

Response to pre-bid meeting queries (held on 09.03.2018)

Request for Proposal (RFP) For Selection of Agency for Providing Comprehensive Facility Management Services

in Deendayal Hastkala Sankul (Trade Centre & Museum), Varanasi

Sl. No	Provisions as per Request for Proposal (RFP)	Queries/Suggestions raised by participants	Authority's response to queries																																				
1.	Form T8 A5 MANPOWER	<p>Suggested amendment</p> <table border="1"> <thead> <tr> <th colspan="3">A) SECURITY SERVICES</th> </tr> <tr> <th>Description</th> <th>As per RFP Qty</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td colspan="3">Providing Security Services (24 x 7 Hour basis)</td> </tr> <tr> <td>Security Officer (Retired from CISF of at-least SI Rank or equal)</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>Security Supervisor (Skilled)</td> <td align="center">3</td> <td align="center">6</td> </tr> <tr> <td>Gunman (Skilled)</td> <td align="center">3</td> <td align="center">6</td> </tr> <tr> <td>Security Guard (Semiskilled)</td> <td align="center">24</td> <td align="center">48</td> </tr> <tr> <td>Total</td> <td align="center">31</td> <td align="center">62</td> </tr> <tr> <td colspan="3">House-keeping Deployment (8 hrs Shift)</td> </tr> <tr> <td>Facility Manager</td> <td align="center">NIL</td> <td align="center">1</td> </tr> <tr> <td>Supervisor (General & Housekeeping work)</td> <td align="center">3</td> <td align="center">6</td> </tr> <tr> <td>Housekeepers</td> <td align="center">40</td> <td align="center">60</td> </tr> </tbody> </table>	A) SECURITY SERVICES			Description	As per RFP Qty	Proposed	Providing Security Services (24 x 7 Hour basis)			Security Officer (Retired from CISF of at-least SI Rank or equal)	1	2	Security Supervisor (Skilled)	3	6	Gunman (Skilled)	3	6	Security Guard (Semiskilled)	24	48	Total	31	62	House-keeping Deployment (8 hrs Shift)			Facility Manager	NIL	1	Supervisor (General & Housekeeping work)	3	6	Housekeepers	40	60	<p>No change in RFP clause</p> <p>Minimum as provided in Form T8 A5 MANPOWER of RFP remains unchanged.</p> <p>Bidders are requested to refer point no 2 below for modified scope of work in security services.</p> <p>Distribution of manpower and shifts to be decided by FMC.</p> <p>The above minimum manpower is the cumulative minimum manpower of the entire 24hrs per day.</p>
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2.	<p>Form T8 A4. V. Security Services</p> <p>Security of Project Facility is in FMC scope. The activities and responsibilities of FMC are:</p> <p>a. To provide security services for the protection of life and property against theft, pilferage, fire etc.,</p> <p>b. Ensure safety and security of men and material,</p> <p>c. Guiding visitors to desired locations/ concerned officials/ occupants,</p> <p>d. Regulating entry of unwanted visitors/salesmen and maintenance of visitor's register,</p>	<p>What is the level of security we would like to maintain at the site? Accordingly, we provision the manpower.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Category</th> <th>Level</th> <th>Activities</th> </tr> </thead> <tbody> <tr> <td align="center">1</td> <td align="center">Tier-1</td> <td align="center">Low</td> <td>Guarding of Premises</td> </tr> <tr> <td align="center">2</td> <td align="center">Tier-2</td> <td align="center">Mid</td> <td>Guarding of Premises, Visitor Management, Vehicle Search & Frisking of Visitor, Parking Management.</td> </tr> </tbody> </table>	S. No	Category	Level	Activities	1	Tier-1	Low	Guarding of Premises	2	Tier-2	Mid	Guarding of Premises, Visitor Management, Vehicle Search & Frisking of Visitor, Parking Management.	<p>Clause A4. V. Security Services for Form T8 of RFP stands amended as below:</p> <p>Security of Project Facility is in FMC scope. The activities and responsibilities of FMC are:</p> <p>a. To provide security services for the protection of life and property against theft, pilferage, fire etc.,</p> <p>b. Ensure safety and security of men and material,</p> <p>c. Guiding visitors to desired locations/ concerned officials/ occupants,</p> <p>d. Regulating entry of unwanted visitors/salesmen and maintenance of visitor's register,</p>																								
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	<p>e. Checking of gate passes and to regulate the entry and exit of vehicles/materials, f. Prevent entry of stray animals like cow, dogs etc., g. Round the clock patrolling of the Project Facility, h. Frisking and checking of visitors during and after operational hours, i. Hand held metal detectors should be provided by the Security Agency to Security Guards for checking and frisking of visitors as well as their carry bags, j. Checking of vehicles at entry and use inverted mirror detectors for checking vehicles, k. Agency shall maintain records of inwards and outwards movement of men, materials and vehicles, etc. with proper check as per instructions given from time to time by Authority, l. Effective involvement during the crisis management like fire accidents and bomb threats and during periodical drills. Liaison with appropriate agencies in case of emergencies/Disaster & be well equipped with their update contact numbers, m. Visitor's management in common, during events & exhibitions, and during other special occasions, n. Having effective control on movement of materials in / out, o. Physical guarding of entry / exit points, p. Screening / directing of visitors, q. Patrolling and guarding various common areas and surroundings to ensure adequate safety and security, r. Assisting the occupants during the emergency evacuation of the building, s. Rescue operation of passengers stranded in the lifts, t. Complete disaster management in case of emergencies/ disasters, u. Providing of adequate security as per the requirement, v. Ensuring and monitoring the operations of Boom Barriers & Access Control System,</p>	3	Tier-3	High	Guarding of Premises, Access Control, Visitor Management, Vehicle Search & Frisking of Visitor, Patrolling of premises, Traffic Control within the premises, Parking Management Record keeping etc.	<p>e. Checking of gate passes and to regulate the entry and exit of vehicles/materials, f. Prevent entry of stray animals like cow, dogs etc., g. Round the clock patrolling of the Project Facility, h. Frisking shall be limited to the entrance and exit of Museum. i. Hand held metal detectors should be provided by the Security Agency to Security Guards for checking and frisking of visitors as well as their carry bags, only at Frisking points. j. Checking of vehicles at entry and use inverted mirror detectors for checking vehicles, (Deleted) k. Agency shall maintain records of inwards and outwards movement of men, materials and vehicles, etc. with proper check as per instructions given from time to time by Authority, l. Effective involvement during the crisis management like fire accidents and bomb threats and during periodical drills. Liaison with appropriate agencies in case of emergencies/Disaster & be well equipped with their update contact numbers, m. Visitor's management in common areas, during events & exhibitions, and during other special occasions, n. Having effective control on movement of materials in / out, o. Physical guarding of entry / exit points, p. Screening / directing of visitors, (Deleted) q. Patrolling and guarding various common areas and surroundings to ensure adequate safety and security, r. Assisting the occupants during the emergency evacuation of the building, s. Rescue operation of passengers stranded in the lifts, t. Complete disaster management in case of emergencies/ disasters, u. Providing of adequate security as per the requirement, v. Ensuring and monitoring the operations of Boom Barriers & Access Control System, (Deleted) w. Lodging of complaints/FIRs in case of emergency/disaster on intimation, x. FMC shall provide a Biometric Attendance System for all the manpower provided by the FMC or its Sub-Contractors.</p>
		Please confirm.				

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	<p>w. Lodging of complaints/FIRs in case of emergency/disaster on intimation,</p> <p>x. FMC shall provide a log book register for making entries by the security personnel of their presence at duty site.</p> <p>y. FMC shall provide at his own cost (i) proper clean uniform and badges and (ii) photo identity cards as per laid down rules for Private Security Agencies.</p> <p>z. FMC shall have his own Establishment/Setup/Mechanism, etc. at his own cost to ensure correct and satisfactory performance of his liabilities and responsibilities under the contract.</p> <p>aa. FMC shall get guards and supervisors screened for visual, hearing, gross physical defects and contagious diseases and will provide a certificate to this effect for each personnel deployed. Authority will be at liberty to get anybody re-examined in case of any suspicion. Only physically fit personnel shall be deployed for duty.</p> <p>bb. FMC shall bear all the expenses incurred on the following items i.e. required security devices, metal detectors, searching mirror, Walky-Talky, provision of torches and cells, lathis/ballams and other equipment to security staff, stationary for writing duty charts and registers at security check points and records keeping as per requirements.</p>		<p>y. FMC shall provide at his own cost (i) proper clean uniform and badges and (ii) photo identity cards as per laid down rules for Private Security Agencies.</p> <p>z. FMC shall have his own Establishment/Setup/Mechanism, etc. at his own cost to ensure correct and satisfactory performance of his liabilities and responsibilities under the contract.</p> <p>aa. FMC shall get guards and supervisors screened for visual, hearing, gross physical defects and contagious diseases and will provide a certificate to this effect for each personnel deployed. Authority will be at liberty to get anybody re-examined in case of any suspicion. Only physically fit personnel shall be deployed for duty.</p> <p>bb. FMC shall bear all the expenses incurred on the following items i.e. required security devices, metal detectors, searching mirror, Walky-Talky, provision of torches and cells, lathis/ballams and other equipment to security staff, stationary for writing duty charts and registers at security check points and records keeping as per requirements.</p>																
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4.	<p>Clause A5.2 Above is the minimum manpower requirement by the Authority:</p> <p>iv. During day shift the total no. of manpower deployed should not be less than the minimum manpower specified in the table, at all times.</p> <p>v. The tentative duration of working hours/operational hours of memorial will be 8 hours, subject to finalization of timings by the client to be conveyed at the time of signing of agreement.</p> <p>vii. State minimum wages will be applicable for manpower deployment.</p>	<p>Manpower</p> <p>(As discussed in the Pre-Bid Meeting the deployment for the security will be in 12hrs shift & for the house-keeping it will 8 hrs/ 26 Days</p>	<p>Sub clauses of Clause A5.2 stands amended as below:</p> <p>Clause A5.2 Above is the minimum manpower requirement by the Authority:</p> <p>iv. Distribution of manpower and shifts to be decided by FMC. The above minimum manpower is the cumulative minimum manpower of the entire 24hrs per day.</p> <p>v. The tentative duration of working hours/operational hours of museum will be 8 hours, subject to finalization of timings by the client to be conveyed at the time of signing of agreement.</p> <p>vii. Govt. minimum wages will be applicable for manpower deployment.</p>
5.	<p>Form T8 A1.3</p> <p>As per the agreement between the Authority and the Operator of Museum, the operator shall be responsible only to manage the areas inside Museum Galleries. The scope of work under FMC shall cover housekeeping of toilets and lifts and operation, repair & maintenance of ambient lighting and common services.</p>	<p>What is the scope of work of FMC for Museum</p>	<p>Clause A1.3 of Form T8 of RFP stands amended as below:</p> <p>Form T8 A1.3</p> <p>As per the agreement between the Authority and the Operator of Museum, the operator shall be responsible only to manage the areas inside Museum Galleries. The scope of work under FMC shall cover housekeeping of toilets and lifts and operation, repair & maintenance of ambient lighting and common services.</p> <p>The FMC team shall not enter the Museum without prior approval from the Authority or Museum Operator.</p>
6.	<p>1.11 Performance Security</p> <p>1.11.1 Within 10 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Authority a Performance Security [to cover the amount of liquidated damages and/or the compensation of the breach of contract] in any of the forms given below for an amount equivalent to 5 % of</p>	<p>Amendment</p>	<p>Clause 1.11 and all its related clauses of RFP stands amended as below;</p> <p>1.11.1 Within 10 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Authority a Performance Security [to cover the amount of liquidated damages and/or the</p>

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	<p>the Contract Price as stipulated in the conditions of contract: Performance Security shall be submitted in the form of Bank Guarantee or in the form of payment through RTGS/NEFT as per bank details provided in the term sheet. Failure of the successful Bidder to comply with the requirements of Sub- clause 1.11.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.</p>		<p>compensation of the breach of contract] in any of the forms given below for an amount equivalent to 10 % of the Contract Price as stipulated in the conditions of contract: Performance Security shall be submitted in the form of Bank Guarantee or in the form of payment through RTGS/NEFT as per bank details provided in the term sheet. Failure of the successful Bidder to comply with the requirements of Sub- clause 1.11.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.</p>
7.	<p>2.6 Insurance 2.6.1 The FMC shall provide, in the joint names of the Employer and the FMC, insurance cover from the Start Date to the end of the Maintenance Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risk: a. loss of or damage to the Works, Plant and Materials; b. loss of or damage to Equipment; c. loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract: and d. Personal injury or death.</p> <p>2.6.2 Policies and certificates for insurance shall be delivered by the FMC to the Authority for the Authority's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.</p> <p>2.6.3 If the FMC does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the contractor or, if no payment is due, the payment of the premiums shall be a debt due.</p>	<p>Regarding Insurance As per para 2.6.1 (page 31) FMC is to be bear the cost of insurance about</p> <p>(a) loss of or damage to the Works, Plant and Materials; (b) loss of or damage to Equipment; (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract: and (d) Personal injury or death.</p> <p>Whereas as per Cl 2.16.7 (page 37) project related insurance is the responsibility of the authority.</p> <p>May be third party insurance alone on account of O & M etc could be the responsibility of FMC. More over insurance of assets is to be in the name of owner.</p>	<p>Clause 2.6 of RFP is amended as below:</p> <p>2.6 Insurance to be taken out by the FMC</p> <p>2.6.1 The FMC shall be responsible to take out and maintain, and shall cause any subcontractor to take out and maintain, at its (or the FMC's, as the case may be) own cost but on terms and conditions approved by the Authority, insurance against the risks for the complete contract period, and for the coverage's in accordance with good industry practice. The Authority shall not be liable towards any insurance claims by or against the second party and or its sub-Contractors or employees of both of them.</p> <p>2.6.2 Indemnity and Insurance</p> <p>a. The FMC shall take out and maintain adequate indemnity insurance and insurance against claims by third parties resulting from acts performed in carrying out the Services. b. Authority undertakes no responsibility in respect of life, health, accident, travel or any other insurance coverage for the personnel or for the dependents of any such personnel. c. The FMC shall indemnify at all times, the Authority from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, judgment, suits, proceedings, demands, costs, expenses and disbursements of whatsoever nature that may be imposed on, incurred by or</p>

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	<p>2.6.4 Alterations to the terms of insurance shall not be made without the approval of the Authority.</p> <p>2.6.5 Both parties shall comply with any conditions of the insurance policies.</p>		<p>asserted against the Authority during or in connection with the services by reason of: (i) infringement or alleged infringement by the FMC of any patent or other protected right; or (ii) plagiarism or alleged plagiarism by the FMC.</p> <p>d. The FMC shall indemnify, protect and defend, at FMC's own expense, Authority, its agents, employees and advisers from and against any and all actions, claims, losses or damages arising out of FMC's failure to exercise the skill and care required under this agreement, provided, however that FMC is notified of such actions, claims, losses or damages not later than twelve months after conclusion of the contract or services; and provided further that the ceiling on FMC's liability shall be limited to the Contract value approved by the Authority except that such ceiling shall not apply to actions, claims, losses or damages caused by FMC's gross negligence or reckless conduct;</p> <p>e. In addition to any liability the FMC may have under this agreement the FMC shall, at its own cost and expense, upon request of Authority, re-perform the Services in the event of FMC's failure to exercise the skill and care.</p> <p>f. The FMC shall have no liability whatsoever for actions, claims, losses or damages occasioned by (i) Authority's overriding a decision or recommendation of FMC or requiring FMC to implement a decision or recommendation with which FMC does not agree; or (ii) the improper execution of FMC's instructions by agents, employees or independent contractors of Authority.</p>
8.	<p>Form T8. A4 point IV Parking Management Parking and Vehicle Management is in FMC scope. The activities and responsibilities of FMC are:</p> <p>a. Support for ticketing management</p> <p>b. Processing parking tickets and reporting the revenue on fortnight basis (FMC shall assist Authority in fixing parking charges),</p> <p>c. Manage operations at Entry and Exit terminals,</p> <p>d. Vehicle and traffic management in Project Facility,</p> <p>e. Manage way - finding / space monitoring & guiding for parking,</p> <p>f. Coordination with local authority where required,</p>	<p>Parking to be kept operational from 8 AM to ? PM (page 74). Parking is not listed in 24X7 requirement at page 77: Will the cost of manning and managing parking be met out of parking charges?</p>	<p>Clause A4.IV of Form T8 of RFP stands amended as below:</p> <p>Form T8. A4 point IV Parking Management</p> <p>FMC can use the revenue generated from ticketing of parking as its own income, under below mandatory conditions for FMC:</p> <p>a. Government vehicles and one car parking space per Licensee of Project Facility shall be exempted from parking charges</p> <p>b. Parking charges shall not be more than the rates prescribed by the district administration/ local authorities</p>

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			<p>c. FMC shall be responsible for operation and management of entire parking within Project Facility through-out contract period</p> <p>d. Vehicle and traffic management in Project Facility,</p> <p>e. Manage way - finding / space monitoring & guiding for parking,</p> <p>f. Coordination with local authority where required,</p> <p>g. Procure any equipment's or infrastructure required for parking management on its own cost</p>
9.	<p>A6.1 Other Inclusions</p> <p>i. Reimbursable costs</p> <p>1. FMC shall procure Diesel required for the project. A log book shall be maintained by the FMC at both power supply agency level and inside the facility. The entries shall be verified from the Authorized representative of the Client as per the duration specified by the client.</p> <p>FMC shall submit invoices for reimbursement on monthly basis along with submission of supporting documents.</p>	<p>It would be difficult to maintain a log book at power-supply agency level as they are a third party. Also since the DG sets available shall provide the levels of Diesel available through BMS, hence the log may only be kept at Project Facility.</p>	<p>Clause A.6.1 of Form T8 of RFP stands amended as below:</p> <p>A6.1 Other Inclusions</p> <p>i. Reimbursable costs</p> <p>1. FMC shall procure Diesel required for the project. A log book shall be maintained by the FMC at both power supply agency level and inside the facility. The entries shall be verified from the Authority's representative on daily basis.</p> <p>FMC shall submit invoices for reimbursement on monthly basis along with submission of supporting documents.</p>
10.	<p>A6.1 Other Inclusions</p> <p>iv. Annual Testing Fee / Rectification charges etc., (except where the same is already covered under scope of other service providers like PMSP, Museum Operator etc. for Project Facility)</p>	<p>Bidder requested that PMSP should conduct at least one time testing of all the equipment before expiry of DLP period.</p>	<p>Below clarifications are provided:</p> <p>Annual testing for all years contract period (including first year) shall be in the scope of FMC.</p>
11.	<p>2.1 Sub-contracting</p> <p>2.1.1 The FMC may sub-contact any portion of work with the approval of the Authority but shall not assign the contract Without the approval of the FMC in writing. Sub-contracting does not alter the facility management contractor's Obligations and responsibilities under the contract.</p>	<p>Bidder suggested that since the responsibility of sub-contractor rests with FMC, hence Approval of every sub-contractor may cause delays.</p>	<p>Clause 2.1 of RFP stands amended as below:</p> <p>2.1 Sub-contracting</p> <p>2.1.1 The FMC may sub-contact any portion of work, however a prior intimation (at least 10 working days in advance of appointment) of the list of sub-contractors and their respective scope of work shall be intimated to the Authority in writing.</p> <p>The Authority reserves the right to disapprove any sub-contractor in case any national security issues. FMC shall abide with the decision taken by the Authority.</p> <p>Sub-contracting does not alter the facility management contractor's Obligations and responsibilities under the contract.</p> <p>The FMC shall not engage the services of any Sub-FMC for the</p>

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			purposes of discharging entire obligation under the Contract without approval of the Authority.
12.	Annexure III: DRAFT PROJECT INFORMATION MEMORANDUM	Additional details required for Project Facilities: 1. IOS summary of BMS system 2. List of Plants both indoor and outdoor in DHS	Required details are provided <ul style="list-style-type: none"> • IOS Summary: Attachment 1 • List of Plants both indoor and outdoor in DHS: Attachment 2
13.	General	One time basic training to be provided to the Facility Management team once they are on board.	Below clarifications are provided: PMSP (NBCC Ltd) shall be providing one time basic training to the Facility Management team once FMC team is on board.
14.	General	Please provide the list of equipment's with extended warranty (beyond DLP period) which shall be passed on to the client by PMPSP.	Below clarifications are provided: Extended warranty beyond the DLP period is as provided below: 1.Solar collector Warranty-10years. 2.Solar power system warranty-25 years. 3.UTP cable-25 years. 4.CAT-6 cable -25 years 5.Water proofing-10 years
15.	General	Please provide the purchased BMS software validity	BMS Software LIFE LONG WARRANTY
16.	1.2.9 Taxes 1.2.9.1 The financial proposal /bid shall be exclusive of applicable Goods & Services Tax (GST). 1.2.9.2 GST, if applicable on Annual Comprehensive Facility Management Cost and any reimbursable expenses born by FMC is to be rendered by the FMC and shall be reimbursed by Authority to the FMC. 1.2.9.3 As a condition, precedent for reimbursement of the GST, the FMC shall provide a valid GST registration number issued by the concerned Statutory Authority. 1.2.9.4 The financial liability on account of any other applicable taxes, as may be applicable on the amounts received by the FMC from Authority shall be solely borne by the FMC. The FMC alone shall be responsible in all respects for the payment of all taxes including Income Tax etc. in a timely manner	Regarding GST There are some contradictory and confusing provisions in RFP about GST (a) Para 1.2.9.1 (page 16) require the proposal to be exclusive of GST and as per para 1.2.9.4 (page 17) all other taxes are to be borne by FMC where as Para 1.3.7 iv (page 21) mention that the financial proposal is to be exclusive of ANY Tax / GST that may be applicable. (b) Further Financial bid format at Page 88 require the bidder to quote GST also where as Page 87 require no such number. In fact as per para1.2.9 GST is reimbursable which mean that it is payable as applicable on FMC and on production of documents proving the amount of GST paid by FMC. Provision regarding GST need to be consistent.	No change in RFP

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	<p>and filing the returns in respect thereof as per the applicable laws.</p> <p>1.2.9.5 However, towards compliance with the applicable Tax laws, Authority shall deduct applicable taxes from the payments to be made by Authority to FMC and FMC shall not object to the same.</p>		
17.	<p>Form T8 A4 II 2.3</p> <p>Waste Management</p> <p>i. Bins must be emptied, cleaned and dried inside and out, bin-liners replaced where necessary and placed in their original locations. Liners must be used at all times.</p> <p>ii. FMC shall Collect the garbage from the garbage collection point and segregate the waste in recyclable and non-recyclable type and shall ensure proper disposal of waste outside the premises as per the standards and directions provided by Competent Authority</p> <p>iii. FMC shall ensure that 100% of recyclable waste is being recycled.</p> <p>iv. FMC shall be responsible for arranging the transport and in consultation with Authority, shall identify the area / frequency for garbage disposal. Proper waste disposal system shall be adopted and collection points shall be defined.</p> <p>v. Waste management methodology shall comply with the guidelines laid down in applicable Waste Management Rules of Central Government and Local Authorities,</p> <p>vi. Renovation Debris is to be stored at designated space at designated area</p> <p>vii. The FMC undertaking the renovation work would remove the debris when it amasses to a volume equivalent to a tempo load</p>	<p>Regarding Waste Management</p> <p>RFP require FMC to be responsible for ensuring 100 % recycling of recyclable waste (page 62). The provision is ambiguous.</p> <p>FMC task should be limited to segregation and disposal to identified places within a specified lead, say 1 Km. (page 62).</p> <p>Otherwise, a lot of green and bio-degradable waste can be recycled at site through composting macines, composting pits and wormiculture etc which require space as well as capital expenditure in creating these additional assets.</p> <p>FMC is to identify disposal area and provide transport for disposal of waste.</p> <p>Disposal to any area beyond 1 Km must be payable.</p>	<p>No change in clause</p> <p>FMC shall also coordinate with Urban Local Body / Local Authority / Municipal body for ensuring proper disposal of waste.</p>
18.	<p>2.10 Manuals & Registers</p>	<p>Regarding Asset Condition Register</p> <p>As per para 2.10.1 and 2.10.2 (page 32) FMC is tasked to prepare Assets Condition Register at the time of take over and also at the time of close of contract linking the same to release of final payments.</p>	<p>No change in RFP clause 2.10</p>

Sl. No	Provisions as per Request for Proposal (RFP)	Queries/Suggestions raised by participants	Authority's response to queries
	<p>2.10.1 The FMC shall provide updated asset register recording the actual condition of the assets at the time of takeover and at the end of the contract period.</p> <p>2.10.2 If the FMC does not submit the asset register at the end of the contract period or they do not receive the Authority's approval, the Authority reserves the right to withhold the final bill payable to the FMC.</p>	<p>Also para (f) on page 60 require FMC to undertake annual survey of building for finalising repair program.</p> <p>Such annual survey will cover all assets. Therefore requirement of special assessment after 5 years by FMC to the satisfaction of authority and linking the same to release of payments is unwarranted.</p>	
19.		To create first asset register complete asset details needs to be provided by the PMSP team.	<p>Below clarifications are provided:</p> <p>Complete handover documents would be provided to the appointed FMC.</p>
20.	<p>2.14 Deduction for Non Performance</p> <p>2.14.1 Subject to the terms and conditions mentioned in the Contract, any deficiency by the FMC in the performance of its delivery obligations, shall render him liable to any or all of the following penalties</p>	<p>Regarding SLAs</p> <p>(a) SLAs for items under AMCs finalised by Authority Authority fix AMCs for DG sets, Lifts, CC TV, Chiller, AHU and fire fighting equipments etc (list at page 59) and will also release their payment.</p> <p>Penalty has been stipulated on FMC for breakdown of Genset, HVAC, Elevators and substation panels and other items as listed on page 35.</p> <p>Breakdowns of these equipments largely being attributable to AMC provider, the provision is harsh on FMC provider.</p> <p>(b) Cleaning of Terrace and glass facade out side once/day (Page 67)</p> <p>(c) Hospitality – washing of linens etc once/day – it need to be linked with occupancy (page 67)</p> <p>(d) What mechanism is to be adopted for verification of frequency of activities as per SLAs (Page 67-73)</p>	<p>No change in clause</p> <p>The responsibility of operations of equipment installed in Project Facility rests solely with FMC. Authority is only facilitating the remuneration of AMC charges of equipment's listed in the RFP.</p> <p>As specified in RFP Form T8, clause A3.1.c.iii FMC shall Supervise, administer and certify works of Main Contractors/PMSP/ Vendors / Suppliers / Manufacturers / AMC agencies for rectification of breakdowns (covered under breakdown maintenance/AMC) and for operations.</p> <p>As specified in RFP Form T8. A4 III. (1). To the extent possible, FMC shall ensure that Vendor / Manufacturer performs their obligations as per Contract. Even after FMC making all the efforts, Vendor / manufacturer fails to perform its obligations, the FMC shall notify the Authority and ask for necessary action.</p>
21.	<p>Form T8, A4 I I</p> <p>c. AMC of below equipment's shall be procured by the Authority directly</p> <ul style="list-style-type: none"> i. D.G Set ii. Lifts & Escalators iii. Chillers iv. Fire Alarm v. Fire Fighting vi. LV / CCTV / Networking 	<p>Regarding scope of FMC for maintenance & repair of equipments after warranty period.</p> <p>(a) Para (j) on page 60 warrant FMC to take up repairs of items, post warranty which are otherwise covered in AMCs. It need clarification.</p> <p>(b) As per para A3.1.b (ii) page 58, FMC scope of work includes Breakdown Maintenance, co-ordination and managing Vendors / Suppliers / Manufactures for performing preventive maintenance as per the O&M Manuals provided by the Contractor /PMSP / Supplier / Vendor / Manufacturers.</p>	<p>Below clarifications are provided:</p> <p>Comprehensive AMCs are being procured by Authority for the listed equipment's. The detailed scope of services covered under these AMCs would be uploaded separately.</p> <p>FMC shall be responsible, for all remaining scope required for operation and maintenance of equipment's installed in project facility on its own cost.</p>


Sl. No	Provisions as per Request for Proposal (RFP)	Queries/Suggestions raised by participants	Authority's response to queries
	<p>vii. AHU & Split Units (Lower and equipments)</p> <p>For all other equipment's in the project for which AMC shall be required, as deemed necessary by the FMC, the same shall be procured by the FMC at their own cost for preservation of all project equipment's.</p>	<p>Breakdown maintenance after warranty period will involve cost of labour and material.</p> <p>Please clarify whether FMC scope after warranty period will be only coordination and cost of such maintenance by such vendors/suppliers/AMC agencies post warranty period will be borne directly by the authority or otherwise? (Page 58)</p> <p>(c) As per Para xii on page 65 FMC scope include coordination with technicians for various repairs.</p> <p>Who bear the cost of technicians and cost of materials and consumables needed by them??</p>	<p>As specified in RFP Form T8. A4 III. (1).</p> <p>To the extent possible, FMC shall ensure that Vendor / Manufacturer performs their obligations as per Contract. Even after FMC making all the efforts, Vendor / manufacturer fails to perform its obligations, the FMC shall notify the Authority and ask for necessary action.</p>
22.	<p>2.16.6 Office Space</p> <p>Authority will provide office space. However, furniture, hardware and software infrastructure and any other infrastructure required shall be arranged by FMC.</p>	<p>FMC may require Office spaces for their team at difference levels of building, kindly provide details of space.</p>	<p>Clause 2.16.6 of RFP has been amended as below:</p> <p>Authority will provide office space equivalent to 320 sq.ft in the Project Facility. However, furniture, hardware and software infrastructure and any other infrastructure required shall be arranged by FMC.</p> <p>In case FMC requires additional space, they may propose and seek approval of the Authority for the same. FMC shall bear all costs associated with the setting-up of their office space.</p>
23.	<p>Form T8 A4 II.(2.5) Hospitality Services</p> <p>The FMC shall operate guest rooms and dormitories as per the guidelines provided by Authority. These Services shall include managing bookings, rent collection and its reporting, room service, housekeeping, washing/ changing of bed covers and linen, operation of air conditioners, cleaning of rooms including toilets, keeping toilets well equipped with supplies, keeping furniture and furnishings arrangements in order, guiding visitors to their destinations in the premises, attending problems on Help-Desk and resolving the problems to closure, which occur on day-to-day basis.</p> <p>The helpdesk / front desk operations shall include responding and resolving the problems which may related to guests which may or may not be logged.</p>	<p>Regarding Hospitality Services</p> <p>(a) As per para II 2.5 on page 63 Hospitality srevices include room service.</p> <p>Does room service include serving food and eatables in rooms? If yes, there is no man power suggested or the same on page 76. What about pantryfacility?</p> <p>There is no provision for room boys. House keepers(40 numbers) are for house keeping purpose.</p> <p>Who will bear laundry Charges for bed linen etc?? Are these to be billed and recovered from users?</p>	<p>Below clarifications are provided:</p> <p>The Dormitories and Guest rooms are envisaged to only provide accommodation facilities to the guests and shall not cover door-step service of food and beverages and any laundry of guest's personal belongings etc. by FMC.</p> <p>The minimum manpower requirement in the RFP Form T8 A5 only indicates the overall manpower under specific skillsets. The FMC is responsible for any bifurcation of manpower as per the scope of services requirement.</p> <p>Dry-cleaning/ Washing/ changing of bed covers and linen etc. are covered in the scope of services of FMC and shall be undertaken by FMC on its own cost.</p> <p>Service level requirement of Hospitality Services for Guest Rooms and Dormitories is covered under Form T8 A4. III.(1) B.</p>

Sl. No	Provisions as per Request for Proposal (RFP)	Queries/Suggestions raised by participants	Authority's response to queries
24.	<p>Form T8 A4 II.(2.7) Horticulture The FMC shall be responsible for ensuring proper maintenance and upkeep of all horticulture works. Adequate equipments shall be procured by FMC including grass cutting machine and other tools required for maintenance of horticulture areas. FMC shall provide seasonal plants and seasonal flowers as deemed fit by the FMC to maintain the horticulture / landscape as per the satisfaction of client/ end user. FMC shall make required arrangements and proper use of required insecticides, Pesticides, Fertilizers, Mannure etc. Guidelines for maintenance of buildings and services as contained in CPWD Manual shall be applicable in general for horticultural maintenance also.</p>	<p>Regarding Horticulture maintenance</p> <p>RFP document mention (a) Lawn area as 16000 Sqm (page 115) (b) Landscape area as 8500 Sqm (page 112) (c) and that Potted plants to be provided (page115)</p> <p>RFP need to mention Hedges area and number as well as average cost of indoor plants. A nursery will be needed for maintenance of indoor plants. Will the kachha space and green house area will be provided by the authority?</p>	<p>Below clarifications are provided:</p> <p>List of Plants both indoor and outdoor in DHS is provided as Attachment 2.</p> <p>Any requirement pertaining to maintenance of horticulture would be the responsibility of FMC.</p>
25.	<p>1.10.3 Payment Terms and Escalation i. The payment for the entire Annual Comprehensive Facility Management Cost will be done on equal monthly instalments basis during contract period.</p>	<p>Regarding Mobilisation advance</p> <p>No provision of Mobilization advance?? It could be atleast 10 % of quote</p>	<p>RFP does not have provision of mobilization advance.</p>
26.	<p>ii. Overall cost escalation of 5% per annum shall be applicable on last paid Annual Comprehensive Facility Management Cost.</p>	<p>Regarding compensation for increase in statutory charges</p> <p>Formula for compensation for statutory increases such as labour rates, applicable taxes – Cl 2.16.3 must be explicit- It is mostly based upon indices and base indecies are specied in tender.</p>	<p>No change in RFP clause 1.10.3</p>
27.	<p>Form T8 A5 MANPOWER</p>	<p>Regarding Addl Manpower</p> <p>(i) Liason Officer – for all liaison works with State authority – Page 65 (ii) Bill Clerk- Collection of rental, license fee common area maintenance charges and other charges on behalf of teh authority and maintaing their accounts and depositing – Page 64 (iii) Room boys for Hospitality/pantry and room services – Page 63</p>	<p>Below clarifications are provided:</p> <p>The minimum manpower requirement in the RFP Form T8 A5 is only for the scope of services required for Project Facility. For any other manpower including FMC's administrative works or support staff etc. FMC shall arrange the same on its own cost.</p> <p>As per Form T8, A6 v. FMC shall provide advance intimation and advise in renewal of all statuary licenses/ NOC's/approvals/clearances. For this, statuary fee required if any shall be paid by Authority.</p>

Sl. No	Provisions as per Request for Proposal (RFP)	Queries/Suggestions raised by participants	Authority's response to queries			
			Please refer clarification on hospitality services in point 23 above.			
28.	Form T8 SCOPE OF WORK FOR THE FACILITY	Scope is silent about maintenance of day to day and periodical maintenance of building structure, plumbing, Road & Pavements, Structural Glazing / Facade, water supply and distribution system for potable consumption and fire, LV works in indicative scope on page 7 and broad scope on page 9	Below clarifications are provided: Please refer Form T8 of the RFP for details			
29.	Critical date sheet: <table border="1" data-bbox="280 459 795 571"> <tr> <td>5</td> <td>Proposal Submission (Online) End Date and Time</td> <td>27.03.2018 at 1700 hrs (05:00 PM)</td> </tr> </table>	5	Proposal Submission (Online) End Date and Time	27.03.2018 at 1700 hrs (05:00 PM)	Date of submission and time is 23.3.18 upto 6 pm on page 9 whereas it is 27.3.18 upto 5 pm in critical date sheet on page 8.	Below clarifications are provided: The Proposal Submission (Online) End Date and Time shall remain as per Critical date sheet of the NIT i.e. 27.03.2018 at 1700 hrs (05:00 PM)
5	Proposal Submission (Online) End Date and Time	27.03.2018 at 1700 hrs (05:00 PM)				
30.	FORM-T10: WORK PLAN	Why bidders are being asked to submit Work Plan and brief on quality control mechanism in technical proposal when these are not to be evaluated? These are avoidable. - Page 20	No change in RFP term			
31.	Clause 1.3.2 v. <ul style="list-style-type: none"> The Bidder shall also submit, along with their Proposal, a copy of this RFP bearing the initials of the Authorized Signatory of the Bidder and stamp of the entity thereof on each page of these documents i.e. RFP. This shall indicate that the Bidder agrees to abide by all terms & conditions specified in the RFP. 	As per 1.3.2 all pages of RFP are to be signed by bidder at the time of online submission – Normally such signature are done on pages requiring entry and submission by bidders. Standard clauses, conditions and asset details etc are signed while signing the agreement	No change in RFP term			
32.	1.3.7 Applicants submission for Financial Proposal i. The Financial Proposal shall be prepared using the attached Standard Forms as per (Section 6) and scanned copy of the financial proposal shall be uploaded as per instructions in clause 1.4.	Has any BOQ file provided for giving financial quote as mentioned on page 23, para (e) or it is to be quoted in format given in Section 5??	Below clarifications are provided: Bidders may refer clause 1.3.7 for details and submission format as per Section 6 of RFP. Bidders need to upload scanned copy of documents as per the instructions in the RFP.			
33.	Form T8. A4 III. (1). Table: Service Level Agreement (Defects)	Minor defects on page 66 may be further defined as those manageable with the manpower specified in NIT at Page 76	No change in RFP term.			
34.	Form T8. A4 III.(2.) Reporting	What is stipulated time for MIS reporting??? Page 73 – weekly, Monthly	Below clarifications are provided: MIS shall be reported on monthly basis.			
35.		FMC scope include reporting energy consumption for UTILITY and facility. - It can be only as per installation of meters or installation of additional meters is intended? Page 73	Below clarifications are provided: This should be as per Site requirements and in discussion of FMC with the Authority			


Sl. No	Provisions as per Request for Proposal (RFP)	Queries/Suggestions raised by participants	Authority's response to queries
36.	III.(2.) Reporting The FMC shall establish a MIS system for reporting. The FMC shall submit the following reports within the stipulated time to the Authorized Officer of the Authority: d. Attendance Reports	Brief on Attendance reporting system	Below clarifications are provided: FMC shall adopt biometric attendance system at its own cost for Attendance management and reporting. Provision of daily monitoring rights shall be provided to the Authority.
37.	Correction Materials, Machinery & Equipment 2.3.1 The FMC shall arrange and supply at his own cost all material, machinery, equipment, plant, tools, appliances, implements, ladder, cordage, tackle, scaffoldings, water and power supply and temporary works requisite or proper for effective execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the Contract or referred to these conditions or not all which may be necessary for the purpose of satisfying or complying with the requirements of the Authority as to any matter which under these conditions he is entitled to be satisfied or which he is entitled to require together with the carriage therefore to and from the work.	Payment of water and power supply should be in Authority's scope	Clause 2.3.1 stands amended as below: 2.3.1 The FMC shall arrange and supply at his own cost all material, machinery, equipment, plant, tools, appliances, implements, ladder, cordage, tackle, scaffoldings, water and power supply and temporary works requisite or proper for effective execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the Contract or referred to these conditions or not all which may be necessary for the purpose of satisfying or complying with the requirements of the Authority as to any matter which under these conditions he is entitled to be satisfied or which he is entitled to require together with the carriage therefore to and from the work.
38.	Term Sheet Additional Point	Clarification of NEFT account details for transfer of EMD / Performance Security	Authority's Bank Details: Name of the Account Holder: National Handloom Development Corporation Ltd, Name of Bank: HDFC BANK Branch: RATHYATRA VARANASI Account Number: 02200350000149 IFSC Code: HDFC0000220

S.NO.	DESCRIPTION	Qty	AI	AO	DI	DO	Field Devices	Scope/Remarks		Imm. Temp. Sensor	Ambient Temp. & RH Sensor	Current Relay	BI- Level Switch	Air DP Switch	Duct Temp. Sensor	Water Flow Switch	Water Pr. Tx.	Flame / Epllosion Proof Level Switch	Single Level Switch	CO Sensor	Voltage Transducer			
								BMS Vendor	Other than BMS Vendor															
i)	HVAC SYSTEM																							
A	Water Cooled Screw / Centrifugal Chillers	3																						
1	Chillers - Status				3		Part of Chiller	Software Integeration																
2	Chiller Enable/Disable					3																		
3	Chiller - Lockout/fault				3																			
4	Chilled / Cond. water flow status				3																			
5	Leaving Chilled Water Temperature		3																					
6	Entering Chilled Water Temperature		3																					
7	Leaving Condensor Water Temperature		3																					
8	Entering Condensor Water Temperature		3																					
9	Compressor Percent RLA		3																					
10	Evaporator Refrigerant Pressure		3																					
11	Condensor Refrigerant		3																					

S.NO.	DESCRIPTION	Qty	AI	AO	DI	DO	Field Devices	Scope/Remarks		Imm. Temp. Sensor	Ambient Temp. & RH Sensor	Current Relay	BI- Level Switch	Air DP Switch	Duct Temp. Sensor	Water Flow Switch	Water Pr. Tx.	Flame / Eplosion Proof Level Switch	Single Level Switch	CO Sensor	Voltage Transducer	
								BMS Vendor	Other than BMS Vendor													
	Pressure																					
12	Compressor Discharge Refrigerant Temperature		3				Part of Chiller	Software Integration														
13	Evaporator Refrigerant Temp.		3																			
14	Condensor Refrigerant Temp.		3																			
15	Chilled Water Setpoint			3																		
16	Current Limit Setpoint			3																		
17	Chiller Out Motorised Butterfly Valves Control & Status				6	3	Butterfly valve with on/off type actuator		HVAC vendor to supply & install the valve & actuator													
18	Condensor Out Motorised Butterfly Valve Control & Status				6	3																
19	Common CHW / Hot water header Supply Temp.		1				 Immersion Temperature sensor	HVAC vendor to make the provision in water line to insert the sensor	1													
20	Cond. water header supply temp.		1								1											
21	Common CHW / Hot header Return Temp.		1								1											
22	Cond. water header Return temp.		1								1											

23	CHW Bypass Line - Flow Direction				1		Water Flow Switch	Supply & Install the switch													1										
24	Chilled Water Expansion tank level monitoring high/low	2			2		BI- Level Switch	Supply & Install the switch				2																			
25	Ambient Temperature/RH		2				Outside temp + Rh Sensor	Supply & install the sensor			1																				
B	Chilled Water Primary Pumps	3																													
1	Pump Start/Stop					3	Potential Free Contact to DDC	Supply of current relay and Integration with starter Panel	HVAC vendor to provide NO/NC contact in starter panel																						
2	Pump Run Status				3	Current Delay								3																	
3	Pump Auto Manual switch Status				3	Potential Free Contact to DDC																									
4	Pump Trip Status				3	Potential Free Contact to DDC																									
C	Chilled Water Secondary Pumps with VFD	8																													
1	Pump Start/Stop					8		Integration with VFD	HVAC vendor to provide VFD for integration																						
2	Pump Run Status				8																										
3	Pump Auto / Manual switch Status				8																										
4	Pump Trip Status				8																										
D	Condensor Water Pumps	3																													

1	Condensor Pump Start/Stop				3	Potential Free Contact to DDC	Supply of current relay and Integration with starter Panel	HVAC vendor to provide NO/NC contact in starter panel														
2	Condensor Pump Run Status				3	Current Relay						3										
3	Condensor Pump Auto Manual switch Status				3	Potential Free Contact to DDC																
4	Pump Trip Status				3	Potential Free Contact to DDC																
E	Hot Water Generator	2																				
1	Hot Water Generator - Status				2	Current Relay	Supply of current relay and Integration with starter Panel			2												
2	Hot Water Generator Enable/Disable				2	Potential Free Contact to DDC	Integration	HVAC vendor to provide NO/NC contact in starter panel														
3	Leaving Hot Water Temperature		2			Immersion Temperature sensor	Supply install the sensor	HVAC vendor to make the provision in water line to insert the sensor	2													
4	Entering Hot Water Temperature		2			Immersion Temperature sensor	Supply & install the sensor		2													
5	Hot Water "Out" Motorised Butterfly Valves Control & Status	2			4	2	Butterfly valve with on/off type actuator	Control & monitor the valve & actuator	HVAC vendor to supply & install the valve & actuator													
F	Hot Water Primary Pumps	3																				

1	Pump Start/Stop				3	Potential Free Contact to DDC	Supply of current relay and Integration with starter Panel 	HVAC vendor to provide NO/NC contact in starter panel													
2	Pump Run Status			3	Current Relay						3										
3	Pump Auto Manual switch Status			3	Potential Free Contact to DDC																
4	Pump Trip Status			3	Potential Free Contact to DDC																
G	Cooling Tower (2 No. Fans per Tower)	3																			
1	Cooling Tower On/Off				6	Potential Free Contact to DDC	Integration	HVAC vendor to provide NO/NC contact in starter panel													
2	Cooling Tower Fan Status			6	Current Relay	Supply of current relay and Integration			6												
3	Cooling Tower Sump Low Water Level Alarm			3	Single Level switch	Supply & install the switch.													3		
4	Cooling Tower Sump High Water Level Alarm			3	Single Level switch	Supply & install the switch.													3		
5	Cooling Tower "In" Motorised Valves ON/Off & Status			6	3	Butterfly valve with on/off type actuator	Control & monitor the valve & actuator	HVAC vendor to supply & install the valve & actuator													
6	Cooling Tower Manual Operation Status			6		Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel													

H	AHUs / AHU CUM TFA UNITS	100																		
1	AHU Start/Stop					100	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel											
2	AHU Fan Status				100		Current Relay	Supply of current relay and Integration			100									
3	AHU Auto / Manual Operation Status				100		Potential Free Contact to DDC	Integration												
4	Return Air Temp. Monitoring		100				Duct Type Temperature sensor	Supply & install the sensor.												100
5	Filter Status (Pre-filter)				100		Diff. Pressure Switch for Filter	Supply & install the switch.												100
6	AHU CHW / HW 2-Way Valve Modulation				100		0-10 v signal from actuator to DDC	Control & monitor the 2 way valve & actuator	HVAC vendor to supply & install the 2 way valve & actuator											
I AHUs For Free Cooling & Smoke Extraction		8																		
1	AHU On/Off					8	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel											
2	AHU Fan Status				8		Current Relay	Supply of current relay and Integration			8									

3	AHU Auto / Manual Operation Status			8		Potential Free Contact to DDC	Integration													
4	Return Air Temp. Monitoring		8			Duct Type Temperature sensor	Supply & install the sensor.						8							
5	Filter Status (Pre-filter)			8		Diff. Pressure Switch for Filter	Supply & install the switch.					8								
6	AHU CHW / HW 2-Way Valve Modulation			8		0-10 v signal from actuator to DDC	Control & monitor the 2 way valve & actuator	HVAC vendor to supply & install the 2 way valve & actuator												
7	AHU Fresh Air Damper Modulation			8		0-10 v signal from actuator to DDC	Control & monitor the Fresh/Return/ Ex. Air Dampers with actuator	HVAC vendor to supply & install the Fresh Air Damper with actuator												
8	AHU Return Air Damper Modulation			8		0-10 v signal from actuator to DDC														
9	AHU Ex.Air Damper Modulation			8		0-10 v signal from actuator to DDC														
10	Exhaust Air Fan On/Off				8	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel												
11	Exhaust Air Fan Status				8	Current Relay	Supply of current relay and Integration			8										
J	Kitchen Scrubber	4																		
1	Start/Stop of Fan				4	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel												

2	Blower Status				4	Current Relay	Supply of current relay and Integration				4								
3	Auto / Manual Operation Status				4	Potential Free Contact to DDC	Integration												
4	Filter Status				4	Diff. Pressure Switch for Filter	Supply & install the switch.					4							
K	Air Washers for Kitchens & DG Room	8																	
1	Start/Stop of Fan					8	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel										
2	Blower Status				8	Current Relay	Supply of current relay and Integration				8								
3	Auto / Manual Operation Status				8	Potential Free Contact to DDC	Integration												
4	Tank low level				8	Single Level switch	Supply & install the switch.												8
5	Filter Status				8	Diff. Pressure Switch for Filter	Supply & install the switch.					8							
L	Car Parking Exhaust / Supplies Fans	48																	
1	Start/Stop of Fans					48	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in										

								starter panel													
2	Fan Status			48		Current Relay	Supply of current relay and Integration			48											
3	Auto / Manual Operation Status			48		Potential Free Contact to DDC	Integration														
4	CO monitoring		48			CO sensor	Supply & install the CO Sensors														48
M	Services Rooms Exhaust / Supply Fans	16																			
1	Start/Stop of Fans				16	Potential Free Contact from DDC to the Panel	Integration	HVAC vendor to provide NO/NC contact in starter panel													
3	Blower Status			16		Current Relay	Supply of current relay and Integration			16											
2	Auto / Manual Operation Status			16		Potential Free Contact to DDC	Integration														
N	Pressurisation Fans	11																			
1	Blower Status			11		Current Relay	Supply of current relay and Integration			11											
2	Auto / Manual Operation Status			11		Potential Free Contact to DDC	Integration														

O	Motorised Dampers	24																		
1	Motorised Damper On/Off				24	At Actuator of Damper	Integration	HVAC vendor to provide NO/NC contact in actuator starter panel												
ii)	PLUMBING SYSTEM																			
A	Filter Feed Pumps	2																		
1	Filter Feed Pumps Status			2		Current Relay	Supply of current relay and Integration			2										
B	Transfer Pumps	2																		
1	Transfer Pumps Status			2		Current Relay	Supply of current relay and Integration			2										
C	Hot Water Recirculation Pumps	2																		
1	Hot water Recirculation Pumps Start/Stop				2	Potential Free Contact from DDC to the Panel	Integration	Plumbing vendor to provide NO/NC contact in starter panel												

2	Hot water Recirculation Pumps Status				2	Current Relay	Supply of current relay and Integration			2									
iii) STP																			
A Filter Feed Pumps		2																	
1	Filter Feed Pumps Status				2	Current Relay	Supply of current relay and Integration			2									
B Flushing Water Transfer Pumps		2																	
1	Flushing Water Transfer Pump				2	Current Relay	Supply of current relay and Integration			2									
C Soft Water Transfer Pumps		2																	
1	Soft water Transfer Pump Status				2	Current Relay	Supply of current relay and Integration			2									
D Irrigation Water Transfer Pumps		2																	
1	Irrigation Water Transfer Pumps Start/Stop				2	Potential Free Contact from DDC to the Panel	Integration	STP vendor to provide NO/NC											

								contact in starter panel													
2	Irrigation Water Transfer Pumps Status				2		Current Relay	Supply of current relay and Integration				2									
E	Blower	1																			
1	Blower Status				1		Current Relay	Supply of current relay and Integration				1									
F	UG Soft Water Tank	1																			
1	UG Soft Water Tank High/low Level				1		BI- Level Switch	Supply & install the level Switch				1									
iv)	WATER TANKS																				
A	UG Treated Water Tank	1																			
1	Level Monitoring High/Low				1		BI- Level Switch	Supply & install the level Switch				1									
B	UG Fire Water Tank	2																			
1	Level Monitoring High/Low				2		BI- Level Switch	Supply & install the level Switch				2									
C	UG Raw Water Tank	1																			

1	Level Monitoring High/Low			1	BI- Level Switch	Supply & install the level Switch					1									
D	OH Domestic Water Tank	2																		
1	Level Monitoring High/Low			2	BI- Level Switch	Supply & install the level Switch					2									
E	Flushing Water Tanks	2																		
1	Level Monitoring High/Low			2	BI- Level Switch	Supply & install the level Switch					2									
F	OH Soft Water Tank	2																		
1	Level Monitoring High/Low			2	BI- Level Switch	Supply & install the level Switch					2									
G	OH Fire Tank	2																		
1	Level Monitoring High/Low			2	BI- Level Switch	Supply & install the level Switch					2									
v)	FIRE FIGHTING SYSTEM																			
A	Hydrant Pump	1																		

1	Hydrant Pump Status				1	Current Relay	Supply of current relay and Integration				1									
B Sprinkler Pump		1																		
1	Sprinkler Pump Status				1	Current Relay	Supply of current relay and Integration				1									
C Jockey Pump		1																		
1	Jockey Pump Status				1	Current Relay	Supply of current relay and Integration				1									
D Diesel Pump		1																		
1	Diesel Pumps Status				1	Current Relay	Supply of current relay and Integration				1									
E Diesel Tank		1																		
1	Diesel Tank High Level				1	Flame/ Explosion Poof Bi -Level Switch	Supply & install the Flame/ Explosion Poof Bi -Level Switch													1
F Pressure in Header		1																		

1	Pressure Monitoring		1			Pressure Transmitter	Supply & install the Pressure Transmitter										1					
v)	ELECTRICAL																					
1	Energy Monitoring (KWH, Dual Meter and Multi Function Meter)	75				Software Interface with Energy meter through RS 485 Communication port.	Integration															
2	Breaker Status At LT panel	6			6	At Volt free contact of Panel.	Integration															
3	Bus Coupler Status					At Volt free contact of Panel.	Integration															
4	HT Panel fault alarm	1			1	Potential Free Contact to DDC	Integration															
5	Incomming HT Voltage	4	4			Voltage Tranducer	Supply & Install the Voltage Tranducer															4
6	Battery Voltage Monitoring of UPS	1	1			Voltage Tranducer	Supply & Install the Voltage Tranducer															1
7	UPS Trip Alarm	4				At Volt free contact of UPS.	Integration															
8	DG fault alarm	4			4	Potential Free Contact to DDC	Integration															
9	DG battery status	4	4			Voltage Tranducer	Supply & Install the Voltage Tranducer															4
10	Fuel Storage - low fuel alarm	4			4	Flame/ Explosion Proof Bi -Level	Supply & install the											4				

							Switch	Flame/ Explosion Proof Bi-Level Switch															
v)	FIRE ALARM																						
1	Fire Signal	1					At FACP																
X	Miscellaneous																						
1	Elevators / Escalators fault alarm	17			17		Potential Free Contact to DDC	Integration															
			206	138	696	259				8	1	239	15	120	108	1	1	5	14	48	9		

Note:

i) Following points shall be displayed/controlled as minimum thru software integration of Chiller Microprocessor Control Panel:

Leaving Chilled Water Temperature

Entering Chilled Water Temperature

Leaving Condenser Water Temperature

Entering Condenser Water Temperature

Compressor Current Draw

Evaporator Refrigerant Pressure

Condenser Refrigeration Pressure

Condenser Discharge Refrigerant Temperature

Evaporator Refrigerant Temperature

Condenser Refrigeration Temperature

Oil Temperature

Oil Pressure Differential
Chiller Status
Condenser Water Flow Status
Chiller Water Flow Status
Manual Reset Alarm
Auto Reset Alarm
Communication Status
Chiller Enable
Chilled Water Set Point
Demand Limit Set Point

ii) *Following points shall be displayed/controlled as minimum thru software integration of Chiller Microprocessor Control Panel:*

VFD Speed Control
VFD-Power (kW)
VFD-Consumption (kWH)
VFD- Fault Alarm
VFD- Bypass Status
VFD-Speed (RPM) Feedback
CTL Address
Frequency Output
Speed
Current
Torque
Power percentage
Drive Temperature
kWH
Run Time hours
DC Bus Voltage Percentage
Last Fault

First Fault
Second Fault
OK Fault
Reset Fault
Error Status

