

HOTO (Hand Over Take Over) Sub Committee Report

Tata Primanti Residents Welfare Organisation (TPRWA) vide its notification dated 05.1.2025 formed a Handing Over taking over (HOTO) subcommittee comprising of following members.

1. Ms. Chanchal Batra- VA8
2. Mr Mahendra Singh Koshal-T5/1801
3. Mr. H.K. Verma-T1/3603
4. Mr. Abhay Agarwal-T2/603
5. Mr. Sunil Khanna-T7/3401 GB Member
6. Mr. Rohan Sinha-T7/1102 Gb Member- Co-ordinator

Objective of the HOTO subcommittee as explained by the GB members was to ascertain and verify the handing/taking over of assets, compliance of issues raised, documents/ drawings etc. by THDC to TPRWA vide MoU signed on 14.06.2022 attached with THDC letter dated 30.09.2022 (**Annexure-1**). As per clause 5 (i) of this MoU, the handover of the Project was to be effective only from 1.10.2022.

BACKGROUND:

THDC vide its letter dated 30.09.2022 jointly signed by Mr. Rahul Dadheech, General Manager and TPRWA authorised signatories namely Mr. Raj Kumar Garg, President, Mr. Nikunj Manocha, Secretary and Mr. J. L. Kapoor, Treasurer handed over common areas and facilities of the Project, including its operations and maintenance as per terms and conditions of the above-mentioned MoU. As per para 1 of this letter the maintenance and operations of the complex had been handed over by THDC appointed maintenance agency JLL Building Operations Pvt Ltd (JLLBO Portfolio Team/Account) to TPRWA appointed maintenance agency JLL Building Operations Pvt Ltd, Regional Team w.e.f. 01.10.2022 and TPRWA through its maintenance agency shall carry out maintenance and operations of the complex.

Further, as per para 2 of the letter dated 30.09.2022, control of all maintenance related activities, assets, operations, finance and accounts of the Complex was handed over w.e.f. 00:01 hrs 01.10.2022 which included:

1. Control of all financial related to maintenance and operations and utilities of the complex. Details of all financial documents, all files and documents taken over were described in the List of Files placed as Annexure [B].
2. TPRWA appointed maintenance agency had taken over all the assets, common area, facilities and amenities from maintenance agency nominated by the Company. List of assets handed over was placed as Annexure [C].
3. Copies of compliance documents, approvals, drawings, electrical and other blueprints, plans, permissions obtained, insurance, government authorisations and licenses for Primanti Garden Estate Complex were detailed as Annexure [D].
4. Details of all Apartment owners/ allotted along with copy of handing over documents were attached as Annexure [E].

Para 3 of letter dated 30.9.2022 stated that an updated work list as agreed in the MoU was also enclosed as Annexure [F].

Several physical and online meetings were held by the HOTO subcommittee members.

Sub committee examined the letter dated 30.9.2022 in detail to proceed further and found that following information/document is not available with the JLL office, the maintenance agency of TPRWA, although TPRWA had signed it as taken over.

1. HOTO Roadmap Activity no 2 all actions, 3 all actions and 4 all actions except (e) & (f) as cited at Reference B of the letter dated 30.9.2022.
2. Annexure [B] cited in para 2(a) of this letter which contained the details of all financial documents, all files and documents taken over as described in the list of files. This is important to ascertain taking over of control of all financials related to maintenance and operations and utilities of the Complex. As per sheet annexed, Annexure B of the handover document to be shared by JLLBO on mail and was to be verified by TPRWA. When JLL was asked about this, JLL conveyed that they didn't have this information and now JLL has approached THDC Estate Manager & others for sharing the Annexure [B] vide their emails attached (**Annexure-2**).
3. Annexure-III mentioned in clause 'C' page 3 of MoU dated 14.6.2022 not attached with the MoU. JLL could not provide this Annexure.
4. Schedule-II as stated in para 5(iii) & Schedule-III as stated in para 5(v), page 6 of the MoU were not made available.

Further, as per MoU clause 3 (a) THDC agreed to carry out certain works as in Schedule-I of the MoU solely at its own costs and expenditure. *In addition, THDC at its own costs also agreed to resolve all issues with respect to shortcoming in design and implementation and construction, which may have an impact on the structure of the buildings and has no relation with ageing of equipment/buildings, in the report of audit of the project by third party agency which shall be appointed by the association at its own cost.* THDC further undertook any liability arising with respect to the title of the project and/or any obligations under the approvals obtained by THDC for construction and development of the project, same has to be discharged by the THDC.

For smooth transition, handover was decided in a phased manner as below:

- (i) Handover of common area maintenance, operations of the Project including but not limited to soft services, raising of invoices for common area maintenance.
- (ii) Handover of common areas, common assets, facilities, equipment and amenities.
- (iii) Final handover including transfer of Interest Bearing Maintenance Security (IBMS) and interest accrued therein

As per information, initial two stages of handover has already been completed and the final stage of handover of IBMS is still pending.

HOTO subcommittee categorised the HOTO activity as below:

- A. Assets (Movable and Immovable).
- B. Operational and Financial handover of the Primanti Complex activities.
- C. Documents, Drawings, Regulatory approvals, Permissions etc.
- D. Work/Issue list requiring THDC action.

A. ASSETS (IMMOVABLE & MOVABLE)

(a) LAND

Total land owned by the erstwhile land owners i.e. i.e. M/s Gurgaon Infratech Pvt. Ltd., M/s Landscape Structures Pvt. Ltd. and M/s Ardent Properties Private Limited was about 36.25 acres. Land details are annexed (**Annexure-3**). As per Deed of Declaration executed on 30.9.2020 (**Annexure-4**), land details for Residential Buildings are as below:

1. Land on which the Project has been constructed admeasures 28591.80 sq.mtrs.

2. Land used for Landscape, Paved area, Walkways, Driveways, Open Car Parking etc. measures 118112.58 sq.mtrs.
3. Said land measures 146704.38 sq.mtrs. or 36.2515 acres.

The whole project comprised of 1255 dwelling units (Residents unit-1063 nos. and EWS-192 nos.), Primary School -1, Nursery School-1, Community Building-1, Convenient Shopping-1, Convenient shopping under EWS building-1 and a Lounge/ Recreational Area with Electrical Kitchen on top floor of Tower 2 - 1. Further as per DoD, land area of 0.0515 acres (208.394 Sq. Mtrs.) had been provided for the green belt for Master Plan Road reducing the area of the said project to **36.20 acres** (146495.97 sq.mtrs.)

As per information obtained from JLL and Mr. Raj Kumar Garg, the then President, TPRWA, **physical measurement of the land actually in possession was not done while handing over taking over.**

TPRWA representatives also requested Mr. Harjinder Singh Maan, heading THDC Gurgaon, in a meeting with THDC in January 2025 second week to share the land measurement details, if available with them while taking it over from the erstwhile land owners and handing over to TPRWA. THDC didn't comment on this issue in its email addressed to TPRWA on 31.1.2025 showing their reluctance on this important issue.

While granting license to the then land owners, land area admeasuring 2.606 acres as shown in Revenue aksh sizra map (**Annexure-5**) adjoining block A, D & E of the Larger Property was excluded from the license due to DTCP open space zone policy. The open space zone land area adjoining D & E blocks has been encroached with haphazard temporary tin shade construction which imposes serious security threat to the peaceful and secure living of residents in society.

RECOMMENDATIONS:

1. Physical measurement of open areas within boundary of Primanti and Verification of the construction (as per approved FAR) & open area as per DTCP approved plan and Deed of Declaration (DoD) is required. For any gap in constructed area or open area, matter should be taken up with THDC. *Area of land in actual possession of TPRWA needs to be got accessed through measurement either from government agency (Tehsildar, Badshahpur) or certified surveyor having a legal sanctity of its report/finding.*
2. No record/documents regarding the title of land, mutation etc. available with RWA/JLL. These documents need to be obtained from THDC.
3. Pursue for Nursery School which has not been provided so far.
4. Encroachment on land in Open Space Zone adjoining D & E blocks need to be got removed by THDC to avoid any security concerns. As no construction can happen on the land in Open Space Zone of Manesar/Gurgaon Master Plan and it being contiguous to the Larger Property (A, D & E blocks) it should be made over by THDC to TPRWA.

(b) CIVIL STRUCTURE:

HOTO couldn't observe any due diligence/efforts, few of which are as below, for ensuring Civil Structure Compliance as assured by THDC prior to its taking over.

1. Whether buildings along with gardens, club, sports amenities etc. have been built as per DTCP approval plans and actual construction had been verified vis a vis approval document?
2. Whether applicable National Building Code (NBC) has been followed in construction of building?
3. Whether various items in common area, their warranty periods and necessary action to be taken by vendors/builder – like exterior paint, firefighting equipment, drainage of common area – parks etc. and leakage from them into underground structure/ basements etc. has been verified?
4. Whether due diligence as cited below was done to ensure as to whether structure of building is strong as claimed by builder in its documents.
 1. Visual inspection of all underground and high structures to understand and identify defects and distress.
 2. Structural and non-structural distresses with detailed backup of causes of distress and likely remedial measures.
 3. Faults in structure were needed to be identified and appropriate tests to verify the same.
 4. Review of Structure Design and Drawings.
 5. Physical Inspection based on NDT (Non-Destructive Test).
5. Whether desired quality of material and desired mixture of various building materials, i.e. cement, steel, sand etc. has been used in construction of building?
6. Verification of constructed and open area with the DTCP approved plan and Deed of Declaration.
7. Review the installation as per IS code/ECBC guidelines as applicable

RECOMMENDATION:

As per TPRWA Explanatory Statement for the AGM dated 3rd July 2022 (**Annexure-6**) with respect to the expense for the survey of assets before takeover which is reproduced as **“Looking at the high cost of structure audit, TPRWA shifted the obligation of getting the structure audit on Tata Housing and they have agreed. Scope of structure audit was also shared with Tata team based on inputs received from our resident volunteer to which Tata has agreed.”**

This point needs to be further pursued by TPRWA with THDC.

(c) MECHANICAL, ELECTRICAL & PLUMBING (MEP):

Annexure [C] of letter dated 30.9.2022, enlisted details of 1260 MEP asset items jointly signed by the JLLBO Portfolio team (Maintenance Agency of THDC) & TPRWA primarily indicate Asset/Equipment Name, OEM etc. Block/Location wise. On perusal of this list, it is found that many fields under columns such as OEM/Make, Serial Number etc. were left blank. JLL was asked to complete such details as JLL was the agency from both sides i.e. THDC & TPRWA in handing over taking over process. Physical checks on major listed items such as HT meter, Transformers, DG sets, HT/ LT panels having ACBs/ VCBs, Fire Pumps, Water Pumps, Fuel Pumps etc. were made along with JLL staff. The observation of physical check is attached to the remarks of the list (**Annexure-7**).

After taking over these assets, TPRWA decided for MEP assets audit and assigned it to M/s NS Properties Guide Advisors Private Limited (PROPCHK), New Delhi. The scope of work and the tasks to be executed by this agency were as below:

SCOPE:

- Thorough assessment of the MEP utilities & services in Common Areas only.
- Design compliance, Operations, Efficiency and Safety.

TASKS:

- **Review:** Design Basis Report (DBR), Technical Specifications, Centralised Control System, AMC Documents, Safety Compliance, MEP Installation.
 - **Validation:** As Built Drawings, Fire Fighting System.
 - **Verification:** Design Changes, Material Approvals, Regulatory Approvals, Warranties, MEP Installations.
 - **Assessment:** Impact on Design Changes, Operational Efficiency.
 - **Testing:** Fire Fighting Central Control System, MEP Functions.
- PROPCHK after comparative study of DBRs, As Built Drawings and Actual on Site and submitted three reports in 2023 namely Executive Summary, MEP Inspection Report and MEP Issues & Observations (Annexure-8a, 8b & 8c).

HOTO sub committee relied upon the Issues, Snags, Missing Drawings/Documents etc. in respect of MFP assets as observed by PROP CHECK in its MEP Audit reports.

(I) SUB STATIONS (33KV/11KV and 11KV/0.4KV)) and DIESEL GENERATORS:

Chief General Manager, Commercial, DHBVN Hisar vide Memo No. Ch-16\SE\C-Sol-121 Dated: 22.7.16 (**Annexure-9**) approved a Bulk Supply (domestic) 33KV HT connection with following details /requirements:

- Approved/Sanctioned load: **9400KW/10444KVA**
- Ultimate load requirement: **13421KW/14912KVA**
- Independent u/g feeder: **Double run 3CX 300 mm² XLPE cable.**
- The Power transformer installed capacity approved: **2x6.3/8 MVA 33/11KV.**
- For distribution (**11KV/0.4KV**) dry type distribution transformers capacity approved to be installed were of **19250 KVA i.e. 3x2500 KVA+3x1250KVA+4x2000KVA.**

The Estimated Demand Load with reference to As Built drawing is 9.6 MVA. DHBVN has provided 33 KV Main Electrical Feeder for which 2x33/11 KV, 6.3 MVA oil type Power transformers have been installed at Power Station in Block C from where 11 KV supply is going to four 11KV/0.433KV distribution substations namely **SS1 (Block D), SS2 (Block E), SS3 (Block A Ph-1) and SS4 (Block A Ph-2).**

OBSERVATIONS:

1. **Connected Load Vs Contract demand:** Total connected load as per DBR was **39835 KVA** (SS1, SS2, SS3, & SS4 was 11217 KVA, 6817 KVA, 7633 KVA & 14168 KVA respectively) whereas as per As Built Drawing it was **50923 KVA** (SS1, SS2, SS3, & SS4 was 15483 KVA, 8960 KVA, 9082 KVA, 17398 KVA respectively). Contract demand got sanctioned from DHBVN is **10444KVA** with ultimate requirement as **14912KVA**.

Mr. Rahul Dhadheech, GM THDC vide email dated 6.7.2023 (**Annexure-10**) informed that **"Post initial assessment, it is found that following changes are required to be done in Primanti HT/LT distribution network:**

- a) **An another 1600KVA transformer to be added in 33/11KV network.**

b) An another 1600KVA transformer to be added in sub station 4, in 11/0.425 KV network

c) Subsequent changes in Incomer and Outgoing Panels for the same.

All associated cost due to these changes would be taken care of by the developer. These changes might take approximately 6 months to implement considering various internal budget/approvals etc. we would conduct a meeting with relevant stake holders, and share implementation plan, in due course of time.

In response to this email, Mr. Nikunj the then Secretary, TPRWA questioned that "does this bring us to the ultimate load capacity of 14912 KVA as sanctioned by DHBVN?" Thereafter, this matter was not pursued further.

- 2. Main 33/11KV Sub Station:** Power transformers (33KV/11KV) capacities should have been installed **2x6.3 MVA/8 MVA** for approved/sanctioned load and a much larger capacity for the ultimate load requirement of **13421 KW/14912 KVA**. THDC installed 2x6.3 MVA transformers of Universal make, both of which were found to be of underrated capacities later. One of these two transformers got faulty in 2019 when THDC was managing the society and the other one gone faulty in 2023 during TPRWA management. **Incidentally, JLL had been managing the operations and maintenance of these transformers at both the occasions. Agencies who repaired these transformers found both transformers much below its stated capacity of 6.3 MVA, after evaluating the copper & laminations core.** MEP audit reflected following major observations:
- a) As built drawing not available except cable routing. Hence, study of deviations on As built drawings was not feasible.
 - b) Digital copies of drawing, Technical Specification, Historical Data & Log Entry were not available
 - c) Both transformers were non-functional and a rented transformer of 6.0 MVA was in service.
 - d) Backup transformer was not grounded properly.
 - e) No ventilation provisioned in Charger and battery room.
 - f) No emergency lights and exit signs
 - g) Panel Fire Suppression Systems were not present for Switch gears.
 - h) Cracks observed at ceiling of 11 KV SG room.
- 3. 11/0.415 KV Distribution Substations:** Total capacity of 11KV/0.4KV transformer installed by THDC is **12500 KVA** against DHBVN approved capacities of **19250 KVA**. Transformer's capacity as per DBR was **2x7250 KVA i.e. 14500 KVA** (SS1+SS2+SS3+SS4 should have been 2x2000 KVA+2x1250 KVA+2x1600 KVA+3x1600 KVA capacities respectively) against installed capacity of **12500 KVA** (SS1+SS2+SS3+SS4 of 2x2000 KVA+2x1250 KVA+2x1000 KVA+2x2000 KVA) only. Major observations of MEP audit on substations were as below:
- a) As per DBR the distribution sub stations (SS1, SS3 & SS4) should have been installed at upper basement but actual on site are at basement 2 of 3.
 - b) Occasional tripping and Voltage Fluctuation in 11 KV Switch gear SS1, SS2 & SS4.
 - c) Metering unit nonfunctional at SS1 & SS4.
 - d) Heavy water leakage through earthing strip in SS3 A block Ph1 and SS4 A block Ph 2. Water leakage through earthing bars in switch gear room SS1 D block, SS2 E block. This may lead to increase in equipment failure, safety and fire risk, increased brownout/blackout instances, personnel accidents.

- e) 75 of 300 KVAR of Capacitor Bank-2 was burnt in SS3.
- f) Power factor not maintained in SS3. Failed automatic operation.
- g) In Block C-LV panel, 1000A ACB Incoming in downstream of respective 800A ACB outgoing from SS3. In Block B-LV panel, 800A ACB Incoming in downstream of respective 630A ACB outgoing from SS4
- h) Fire Suppression System non-functional in SS3, SS4. False alarm generated.
- i) Connections to the Earthing pits were not intact at multiple locations. Earthing pits couldn't be identified for many high side equipment in Block E & Block A Ph 2.
- j) Inadequate ventilation in SS1, SS3 & SS4.

Inferences drawn from tests conducted on:

1. 11/0.433 KV transformer:

- Unbalanced loading
- Significant heat loss
- Voltage regulation not in coordination etc.
- Resonance in windings

2. Air Circuit Breakers (ACBs):

- Unbalance loading
- Metering unit nonfunctional
- System not synchronised and coordinated
- No surge protection devices
- No digital integration
- Faulty Spring Charge Mechanism.

3. LT panels:

- Faulty capacitor banks
- Unmaintained LT panels
- Fire Suppression System (FSS) not operational
- Uncoordinated breaker and relay settings
- No Surge Protection Devices (SPD) and High Rupturing Capacity (HRC) fuses
- No Digital Monitoring.

4. Harmonics tests:

- No Harmonics Filters installed
- Current and Voltage harmonics distortion beyond acceptance
- Poor Power quality i.e. unbalanced loading
- Neutral Overloading, Fluctuations
- Unoptimised operations
- Lower life span of Low Voltage (LV) and Extra Low Voltage (ELV) equipment.

5. Earthing tests:

- Damaged Earthing connections
- Neutral Earthing for DG not in compliance to standards
- Earthing Resistance above 1 ohm
- Potential electric shock
- Earthing pits not maintained and without markings.
- Component failures (Elevators ELV)

- 4. Diesel Generators:** For 100% power backup, THDC should have provisioned total DG sets capacity of **19250 KVA** equivalent to the sub stations capacity. As per MEP audit report, total DG sets installed capacities is **13540 KVA** including the capacity of standby DG sets. The details of which are 3x1250KVA+1x500KVA (SS-1), 2x1010KVA+1x500KVA (SS-2), 2x1010KVA+1x500KVA (SS-3) and 3x1250KVA+1x500KVA (SS-4). SS1 & SS2, SS3 & SS4 are tied for redundancy. DG sets as per DBR were to be installed of **17540 KVA** capacity (4x1250 KVA, 3x1010KVA, 2x1250KVA+1x1010KVA

and 4x1500KVA for SS1, SS2, SS3 & SS4 respectively) but actually installed only **13540 KVA** capacity (3x1250KVA+1x500KVA, 2x1010KVA +1x500KVA, 2x1010KVA+1x500KVA & 3x1250KVA+1x500KVA respectively for SS1, SS2, SS3 & SS4 respectively). As per MEP audit report, major observations were as below:

- a) Automatic operation was nonfunctional. Manual Operation in SS1, SS2, SS3 & SS4.
- b) In SS1- Burnt Bus Bar of DG 3 and hot shutdown of DG4.
- c) In SS3- DG1 control unit was nonfunctional, coolant pipe tied with wire. DG2 oil leakage from equipment. DG3 frequent failure at VCB.
- d) In SS4- DG1 fluctuating RPM 1300-1700 RPM. In DG3 Starting Error, Faulty Engine Control Module (ECM).
- e) Fresh air fans were nonfunctional in SS1.
- f) Insufficient wall clearance for DG4 in SS1 (922mm Only). It is not sufficient to open enclosure door.
- g) HSD yard was not operational at the time of handover. In HSD yard at gate no 3, **2x40KL** storage is provided against **3x40KL** proposed in DBR.
- h) Poorly maintained DGs impact Reliability, Efficiency, Environmental Impacts, Disrupt Critical Operations.

Inference drawn from tests conducted on DG sets were:

- **Manual operation**
- **Non operational HSD yard caused to loss pf fuel, increased labour cost, increase in personnel for accounting, poor DG efficiency**
- **Inefficient operation**
- **Foundation level not compliant to standards**
- **Significant change over time**
- **Damaged earthing connections.**

(II) PLUMBING SYSTEM:

It is divided into two phases.

- Phase-I Block A (Tower 3 & 4), Block D (Tower 1 & 2) and Block E.
- Phase-II Block A (Tower 5, 6, & 7) Block B & C and Club house.

a) UNDERGROUND TANKS (Fire, Raw & Domestic) - Block E:

- i. In underground tank the Level gauge was not available. Overflow provision only.
- ii. In Plant room Block E, the Hydro Pneumatic System (HPN1) VFD was not working. Pressure Vessel was not working due to leakage. Hydro Pneumatic System (HPN2)- Pump was operated manually due to electric panel issue.
- iii. Activated Carbon filter (ACF)- Penal Grade (PG) was faulty
- iv. No comment on Multi Grade Filter (MGF)
- v. Softener system was not working. Brine tank (a component of water softener system) was empty.

b) UNDERGROUND TANKS (Fire, Raw & Domestic) - Block A:

- i. In underground tank the Level gauge was not available. Overflow provision only.
- ii. In plant room the Filter feed pump was manually operated
- iii. In Plant room Block A, the Hydro Pneumatic System (HPN1) - VFD was not working. Manual and Auto both. Hydro Pneumatic System (HPN2) -VFD was not working. Manually operated. Pressure gauge was faulty. Hydro Pneumatic System (HPN3)- VFD was not working. Manually operated.
- iv. Activated carbon filter (ACF)- Penal Grade (PG) was faulty
- v. No comment on Multi Grade Filter (MGF)
- vi. Softener system was not working. Brine tank was empty. No pressure gauge on softener.

c) DOMESTIC OVERHEAD TANKS:

- i. 4x6.75KL at site Vs 4x13KL as per DBR in Tower 4.
- ii. 2x17KL at site Vs 2x19KL as per DBR in Tower 6.
- iii. No maintenance space is available due to panel installation in Tower 5.
- iv. Booster pumps for top 4 floors in all towers.

d) PHE Pumps:

Unmaintained PHE pumps will increase O&M cost, Water Wastage, reduce Pump life span & degrade water quality.

Inference drawn from PHE tests conducted:

- Ineffective Softener (treated water hardness 160 mg/L)
- Variable Frequency Drive (VFD) not working
- Faulty Auto Operation of Pumps
- Faulty Motorised Valves
- In effective Drainage System.

(III) RAINWATER HARVESTING (RWH):

40 RWH pits are there in all blocks (A-11, B-8, C-6, D-7, E-8). Storm Water Drainage operation from Block A, C & D pits is by Gravity and then its is pumped to GMADA drain using Block C RWH Pumping station. Storm Water Drainage operation of Block E to GMDA drain is by using Block D RWH Pumping station. Storm Water Drainage operation from Block B is by Gravity and then by pumps of Block B RWH Pumping station to GMDA drain. Reference documents of Pumping stations of Block B, C & D were not available and could not be identified at site. One pump each was reported faulty in Block E RWH pit no 16 & 19.

(IV) SEWAGE TREATMENT PLANT (STP):

- i. **STP block D:** Issues observed by MEP audit were Bar Screen damaged. Grease chambers drain line were choked and chamber was full with grease and sludge due to failure of Bar screen. Pump P-1 was not working properly, service required. Pump P-3 was without motor. Strainer was missing. 6 Nos. of diffusers were not working for Sequencing Batch Reactor SBR-1. 5 Nos. of diffusers were not working for SBR-2. RAW Sewage Transfer Pump (1W + 1S) not working. One Sump Pump (1W + 1S) was faulty. Sludge Transfer Pump (1W+ 1S) not working and panel was also faulty. One of the Filter Feed Pump (1W + 1S) was faulty. Treated Water Transfer Pump (EA, T3 & T4, T1 & T2) installed but was not working. One Irrigation Pump (1W+1S) and one Screw Pump (1W+1S) were not available. Ultra Violet System was faulty. Chlorine Dosing System was not working. Poly Dosing System was not working.
- ii. **STP block B:** Issues observed by MEP audit were one pump of RAW Sewage Transfer Pump (2W+ 1S) was not in operation. Sludge Transfer Pump-2 (1W+ 1S) set was not in operation and Poly Dosing System was not working. One pump and all meters of Filter Feed Pump (1W+ 1S) were not working. Both pumps of Treated Water Transfer Pump _ Flushing (1W+1S) for T5, T6 & T7 were not working. Treated Water Transfer Pump_Flushing (1W+1S) for EA, Pressure vessel was not connected, and level gauge was not available. Irrigation Pump (1W+1S), Pump Housing was damaged, Pump failed to operate manually, and Water Meter was not working. Both pumps in Screw Pump (1W+1S) were not working. No belt was available in one Screw pump. Water Meters were not working In Multi Grade Filter and Activated Carbon Filter. Ultra Violet System was not working.

iii. **Quality parameters:** Block B STP quality parameters were not meeting the Haryana Pollution Board references in respect of Chemical Oxygen Demand (COD), Total Suspended Solids (TSS) & Biochemical Oxygen Demand (BOD) parameters which were 97.6Mg/L, 78.5Mg/L & 13.7MG/L against <50MG/L, <20MG/L and <10MG/L respectively.

iv. Non Operational STP would increase cost of fresh water, health risks, environmental Impact, door & nuisance, water pollution and legal consequences.

Inference drawn from tests conducted on STP:

- **Water parameters at STP plant block B beyond acceptance**
- **Treated water not consumed optimally**
- **Flushing water tanks filled with domestic water**
- **Filter press system not in operation**

(V) FIRE FIGHTING SYSTEM:

i. Fire Fighting Plant Room in Basement-1, Block E:

It covers Block D (Tower 1 & 2) and Block E. Reference drawings were not available for Hydrant, Sprinkler, Diesel, Jockey, Water curtain Main/Diesel pumps and Fire Hose Cabinets (Internal & external)

ii. Fire Fighting Plant Room in Basement-2 Block A:

It covers Block A (Tower 3,4,5,6&7), Block B, C & Club house. Reference drawings were not available for Hydrant, Sprinkler, Diesel, Jockey, Water curtain main/diesel pumps and Fire Hose Cabinets (Internal & external)

Inference drawn from tests conducted on Firefighting System:

- **Faulty Water Curtain System,**
- **Faulty Booster System (EA3),**
- **No Building Management Solution (BMS) Integration.**

(VI) HEATING VENTILATION AIR CONDITIONING (HVAC) SYSTEMS:

Air-conditioned spaces are fed by Variable Refrigerant Flow (VRF) systems.

Phase 1 covered Block A (Tower 3 & 4), Block D (Tower 1 & 2), Block E and club house.

Phase 2 covered Block A (Tower 5, 6 & 7), Block B & C, Block E and club house.

MEP audit finding on HVAC systems were as below:

- Ventilation layout drawing matrix for Blocks B, D, E not available. AC layout of club house not available. Ventilation ducts damaged.
- Smoke exhaust fans were not installed for zone 1, 2 & 3 of basement 1 Block A (Phase2).
- Normal exhaust fan not available for zone 3 of basement 2 Block A (Phase1). **Exhaust normal (58000CFM-1 No) and Exhaust Fire (44000CFM- 2 Nos.) in Zone 5 did not exist although shown in as built drawing.**
- Exhaust fans not present (provisioned) in Machine Room, Control Room of MRL elevator.
- Smoke exhaust fans were not available for zone 1 & 2 of basement, Block B.
- Smoke exhaust fans were not available for zone 1 & 2 of basement, Block C.
- As built drawing not available for ventilation fans of all zones of Basement 1,2 & 3, Block D.
- As built drawing not available for ventilation fans of all zones of Basement Block E.
- Other observations included damaged ventilation ducts, forced ventilation not maintained leading to temp rise and improper installation of exhaust gravity louvers.

(VII) LIGHTENING PROTECTION SYSTEM (Towers)

- Air terminals are not installed in the centre
- Down conductors installed only on one facade having much less than minimum separation.

(VIII) ELEVATORS

- Emergency dummy landing not identified
- Car position indicator not found at some floors
- Significant floor levelling time & Jerk (Quality of Service)

(IX) ELEVATOR MACHINE & CONTROL ROOM (MRL)

- No Exit signage
- LUX level not maintained
- No emergency light
- No ventilation & air-conditioning leading to rise in temperature of PCBs, Reliability and life span, O&M cost, Panic events
- Malfunctioning of Control panel.

(X) TELECOM & FIRE CONTROL ROOM

- No Exit signage
- LUX level not maintained
- No emergency light
- Inadequate AC provision
- Camera malfunctioning.

(XI) CORRIDOR & STAIRCASE LIGHTING

- LUX level much below minimum recommended level
- Florescent lamps used
- LED recommended.

(XII) ISSUES AS HIGHLIGHTED BY TPRWA TO MEP AUDIT TEAM

• SEVERITY LEVEL- HIGH

- Block E getting flooded, water entering into Villas
- Water seepage into electrical rooms/ panels, especially in Block D
- Heavy DG billing
- Tripping during electrical faults not localised
- Frequent failure of 33/11 kV Oil Type distribution transformer
- Over flooding STP in monsoon
- Leakage of domestic water lines in high rise buildings
- Voltage fluctuations
- Rainwater dripping inside villas from ceiling
- Empty water tanks/ Insufficient water supply in villas
- Automatic water level monitoring system not operational
- Frequent power brownouts
- Lift entrapment issues because of PLC malfunctioning

• SEVERITY LEVEL- MEDIUM

- Heavy Jerk in elevators
- Problem of smell from STP at Block B
- Foul water smell in some villas
- Motorised shutters of garage malfunctioning
- Slab leakage in basementS
- Switching and communication issues of CCTV

Operational issues highlighted in the MEP audit were discussed with JLL with regard to action taken and present status. The details are annexed at **Annexure-11**.

DEVIATION SUMMARY:

SERVICE	REQUIRED	PROVIDED	REMARKS
33/11 KVA Power Transformer	66/11KVA	33/11KVA	DBR Vs Actual
11/0.415 KVA Distribution Transformers	19250 KVA	12500 KVA	Approved Vs actual
Connected Load	39835 KVA	50923 KVA	DBR Vs As built
11KV SS1	Upper basement	Basement 2 of 3	DBR Vs Actual
	ACB 630A	ACB 800A	As built Vs Actual
	DG 4x1250KVA=5000KVA	3x1250+1x500KVA=4250KVA	DBR Vs Actual
11KV SS2	ACB 630A	ACB 800A	As built Vs Actual
	DG 3x1010KVA=3030KVA	2x1010+1x500KVA=2520KVA	DBR vs actual
	TPN AI Bus bar 2000A	2500A	As built Vs Actual
11KV SS3	Upper basement	Basement 2 of 2	DBR Vs Actual
	Transformer 2x1600KVA=3200KVA	2x1000KVA=2000KVA	DBR Vs Actual
	DG 2x1250+1x1010KVA =3510KVA	2x1010+1x500KVA=2520KVA	DBR Vs Actual
11KVA SS4	Incomer of MDB1 400A	250A	As built Vs Actual
	Upper basement	Basement 2 of 2	DBR Vs Actual
	Transformer 3x1600KVA=4800KVA	2x2000KVA=4000KVA	DBR Vs Actual
	DG 4x1500=6000KVA	3x1250+1x500KVA=4250KVA	DBR Vs Actual
	ACB 630A	ACB 1250 A	As built Vs actual
HSD Yard	HSD Storage 3x40KL	2x40KL	DBR Vs Actual
Lighting	MINIMUM LUX LEVEL NOT MAINTAINED. NO SELF ILLUMINATED EXIT SIGNS		
Earthing	Earthing resistance going upto 5 ohms		
Lightening Protection	All terminals were not in centre of the respective buildings Down conductors only on one facade		
Elevators	Emergency dummy landing not located at every 11mtrs.		

B. REGULATORY COMPLIANCES

Regulatory Compliance of assets such as Civil structure, Club house, Restaurant, Lifts, Fire equipment, DG sets etc. had neither been verified at the time of operational/assets taking over nor while doing MEP audit especially on following:

1. Whether all Regulatory approvals were in place?
2. For conditional approval, if any, whether associated conditions have been complied with?
3. Whether Chief Electrical Inspectorate (CEI) clearance obtained from safety angle for all substations?
4. Whether any further approval/sanction/certificate was required (other than annual NOC's required for lift, swimming pool etc.).
5. Whether there was any cost associated till the time any further certificate/approval/sanction was obtained (for example completion certificate).
6. Whether there was any monthly/quarterly/half yearly/yearly fee payable to the Government or any semi govt. agency till the time certificate/approval/sanction is obtained
7. Whether builder has provided all required Documents/Design Reports/Drawings/Approvals etc. to the association and the design and drawings were certified by proof checking agency deployed by builder.
8. Whether any attention was paid to design and detailing of reinforcement drawings with respect to Seismic Codal Provisions, Soft Story Analysis etc?
9. Whether electric load required for the condominium has been approved by DHBVN and whether desired/approved load has been availed?
10. Whether review/observation on all approvals mandatory for Group Housing like DTCP Approval Plan, Building Service Estimates, Fire Scheme, Electrical Load, Environmental clearances, STP CTC and CTO, OC and CC etc. was done?

This task although was part of the MEP audit Professional fee yet not completed by the MEP audit agency.

C. PENDING ISSUES:

The status of the compliance and sign off on the pending issues listed in Annexure-[F] of the MoU while taking over the operational handover is attached in the **Annexure-12**. HOTO sub committee couldn't observe compliance on these pending issues as no SIGN OFF were available/taken from the THDC. Several issues still exist, but THDC has shown all pending issues completed. RWA has been spending huge amount on these pending issues since take over. Few are listed below:

1. Basement leakage issues still exist in all blocks. In A block, the heavy water ingress observed through passage for electric cable entering the Electrical equipment room from revenue road. In all other blocks too, water leakages to basements is continuing which is damaging the structure.
2. Despite THDC management assurance on '**D block others' land and land between A & D block**' issue that they will not leave any stone unturned **including purchase of land** within the legal terms to address issues related to this land, issue is still pending and THDC has washed away its responsibility saying that the Project had already been handed over. Within a few months of the handing over of the project, residents had been put to fighting legal cases involving huge expenditure over this pending issue. THDC despite knowledge of owners of the others' land, misled the TPRWA by apprising that the remaining patch of land belongs to unidentified group of individuals

and they had tried to approach different parties to identify them whereas THDC knew the owners of this land in 2016 itself while defending case on Right of Way (RoW)/ access to the others' land in D block in Revenue Commissioner's court at Gurgaon.

3. No Sign Off exists from TPRWA regarding proper and satisfactory functioning of Boom barriers. Within months of taking over the project, residents started complaining about the poor functioning of boom barriers forcing the RWA to take up the replacement of the boom barriers in 2023-2024. Residents had to pay for this avoidable expenditure of several lakhs through CAM enhancement.
4. Organic Waste Compost (OWC) installation is pending due to non-identification of location by TPRWA.
5. Provision of common facilities such as Driver Rooms, Staff Cafeteria, Changing Area, Lockers Room, Fireproof Cabinets for documents.
6. HSD Yard was not made operational at the time of handover. One 40KL HSD storage still not provided.
7. Resolution of CAM arrears was not completed as it was shown as "in progress".
8. Separate Electricity Connections for EWS units and School are not provided.

D. DOCUMENTS AND DRAWINGS:

As per Annexure [D] of MoU, a list of photocopies of Compliance Documents, Approvals, Drawings, Plans and Layouts is attached. Whatever documents were handed over and available with the JLL were not properly organised, kept and stored safely. JLL was requested to segregate all available Documents/Drawings etc. equipment wise and get these verified to the HOTO subcommittee. JLL informed that due to lack of clarity on as to what type of documents and of which equipment was taken over, it would not be feasible for them to get the attached list of Compliance Documents, Approvals, Drawings, Plans and Layouts with Annexure [D] of MoU verified to the HOTO subcommittee. However, HOTO subcommittee asked JLL staff to prepare a list of whatever available Documents/ Drawing with them (**Annexure-13**) and properly organise by segregating these documents equipment wise in separate box folders and store them safely. Civil Structural drawings of the Project are not available. As per clause 13 (2) of the issue list, Fireproof cabinets for documents were to be provided by THDC. No such fireproof cabinets were found existing in the RWA/JLL office.

As per MEP audit of assets, it was reported that following documents were not available.

1. Reference DBR/Drawing of Plant Room Block E and Block A.
2. Reference Drawings of Domestic Overhead tanks.
3. Reference documents of Rain Water Harvesting (RWH) Pumps block B, C, D & block E RWH 12 to 19.
4. Reference Drawings of Fire Plant Room block D & E
5. Reference Drawings of Fire Hydrant Control (FHC) Internal & External block A, B & C
6. Reference DBR for Water Curtain Main & Diesel pumps of Fire Plant Room Block A & Block E.
7. Reference Drawings of Water Curtain System basement single zone of Block B & C.
8. Reference Drawings of overhead Fire Tank of Tower 1, 2, 3, 4, 5, 6, 7, EA1 to EA 8
9. As built Drawing of Ventilation fans basement 1, 2 & 3 of Block D and Block E.
10. As built Drawing of Ventilation fans for exhaust fire basement 1 Block A Phase 2, Basement of Block B & C.
11. Tripartite agreement signed with HPVN and DHBVN.
12. Historical Data, Documentation and Maintenance schedule of DG sets Earthing.
13. Historical Data, Documentation and Maintenance schedule of LT panels.
14. Historical Data and Documentation of Transformers

E. ACTION POINTS AT TPRWA:

TPRWA should ensure action on following issues prior to final stage of handover from THDC i.e. IBMS taking over.

1. Area of land in actual possession of TPRWA needs to be got accessed through measurement either from government agency (Tehsildar, Badshahpur) or certified Surveyor having a legal sanctity of its report/finding. Format for application to Tehsildar is at **Annexure-14**. Original revenue records of land made over to TPRWA are not available. Status & need of mutation of land in revenue records need to be checked at TPRWA level.
2. Provision of a Nursery school as per the Deed of Declaration.
3. Removal of encroachments on land falling under Open Space Zone adjoining D & E blocks from THDC to ensure security of residents.
4. THDC be asked to initiate the Structural Audit of Project Primanti as agreed with the then TPRWA team as mentioned in the explanatory statement for the AGM dated 3rd July 2022 which is reproduced as **"Looking at the high cost of structure audit, we shifted the obligation of getting the structure audit on Tata Housing and they have agreed. Scope of structure audit was also shared with Tata team based on inputs received from our resident volunteer to which Tata has agreed."**
5. Seek compliance from THDC to the MEP audit report deviations and issues of work list still pending/open from TPRWA side as below:
 - a) Upgrade DHBVN sanctioned load of **9400KW/10444KVA** to ultimate load requirement of **13421KW/14912KVA** as projected to DBHVN in view of the Actual Connected Load of 50923 against Connected Load of 39835 KVA as projected in Design Basis Report.
 - e) 11/.4KVA Distribution transformers capacity upgrade from installed capacity of **12500KVA** to DHBVN approved capacity of **19250 KVA**.
 - b) Transformer's capacity installed is **12500 KVA (2x6250 KVA)** (SS1+SS2+SS3+SS4 = 2x2000 KVA+2x1250 KVA+2x1000 KVA+2x2000 KVA) only against **14500 KVA (2x7250 KVA)** (SS1+SS2+SS3+SS4 should be 2x2000 KVA+2x1250 KVA+2x1600 KVA+3x1600 KVA respectively) as per DBR.
 - c) Upgrade SS3 11/.4KVA transformer capacity to **3200KVA (2x1600KVA)** as per DBR from **2000KVA (2x1000KVA)** actually built.
 - d) Upgrade SS4 11/.4KVA transformer capacity to **4800KVA (3x1600KVA)** as per DBR from **4000KVA (2x2000KVA)** actually built.
 - e) For 100% power backup, THDC should have provisioned total DG sets capacity of **19250 KVA** equivalent to the sub stations capacity. As per MEP audit report, total DG sets installed capacities is **13540 KVA** including the capacity of standby DG sets.
 - f) As per DBR, Diesel Generator sets were to be installed of **17540 KVA** capacity (4x1250 KVA, 3x1010KVA, 2x1250KVA+1x1010KVA and 4x1500KVA for SS1, SS2, SS3 & SS4 respectively) but actually installed only **13540 KVA** capacity (3x1250KVA +1x500KVA, 2x1010KVA +1x500KVA, 2x1010KVA+1x500KVA).
 - g) Bulk HSD Storage yard should have 3x40KL tanks whereas THDC provisioned 2x40KL tank storage only. Additional 40KL storage to be got provisioned.

- f) Reimbursement of upgradation/repair expenses incurred by TPRWA on underrated 6.3 MVA Universal make Transformer (T2) from THDC.
 - h) Provision of Harmonic filters for ensuring Current and Voltage Harmonics distortion within acceptable limits, Balanced loading, Neutral overloading, Controlling fluctuations, Optimised operations etc.
 - i) Provision of Building Management Solution (BMS) integration for Fire Control Equipment.
 - j) All Lightening Protection Terminals are not in the centre of the respective buildings and down conductors provided only on one facade. Being a security issue, necessary action on priority needed.
 - k) Clarification on mandatory requirement for Emergency dummy landing for Elevators in high rise towers for not locating at every 11mtrs.
 - l) Work out details of expenses incurred with material and manpower for attending to faulty equipment, deficiencies etc. by TPRWA as highlighted in the MEP audit report and seek compensation from THDC.
6. Necessary documents and a certification form THDC may be obtained for ensuring necessary Regulatory Compliances about the Project.
 7. Immediate action needed from THDC for sign off on Open/Pending points of the work list especially following:
 - a) Basement leakage issues in all the blocks as these are weakening the structure. In A block, the heavy water ingress into the electrical equipment room through electric cables passage from revenue road observed.
 - b) Address the issue of 'D block land and land between A & D block'. This issue is still open from TPRWA side. Seek reimbursement of huge legal expenses incurred by TPRWA on this since take over.
 - c) Organic Waste Compost (OWC) installation.
 - d) Provision of common facilities such as Driver Rooms, Staff Cafeteria, Changing Area, Lockers Room, Fireproof Cabinets for documents.
 - e) Resolution of CAM arrears as it was shown as in progress.
 - f) Seek complete record of parking allotment to owners slot/block wise.
 8. Seek pending DBR/As built/Structural Documents/Drawing of Project Primanti.
 9. Although JLL confirmed to HOTO vide details at Annexure-11 that most of the operational issues pointed out in the MEP reports have been attended yet HOTO is of the view that a technical sub committee with appropriate mandate may be formed to oversee and ensure that all operational issues highlighted in the MEP report are attended fully.
 10. Brigadier Kaushal opined that any team nominated by TPRWA to deal with THDC on handing over must have representatives from HOTO sub committee, since they have detailed knowledge of issues.


(Chanchal Batra)

*out of country**
(MS Koshal)


(Abhay Agarwal)


(Rohan Sinha)


(Sunil Khanna)


(HK Verma)

Enclosures: as above

* concurred reports on HOTO whats App group.