger facilitation and operational equipment’s.
(5) Water Coolers and RO System for drinking water supply.
(6) Electronic Weighing Machine for checking counters.
(7) Signages for passenger facilitation in existing terminal building.
(8) Signages for operational area i.e. runway, taxiway etc.
(9) Electrical Installation in signaling area i.e. Wind cone, Landing T etc.
(10) Electrical fitting & fixtures for new proposals / requirements by CNS, ATC, Civil etc.

Note: The Runway Lights, Taxiway Lights, PAPI Lights, Approach Lights, Apron High Mast Lights, Perimeter Lights are not considered for VFR operation.

11. CNS Equipment Terminal building/Tower/space for CNS equipment are not available at present.

- **Availability of CNS Equipment:** NIL.

- **Availability of Power supply:** Power source is available inside the airport premises but needs up-gradation. After up-gradation it can be utilized to energize UPS for equipment after proper cabling.

- **Availability of Air Conditioning:** No AC is available at present. It is required to install two ACs for VHF AND DVR equipment.

- **Availability of Earthing:** No Earthing is available. A new Earthing is required to make before installation of CNS equipment.

- **Availability of Telephone line:** Telephone line is not available inside airport premises. Local administration has to take up the issue with BSNL/Other service provider to terminate few lines inside airport premises.

- **Availability of DG Set as back up:** DG set is not provided as back-up for mains supply. It needs to be provided as back-up.

- **Availability of Furniture for CNS equipment:** No furniture available for CNS equipment. Needs to provide few basic furniture for equipment and officers.

CNS Requirements for VFR operation

Following essential facilities are required to be provided by CNS Dte. in-order to provide Air Traffic Control Service under RCS at AAI and non-AAI airports.
1) VHF for Control Tower (Main & Standby Frequency) with associated equipment’s recording facility (DVR) etc.
2) Digital Clock.
3) Direct Telephone line with STD facilities and Fax machine.
4) Intercom facilities with CNS units, fire stations etc.
5) Direct Hot Line with City fire brigade.
6) At least two sets of Walky-Talky equipment’s.
7) Crash Fire Alarm and PA systems.
8) Mobile Phone with dual SIM (One from BSNL and other having good coverage)
9) Computer with internet facility and Printer.

Remarks for CNS Equipment’s/facilities:

1) CHQ (CNS-P) is taking action to procure facilities at Sl. No: 1 wherever not available.
2) RHQ’s are required to take action to provide facilities from Sl. No. 2 to 9 wherever required.
3) An approved proposal for Pre-engineered/Pre-fabricated ATC Towers Chitrakoot, is included in the list.

12. Airport Security:
State Police shall provide/ensure Airport security and shall be trained by Bureau of Civil Aviation Security (BCAS) for anti-hijacking and peripheral security. The number of police personnel to be deputed shall be communicated to State Govt. by BCAS after inspection for training and deployment.

- Minimum two watchtowers to be provided at ends of runway
- State Govt. to provide following Security equipment’s/ gadgets:
  - X-ray Baggage Inspection System for Hand Baggage – 1 No.
  - ETD (Explosive Trace Detector) – 1 No.
  - DFMD (Door Frame Metal Detector) – 2 Nos.
  - HHMD (Hand Held Metal Detector) – 2 Nos.
  - CCTV – As per requirement
  - FIDS (Flight Information Display System) – 2 Nos.
  - PA System – 2 Nos.

13. Fire Services:
It was found that an incomplete under construction / fire station is available with an underground static tank of one lakh litre capacity. The same can be completed and utilized as a fire station according to Fire Safety Manual-15 (AAI). However, other Fire Service facilities are not available at the Aerodrome.

Fire extinguishing media and appliances required according to Cat-IV and Communication facility as required for fire service/fire section according to category- IV is also required. Static tank was available but overhead tank does not exist. Further, crash gate at both the ends of runway is not available which is a mandatory factor. Considering these facts into account a Fire Service Manual-15 (AAI) extract is attached.
14. **Obstacle Limitation Surfaces (OLS) survey:**

During the inspection, the following natural/man made obstacles were observed and these needs to be assessed/removed for the proposed operations:

(a) Overhead electricity transmission (OHT) line is passing along the boundary wall near runway 06. It needs to be diverted/Underground cabling for safety of Aircraft operations.

(b) Height clearance of the new fire station from transitional slope is to be ensured. A detailed Obstacle Limitation Surfaces (OLS) survey of the airport area and the area around the airport as per CAR (Civil Aviation Requirement) published by DGCA must be carried out **mandatorily** for establishment of obstacle limitation surface (i) conical surface (ii) inner horizontal surface (iii) approach surface (iv) transitional surface in-order to find out existing obstacles penetration and thereby subsequently issue NOC for others. This is essential to identify the obstacles, to check the viability of operation and to ascertain declared distances before taking up any operations and also for development of Aerodrome chart, Grid Map, Zoning Map and type-A obstacle chart of approach runway 06 & 24 etc.

15. **Notification for obstacle limitation:**

The Master Plan for the airport development (including proposed future development, if any for bigger aircraft operations) may be finalized and accordingly DGCA and the state Govt. should be requested to immediately issue the notification to include Chitrakoot Airport as an VFR Airport in the Airport list of GOI notification no. GSR-751 (E) for making it mandatory for obtaining of “NOC for height clearance” for construction of buildings and structures around airport taking into account the proposed Master plan.

16. **Aerodrome Licensing requirement:**

Presently Airport license is not available. As the proposal is intended for scheduled flight operation by Airline and also for general Aviation flights etc, the airport shall have to obtain aerodrome license for ‘public use category from Directorate General of Civil Aviation (DGCA)’ it is therefore proposed that the development plan should be submitted to DGCA before execution and prior consent of meet the regulatory compliance thereby facilitating obtaining of aerodrome license.

It shall also be desirable to obtain BCAS clearance on the development plan before execution.

Further, any other statutory clearance required from local/central authorities shall be obtained.
View of VVIP Room & Watch Tower from Apron

View of under construction Fire Station from Apron
Sub-Station

View from Runway 06
View of Entry Gate from Stop way/ overrun

Boundary wall between primary and secondary runway completely merged due to grading of secondary runway
View of Boundary Wall from Runway 24 side

View of Runway from 24 side
T & P and aggregate dumped near Apron

Hot Mix Plant, T&P and Aggregate placed near Apron
T & P placed near VVIP Room
## Requirements for operation of RCS Airport Code-1B

1. Minimum Length of Runway - 800 mtr.
2. Minimum Basic Strip - 30 Mtr. on either side
3. Shoulder required – Nil
4. RESA - (2xwidth of runway) x 30 mtr.
5. Apron Size - 70X35
6. Taxiway width - 10.5 mtr.
7. Terminal Building – Covered area 525 sqm.
8. Car Park for 25 cars @ 20 sqm. per car = 500 sqm.
9. Lateral Transition slope 20%
10. Longitudinal Transition slope 5%

## M 28 Aircraft Technical Information (M 28 Twin Turboprop Aircraft)

- **Passenger Capacity** - 19 passengers + 2 Crew
- **Cabin Length** - 5.26 mtrs.
- **Cabin Height** - 1.70 mtrs.
- **Cabin Width** - 1.73 mtrs.
- **Cabin Volume** - 13.7 m³
- **External Luggage Pod Volume** - 1.3 m³
- **Rear door length** - 2.6 mtrs.
- **Rear door width** - 0.9 – 1.2 mtrs.
- **Wing Span** - 22.06 mtr.
- **Length** - 13.10 mtr.
- **Tail height** - 4.90 mtr.

### Specifications: Performance (estimated)

<table>
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<tr>
<th>Parameter</th>
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<tr>
<td>Maximum Takeoff Gross Weight</td>
<td>7500 Kg.</td>
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<tr>
<td>Takeoff Distance</td>
<td>548 m</td>
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<tr>
<td>Landing Distance</td>
<td>499 m</td>
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<tr>
<td>VMO</td>
<td>355 km/h</td>
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<tr>
<td>Maximum Cruise Speed</td>
<td>355 km/h</td>
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<tr>
<td>Long Range Cruise Speed</td>
<td>244 km/h</td>
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<tr>
<td>Range (10,000 ft, 45 minute reserve)</td>
<td>1592 km</td>
</tr>
<tr>
<td>Range with Auxiliary Fuel Tanks (10,000 ft, 45 minute reserve)</td>
<td>2444 km</td>
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<tr>
<td>Average Fuel Flow (10,000 ft.)</td>
<td>268 kg./hr</td>
</tr>
<tr>
<td>Endurance Standard Tanks (10,000 ft., 45 minute reserve)</td>
<td>6.2 hours</td>
</tr>
<tr>
<td>Endurance Auxiliary Tanks (10,000 ft., 45 minute reserve)</td>
<td>11 hours</td>
</tr>
<tr>
<td>Stall Speed</td>
<td>118 km/h</td>
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<tr>
<td>Rate of Climb</td>
<td>12.29 m/s</td>
</tr>
<tr>
<td>Service Ceiling</td>
<td>7620 m</td>
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<tr>
<td>OEI Service Ceiling</td>
<td>3901 m</td>
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### Weights

<table>
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<tr>
<td>Maximum Takeoff Gross Weight</td>
<td>7500 kg.</td>
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<tr>
<td>Empty Weight</td>
<td>4354 kg.</td>
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<tr>
<td>Useful Load</td>
<td>3145 kg.</td>
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<tr>
<td>Maximum Payload</td>
<td>2300 kg.</td>
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<tr>
<td>Maximum Fuel Weight</td>
<td>1766 kg (2278 l)</td>
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### Fuel System

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<tr>
<td>Normal Capacity</td>
<td>2278 l</td>
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<tr>
<td>Auxiliary Ferry Tank</td>
<td>2090 l</td>
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### Dimensions

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<tr>
<td>Propeller Diameter</td>
<td>2.82 m</td>
</tr>
<tr>
<td>Wheelbase</td>
<td>3.39 m</td>
</tr>
<tr>
<td>Wing Tip to Wing Tip turn radius</td>
<td>14.73 m</td>
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### Engines

<table>
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<tr>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer/ Type</td>
<td>(2) PRATT &amp; WHITNEY, CANADA PT6A-65 B</td>
</tr>
<tr>
<td>Max. take-off power (per engine)</td>
<td>820 kw</td>
</tr>
<tr>
<td>Max. continuous power (per engine)</td>
<td>820 kw</td>
</tr>
<tr>
<td>Max. cruise power (per engine)</td>
<td>745 kw</td>
</tr>
<tr>
<td>Max. climbing power (per engine)</td>
<td>745 kw</td>
</tr>
</tbody>
</table>

### Dornier 228-212

- Wing Span (Over Winglets)         | 16.97 m |
- Wheel Base                         | 6.29 m  |
- Passenger Capacity                 | 19 Seats |

### Beechcraft 1900 D

<table>
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<tr>
<td>Aircraft Range</td>
<td>1500 nm</td>
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<tr>
<td>Fuel Capacity</td>
<td>2022 kg</td>
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<tr>
<td>Main Gear</td>
<td>Dual</td>
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<tr>
<td>Passenger Capacity</td>
<td>19 seats</td>
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<table>
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<tbody>
<tr>
<td>A. Maximum Aircraft Ramp Weight</td>
<td>7736 kg.</td>
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<tr>
<td>B. Maximum Aircraft Landing Weight</td>
<td>7530 kg.</td>
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<tr>
<td>C. Maximum Aircraft Takeoff Weight</td>
<td>7688 kg.</td>
</tr>
<tr>
<td>D. Minimum Turning Radius</td>
<td>Not Available</td>
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<tr>
<td>E. Length (Overall)</td>
<td>17.63 m</td>
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<tr>
<td>F. Wing Span (Over Winglets)</td>
<td>17.67 m</td>
</tr>
<tr>
<td>G. Tall Span</td>
<td>5.63 m</td>
</tr>
<tr>
<td>H. Wheel Base</td>
<td>7.25 m</td>
</tr>
<tr>
<td>I. Wheel Track</td>
<td>5.23 m</td>
</tr>
<tr>
<td>J. Tail Height</td>
<td>4.72 m</td>
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**Action Plan**

The sketch/Development plan of Chitrakoot Airport for this is attached as **Annexure-I**. However, the requirements as mentioned in the following Paras shall be fulfilled for the same:

1. **Land requirement:** The approach road and entrance gate are coming under the approach funnel of 06 side of runway. The location of entrance gate is almost in the centerline of runway which is completely incorrect. The diversion of approach road is also required but due to space constraint, it is not feasible.

In view of above, the Terminal Building with Car Parking and Hard Stand for buses is proposed out-side the airport toward city side approach as shown in **Annexure-I** with provision of boundary wall and new entrance gate. The land required for Terminal Building and other facilities are approximate 1.73 acres. The existing boundary wall toward approach road shall be utilized as separation wall between city side area and airside area. The existing main entrance gate will be utilized as an entry gate in operational area.

State Govt. shall take necessary action for acquisition and handing over of same.

**Action:** State Govt.

2. **Pavement works:**

   - Extension of apron by (78.5X 11+ 39x20.5=1674.7 Sqm)
     (overall size 78.5mX39m)
   - Basic strip grading
   - Construction of RESA 46X30 mtr.
   - Fire CFT Holding position road 6.0 mtr wide
   - Connection roads from fire station & ATC tower
   - Connecting Road between Runway and Fire Station
   - Runway and Apron Marking
   - Visitors Car Parking
   - Approach Road
   - Storm Water Drain

The pavement works shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 14.50 Crore  
**PDC:** July 2018

**Action:** State Govt. / AAI Plg. Dte. / RED, NR, AAI

3. **Terminal Building:**

   It is proposed to construct pre-engineered structure as Passenger Terminal Building of covered area 525 sqm (as per enclosed drawing as **Annexure-II**) to accommodate 20 nos. arrival passengers and 20 nos. departure passengers at a time to provide the following essential facilities/ areas:

   - Arrival lounge, Departure lounge, Security hold area with Washroom facility for Male, Female & Differently abled passengers, Passenger Check-in Area, VIP Lounge, First Aid Room, Fire control room, Arrival baggage claim area, Baggage Make up area.
Suitable seating arrangement is required in departure and security hold area. The drinking water facility have to be provided in terminal building. Suitable arrangement to be made for passenger baggage trolleys for arriving as well as departing passengers. The air conditioning should be provided for at least SHA. Internal road around terminal building, VVIP room and for control tower is to be provided. The passenger traffic picks up, food stalls, TR stalls, etc can be provided by positioning porta cabins on the side of terminal building.

The work for construction of Terminal Building along with above mentioned facilities shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 2.5 Crore

PDC: July 2018

Action: State Govt. / AAI Plg. Dte. / RED, NR, AAI

4. **Operational Boundary Wall:**

1. The present boundary wall is 2.4 m height brick wall with barbed wire fencing which needs to be raised to 8 ft. height brick wall + 1.5 ft. concertina coil.
2. The construction of 300 m long boundary wall as per BCAS norms between primary and secondary runway which has been completely merged due to grading work.
3. Raising of existing boundary wall upto 8 ft. height brick wall + 1.5 ft. concertina coil wherever, it becomes shorter after basic strip grading work.
4. Construction of operational wall i.e. 8 ft. height brick wall + 1.5 ft. concertina coil in proposed area for Terminal Building and other facilities as per proposed Master Plan.
5. Provision of fire crash gates on both ends of boundary wall.

The work for construction of boundary wall shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 1.5 Crore

PDC: July 2018

Action: State Govt. / RED, NR, AAI

5. **Runway Strength (PCN)** – PCN and Subgrade Strength evaluation of the existing runway, taxiway and apron shall have to be carried out and if required same needs to be strengthened to meet the desired PCN value. The CBR value of soil subgrade, cross section of runway/taxiway/apron/pavements shall be required for PCN evaluation. The State Govt. may please provide the same from their consultant M/s RITES.

For PCN evaluation, action has been initiated by AAI, CHQ Structure Directorate.

PDC: April 2018

Action: AAI, CHQ Structure Dte./ State Govt.
6. **Other Misc. Civil works:**

- Provision of Cooling pit is also required. The location of the same will be identified and action for completion shall be taken up by UP State govt.
- Fire Pit
- Development of green area in front of Terminal Building.
- Underground and overhead tank for water supply.
- Guard room / Watch Tower etc.
- Windsock, ARP and Landing T etc.
- Septic Tank
- Bore Well
- Completion of Balance work of Fire Station
- Construction of a room of size 6x4m for installation of CNS equipment’s
- Construction of 8x10m room/ space for electrical panels etc.

The above-mentioned work shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 2.5 Crore  
**PDC:** July 2018  
**Action:** State Govt. / AAI Plg. Dte. / RED, NR, AAI

7. **Access Control/ Approach Road:**

Approach road from highway to be widened to two lane road with boom barriers at the airport entrance and properly illuminated. Necessary signage’s from highway also to be provided. Shelter covers/ booths to be provided for checking security staff.

The work for construction of approach road shall be carried out by state Govt.

**PDC:** July 2018.  
**Action:** State Govt.

8. **Control Tower:**

It is proposed to construct a Pre-engineered/Pre-fabricated ATC tower with control room size of 5.40 mtrx5.40 mtr at a height of 6.30 mtr. with lightning /surge protection, earthing, RF/Data cable ducts etc. and same is in process of procurement.

**PDC:** July 2018.  
**Action:** Engineering/ CNS/ RED, NR, AAI

9. **Documentation:**

The necessary documentation like security manual, quality control manual, aerodrome manual, emergency procedure and contingency plans, safety management manual etc. to be prepared by State Govt. in co-ordination with AAI Ops. Dte.

**Action:** State Govt.
10. CNS Works:

Following essential facilities are required to be provided by CNS Dte. in order to provide Air Traffic Control Service under RCS at AAI and non-AAI airports.

1) VHF for Control Tower (Main & Standby Frequency) with associated equipment’s recording facility (DVR) etc. - **CHQ (CNS-P) is taking action to procure facilities**
2) Digital Clock.
3) Direct Telephone line with STD facilities and Fax machine.
4) Intercom facilities with CNS units, fire stations etc.
5) Direct Hot Line with City fire brigade.
6) At least five sets of Walky-Talky equipment’s with one Base Station.
7) Crash Fire Alarm and PA systems.
8) Mobile Phone with dual SIM (One from BSNL and other having good coverage)
9) Computer with internet facility and Printer.

- RHQ’s is required to take action to provide facilities from Sl. No. 2 to 9
- It is required to install two ACs for VHF AND DVR equipment.
- A new Earthling is required to make before installation of CNS equipment.
- **Local administration has to take up the issue with BSNL/Other service provider to terminate few lines inside airport premises.**
- DG set is not provided as back-up for mains supply. It needs to be provided as back-up.
- No furniture available for CNS equipment. Needs to provide few basic furniture for equipment and officers.

The CNS equipment shall be precured/ arranged by AAI and shall be provided to State Govt. on rental basis.

Approx. Cost: Rs. 1.0 Crore

PDC: July 2018

Action: CNS Dte., AAI, CHQ

11. Security Equipment:

Security equipment required are assessed as below:
- XBIS (RB)-1 No.
- X-BIS(HB)-1 No.
- DFMD-4Nos. (SHA-2 Nos., Entrygate-1 No., Stop Gate-1 No.)
- HHMD-8 Nos.
- CCTV
- ETD-2 Nos.
- FIDS-2 Nos.
- PA System – 2 Nos.

The Security equipment shall be precured/ arranged by AAI and shall be provided to State Govt. on rental basis.

Approx. Cost: Rs. 1.5 Crore

PDC: July 2018

Action: AAI
12. **Airspace Management perspective and removal of obstacles:**

Airspace over Chitrakoot Airport is restricted Airspace (identified as VIR157) therefore, prior permission will be required from IAF/ concerned authorities to use its Airspace. In addition to above, OLS Survey needs to be carried out before commencement of operations. For survey and OLS charting Award letter has already been placed by CHQ vide letter No. AAI//9-3/RCS/2018(Survey) dated 23.02.2018.

After receiving the OLS study, the marking of the identified obstacles like buildings, towers, trees, HT Lines (if any) shall be carried out by State Govt. and action for removal of same will be taken-up by Govt. of Uttar Pradesh.

Approx. Cost: Rs. 11.8 Lakhs (for OLS survey)  

**PDC:** April 2018

**Action:** State Govt. / ED(ATM), CHQ, AAI

13. **Fire Services:**

Fire and rescue services shall be provided by State Govt. Fire Department on requirement basis. The city fire Brigade may be utilized for RFFS during the flight operations.

In-order to commencement of operation immediately at the Airport below mentioned infrastructure works and facilities are immediately required.

- The balance work of incomplete/ under construction fire station and underground static tank of one lakh liter capacity shall be completed for utilizing them for aircraft operation.
- Construction of connecting roads from fire station to Runway shall be done.
- Before commencement of operation an overhead tank should be constructed to avoid water supply shortage.
- At present the transformer is placed very close to Fire Station, the same shall be relocated to another place in the premises.
- ARFF competent firefighting crew along with fire extinguishing media for category- IV is required to be commissioned before commencement of operation.
- The city fire Brigade personal shall have to be suitably trained for Aviation firefighting. Training of the State Govt. Fire and Rescue crew shall be ensured.
- The following mandatory equipment’s and transport facilities are required
  a. 01 CFT and 01 Ambulance to be commissioned.
  b. 01 CFT 01 Ambulance to be kept stand-by.
  c. Fire store requirements:
     i. At least 700 liters of foam compound should be kept in reserve.
     ii. At least 135kg of DCP should be kept in reserve.
     iii. Rescue tools, Communication System, required furniture for Fire Station, Fire Pit
     iv. Fire Crash Gate at both ends of runway.

The balance work of Fire Station shall be done by State Govt. However, the equipment’s and transport facilities shall be precured / arranged by AAI and shall be provided to State Govt. on rental basis.

**PDC:** July 2018

**Action:** State Govt./ RED, NR, AAI
14. **Security Services:**

The Security services are to be provided by the State Govt. The State Police shall provide/ensure Airport security and shall be trained by Bureau of Civil Aviation Security (BCAS) for anti-hijacking and peripheral security. The number of police personnel to be deputed shall be communicated to State Govt. by BCAS after inspection for training and deployment.

**Action:** State Govt. / BCAS

15. **Electrical works:**

The dedicated 11KV HT supply with 11 KV/415 Volt Transformer is required with LT metering connection from UPPCL. The space is also required for installation of AMF Panel, LT Panel and Sub-station equipment’s.

(1) The standby power supply source i.e. DG set 63 KVA with AMF Panel and LT Panel.
(2) Internal & External electrification as per operational requirement.
(3) Electrical fitting and fixtures i.e. Fan, LED Light Fitting in existing terminal building.
(4) Air-Conditioning of existing terminal building for passenger facilitation and operational equipment’s.
(5) Water Coolers and RO System for drinking water supply.
(6) Electronic Weighing Machine for checking counters.
(7) Signages for passenger facilitation in existing terminal building.
(8) Signages for operational area i.e. runway, taxiway etc.
(9) Electrical installation in signaling area i.e. Windsock, Landing T etc.
(10) Electrical fitting & fixtures for new proposals / requirements by CNS, ATC, Civil etc.

**NOTE:** The Runway Lights, Taxiway Lights, PAPI Lights, Approach Lights, Apron High Mast Lights, Perimeter Lights are not considered for VFR operation.

The Electrical work shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 2.00 Crore

**PDC:** July 2018.

**Action:** State Govt. / RED, NR, AAI

16. **Removal of T&P and unwanted material:**

The State Govt. shall remove all the Trucks, Dumpers, Hot Mix Plant and aggregate etc. laying near apron and basic strip. In addition to this all the other temporary structures and unwanted material shall also be removed from Aerodrome, if any.

**Action:** State Govt.

17. **Meteorology:** Met observatory and the trained Met. Officials may be required before commencement of commercial flights. Necessary coordination with Met. Department to be taken up by State Govt. of UP.

**Action:** State Govt.

18. **Status of Airport Licence:**

Presently Airport license is not available. The state Govt shall initiate action for obtain aerodrome license ‘public use category from Directorate General of Civil Aviation (DGCA).

**PDC:** July 2018.

**Action:** State Govt.
19. Suitability of Airport -
Presently, Aerodrome is not fit for commercial flights, however, after actions as above and obtaining aerodrome licence, the commercial flight operations may be commenced.

Sh. Asljish Shrivastava
DGM (CNS-P)

Sh. Abhishek Choudhary
DGM (Oper.)

Sh. S. Ghosh
AGM (Str.)

Sh. Ravi Saini
AGM (ATM)

Sh. R K Shami
AGM (Engg.-Civil)

Sh. Rajkumar
AGM (Engg.-Elect.)

Sh. Ganesha Sharma
SM (Engg.-Civil) Plg.

Sh. Anupam Kumar
AM (Drg.-Plg.)

Sh. Ram Sawaroop
Manager (FS)
PROPOSED AREA = 100.00 M. X 70.00 M. = 1.73 ACRE

EXISTING GATE

PROPOSED TERMINAL BUILDING

ROAD

GREEN ROAD

PARKING

PROPOSED GATE

PROPOSED BOUNDERY WALL

PROPOSED AIR TERMINAL COMPLEX
CHITRAKOOT AIRPORT, SIDDHIPUR.UTTER PRADESH