

WEBEL TECHNOLOGY LIMITED

CORRIGENDUM – I

TENDER NO. WTL/PHE/WC/24-25/013 DATED 25.09.2024

| Sl. No. | Section No. | Clause No. | Page No. | Present Clause | Revised Clause |
|---------|-------------|------------|----------|--|---|
| 1 | P | 3 | 47 | Residual Chlorine Sensor "Accuracy: + 5% certified from NABL Accredited Lab". It would rather be requirement of only self-certification. | Accuracy: + 5% certified via self certification when compared to reference material of ISO 17034 from Bharatiya Nirdeshak Dravya (BND). Valid certificate of reference material to be produced. The same accuracy test may be re-requested during procurement and factory visit. |
| 2 | A | 1 | 5 | What is the scope of the bidder from the Point of View of the Electrical and Mechanical work associated with the installation of the Sensors like Flometers and also electrical laying for conenctivity of IoT Unit to Sensors along with communication channels. What is the typical size and complexity of a site. | <p>Civil / Mechanical / Electrical: The scope of work includes all civil construction in the form of pit formation (if required), pit creation (if required), housing creation (if required).</p> <p>The scope of work includes all mechanical works towards creation of flanges and custom short pipes for the flowmeters. Installation of the flowmeters using tapping, welding, etc.</p> <p>Creation of taps, housing, bifurcations, piping for the other sensors on the relevant hot line pipes. The electrical shall include all concealed, underground armoured cabling along with relevant wiring for signal system across the various sensors within a location to the RTU. These have to be armoured cable including conduit and concealed during installation.</p> <p>The cost of material, labour and all associated accessories are part and parcel of I&C along with support of the same for the next 12 months.</p> <p>Survey: The selected SI's shall also have the relevant responsibility to map the designated quantity allocated locations for creation of final and accurate BOQ and such there is no additional cost allocated for such survey, it has to be included in the I&C.</p> <p>Cost of Networking for IoT Devices: The cost of the network connectivity either via 4G enabled IoT Sim cards as per TRAI regulations including failsafe mechanism of fallback against multiple MSP to ensure real-time data</p> |

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| | | | | | availability and transferability is to be considered as scope of the SI. The same scope includes such connectivity for 12 months from date of Go-live. |
| 3 | Large-scale IoT deployments covering multiple locations - 200 units | 7 | 13 | 7. The bidder/OEM shall have executed the work of installing Combined Environmental Monitoring & Awareness Solution including Water Quality/ Noise Monitoring Terminals / Ambient Air Quality & Display Board with Mobile App of not less than total Quantity of 200 locations in last the three financial years and current financial year (considering FY – 2020-21, 2021-22, 2022-23) for any State or Central Government department / SPSU / CPSU. References order copy with completion certificate/payment certificate with all relevant details for the project to be provided. | The bidder/OEM shall have executed the work of installing Combined Environmental Monitoring & Awareness Solution including Air, Chemical, Noise, Flow, Humidity, Pressure and Temperature, Bio-medical Sensors sensors & Display Board with Mobile App of not less than total Quantity of 200 locations in last the three financial years and current financial year (considering FY – 2020-21, 2021-22, 2022-23) for any State or Central Government department / SPSU / CPSU. References order copy with completion certificate/payment certificate with all relevant details for the project to be provided. |
| 4 | Product Certification | | 47,48 | <p>1 Ground Level Sensor CSIR-NPL at an accuracy of + 0.25%</p> <p>2 Pressure Sensor CSIR-NPL at an accuracy of + 0.25%</p> <p>3 Residual Chlorine Sensor NABL accredited laboratory with accuracy of + 5%</p> <p>4 IoT Module at Plant 4G LTE CAT 4 Modem with CE/FCC certification</p> <p>5 IoT Modules at each cluster/ DMA/ habitation 4G LTE CAT 4 Modem with CE/FCC certification</p> <p>6 Flowmeter (size 80 to 125mm): At entry of each cluster/ DMA/ habitation) CSIR-NPL at an accuracy of + 0.5%</p> <p>7 Flowmeter (80 mm) CSIR-NPL at an accuracy of + 0.5%</p> <p>8 Non-invasive Flowmeter (125 to 350 mm): At outlet of SR CSIR-NPL at an accuracy of + 1%</p> <p>9 Village Level Display Unit BIS & Energy Start Certification</p> | <p>1 .Ground Level Sensor CSIR-NPL at an accuracy of + 0.25%</p> <p>2 .Pressure Sensor CSIR-NPL at an accuracy of + 0.25%</p> <p>3 .Residual Chlorine Sensor Accuracy: + 5% certified via self certification when compared to reference material of ISO 17034 from Bharatiya Nirdeshak Dravya (BND). Valid certificate of reference material to be produced. The same accuracy test may be re-requested during procurement and factory visit.</p> <p>4. IoT Module at Plant 4G LTE CAT 4 Modem with CE/FCC/ CISPER certification</p> <p>5. IoT Modules at each cluster/ DMA/ habitation 4G LTE CAT 4 Modem with CE/FCC/ CISPER certification</p> <p>6. Flowmeter (size 80 to 125mm): At entry of each cluster/ DMA/ habitation) CSIR-NPL at an accuracy of + 0.5% or ISO 4064 & MID / OIML R 49</p> <p>7. Flowmeter (80 mm) CSIR-NPL at an accuracy of + 0.5% or ISO 4064 / OIML R 49 / MID</p> <p>8. Non-invasive Flowmeter (125 to 350 mm): At outlet of SR CSIR-NPL at an accuracy of + 1% or ISO 4064 / OIML R 49 / MID</p> <p>9. Village Level Display Unit BIS Certification</p> |
| 5 | End-to-end data encryption | | 45-47 | | All IoT device manufacturers incorporate end-to-end encryption (256-bit encryption) for data transfer from the device to the server. |

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| 6 | LCD display on IoT devices (Inbuilt) | | 45-47 | | Inbuilt LCD display on IoT devices for onsite monitoring by local support and verification of sensor data, GSM network strength and indication of data sending activities. LCD of minimum 48X24 Character to be available on the RTU with Backlit |
| 7 | B | 5 | 13 | The Bidder should have completed a single project of at least INR 1.0 Cr in the area of IT/ITeS implantation intervention related project for Central Government / State Government / Urban Local Bodies/ PSU in India. Bidder should submit reference order copy with completion certificate/payment certificate with all relevant details for the project to be provided. | The organization should have a positive Networth in Financial Year 2023-24. The same should be certified by a CA. |
| 8 | F | 1(1.1) | 30 | It is requested that the Total Turnover clause is considered in totality and not restricted to particular business areas. It is impossible to furnish such details and is unnecessarily restrictive for Bidders. It is further requested that the word "annual" is removed in order to make it in line with the rest of the Bid Document. It is pertinent to note that both the Eligibility Criteria in Section B, and the Checklist for Eligibility Criteria in Section S mention "total turnover" only but this clause in Section F mentions "Total Annual Turnover", so either this clause or the other clauses need to be modified. | To be read as "The Bidder should have total annual turnover of minimum Rs. 10.0 Crore for the last 5 financial years (2019-20,2020-21,2021-22, 2022-23 & 2023-24) Above Rs 50 Cr (Marks -15) ≥ Rs 30 Cr and < Rs 50 Cr (Marks -10) ≥ Rs 10 Cr and < Rs 30 Cr (Marks- 5) " |
| 9 | P | Display Unit | 47 | Display Unit is 9120 X 1080 | Corrected resolution 1920 X 1080 pixels |

| Sl. No. | Section No. | Clause No. | Page No. | Pre Bid Queries | Clarification Answer |
|---------|-------------|------------|----------|---|---|
| 1 | P | NA | 47 | Under the "Sensor Certification" section, request to allow for submission of certification post award and till before supply of the sensors, as the same not always available at ready. | Only valid certificates during the time of bid submission shall be accepted |
| 2 | H | 33 | 34 | What is the support period for "Cost of Private Cloud Hosted Dashboard(based on details as mentioned in Section – P) inclusive of Cert-in Security Audited with Safe to Host Certificate" | 12 Months after handover/integration of final unit |

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| 3 | D | 15 | 19 | Please elaborate on condition to achieve "Obtaining go-live / commissioning certificate from site incharge" also, would request the timeline for "Obtaining go-live / commissioning certificate from site incharge" be increased from "T+75" to "T+120". | No change as maintenance of timeline is one of the important essence of the project and for that WTL, if required due to urgency WTL may distribute among more bidder at L1 price. |
| 4 | D | 15 | 19 | Kindly confirm on the site readiness parameter. | Site readiness to be assessed during survey. |
| 5 | Authorisation from Flow meter OEM | 9 | 56 | Inconsistencies found regarding the manufacturer authorization. Authorization is only required for the IoT part, however no such clause given for the flowmeter portion. Without having this from flowmeter manufacturer, there is a significant risk that anyone can supply substandard product (s), compromising the quality, efficiency and reliability. This could lead to issues arise on the flowmeter's quality assurance, delivery commitment of 30 days and after-sales support. Incorporating this part would ensure consistent quality standards across all components and hold both Flowmeter and IoT manufacturers accountable for their products. | It is for all segment. MAF required for all line items in the BOQ. Hard copy of the MAF, Certifications will be sought postfacto with inked signatures. Original certificate to be presented as on request. Table with contact details of the certification, MAF along with contact details to certify the MAF & the Lab Certifications. For ISO verification https://www.iafcertsearch.org/ or https://www.veritasassurance.com/verifycert.php |
| 6 | End-to-end data encryption | | | Considering the critical nature of data security in IoT systems, tender committee may opt to mandate that all IoT device manufacturers incorporate end-to-end encryption (256-bit encryption) for data transfer from the device to the server. This level of encryption is crucial for safeguarding sensitive data, preventing unauthorized access, and ensuring the overall integrity and confidentiality of the IoT ecosystem. | Specification updated to 256 bit encryption |
| 7 | Local storage | | | We would like to propose the inclusion of a robust big data database solution, specifically MongoDB or Cassandra, as we aim to enhance the system's performance and support for high concurrency. Both MongoDB and Cassandra are designed to handle large volumes of data and can scale horizontally, ensuring that the system remains efficient even under heavy loads. With their distributed architecture, these databases provide robust fault tolerance and uptime. The ability to process large datasets with low latency will improve user experience and system responsiveness. | Optional - MongoDB or Cassandra for Bigdata processing. It is upto the bidder to choose but the platform provided must have an uptime of 99% |

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| 8 | Communication protocol (Modbus, ADC) | | | <p>Request the inclusion of any Government lab certifications related to electrical circuits and communication protocols such as ADC and Modbus for IoT devices. It may ensure -</p> <ul style="list-style-type: none"> • Certification of electrical circuits to guarantee adherence to regulatory and safety norms. • Certification for Modbus communication to ensure effective and reliable data exchange. • Verification of Analog-to-Digital Converter (ADC) functionality for accurate signal processing. <p>Incorporating these certification requirements will enhance the quality and reliability of our IoT devices, ensuring they meet essential industry standards. This will not only improve safety but also build trust with users and stakeholders.</p> | Optional - Requirement of Govt Lab certification for RTU using ADC or MODBUS |
| 9 | IoT Modules | | | The specification of IoT Modules at each cluster / DMA/ habitation is not understood, Kindly clarify. | Refer to Section Section-P, Sub-6, Page 46 |
| 10 | A | N.A | 4 | <p>Please define the Handover Process and clarify consideration of the O&M period commencement date. Since the project has to be executed at multiple sites the O&M commencement date is preferred to be site specific.</p> <p>Also please confirm maximum gap between fully integrated site vis-a-vis Go-Live Date as SIM and O&M Support costs are recurring in nature.</p> | Network Conenctivity - 15 months (3 months for installation + 12 months), O&M date from date of handover. Ste Handover - available on dashboard with stabilization time of 1 week with all sensor datasets |
| 11 | A | N.A | 4 | Sample layout is not attached | Attached |
| 12 | A | N.A | 11 | Please clarify this point: Enable users to collect data manually from non-instrumented sources using personal devices and handheld terminals | Some handheld instruments are used from time to time for measurement of flow or other paramters, who should also have the capability to be integrated into the Dashboard/ICCC platform |
| 13 | B | 18 | 14 | Please consider On-Roll Employee also along with offices and engineers | Need to submit PF/ESI statement for them along with HR certificate |
| 14 | D | 20 | 20 | Kindly Define Payment Milestones and please confirm RA billing and it's obligtaions, such as minimum no. of sites to be Billed / minimum Intervals. Also please confirm the maximum Credit days from the date of Invoicing. | No change |
| 15 | H | 33 | 34 | Considering there is a mention of order splitting among bidders, then each bidder should consider what %age of cost for the line item mentioned as "Cost of Private Cloud | Should consider compelte cost as per specification. |

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| | | | | Hosted Dashboard(based on details as mentioned in Section – P) inclusive of Cert-in Security Audited with Safe to Host Certificate" or should they consider the complete cost for further integration among bidders? Require clarifications. | |
| 16 | B | 8 | 13 | Bidder & OEM should have a call center (toll free or otherwise) in West Bengal. Details to be submitted in respective letter head. | At the time of bidding that's why it can be either toll-free or otherwise |
| 17 | B | 10 | 13 | OEM should have authorized service center/replacement centers in the State of West Bengal. Service Center details to be submitted as per format (Section – R) duly signed by the authorized signatory of the company. | Considering the sensitivity of the project and real-time depiction of the data at the state H.Q level , prompt action in local language is very much desirable. |
| 18 | B | 18 | 14 | The bidder should have a presence in the form of offices or engineers in at least 5 districts of West Bengal (covering the state spread). This should be substantiated via proof of office or proof of permanent staff at West Bengal. Declaration from HR Head in company letter head should be submitted | Considering the sensitivity of the project and real-time depiction of the data at the state H.Q level , prompt action in local language is very much desirable. |
| 19 | D | 20 | 20 | Terms of payment terms will be on back-to-back basis, i.e., payment will be made only on receipt of payment from relevant customer. | Post submission of Invoice , when WTL receives the payment , it will be re-imbursed to the enrolled bidder within 7 (seven) working days |
| 20 | D | 28 | 21 | SUB-CONTRACT The purchaser (WTL) does not recognize the existence of Sub-Contractors. The Contractor's responsibility is not transferable. No consortium partner is allowed. | WTL does not recognize sub-contracting |
| 21 | | | 4 | Survey: The selected SI's shall also have the relevant responsibility to map the designated quantity allocated locations for creation of final and accurate BOQ and such there is no additional cost allocated for such survey, it has to be included in the I&C. | Yes |
| 22 | B | 4 | 13 | The bidder should have a total turnover of not less than Rs. 10.00 Cr. covering the last five financial years (considering FY 19-20,20-21,21-22,22-23 & 23-24). Bidder shall have to submit Audited Balance Sheet / Audited Accounts / Auditor Certificate in support of their claim. | Yes |
| 23 | D | 14 | 18 | It is requested that the Clause is amended to reflect Performance Bank Guarantee to 3% in line with Finance Department Government of West Bengal Memo No. 796-F(Y) dated 25/02/2022 stipulating performance security at 3% of the value of the contract | No change |

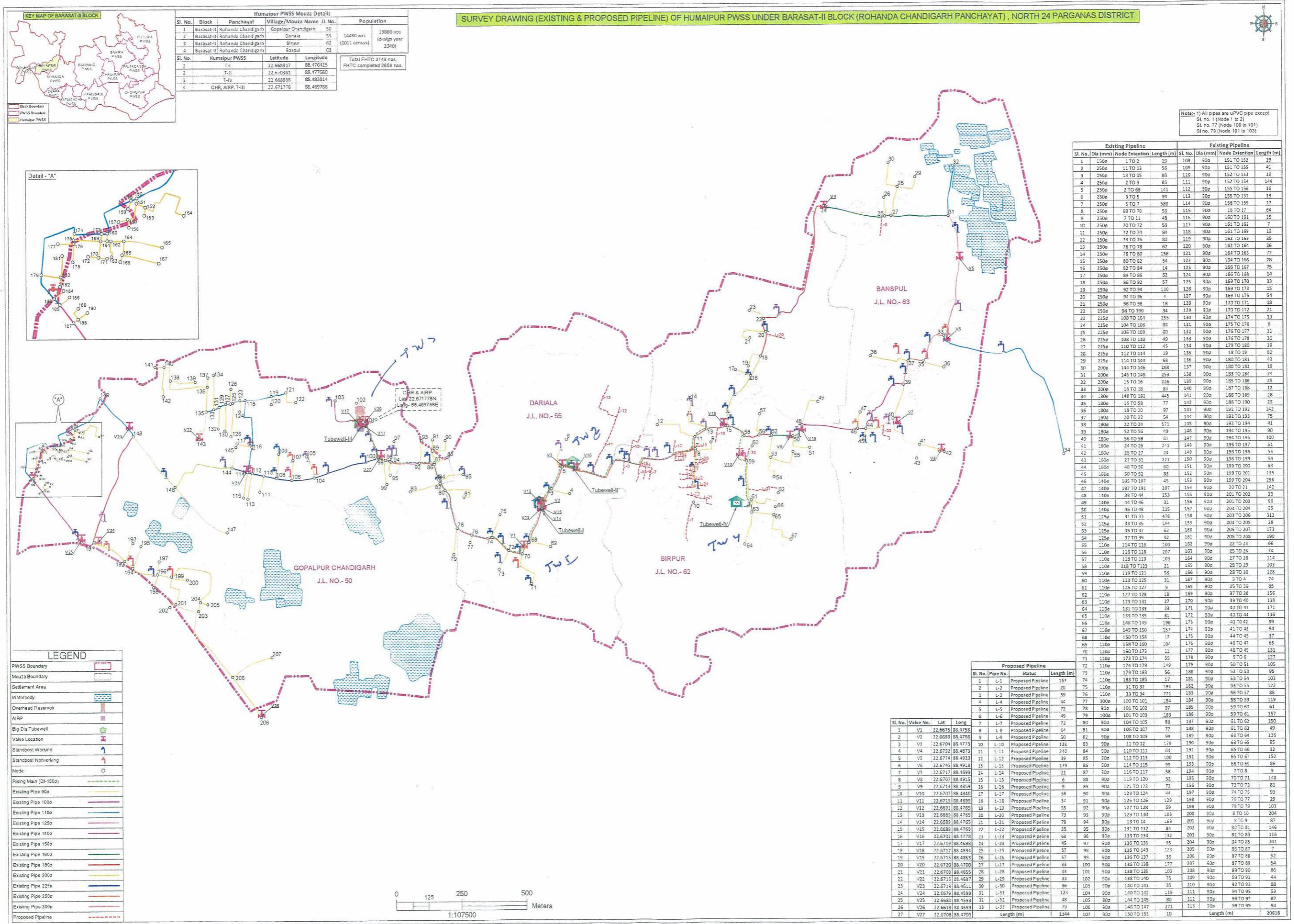
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| 24 | D | 28 | 21 | It is requested that Consortium may kindly be allowed in order to enhance participation and ensure that the SITC is undertaken comprehensively. It is respectfully submitted that SITC involves a multitude of different activities and it is not simply a supply of goods. In such a case it is beneficial for both the Contractor and the Customer to have a Consortium where Members who specialize in different roles can come together to execute the project. | No change |
| 25 | D | 34 | 22 | It is requested that a time barred limitation is added to the clause for say 12 months in order to align it with the Warranty clause in clause 33 just above. Having no limitation on the Warranty Support clause in this clause 34 will make it impossible for the prospective Bidder to quote any rational figure. | 12 Months |
| 26 | D | 61 | 25 | The Tendering Authority has kindly permitted site inspection which can be organized at four day's notice. It is requested that the modalities for the same are shared so that the prospective Bidder can undertake site inspection prior to submitting its Bid. | Refer to Sample layout section |
| 27 | E | - | 29 | The Tendering Authority is requested to clarify who is responsible for authorizing and verifying the signature in the Bid Form. If any internal authorization is required, then a Board Resolution will surely be a more effective alternate. | Authorized signatory -Board Resolution to be produced |
| 28 | D | 61 | 25 | There is no specific line item in the BOQ for the cost of the Site Inspection. Please clarify or modify the BOQ to add the line item for the Site Inspection cost. | No change - to be considered within the other line items of the BOQ |
| 29 | A | N.A | 11 | Please clarify this point: Enable users to collect data manually from non-instrumented sources using personal devices and handheld terminals | Some handheld instruments are used from time to time for measurement of flow or other parameters, who should also have the capability to be integrated into the Dashboard/ICCC platform |
| 30 | H | 33 | 34 | In reference to the possibility of order splitting among bidders, could you clarify if each bidder should allocate a certain percentage of the cost for the line item "Cost of Private Cloud Hosted Dashboard (as detailed in Section P) inclusive of Cert-in Security Audited with Safe to Host Certificate," or should the full cost be accounted for by each bidder to ensure seamless integration among all parties? We request further clarification on this aspect. | Go-live at customer end server |

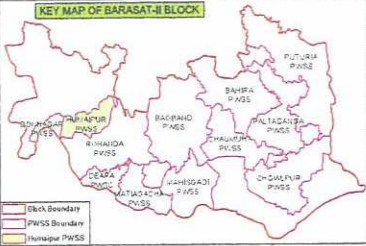
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| 31 | D | 9 | 18 | Could you provide more details on the Earnest Money Deposit (EMD) refund process, especially in the case of disqualified bidders? | if disqualified then EMD shall be returned |
| 32 | F | 4 | 32 | Is it mandatory to submit completion certificates from similar projects within the past five years, or are ongoing projects acceptable? | Completion Certificate Mandatory or Payment Certificate |
| 33 | L | 13 | 39 | In case of a discrepancy between digital signatures and document copies, how should bidders rectify errors? | Tender Committe will decide. |
| 34 | A | 9 | 23 | What are the specifications and protocols to be followed for integrating third-party water quality sensors with the IoT platform? | MQTT / RabbitMQ - optional |
| 35 | G | 5 | 13 | What is the expected uptime for the cloud-hosted IoT platform? Are there specific SLAs related to data processing delays? | 99% of the IoT Platform - non-dependency on the Cloud |
| 36 | A | 2 | 5 | Is there a provision for integration with external APIs for water consumption data analytics? Will API access be provided to external stakeholders? | YES |
| 37 | | | | Local storage allows devices to cache data during outages, ensuring no information is lost. Eliminating the need for dual SIM setups simplifies device design and reduces costs. Data can be processed and stored locally, leading to faster response times and less reliance on external networks. Local storage can maintain data integrity by ensuring that all collected data is safely stored until connectivity is restored. Minimizing reliance on multiple SIM cards or additional networking hardware lowers operational costs. | On System Backup for minimum of 30 days |

Sample Site Layout



SURVEY DRAWING (EXISTING & PROPOSED PIPELINE) OF HUMAIPUR PWSS UNDER BARASAT-II BLOCK (ROHANDA CHANDIGARH PANCHAYAT), NORTH 24 PARGANAS DISTRICT



| Humaipur PWSS Mouza Details | | | | | |
|-----------------------------|------------|--------------------|---------------------|--------|--------------------------|
| Sl. No. | Block | Panchayat | Village/Mouza Name | JL No. | Population |
| 1 | Barasat-II | Rohanda Chandigarh | Gopalpur Chandigarh | 50 | 14480 nos. |
| 2 | Barasat-II | Rohanda Chandigarh | Dariala | 55 | 19880 nos. |
| 3 | Barasat-II | Rohanda Chandigarh | Birpur | 62 | (2011 census) |
| 4 | Barasat-II | Rohanda Chandigarh | Banspuli | 63 | (2011 census) |
| | | | | | Total FHTC 3148 nos. |
| | | | | | FHTC completed 2658 nos. |

| Sl. No. | Humaipur PWSS | Latitude | Longitude |
|---------|----------------|-----------|-----------|
| 1 | T-1 | 22.668317 | 88.476415 |
| 2 | T-2 | 22.670301 | 88.477690 |
| 3 | T-3 | 22.668558 | 88.483814 |
| 4 | CHR, AIRP, T-4 | 22.671778 | 88.469788 |

Note: 1) All pipes are uPVC pipe except
Sl. no. 1 (Node 1 to 2)
Sl. no. 77 (Node 100 to 101)
Sl. no. 79 (Node 101 to 103)

| Existing Pipeline | | | | Existing Pipeline | | | |
|-------------------|----------|----------------|------------|-------------------|----------|----------------|------------|
| Sl. No. | Dia (mm) | Node Extension | Length (m) | Sl. No. | Dia (mm) | Node Extension | Length (m) |
| 1 | 150e | 1 TO 2 | 10 | 108 | 90a | 151 TO 152 | 19 |
| 2 | 250e | 11 TO 13 | 56 | 109 | 90a | 151 TO 155 | 41 |
| 3 | 250e | 13 TO 15 | 88 | 110 | 90a | 152 TO 153 | 16 |
| 4 | 250e | 2 TO 3 | 85 | 111 | 90a | 152 TO 154 | 14 |
| 5 | 250e | 2 TO 6B | 123 | 112 | 90a | 155 TO 156 | 16 |
| 6 | 250e | 3 TO 5 | 94 | 113 | 90a | 155 TO 157 | 19 |
| 7 | 250e | 5 TO 7 | 580 | 114 | 90a | 158 TO 159 | 17 |
| 8 | 250e | 8 TO 7C | 53 | 115 | 90a | 16 TO 17 | 64 |
| 9 | 250e | 7 TO 11 | 48 | 116 | 90a | 160 TO 161 | 15 |
| 10 | 250e | 70 TO 72 | 53 | 117 | 90a | 161 TO 162 | 7 |
| 11 | 250e | 72 TO 74 | 84 | 118 | 90a | 161 TO 169 | 13 |
| 12 | 250e | 74 TO 76 | 80 | 119 | 90a | 162 TO 163 | 35 |
| 13 | 250e | 76 TO 78 | 62 | 120 | 90a | 162 TO 164 | 26 |
| 14 | 250e | 78 TO 80 | 158 | 121 | 90a | 164 TO 165 | 77 |
| 15 | 250e | 80 TO 82 | 34 | 122 | 90a | 164 TO 166 | 78 |
| 16 | 250e | 82 TO 84 | 14 | 123 | 90a | 166 TO 167 | 75 |
| 17 | 250e | 84 TO 86 | 62 | 124 | 90a | 166 TO 168 | 14 |
| 18 | 250e | 86 TO 92 | 57 | 125 | 90a | 169 TO 170 | 33 |
| 19 | 250e | 92 TO 94 | 110 | 126 | 90a | 169 TO 173 | 15 |
| 20 | 250e | 94 TO 96 | 6 | 127 | 90a | 169 TO 175 | 54 |
| 21 | 250e | 96 TO 98 | 18 | 128 | 90a | 170 TO 171 | 18 |
| 22 | 250e | 98 TO 100 | 34 | 129 | 90a | 170 TO 172 | 21 |
| 23 | 225e | 100 TO 101 | 253 | 130 | 90a | 174 TO 175 | 13 |
| 24 | 225e | 104 TO 106 | 88 | 131 | 90a | 175 TO 176 | 8 |
| 25 | 225e | 106 TO 108 | 60 | 132 | 90a | 175 TO 177 | 31 |
| 26 | 225e | 108 TO 110 | 49 | 133 | 90a | 175 TO 177 | 36 |
| 27 | 225e | 110 TO 112 | 45 | 134 | 90a | 175 TO 180 | 39 |
| 28 | 225e | 112 TO 114 | 19 | 135 | 90a | 18 TO 19 | 82 |
| 29 | 225e | 114 TO 116 | 63 | 136 | 90a | 180 TO 181 | 43 |
| 30 | 200e | 144 TO 146 | 268 | 137 | 90a | 180 TO 182 | 19 |
| 31 | 200e | 146 TO 148 | 253 | 138 | 90a | 183 TO 184 | 24 |
| 32 | 200e | 15 TO 16 | 226 | 139 | 90a | 185 TO 186 | 25 |
| 33 | 200e | 16 TO 18 | 84 | 140 | 90a | 187 TO 188 | 12 |
| 34 | 180e | 148 TO 191 | 445 | 141 | 90a | 188 TO 189 | 28 |
| 35 | 180e | 15 TO 18 | 77 | 142 | 90a | 188 TO 190 | 23 |
| 36 | 180e | 18 TO 20 | 97 | 143 | 90a | 191 TO 192 | 142 |
| 37 | 180e | 20 TO 22 | 54 | 144 | 90a | 192 TO 193 | 75 |
| 38 | 180e | 22 TO 24 | 57 | 145 | 90a | 192 TO 194 | 41 |
| 39 | 180e | 24 TO 26 | 79 | 146 | 90a | 196 TO 195 | 90 |
| 40 | 180e | 26 TO 28 | 51 | 147 | 90a | 194 TO 196 | 100 |
| 41 | 180e | 28 TO 25 | 713 | 148 | 90a | 195 TO 197 | 51 |
| 42 | 180e | 25 TO 27 | 24 | 149 | 90a | 195 TO 198 | 53 |
| 43 | 180e | 27 TO 31 | 221 | 150 | 90a | 195 TO 199 | 54 |
| 44 | 160e | 48 TO 50 | 63 | 151 | 90a | 199 TO 200 | 63 |
| 45 | 160e | 50 TO 52 | 83 | 152 | 90a | 199 TO 201 | 133 |
| 46 | 140e | 185 TO 187 | 45 | 153 | 90a | 199 TO 204 | 296 |
| 47 | 140e | 187 TO 191 | 297 | 154 | 90a | 20 TO 21 | 142 |
| 48 | 140e | 38 TO 44 | 253 | 155 | 90a | 201 TO 202 | 33 |
| 49 | 140e | 44 TO 46 | 31 | 156 | 90a | 201 TO 204 | 81 |
| 50 | 140e | 46 TO 48 | 315 | 157 | 90a | 201 TO 204 | 35 |
| 51 | 125e | 31 TO 33 | 476 | 158 | 90a | 203 TO 206 | 112 |
| 52 | 125e | 33 TO 35 | 244 | 159 | 90a | 204 TO 205 | 29 |
| 53 | 125e | 35 TO 37 | 52 | 160 | 90a | 205 TO 207 | 173 |
| 54 | 125e | 37 TO 39 | 92 | 161 | 90a | 205 TO 208 | 190 |
| 55 | 110e | 114 TO 116 | 100 | 162 | 90a | 22 TO 23 | 66 |
| 56 | 110e | 116 TO 118 | 207 | 163 | 90a | 25 TO 26 | 74 |
| 57 | 110e | 118 TO 119 | 103 | 164 | 90a | 27 TO 28 | 114 |
| 58 | 110e | 118 TO 113 | 21 | 165 | 90a | 28 TO 29 | 103 |
| 59 | 110e | 119 TO 121 | 58 | 166 | 90a | 28 TO 30 | 128 |
| 60 | 110e | 123 TO 125 | 31 | 167 | 90a | 3 TO 4 | 74 |
| 61 | 110e | 125 TO 127 | 81 | 168 | 90a | 25 TO 26 | 85 |
| 62 | 110e | 127 TO 129 | 18 | 169 | 90a | 37 TO 38 | 156 |
| 63 | 110e | 129 TO 131 | 27 | 170 | 90a | 39 TO 40 | 138 |
| 64 | 110e | 131 TO 133 | 23 | 171 | 90a | 40 TO 41 | 171 |
| 65 | 110e | 133 TO 135 | 31 | 172 | 90a | 40 TO 44 | 116 |
| 66 | 110e | 148 TO 149 | 196 | 173 | 90a | 41 TO 42 | 99 |
| 67 | 110e | 149 TO 150 | 157 | 174 | 90a | 41 TO 43 | 54 |
| 68 | 110e | 150 TO 158 | 17 | 175 | 90a | 44 TO 45 | 37 |
| 69 | 110e | 158 TO 160 | 104 | 176 | 90a | 46 TO 47 | 65 |
| 70 | 110e | 160 TO 173 | 11 | 177 | 90a | 48 TO 49 | 131 |
| 71 | 110e | 173 TO 174 | 55 | 178 | 90a | 5 TO 6 | 127 |
| 72 | 110e | 174 TO 179 | 249 | 179 | 90a | 50 TO 51 | 105 |
| 73 | 110e | 179 TO 183 | 56 | 180 | 90a | 51 TO 53 | 96 |
| 74 | 110e | 183 TO 185 | 17 | 181 | 90a | 53 TO 54 | 103 |
| 75 | 110e | 11 TO 32 | 194 | 182 | 90a | 53 TO 55 | 122 |
| 76 | 110e | 33 TO 34 | 721 | 183 | 90a | 56 TO 57 | 88 |
| 77 | 300e | 100 TO 101 | 154 | 184 | 90a | 58 TO 59 | 119 |
| 78 | 90a | 101 TO 102 | 97 | 185 | 90a | 59 TO 60 | 61 |
| 79 | 100e | 101 TO 103 | 183 | 186 | 90a | 59 TO 61 | 157 |
| 80 | 90a | 104 TO 105 | 88 | 187 | 90a | 61 TO 62 | 150 |
| 81 | 90a | 105 TO 107 | 77 | 188 | 90a | 61 TO 63 | 49 |
| 82 | 90a | 108 TO 109 | 94 | 189 | 90a | 63 TO 64 | 126 |
| 83 | 90a | 11 TO 12 | 179 | 190 | 90a | 63 TO 65 | 85 |
| 84 | 90a | 110 TO 111 | 54 | 191 | 90a | 65 TO 67 | 32 |
| 85 | 90a | 112 TO 113 | 100 | 192 | 90a | 65 TO 67 | 152 |
| 86 | 90a | 114 TO 115 | 99 | 193 | 90a | 68 TO 69 | 86 |
| 87 | 90a | 116 TO 117 | 58 | 194 | 90a | 7 TO 8 | 9 |
| 88 | 90a | 119 TO 120 | 32 | 195 | 90a | 70 TO 71 | 148 |
| 89 | 90a | 121 TO 122 | 72 | 196 | 90a | 72 TO 73 | 81 |
| 90 | 90a | 123 TO 124 | 44 | 197 | 90a | 74 TO 75 | 93 |
| 91 | 90a | 125 TO 126 | 129 | 198 | 90a | 75 TO 77 | 29 |
| 92 | 90a | 127 TO 128 | 59 | 199 | 90a | 78 TO 79 | 103 |
| 93 | 90a | 129 TO 130 | 103 | 200 | 90a | 8 TO 10 | 204 |
| 94 | 90a | 130 TO 131 | 137 | 201 | 90a | 8 TO 9 | 87 |
| 95 | 90a | 130 TO 134 | 263 | 202 | 90a | 8 TO 81 | 146 |
| 96 | 90a | 131 TO 132 | 84 | 203 | 90a | 82 TO 83 | 118 |
| 97 | 90a | 131 TO 134 | 137 | 204 | 90a | 82 TO 83 | 118 |
| 98 | 90a | 135 TO 136 | 95 | 205 | 90a | 84 TO 85 | 101 |
| 99 | 90a | 135 TO 143 | 123 | 206 | 90a | 85 TO 87 | 7 |
| 100 | 90a | 136 TO 137 | 36 | 206 | 90a | 87 TO 88 | 52 |
| 101 | 90a | 136 TO 138 | 177 | 207 | 90a | 87 TO 89 | 54 |
| 102 | 90a | 138 TO 139 | 103 | 208 | 90a | 89 TO 90 | 86 |
| 103 | 90a | 138 TO 140 | 75 | 209 | 90a | 89 TO 91 | 44 |
| 104 | 90a | 140 TO 141 | 35 | 210 | 90a | 92 TO 93 | 88 |
| 105 | 90a | 140 TO 142 | 119 | 211 | 90a | 94 TO 95 | 53 |
| 106 | 90a | 144 TO 145 | 80 | 212 | 90a | 95 TO 97 | 87 |
| 107 | 90a | 148 TO 147 | 271 | 213 | 90a | 98 TO 99 | 64 |
| 108 | 90a | 150 TO 151 | 10 | 214 | 90a | 107 TO 108 | 10 |

| Proposed Pipeline | | | | Proposed Pipeline | | | |
|-------------------|----------|-------------------|------------|-------------------|----------|-------------------|------------|
| Sl. No. | Pipe No. | Status | Length (m) | Sl. No. | Pipe No. | Status | Length (m) |
| 1 | L-1 | Proposed Pipeline | 157 | 74 | L-10 | Proposed Pipeline | 183 |
| 2 | L-3 | Proposed Pipeline | 20 | 75 | L-11 | Proposed Pipeline | 194 |
| 3 | L-3 | Proposed Pipeline | 39 | 76 | L-12 | Proposed Pipeline | 171 |
| 4 | L-4 | Proposed Pipeline | 44 | 77 | L-13 | Proposed Pipeline | 154 |
| 5 | L-5 | Proposed Pipeline | 72 | 78 | L-14 | Proposed Pipeline | 185 |
| 6 | L-6 | Proposed Pipeline | 49 | 79 | L-15 | Proposed Pipeline | 183 |
| 7 | L-7 | Proposed Pipeline | 72 | 80 | L-16 | Proposed Pipeline | 88 |
| 8 | L-8 | Proposed Pipeline | 64 | 81 | L-17 | Proposed Pipeline | 97 |
| 9 | L-8 | Proposed Pipeline | 30 | 82 | L-18 | Proposed Pipeline | 74 |
| 10 | L-10 | Proposed Pipeline | 186 | 83 | L-19 | Proposed Pipeline | 127 |
| 11 | L-11 | Proposed Pipeline | 240 | 84 | L-20 | Proposed Pipeline | 130 |
| 12 | L-12 | Proposed Pipeline | 39 | 85 | L-21 | Proposed Pipeline | 100 |
| 13 | L-13 | Proposed Pipeline | 179 | 86 | L-22 | Proposed Pipeline | 130 |
| 14 | L-14 | Proposed Pipeline | 21 | 87 | L-23 | Proposed Pipeline | 130 |
| 15 | L-15 | Proposed Pipeline | 6 | 88 | L-24 | Proposed Pipeline | 130 |
| 16 | L-16 | Proposed Pipeline | 9 | 89 | L-25 | Proposed Pipeline | 130 |
| 17 | L-17 | Proposed Pipeline | 56 | 90 | L-26 | Proposed Pipeline | 130 |
| 18 | L-18 | Proposed Pipeline | 34 | 91 | L-27 | Proposed Pipeline | 130 |
| 19 | L-19 | Proposed Pipeline | 55 | 92 | L-28 | Proposed Pipeline | 130 |
| 20 | L-20 | Proposed Pipeline | 73 | 93 | L-29 | Proposed Pipeline | 130 |
| 21 | L-21 | Proposed Pipeline | 79 | 94 | L-30 | Proposed Pipeline | 130 |
| 22 | L-22 | Proposed Pipeline | 35 | 95 | L-31 | Proposed Pipeline | 130 |
| 23 | L-23 | Proposed Pipeline | 86 | 96 | L-32 | Proposed Pipeline | 130 |
| 24 | L-24 | Proposed Pipeline | 45 | 97 | L-33 | Proposed Pipeline | 130 |
| 25 | L-25 | Proposed Pipeline | 57 | 98 | L-34 | Proposed Pipeline | 130 |
| 26 | L-26 | Proposed Pipeline | 67 | 99 | L-35 | Proposed Pipeline | 130 |
| 27 | L-27 | Proposed Pipeline | 33 | 100 | L-36 | Proposed Pipeline | 130 |
| 28 | L-28 | Proposed Pipeline | 33 | 101 | L-37 | Proposed Pipeline | 130 |
| 29 | L-29 | Proposed Pipeline | 33 | 102 | L-38 | Proposed Pipeline | 130 |
| 30 | L-30 | Proposed Pipeline | 36 | 103 | L-39 | Proposed Pipeline | 130 |
| 31 | L-31 | Proposed Pipeline | 124 | 104 | L-40 | Proposed Pipeline | 130 |
| 32 | L-32 | Proposed Pipeline | 48 | 105 | L-41 | Proposed Pipeline | 130 |
| 33 | L-33 | Proposed Pipeline | 79 | 106 | L-42 | Proposed Pipeline | 130 |
| 34 | L-34 | Proposed Pipeline | 107 | 107 | L-43 | Proposed Pipeline | 130 |

LEGEND

- PWSS Boundary
- Mouza Boundary
- Settlement Area
- Waterbody
- Overhead Reservoir
- AIRP
- Big Dia Tubewell
- Valve Location
- Standpost Working
- Standpost Notworking
- Node
- Rising Main (DI-150)
- Existing Pipe 90e
- Existing Pipe 100e
- Existing Pipe 110e
- Existing Pipe 125e
- Existing Pipe 140e
- Existing Pipe 150e
- Existing Pipe 160e
- Existing Pipe 180e
- Existing Pipe 200e
- Existing Pipe 225e
- Existing Pipe 250e
- Existing Pipe 300e
- Proposed Pipeline

