

**Amendment No. 2 dated 14th November 2022**

**To**

**Renovation, Construction, Testing, Commissioning and Validation of TB Containment Laboratory and associated works in compliance with National Tuberculosis Elimination Program (NTEP), Central TB Division (CTD), Govt. of India**

**Bid Ref. No.: SAMS/FIND India/Lab Renovation/ATE/03/2022 dated 22/10/2022**

Reference original Advertised Tender Enquiry (ATI) issued on 22<sup>nd</sup> October, 2022, following Lab details are included in the Chapter IV : SCHEDULE OF REQUIREMENT, TECHNICAL SPECIFICATIONS AND DRAWINGS/ LAYOUTS OF LABORATORIES AND REQUIRED WORKS; under sub-clause D. SCOPE OF WORK, TECHNICAL SPECIFICATIONS AND DRAWINGS/ LAYOUTS OF LABORATORIES

**Lab Wise Compliance Sheet for Additional Work Requirement and Some Site-Specific Detail for TB Containment Lab Renovation Work**

Sl. No.	Name of Lab	Specific Work requirement																																																																																																																												
1	IRL Hyderabad	<p><b>1. For existing TB Containment lab:</b></p> <p>a. Dismantling of existing brick wall of size 6' between the ante room and TB containment room and appropriate flooring to be done after removal of existing cemented wall (19'3"(L)x11'6"(H)).</p> <p>b. Existing one view panel between the passage and TB containment lab to be modified/converted into pass box.</p> <p>c. Existing one view panel between the passage and Ante room of TB containment lab need to be closed permanently with brick &amp; mortar along with painting work.</p> <p>d. Dismantling and removal of existing list of the items of AHU/HVAC system mentioned below and handed over to site for safe and secure storage, planned in the staff room for temporary storage.</p> <table border="1"> <thead> <tr> <th>S.NO</th> <th>Items to be Removed and Handed over to the site</th> <th>Make and Model</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td><b>1</b></td> <td><b>Supply Air Handling Unit (AHU)</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Blower</td> <td>CG</td> <td>1 no</td> </tr> <tr> <td>ii)</td> <td>Motor</td> <td>Nicotra-3HP</td> <td>1 no</td> </tr> <tr> <td>iii)</td> <td>Cooling Coil</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>iv)</td> <td>Pre-Filter</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>v)</td> <td>Fine filter</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>vi)</td> <td>HEPA Filter</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td><b>2</b></td> <td><b>Exhaust Air Handling Unit</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Blower</td> <td>CG 3.7KW</td> <td>1 no</td> </tr> <tr> <td>ii)</td> <td>Motor</td> <td>Nicotra 5HP</td> <td>1 no</td> </tr> <tr> <td><b>3</b></td> <td><b>Condensing Unit (17 TR):</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Compressor</td> <td>Voltas 8.5TR</td> <td>2 nos</td> </tr> <tr> <td><b>4</b></td> <td><b>Puff Paneling</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Wall Panel- (Quantity in Feet)</td> <td>OEM</td> <td>920 SQFT</td> </tr> <tr> <td>ii)</td> <td>Ceiling Panel- (Quantity in Feet)</td> <td>OEM</td> <td>506 SQFT</td> </tr> <tr> <td>iii)</td> <td>Puff Insulated Door</td> <td>OEM</td> <td>5 nos</td> </tr> <tr> <td><b>5</b></td> <td><b>AHU Control Panel including Wiring</b></td> <td>OEM</td> <td>1 unit</td> </tr> <tr> <td><b>6</b></td> <td><b>GI Ducting</b> Existing GI ducting (Quantity in Square Feet), Total quantity of</td> <td>OEM</td> <td>800 SQFT</td> </tr> <tr> <td><b>7</b></td> <td><b>Dampers</b> (Existing dampers available needs to be mentioned)</td> <td>OEM</td> <td>1 set</td> </tr> <tr> <td><b>8</b></td> <td><b>Interiors</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Eye wash and shower</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>ii)</td> <td>Wash Basin</td> <td>OEM</td> <td>2 nos</td> </tr> <tr> <td>iii)</td> <td>Pass Box</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>iv)</td> <td>Storage Rack</td> <td>OEM</td> <td>2 nos</td> </tr> <tr> <td>v)</td> <td>Shoe Rack</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>vi)</td> <td>Split AC (Indoor Unit and Outdoor both)</td> <td>CamiPro-1.5TR</td> <td>1 no</td> </tr> <tr> <td>vii)</td> <td>Work Bench</td> <td>OEM</td> <td>1 no</td> </tr> <tr> <td>viii)</td> <td>Lab Stools</td> <td>OEM</td> <td>4 nos</td> </tr> <tr> <td>ix)</td> <td>EPBAX System</td> <td>OEM</td> <td>1 Set</td> </tr> <tr> <td>x)</td> <td>Fire Alarm System</td> <td>OEM</td> <td>1 Set</td> </tr> </tbody> </table>	S.NO	Items to be Removed and Handed over to the site	Make and Model	Quantity	<b>1</b>	<b>Supply Air Handling Unit (AHU)</b>			i)	Blower	CG	1 no	ii)	Motor	Nicotra-3HP	1 no	iii)	Cooling Coil	OEM	1 no	iv)	Pre-Filter	OEM	1 no	v)	Fine filter	OEM	1 no	vi)	HEPA Filter	OEM	1 no	<b>2</b>	<b>Exhaust Air Handling Unit</b>			i)	Blower	CG 3.7KW	1 no	ii)	Motor	Nicotra 5HP	1 no	<b>3</b>	<b>Condensing Unit (17 TR):</b>			i)	Compressor	Voltas 8.5TR	2 nos	<b>4</b>	<b>Puff Paneling</b>			i)	Wall Panel- (Quantity in Feet)	OEM	920 SQFT	ii)	Ceiling Panel- (Quantity in Feet)	OEM	506 SQFT	iii)	Puff Insulated Door	OEM	5 nos	<b>5</b>	<b>AHU Control Panel including Wiring</b>	OEM	1 unit	<b>6</b>	<b>GI Ducting</b> Existing GI ducting (Quantity in Square Feet), Total quantity of	OEM	800 SQFT	<b>7</b>	<b>Dampers</b> (Existing dampers available needs to be mentioned)	OEM	1 set	<b>8</b>	<b>Interiors</b>			i)	Eye wash and shower	OEM	1 no	ii)	Wash Basin	OEM	2 nos	iii)	Pass Box	OEM	1 no	iv)	Storage Rack	OEM	2 nos	v)	Shoe Rack	OEM	1 no	vi)	Split AC (Indoor Unit and Outdoor both)	CamiPro-1.5TR	1 no	vii)	Work Bench	OEM	1 no	viii)	Lab Stools	OEM	4 nos	ix)	EPBAX System	OEM	1 Set	x)	Fire Alarm System	OEM	1 Set
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xi)	Access Control System	OEM	1 Set
xii)	Magnehelic Gauge	OEM	2 nos
<b>11</b>	<b>Any Other Additional Items</b>		
i)	Air Curtain	Almonaro	2 nos

- e. Complete putty & whitewash of existing permanent wall of an area of 1000 sqft and ceiling of the area of 520 sqft after complete dismantling of existing interior (puff panels of existing TB Containment Facility).
- f. Proper levelling and rework of existing cemented flooring before applying new epoxy flooring.
- g. Dismantling of existing two Biosafety cabinet with external blower including ducting, and permanent closure of ducting opening at wall.
- h. Shifting of two Biosafety Cabinet, three refrigerated centrifuges and two MGIT 960 system along with UPS to safe location (CBNAAT area & existing BSL 2 room) identified by the site with appropriate bubble packaging.
- i. Re-shifting and installation of three Biosafety Cabinet (newly supplied), two refrigerated centrifuges, two MGIT 960 system along with UPS from the existing BSL2 Lab area to the renovated TB Containment facility in coordination with service provider /OEM.

## 2. For CBNAAT room

- a. Uniform tile flooring along with appropriate cementing work with supply and provision of vinyl carpet for entire CBNAAT room of an area approx. 325 SQFT {16' width and 20'3" length}
- b. Complete whitewash and putty work for entire CBNAAT area of approx. 1117 SQFT
- c. Closure of two existing windows of dimension 4'6" H X 3'6" W and 3' H X 3' W inside the CBNAAT room permanently with brick & mortar.
- d. Reinstallation of two existing BSC including appropriate ducting work.
- e. Provision of two electrical sockets single phase, 15 /6 AMP in the aluminum partition for the installation of 2 numbers of BSC.
- f. Shifting of 16 module GeneXpert with UPS to adjacent room.
- g. Provision of three electrical 15/6 Amp socket for GeneXpert.
- h. Reinstallation of 1.5 TR Split AC from existing TB containment lab to new CBNAAT room including insulation and appropriate drainage pipes.
- i. Supply and provision of one no of 26 AMP MCB socket including necessary wiring for the reinstallation of 1.5 TR Split AC.
- j. Provision of two ceiling lights with dedicated switch for new CBNAAT room.

## 3. For BSL2 Lab:

- a. Supply and installation of three work benches of 6' length & 2'6" width & 2'6" Height need to be provided. Frame shall be made up of SS 304, with nylon cushion/bushing for the legs, non-particle shredding material and shall be chemical resistant to allow chemical disinfection. It should be strong to hold the granite top/workbench as well as equipment places on the workbench. It should be stable and vibration free. There shall have arrangement for placing the UPS below the work bench or keeping consumables.
- b. Provision of four numbers of electrical sockets (single phase, 15/6 AMP sockets) with dedicated switch along with necessary wiring for refrigerated centrifuges near to the new work benches.

2

NDTBC, Delhi

## I. Shifting of Equipment

### 1. Shifting of

- a. Centrifuges (1 No. of "Hettich" Make and 1 no. of "Eppendorf" Make) from the existing TB containment Lab to the proposed extended TB Containment Lab
- b. MGIT 960 machines (all 3 Nos.) from the existing TB containment Lab to the proposed extended TB Containment Lab
- c. Biosafety cabinet (1 No. of "Heal force" Make) from the existing TB containment Lab to the proposed extended TB Containment Lab
  - i. Pressure balancing to be done to maintain negative pressure with 3 biosafety cabinets in the existing TB Containment Lab while shifting this BSC as there are 4 BSC in the existing TB Containment lab.

2. These shifting to be done in coordination with the OEM as well as FIND India and its AMC/CMC agencies.

## II. Civil, plumbing, and electrical works

### 1. For existing TB Containment Lab

#### a. Civil and Plumbing Works:

- i. Removal of ducting of one "Heal force" biosafety cabinet along with permanent closure of the holes in the wall after removal of ducting and motor blower and its exhaust.

#### b. Electrical works:

- i. Removal of motor blower and its exhaust (of the "Heal force" BSC) and reinstallation at the proposed extended TB containment Lab.

### 2. For Existing Autoclave Room

- a. **Civil and Plumbing Works:**
  - i. Creation of an opening (passage/entrance) of dimension 3'6" (W)x 7' (H) in the wall between the existing and proposed autoclave room as indicated in the Layout. This will help for ease transfer of samples from existing TB Containment lab to extended TB Containment lab. Further, it will help expand capacity for autoclaving which currently is inadequate.

3. **For Proposed Autoclave Room**

- a. **Dimensions of the proposed room: 15'6" (L)x11'4" (W)**
- b. **Civil and Plumbing Works:**
  - i. To create a room of half brick wall and half glass aluminum partition of dimensions of 15'6" (L) x 11'4" (W)
    - The 2 walls of the room to be created with brick wall (6" Inches thick) up to a height of 6' (H) from floor.
    - The remaining part of wall till the ceiling of the room (approx. height 6') to be made of glass aluminum partition as per dimensions of the room as per layout
  - ii. The existing double wooden door (for exit from storeroom 1) needs to be removed and replaced with a new single wooden laminated door of dimensions 4'(w)x6'8" (H) with proper door lock facility
  - iii. Creation of Workbench of size 6' (L) x 2'6" (W) x 3' (H) of brick and mortar with a granite top.
  - iv. Installation of a new modular standalone washbasin made of SS 304 with elbow or foot operated mechanism along with proper water supply and drainage lines (as per layout)
    - Wall hanging soap dispenser to be provided adjacent to wash basin unit along with a wall mounted tissue paper box with a mechanism to pull out tissue papers be provided
  - v. Water inlet and outlet line to be provided as per layout for the horizontal autoclave
- c. **Electrical Works:** As per the layout:
  - i. Installation of Ceiling Lights, Fan with dedicated switch and socket
  - ii. Installation of 4 nos. 5/15 Amp modular switch and socket
  - iii. Installation of 3 phase,4 pole, 40-amp MCB,4 SQMM wire size for installation of Horizontal Autoclave
  - iv. Installation of 1 no. exhaust fan of adequate capacity (along with appropriate civil work)

4. **For Proposed UPS+ AHU Panel Room**

- a. **Civil and Plumbing Works:**
  - i. Existing double wooden door needs to be replaced with a new single wooden laminated door of dimensions 3' (w) x 6'8" (H) with proper door lock facility. Suitable civil works (brick and mortar) to close out any empty space to be carried out after removal of the door.
- b. **Electrical Works:** As per the layout
  - i. Installation of 3 Ceiling Lights, 1 ceiling Fan with dedicated switches Installation of 1 no. exhaust fan of adequate capacity (along with appropriate civil work)

5. **For the Proposed extended TB Containment Lab:**

- a. **Civil and Plumbing Works:**
  - i. Emergency exit: Removal of the existing door and expansion of door space to 4' (W) to accommodate the emergency exit door dimensions (as per the layout)
  - ii. Creating a shaded cemented path of dimension of 9' (W) x 11'6" (L) + 4'6" (W) x 26'6" (L). The height of the path should be same as the existing Shaded cemented path (~8')
    - This will help connect the cemented path leading to the external AHU unit
    - It will also connect to the existing cemented path in the backyard of the lab
  - iii. Creating pass box opening in the walls
    - As indicated in the layout- openings need to be created in the walls for two pass boxes opening
- b. **Creating small cabin for locating emergency shower and eye wash station**
  - i. This will be located just outside the emergency exit of proposed extended TB Containment Lab (right side).
  - ii. Dimensions of the cabin will be 3'(W) x 4'(L) x 8' (H) made up of aluminium glass partition. It will have one door with a latch.
  - iii. Inside the cabin will be installed emergency shower and eye wash station with required accessories and inlet and outlet plumbing work as indicated in the layout.
- c. **Electrical works:**
  - i. Installation of ceiling light with dedicated switch inside the emergency shower and Eye washroom Cabin

3	<u>IRL Cuttack</u>	<p>2. Identified area for Extension of TB Containment lab (before renovation work):</p> <ol style="list-style-type: none"> <li>Clearing the identified storeroom and its existing furniture, and RCC racks.</li> <li>Dismantle the RCC rack throughout the area for both the rooms.</li> <li>General storeroom has a wall at 12 feet 6 inches from the door, that has an opening of 6 feet wide and 8 feet 7 inches high at 1 foot 4 inches from the wall left to the door. This opening has to be extended higher at around 10 feet high.</li> <li>Removal of existing tile flooring and relaying levelled uniform tilted flooring of area (22' X 21') SQFT.</li> <li>Closing of two existing windows of size [3' x 4'8"] each and ventilators with brick, mortar wall or RCC walls.</li> <li>Door opening should be more than 3 feet and 6 inches from the wall to wall from the proposed ante room to TB Containment facility.</li> <li>Removal of existing electrical fixtures like ceiling light, fan, and electrical sockets etc.</li> <li>Supply and installation of one ceiling fan with required wiring in the AHU control panel and UPS room.</li> </ol> <p>3. Identified area for extension of TB Containment lab (during renovation work):</p> <ol style="list-style-type: none"> <li>Creation of partition with glass aluminium as indicated in the layout covering the width of corridor (6 feet 6 inches) and height till the ceiling (12 feet 6 inches), it will separate LPA, TB containment lab, and BSL II from rest of the lab. The partition is to be installed right after the Microbiologist room towards the LPA section. The partition will have double door of dimensions of each 2 feet wide by 7 feet high with self-closing mechanism (door closure) and with lock and key facility.</li> <li>Supply and installation of 2 unit's Air conditioner, capacity of 1.5 tonnage for the storeroom and media room. These will be inverter ACs (minimum three star) of Hitachi/ Bluestar/ Carrier/ Lloyd/ Godrej or equivalent OEM. The outdoor unit will be suitably placed outside the lab with easy access and adequate protection from theft. Drainage pipe of ACs will be adequately long and connected into the drainage system of the institute.</li> <li>Supply and installation of slotted angled racks (8 units) <ol style="list-style-type: none"> <li>Dimension: 3'6" (L)x 1'6" (W) x 6'(H)</li> <li>Material:18 Gauge Iron with anti-rusting coating</li> <li>Adjustable 4 shelves for each rack</li> <li>Plastic/ Rubber/ Neoprene Shoes</li> <li>Bolts and nuts as required for fitting of shelves</li> <li>Scratch resistance smooth finish</li> </ol> </li> </ol> <p>4. Identified area for AHU Panel and UPS room:</p> <ol style="list-style-type: none"> <li>supply and Installation of 1 ceiling fan of 1200 mm sweep with all accessories including electronic regulator in the UPS+ AHU control panel room</li> </ol>
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4	<u>IRL Indore</u>	<p><b>1. For existing culture reading room:</b></p> <ol style="list-style-type: none"> <li>Creation of door opening with supply and installation of glass aluminum double door of dimensions (4'W X 6'8"H) with lock &amp; key assembly, auto door closure mechanism for the existing reading room from the passage area.</li> <li>The existing granite platform needs to be resized as per layout to create the door opening and entry to the existing reading room.</li> </ol> <p><b>2. For existing TB containment Lab:</b></p> <ol style="list-style-type: none"> <li>Dismantling and removal of existing list of the items of air handling unit (AHU)/ heating, ventilation &amp; air conditioning (HVAC) system mentioned below and handed over to site for safe and secure storage, planned outside open space of the lab near generator:</li> </ol> <table border="1" data-bbox="438 1478 1444 2024"> <thead> <tr> <th>s.no</th> <th>Items to be Removed and Handed over to the site</th> <th>Make and Model</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td><b>1</b></td> <td><b>Supply Air Handling Unit (AHU)</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Blower</td> <td>Kruger</td> <td>2 numbers</td> </tr> <tr> <td>ii)</td> <td>Motor</td> <td>Crompton Greaves 3 phase induction motor</td> <td>2 numbers</td> </tr> <tr> <td>iii)</td> <td>Cooling Coil</td> <td>8 row cooling coil 2 circuit</td> <td>1 number</td> </tr> <tr> <td>iv)</td> <td>Pre-Filter</td> <td>OEM</td> <td>1 set</td> </tr> <tr> <td>v)</td> <td>Fine filter</td> <td>OEM</td> <td>1 set</td> </tr> <tr> <td>vi)</td> <td>HEPA Filter</td> <td>OEM</td> <td>1 set</td> </tr> <tr> <td><b>2</b></td> <td><b>Exhaust Air Handling Unit</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Blower</td> <td>Kruger</td> <td>3 numbers</td> </tr> <tr> <td>ii)</td> <td>Motor</td> <td>Crompton Greaves 3 phase induction motor 2(5HP/3.7KW) and 1(1HP/0.8KW)</td> <td>3 numbers</td> </tr> <tr> <td><b>3</b></td> <td><b>Condensing Unit</b></td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Compressor</td> <td>Carrier 8.5 Ton</td> <td>2 numbers</td> </tr> </tbody> </table>	s.no	Items to be Removed and Handed over to the site	Make and Model	Quantity	<b>1</b>	<b>Supply Air Handling Unit (AHU)</b>			i)	Blower	Kruger	2 numbers	ii)	Motor	Crompton Greaves 3 phase induction motor	2 numbers	iii)	Cooling Coil	8 row cooling coil 2 circuit	1 number	iv)	Pre-Filter	OEM	1 set	v)	Fine filter	OEM	1 set	vi)	HEPA Filter	OEM	1 set	<b>2</b>	<b>Exhaust Air Handling Unit</b>			i)	Blower	Kruger	3 numbers	ii)	Motor	Crompton Greaves 3 phase induction motor 2(5HP/3.7KW) and 1(1HP/0.8KW)	3 numbers	<b>3</b>	<b>Condensing Unit</b>			i)	Compressor	Carrier 8.5 Ton	2 numbers
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8	<b>AHU Control Panel including Wiring</b>	Kwality power control	1 set
9	<b>UPS (3KVS, 30 mins Backup) for TB Containment LAB Backup</b>	Not Available	NA
10	<b>GI Ducting:</b> Existing GI ducting (Quantity in Rfeet), Total quantity of	OEM	1000 SQFT
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iii)	Pass Box	Bio flit	2 numbers
iv)	Storage Rack	OEM	1 number
v)	Shoe Rack	OEM	1 number
vi)	Split AC (Indoor Unit and Outdoor both)	Lloyd and Samsung	2 numbers
vii)	Work Bench	OEM	2 numbers
viii)	Lab Stools	OEM	5 numbers
ix)	CCTV Camera system	I Safe	1 set
x)	EPBAX System	OEM	3 numbers
xi)	Fire Alarm System	Zicom	4 numbers
xii)	Access Control System	OEM	1 Set
Xiii)	Magnehelic gauge	OEM	2 numbers

3. Shifting and reinstallation of one modular door along with door closures and other assemblies from TB containment lab to existing master mix room of the existing LPA section.
4. Complete putty & whitewash of existing permanent wall of area 1250 sq. Ft and ceiling of the area 480 sq. Ft after complete dismantling of existing interior (puff panels of existing TB containment Facility).
5. Proper levelling and rework of existing cemented flooring before applying new epoxy flooring.
6. Removal of two numbers of split ACs of capacity 2 Tons each including removal of the existing wiring and reinstallation of the split ac in the reading room and BSL2 lab respectively including insulation and appropriate drainage pipes.
7. Supply and provision of two numbers of 32 AMP MCB including necessary wiring for the reinstallation of 2 TR Split ACs in both reading room and BSL 2 lab
8. Supply of additional 4 numbers of ergonomic laboratory chair, designed for infectious laboratory areas:
  - adjustable height to suit different users, seat range approximately 400- 490 mm
  - adjustable-angle back rest (no arm rest)
  - castor wheels
  - all metal parts chrome plated
  - disinfect able with alcohol-containing disinfectants
9. Provision of three service windows to access the ceiling for maintenance purpose as shown in the layout annex 2.
10. Dismantling of existing three Biosafety cabinet (BSC) with external blower including ducting, and permanent closure of ducting opening at wall.
11. Shifting of three BSCs, three refrigerated centrifuges, two microliter centrifuge and two MGIT 960 system along with UPS to safe location (corridor area/existing BSL II room) identified by the site with appropriate bubble packaging.
12. Reinstallation of one BSC (Nuair make) in the existing BSL 2 Lab including the ducting work.
13. Re-shifting and installation of two BSCs, three refrigerated centrifuges, two MGIT 960 system along with UPS from the corridor area to the renovated TB Containment facility in coordination with service provider /OEM.

5	<b>IRL Nagpur</b>	<p><b>1.For existing BSL II Lab:</b></p> <ol style="list-style-type: none"> <li>a) Removal of RCC-brick granite platform of dimension (16' (L) X 2'6" (W)).</li> <li>b) Removal of existing tile flooring of entire BSL II lab area and disposal of waste to a suitable area identified by the site.</li> <li>c) Uniform Kota stone flooring of entire BSL II room of dimension (23'8" (L) X 16' (W)) with appropriate cementing mixture to ensure proper levelling of existing flooring.</li> <li>d) Removal of three numbers of split ACs of capacity 2 Tons each including the existing wiring and reinstallation work in TrueNaat room, Data entry Room and Cold room respectively.</li> </ol>
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		<ul style="list-style-type: none"> <li>e) Supply and provision of three numbers of 32 AMP MCB including necessary wiring for the reinstallation of 2TR Split ACs in TrueNaat room, Data entry Room and Cold room respectively.</li> <li>f) Supply and provision of additional 21 feet copper pipes including insulation and appropriate drainage pipes for the reinstallation of 2TR Split ACs and its outdoor units.</li> <li>g) Dismantling of existing two Biosafety cabinet with external blower including ducting, and permanent closure of ducting opening at wall.</li> <li>h) Shifting of 2 Biosafety cabinets with appropriate bubble packaging to safe location identified by site.</li> <li>i) Two refrigerated centrifuges will be shifted to existing TB Containment Lab and one refrigerated centrifuge will be shifted to safe and secure location with proper packaging by vendor identified by FIND India.</li> <li>j) Removal of existing electrical switch-sockets, ceiling fan, tube lights, CCTV Camera (2nos.) with wiring form the proposed TB Containment Lab including change room and ante room and hand over to the site.</li> <li>k) Removal of existing wash basin including the plumbing lines.</li> <li>l) Existing one glass aluminium window of dimension (5'10" W X 4' H) to be converted in door of dimension (3' W X 6'8" H) and rest space should be covered with brick-mortar with tile dadoing work.</li> <li>m) Existing one glass aluminium window of dimension (2'6" W X 4' H) need to be closed permanently by brick-mortar with tile dadoing work.</li> <li>n) Removal of existing glass aluminum partition from ante room of BSL II lab.</li> <li>o) Removal of existing glass aluminium door (4'10"X 6 '8") to this be converted in emergency exit and the remaining space needs to be closed permanently by brick and mortar with tile dadoing work.</li> <li>p) Removal of existing two glass aluminium-metal grill window of dimension (5'10" W X 4'H) of each (including window of microscopy room and corridor refer existing layout annexure 1) and close the space permanently by brick-mortar with tile dadoing work.</li> <li>q) Permanent closure of existing ventilation window (13 no.) with brick-mortar work.</li> <li>r) Supply and provision of aluminium partition above the ceiling height 8' to the true ceiling height of the proposed change/ante room with a provision of a sliding service passage for maintenance work.</li> </ul>
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Sl. No.	General Works for All Sites	Specifications Compliance /Deviation, if any along with Make and Model of Item Quoted
1	Batteries of UPS should be provided with rack. UPS's with batteries and proper arranged wiring (e.g: wire tie to be used) to be installed and well-arranged/organized for giving aesthetic look	
2	Dedicated earthing to be done for TB Containment Lab	
3	Any Minor Civil, Electrical and Plumbing works identified during Lab renovation other than additional works mentioned needs to be carried out by identified Agency	

**Note: the above lab Wise Additional Work Requirement and Some Site-Specific Detail for TB Containment Lab Renovation Work are already mentioned in the technical compliance sheet (Tech form 8).**

**For Strategic Alliance Management Services Pvt. Ltd.**



**Dinesh Kumar- Manager (Procurement)**