

## CB No: MCA-M/CF/DWA/W-01

**Bidding Document for Construction Works of an Advanced Water  
Purification Plant (AWPP) and SCADA Controls (CP 2)**

**ANSWERS TO CLARIFICATION QUESTIONS – ISSUE NO. 4  
(QUESTIONS 170-241) February 9, 2021**

<b>Questions and Answers 1-7 issued to all registered Bidders on January 11, 2021</b>	
<b>Questions and Answers 8-115 issued to all registered Bidders on January 25, 2021</b>	
<b>Questions and Answers 115- 169 issued to all registered Bidders on February 4, 2021</b>	
<b>Question 170:</b>	Is there any restriction on claiming the experience of subsidiaries by the parent company?
<b>Answer 170</b>	With respect to factors 2.4.2 and 2.4.3 – Similar and Specific Experience, the experience of a parent company, affiliate company, or subsidiary of the entity/entities comprising the Bidder may only be considered if the Bidder demonstrates such business affiliation (including consolidation of financial results) and that the experience and capability of such parent company, affiliate company, or subsidiary are at the disposal of the Bidder entity for execution of the Works.
<b>Question 171:</b>	We kindly request 6 weeks extension for the bid submission date as we are witnessing delay from the suppliers / manufacturers, and they are asking for more time in order to finalize their offers.
<b>Answer 171:</b>	a) This IFB was released on December 15, 2020 and Bidders were given sufficient time to coordinate both their own work schedule and communication channels with suppliers and partners. The Bid Submission date will not be extended beyond March 2, 2021. b) MCA-Mongolia has not issued any changes to the Technical specifications or bidding requirements that are significant enough to warrant an extension. As such, the Bid Submission date is currently maintained as March 2, 2021.
<b>Question 172:</b>	Due to the restrictions related to Covid-19 pandemic for the flights to Mongolia, due to the difficulties to reach the factories and suppliers for the basic construction material (such as cement, steel iron, gravel etc...) because of the fact that factories and suppliers are closed or working from distance, we kindly ask five (5) week extension to the tender in order to prepare a good, reasonable and competitive Bid to the advantage of MCA-Mongolia.
<b>Answer 172:</b>	Please refer to the response to Question #171.
<b>Question 173:</b>	Company is requested to provide 4-Weeks extension. Contractor has requested this extension based on the current COVID situation and prominent delay in proposal submission from project key vendors.
<b>Answer 173:</b>	Please refer to the response to Question #171.

<b>Question 174:</b>	In case the suppliers / manufacturers have representative in Mongolia then the contractor may take the services / training directly from them. Kindly confirm if that option will be acceptable.
<b>Answer 174:</b>	<p>While foreign bidders may consider using Mongolian Subcontractors or suppliers, there are no specific requirements to do so.</p> <p>Bidders are also reminded that while the suppliers/manufacturers may have a representative in Mongolia, if that supplier or manufacturer is a Government-owned Enterprise or from an embargoed country, the restrictions of the Bidding document apply.</p> <ol style="list-style-type: none"> <li>Please refer to the responses to Questions 2, 3 and 4 in Clarification #1 issued to all registered Bidders on January 11, 2021.</li> <li>Please refer to the responses to Questions 72, 88 and 100 in Clarification #2 issued to all registered Bidders on January 25, 2021.</li> <li>Please refer to the responses to Questions 117, 132 and 136 of Clarification #3 issued on February 4, 2021.</li> </ol>
<b>Question 175:</b>	Referring to Subclause 14.5(b) and 14.5(c) “Plant and materials intended for the works” in “Appendix to bid”; a table is mentioned for the “Plant” and “Material” with the country of origin. Kindly clarify what to include in plant part and in material part. The previous clarification was not clear to us.
<b>Answer 175:</b>	<p>As a follow up to the answer to Question 11 of Clarification #2 issued on January 25, 2021, the Table under Sub-clause to be submitted at this bidding stage shall include all major “Plant” and “Material” items above USD 20,000 that will be imported and their country of origin. This is to ensure that these items are compliant for eligibility purposes as provided for in ITB 6.4.</p> <p>For definitions for “Plant” and “Material”, see Sub-Clauses 1.1.5.3-1.1.5.5 of FIDIC Conditions of Contract for Construction, for Building and Engineering Works Designed by the Employer, First Edition, 1999.</p>
<b>Question 176:</b>	Kindly advise us for the bid security hard copy submission on time due to the Covid-19 status, there could be some delays in courier service due to country closure. Kindly propose an alternative method.
<b>Answer 176:</b>	<p>The Bidder is responsible for ensuring this arrives on time. This includes, but is not limited to, the use of a local representative to ensure hand delivery.</p> <p>The financial institution legally authorized to provide this guarantee shall have a correspondent financial institution located in Mongolia that will ensure the enforceability of this guarantee. The Bidder has to ensure that their selected financial institution provides enough time to allow for the Bidder to provide this hard copy is delivered 7 working days from Submission of Bid as per the requirements of ITB 20.2.</p> <p>Bidders are reminded that the Form of Bid Security (Bank Guarantee) states:</p> <p><i>“Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.”</i></p> <p><i>[Issuing Bank to delete whichever is not applicable]</i></p>

	<p><i>We confirm that [we are a financial institution legally authorized to provide this guarantee in the Employer’s country] [OR]</i></p> <p><i>[we are a financial institution located outside the Employer’s country but have a correspondent financial institution located in the Employer’s country that will ensure the enforceability of this guarantee. The name of our correspondent bank and contact information is as follows: [provide name, address, phone number, and email address].</i></p>
<b>Question 177:</b>	Kindly provide instructions for the completion of forms for IFB (Section IX. Contract Annexes) Should we fill the table which was given; in accordance with the request that bidders should prepare.
<b>Answer 177:</b>	<p>Bidders are directed to Section I of the IFB - Instruction to Bidders - ITB 12 “Documents Comprising the Bid”. This provides the Bidders with the items it must provide with the Bid. If a Form has been added or amended, Bidders shall submit that new or updated Form.</p> <p>The items specifically from Section IX of the IFB - Contract Annexes are the Appendix to Bid and the Compliance with Sanctions Certification Form (Form CON-2).</p>
<b>Question 178:</b>	According to the IFB, bidders should prepare a table including of each staff member. Can we assume this should be our key personnel in project management organization table which will be given with form-Tech-5 or any other request of for any other defined staffs? Please clarify.
<b>Answer 178:</b>	<p>Bidders shall provide CVs using the template provided in Form TECH-7: CVs of Key Personnel.</p> <p>As stated in Form TECH-5: Project Management Organization: <i>“The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key personnel listed in Part II, Work Requirements. At a minimum, CVs must be provided for the Key Personnel for the following positions identified in Section III 2.6, using the forms provided:”</i></p>
<b>Question 179:</b>	Kindly advise us that in the event of the Contract award being during a period when Mongolia is still under closure due to COVID-19 travel restrictions, what would be the actual starting date.
<b>Answer 179:</b>	<p>There is currently a restriction on border crossings until March 31, 2021 and the Contract will not have been awarded by that time. MCA-Mongolia cannot advise if these restrictions will continue beyond this and up to the date of Contract award.</p> <p>Refer to response to Question 140 of Clarification #3, issued on Feb. 4, 2021.</p>
<b>Question 180:</b>	According to Section 02275 of the design specifications, “Polystyrene for Pipeline Trench”, a horizontal layer of Extruded Polystyrene Insulation will be installed in the pipeline trench, located above the pipe. In the drawings (page 67/985), there is a cross section image of the trench insulation. However, there does not seem to be enough information to calculate or locate the total amount of extruded insulation required for the trench. Can you please identify the specific areas in the bid documents that show the amount of insulation required, or that should be used to calculate the amount of

	insulation required?
<b>Answer 180:</b>	Insulation is required in the trench at locations where the pipe has less than 4 meters of cover as shown in the detail and Pipe Insulation Width Table on drawing 99 C-703. The quantity of insulation required can be determined based on the depth of the yard piping shown in the profiles on drawings 00 C-301 through 00 C-307.
<b>Question 181:</b>	<p>Kindly confirm that below mentioned services and tests shall be priced under item 1. P “Training and support to USUG (Water Utility Operator of Ulaanbaatar city) operators as specified prior to and during the one-year Defect Notification Period (DNP)” of the letter of Bid.</p> <ul style="list-style-type: none"> <li>a) Factory trained service Technician (installation, functional testing, field performance testing, vendor training, etc...);</li> <li>b) Witness test;</li> <li>c) Services of Manufacturer’s representative;</li> <li>d) Field service engineer;</li> <li>e) Field service rate.</li> </ul>
<b>Answer 181:</b>	This is correct. The cost for these services shall be included in item 1.P of the Letter of Bid and should include works and resources that will satisfy requirements in specifications 01951 and 01952.
<b>Question 182:</b>	<p>Referring to section 11286 UV Disinfection system; kindly confirm the following:</p> <ul style="list-style-type: none"> <li>a) Clause 1.04 / A / “Qualifications shall be submitted with the bid for evaluation”. Kindly confirm that the contractor shall submit qualifications at later stage.</li> <li>b) Clause 1.04 / F / “The UV shall assign a project manager”. Kindly advise if project manager shall be assigned by the UV manufacturer or by the contractor. And kindly advise where to include the additional cost of that item?</li> <li>c) Clause 1.04 / G / “The UV shall assign a qualified site supervisor for site supervision during installation of the UV provided equipment for this project”. Kindly advise if a supervisor shall be assigned by the UV manufacturer or by the contractor. And kindly advise where to include the additional cost of that item?</li> <li>d) Clause 1.05 / d / “compliance with the UVDGM”. Kindly advise if it is necessary to meet that requirements as some UV manufacturers can’t comply with that.</li> <li>e) Kindly note that not all UV suppliers have local support in Asia including one of the nominated suppliers such as Calgon. Kindly advise if the contractor should comply with that.</li> <li>f) Kindly confirm if 3<sup>rd</sup> party validation is needed.</li> <li>g) Kindly confirm if NFPA70 is needed.</li> <li>h) Clause 2.02. refers to “Log-R Crypto: 2” and “UV dose: 12 mJ/cm<sup>2</sup>”. Kindly note that 2-log crypto is equal to UV dose of 5.8 mJ/cm<sup>2</sup> and 3-log is equal to 12 mJ/cm<sup>2</sup>. Kindly confirm the log that the contractor shall proceed with.</li> <li>i) Clause 2.02. refers to Design Flow of 2,523 m<sup>3</sup>/hr. is that the flow rate for each UV unit so the Total flow rate will be 121,104 CMD. And what about the</li> </ul>

	<p>hydraulic profile that shows a total flow of 88,430 CMD. Kindly confirm the unit flow rate and total flow rate.</p> <ul style="list-style-type: none"> <li>j) Kindly confirm the quantity of UV reactors units. Is it three units two duty one standby?</li> <li>k) Clause 3.03 / E / 2.a / Start of Reliability Test: Agreed upon date by Contractor and the Engineer without exceeding thirty (30) calendar days following the successful completion of the Demonstration Test. Kindly confirm if the contractor shall consider 30 days for the reliability test to be done by the UV supplier on site. And kindly advise where to include the additional cost of that item?</li> <li>l) Clause 3.04 / B / UV System Supplier shall provide 64 hours of on-site support in the first twelve (12) months of operation. Kindly confirm if the contractor shall consider 64 hours for training and if it shall be included under item 1.P Letter of Bid.</li> <li>m) Kindly confirm if equivalent to “Control Panel NEMA 4X” will be acceptable.</li> <li>n) Kindly confirm if low pressure UV will be acceptable instead of medium pressure UV.</li> </ul>
<p><b>Answer 182:</b></p>	<ul style="list-style-type: none"> <li>a) Bidders shall submit vendor name and model number in the amended TECH-1 form of Clarification #2, issued on January 25, 2021. Vendor proposal and full technical datasheets will be asked to be submitted at a later stage.</li> <li>b) The Project Manager shall be assigned by the UV system supplier. The price of the UV system should be included in item 3 in the Letter of Bid and refer to Specification 01025.</li> <li>c) The Site Supervisor shall be assigned by the UV system supplier. The price of the UV system should be included in item 3 in the Letter of Bid and refer to Specification 01025.</li> <li>d) Bidders shall bid based on the specifications and drawings as provided. It is the Bidder’s responsibility to procure UV system suppliers who can comply with the specifications and drawings. Compliance with the USEPA UVDGM is considered a very important industry specification for the system quality.</li> <li>e) If the UV supplier does not have local support to the project location, the Bidder must verify during the submittal process that service/support can be provided within 1 week of notice for the need for service as stipulated in 1.04 (F) of the UV Specification.</li> <li>f) See response to d) validation as described in the UVDGM is required.</li> <li>g) Yes, compliance with NFPA 70 is required.</li> <li>h) Noted. The design inactivation is 2-log cryptosporidium and in accordance with the UVDGM, the system must be able to show a delivered dose (after safety factors) of 5.8mJ/cm2 as demonstrated by third party validation and biosimetry.</li> <li>i) The maximum design flow per reactor is 2,523 m3/hr. Please refer to section 2.02 of the UV Specification for the design flow.</li> <li>j) Yes. Refer to the Hydraulic Profile Drawing 00-D-011 and specification 11286 Clause 2.02.B1.</li> <li>k) The UV system supplier shall be on site at a minimum at the beginning of the reliability test and shall remain on site as long as needed to successfully complete</li> </ul>

	<p>the test, at the discretion of the supplier and the Contractor. It should be noted that if a failure of the reliability test occurs, the test shall be repeated at no cost to the Employer. The Contractor shall provide the startup requirements as described in 01650. The Commissioning test is 30 days. The price of the UV system should be included in item 3 in the Letter of Bid and refer to Specification 01025.</p> <ul style="list-style-type: none"> <li>l) No, the 64 hours of on-site support is separate from the training. Price for onsite support should be included in item 1.P in the Letter of Bid. Note that it is the Contractor’s responsibility to coordinate with vendors to supply training services and technical support during DNP described in specification 01951 and 01952.</li> <li>m) An equivalent to NEMA 4X can be considered, provided that the alternative enclosures provide equivalent or superior protection compared to a NEMA 4X enclosure.</li> <li>n) The basis of design is for a medium pressure system. A low-pressure UV system will change the layout of the UV area and will have impacts on the electrical, mechanical, I&amp;C, structural, and hydraulic design. Therefore, the cost for the low pressure UV system, if proposed, must include the cost for the revisions to all other features that would require revisions, including the re-design of the UV system, and shall cover costs or penalties related to potential delays. See response to Question 115.</li> </ul>
<p><b>Question 183:</b></p>	<p>Kindly clarify what is the meaning of”12 person days”, “6 person days”, “2 person days”, etc....? kindly clarify the number of technicians and the number of days that the contractor shall consider.</p>
<p><b>Answer 183:</b></p>	<p>“Person day” refers to the work performed by one person in one day. The Bidder shall consult the individual specifications regarding requirements for technicians, vendor training, etc. Unless stated otherwise, the service technician or trainer shall be provided for the number of days stated.</p>
<p><b>Question 184:</b></p>	<p>Referring to SECTION 13530 FILTER UNDERDRAIN SYSTEM.</p> <ul style="list-style-type: none"> <li>a) Kindly note that the specifications are general and not specify a certain type of filters the same as for drawings; no detailed drawings for filters can be found. Kindly advise.</li> <li>b) There is so specific set of spare parts for the filters in the technical specification. Kindly advise if we have to consider one set of spare parts for two years.</li> <li>c) Depth of Media is mentioned as 200 mm sand and 1520 mm GAC while in section 13540 “Filter Media” it is mentioned as 300 mm Silica and 600 mm anthracite coal. Kindly advise us with the correct depth that shall be considered by the contractor.</li> </ul>
<p><b>Answer 184:</b></p>	<ul style="list-style-type: none"> <li>a) The filter cross section is shown on Sheet 10 D-305. The underdrain shall be a dual parallel lateral plastic block style underdrain with a media retainer cap. It should be noted that the media retainer cap can be porous or can be a slotted screen similar to Xylem XA 200.</li> <li>b) The spare parts shall be enough to replace (1) row of blocks per 2.03 (8) a.</li> </ul>

	c) The correct media is as listed in Specification 13540 2.04 (C), comprised of sand and anthracite.
<b>Question 185:</b>	Kindly advise if spare parts set shall be priced for each item. I.e., if we have four pumps of certain type then shall the contractor price four sets of spare parts or just one set for the four pumps and this will be the same for all items (mixers, aerators, UV reactors, cartridge filters, etc....).
<b>Answer 185:</b>	Bidders shall consult the individual specification for spare parts requirements specific to each type of equipment. For example, Specification 11217 1.06.A.1.B requires “unit” and specification 11300 1.05.B.1 requires “for each pump”.
<b>Question 186:</b>	It is requested to supply spare parts for two years for the aeration units as per section 11374 clause 1.06. kindly advise if this paragraph it is valid as the two years operation and maintenance was deleted.
<b>Answer 186:</b>	Bidders shall provide spare parts recommended by the manufacturer for two years. Spare parts are being provided as specified for the use of others during the operation period so the removal of the operation and maintenance period is irrelevant to this requirement.
<b>Question 187:</b>	Kindly advise what the contractor shall consider for the items that have no spare part list.
<b>Answer 187:</b>	Only spare parts as listed shall be required.
<b>Question 188:</b>	Kindly advise that metric flanges instead of ANSI / AWWA will be acceptable.
<b>Answer 188:</b>	See response to Question 37 in Clarification #2, issued on January 25, 2021  Subject to acceptance by the Engineer, alternative standards may be used in lieu of ANSI/AWWA provided that the proposed alternative is an internationally recognized or acceptable local standard (e.g., ISO or local MNS Standards) that are considered similarly effective in terms of material quality and performance of the constructed product.
<b>Question 189:</b>	Kindly confirm that IEC standard motors instead of NEMA standard will be acceptable.
<b>Answer 189:</b>	See responses to Questions 35 and 115 in Clarification #2, issued on January 25, 2021. Motors meeting IEC standards are acceptable provided that the motors meet the performance and testing requirements in the Specifications for that equipment.
<b>Question 190:</b>	Many pumps can meet the primary points, but not the secondary and shutoff conditions. Kindly advise if that will be acceptable.
<b>Answer 190:</b>	Bidders shall bid following the drawings and specifications. It is the Bidder’s responsibility to procure vendors who can supply equipment that complies with the specifications and drawings.
<b>Question 191:</b>	Kindly advise us with the Cost of electricity (Tarif).
<b>Answer 191:</b>	See response to Question 29 in Clarification #2, issued on January 25, 2021.

	The Ulaanbaatar Electrical Distribution Network (UBEDN) provides tariff information at this link: <a href="http://www.tog.mn/une/1#">http://www.tog.mn/une/1#</a> Section 1 is for the mining sector, Section 2 is industrial, Section 3 is residential. The tariffs do not include VAT. The AWPP would be considered as industrial.
<b>Question 192:</b>	Referring to answers to Clarification Questions – Issue no. 2 (Questions 8-115) January 25, 2021. kindly clarify the meaning of “ <i>The Bidder shall determine its own cost to supply electricity prior to the Taking Over Certificate</i> ”.
<b>Answer 192:</b>	Bidders are responsible for conducting their own search on the cost of electricity in Mongolia and estimate the electricity cost they will incur for completing the Works described in the Contract Documents, including drawings and specifications.
<b>Question 193:</b>	Referring to section 01650 “Testing and startup requirements”; kindly advise if it is the contractor responsibility to pay for chemicals, electricity and consumables during the 90-day Functional Testing, 30-day Commissioning Period and 30-day Acceptance Testing.
<b>Answer 193:</b>	Yes, it is the Contractor’s responsibility. Additionally, refer to specification 01952, Clause 1.09.
<b>Question 194:</b>	Referring to section 01650 “Testing and startup requirements”; kindly confirm that the cost of 90-day Functional Testing, 30-day Commissioning Period and 30-day Acceptance Testing shall be covered under item 1.P Letter of Bid.
<b>Answer 194:</b>	Include the costs for starting up of equipment in the lump sum values 2 to 8 of the Letter of Bid. The breakdown can be provided in the schedule of values described in FIDIC clause 14.1.(d)
<b>Question 195:</b>	Referring to section 01650 “Testing and startup requirements” kindly confirm that Exhibit 2 – weekly grab sampling to be measured by third party shall be covered under item 1.P Letter of Bid,
<b>Answer 195:</b>	See response to Question 194.
<b>Question 196:</b>	Referring to 01951, it is mentioned to “ <i>provide on-site training on how to operate the entire bulk water supply system, including the wells, pump stations, conveyance systems, and the AWPP</i> ”. We supposed that the training of items outside contractor CP2 will not be our responsibility. Kindly confirm.
<b>Answer 196:</b>	Section 01951 1.05.A is correct. CP2 Contractor is responsible for providing on-site training for items that the AWPP has an interaction with. For example, training of using SCADA system that connect AWPP and the conveyance system and pump stations for the well fields. The SCADA system for the AWPP being built by this contract controls the other infrastructure.
<b>Question 197:</b>	All chemical storage tanks are full at the time of Taking Over. Kindly advise if the price of that will be covered under item 1.P Letter of Bid.
<b>Answer 197:</b>	Yes, the cost of chemicals should be included in item 1.P of the Letter of Bid.



	As per the specification Section 01952, the Contractor shall provide “spare parts and chemicals to enable operation of the AWPP for one year” after Taking Over Certificate is issued.
<b>Question 198:</b>	A new Addendum has been received for drawings and technical specifications. Kindly confirm that the changes have been considered for Division 1 and for the ESMP.
<b>Answer 198:</b>	Yes, all Addendum that have amended drawings and technical specifications were reflected in Division 1 and the ESMP.
<b>Question 199:</b>	Section 13202 for chemical tank is not included in technical specifications.
<b>Answer 199:</b>	There is no specification 13202. See other specifications including 11354 for requirements for the chemical tanks.
<b>Question 200:</b>	Referring to SECTION 01650 TESTING AND STARTUP REQUIREMENTS EXHIBIT 2: WATER QUALITY STANDARDS (Finished water unless noted otherwise) shows the quality of treated water that shall be meet. Kindly advise us with the same parameters for the inlet water.
<b>Answer 200:</b>	Inlet water quality is shown in specification 13025.
<b>Question 201:</b>	Kindly advise us to possibility of using blasting method for rock excavation?
<b>Answer 201:</b>	Section 02211 Rock Excavation and Disposal, in 1.01.A states that non-blasting rock excavation methods shall be utilized. This is consistent with requirements of the ESMP.
<b>Question 202:</b>	Kindly advise us to assign a special place for stockpile for backfilling excavated material?
<b>Answer 202:</b>	The Contractor is responsible for determining the location for stockpiling of excavated material in coordination with performance of site work.
<b>Question 203:</b>	Kindly advise the possibility of setting up a crushing and screening plant on site?
<b>Answer 203:</b>	A crushing and screening plant is not recommended for the following reasons: <ul style="list-style-type: none"> <li>• There is limited space at the AWPP site.</li> <li>• Most raw material at the site would not be suitable.</li> <li>• Use of raw material at the site would require a mining license.</li> <li>• Crushing and screening would require a license for manufacture of construction materials, which must be obtained from the Construction Materials Producers Union.</li> <li>• Crushing and screening would require approval by the Environmental Department of Songino-Khairkhan District.</li> <li>• Crushing at the site may not be allowed if the noise disturbs nearby endangered species (see ESMPs).</li> </ul>
<b>Question 204:</b>	Kindly advise us , Is there any special location for proposed surplus material off-site disposal ) if yes; how many km away from site?

<b>Answer 204:</b>	No special location has been designated. The Contractor is responsible for determining a location for proper disposal of surplus material from the site in accordance with Mongolian law.
<b>Question 205:</b>	Kindly advise For pavement naming; road-08 is available; What about road 6-7? We could not see any reference.
<b>Answer 205:</b>	Roads 06 and 07 were included in the early stages of design and were deleted as the result of design revisions. There are no roads 06 and 07 included in the design.
<b>Question 206:</b>	<ul style="list-style-type: none"> <li>a) Kindly advise According to Geotechnical Report, beneath the pavements (Type A,B,C) In case, 4 mt deep excavation and replacement with new selected approved material is requested.</li> <li>b) What about beneath the buildings; is it necessary to excavate and replace the soil with selected material in the same way?</li> </ul>
<b>Answer 206:</b>	<ul style="list-style-type: none"> <li>a) As indicated in Site Grading Sections Notes 3 &amp; 4 on Drawing 00 C-002, the top layer of silty sand and clay gravel is to be removed to a depth of 4 meters and replaced with acceptable soil in accordance with specifications Section 02210.</li> <li>b) Geotechnical recommendations include removal of the top layer of silty sand and clay gravel to a depth of 4 meters. The depth of these layers varies throughout the site. The depth of soil to be removed and replaced should be confirmed and approved on site by the Engineer. Excavation and backfill should be completed in accordance with Section 02210 of the specifications. Below structures fill and backfill with Select Borrow as specified in Section 02225.</li> </ul>
<b>Question 207:</b>	Kindly advise the possibility of working in unworking cold weather months after taking necessary precautions?
<b>Answer 207:</b>	<p>See response to Question 168 of Clarification #3, issued on February 4, 2021.</p> <p>The Illustrative Construction Schedule in Appendix E indicates that outside concrete works are restricted during the winter. For the Engineer to approve the execution of other Works in the winter, the Contractor shall provide, to the satisfaction of the Engineer, evidence of how those Works can proceed safely and without harm to the quality of Works.</p>
<b>Question 208:</b>	<ul style="list-style-type: none"> <li>a) Kindly advise necessary authorized Laboratories available in Ulaanbaatar for material testing.</li> <li>b) Could we set up material testing laboratory for soil, rock, concrete and steel?</li> </ul>
<b>Answer 208:</b>	Bidders should research local authorized laboratories for material testing. The Contractor must hire an independent laboratory to conduct materials testing.
<b>Question 209:</b>	<p>Kindly advise:</p> <ul style="list-style-type: none"> <li>a) Flowmeter Because of POL and CIP are using at electromagnetic flowmeters, are the using NSF certificate obligate for flowmeter that inner coating is Teflon.</li> <li>b) Information about flowmeters transmitter connection and sensitivity are not given, we kindly request detailed information.</li> </ul>

	<p>c) Connection was not indicated at pressure transmitter. We kindly request detailed information.</p> <p>d) If the usage of NSF certificate is obligatory for pressure transmitters ?</p>
<b>Answer 209</b>	<p>a) No. In this case, NSF certificate is not required.</p> <p>b) Please refer to Specification 13300 A.</p> <p>c) Please refer to Specification 13300 A for pressure transmitter drawing and installation location.</p> <p>d) Yes, for pressure transmitters in contact with filtered or treated water.</p>
<b>Question 210:</b>	<p>Kindly advise the following about UV system:</p> <p>a) Design flowrate = 2523 m<sup>3</sup>/hr. = 16 mgd Hydraulic profile shows Phase I as 23.4 mgd.</p> <p>b) Treatment objective = 2-log crypto is equal to UV dose of 5.8 mJ/cm<sup>2</sup>; if 3-log is equal to 12 mJ/cm<sup>2</sup>, which one will be chosen?.</p>
<b>Answer 210:</b>	See response to Question 182.
<b>Question 211:</b>	Referring to section 01030 / clause 1.24 / D; kindly confirm if the contractor shall proceed with the percentage values mentioned for shop drawings, Manufacturers' Checkout and Startup Assistance, Equipment testing, Manufacturers' Training of Contract Operations and Owner Personnel – including training materials.
<b>Answer 211:</b>	When the Contractor submits its schedule of values in accordance with FIDIC clause 14.1.D, it shall consider these values when submitting its recommendation to the Engineer.
<b>Question 212:</b>	<p>In case of inconsistencies between the technical specifications and drawings. Please advise the order of precedence of the documents. Such as:</p> <ul style="list-style-type: none"> <li>- Flow rate of Plate settler (PS) mentioned as 90,234 CMD in Hydraulic profile and as 119,228 CMD in SECTION 11217 INCLINED PLATE SETTLER. Kindly advise us with the correct flow.</li> <li>- Flow rate of mechanical aeration equipment mentioned as 90,234 CMD in Hydraulic profile and as 98,790 CMD (16,465 CMD per unit) in SECTION 11374 mechanical aeration equipment. Kindly advise us with the correct flow.</li> </ul>
<b>Answer 212:</b>	Please refer to the responses to Question 19 of Clarification #1 issued on January 25, 2021 together with the response to Question 161 of Clarification #3 issued on February 4, 2021.
<b>Question 213:</b>	Kindly advise RO feed and CIP cartridge filters elements length is given 40 in. Can we revise according to suppliers design?
<b>Answer 213:</b>	The 40" cartridge filter length is industry standard. If they change, then the vessels will change size in length and diameter. We recommend staying with the 40" length and avoid impacts to the layout in terms of piping and equipment spacing.
<b>Question 214:</b>	In technical specifications section 01951, 1.02 B <i>Training prior to start-up</i> , it is stated <i>“the training shall include all aspects of the AWPP. The AWPP provides control to the other components of the Downstream Wells Water supply including the wellfields at Biokombinat and Shuvuun, the raw water pipelines and the finished water pipelines</i>

	<p><i>which are being constructed by the others. The training shall include all aspects of the monitoring and control of the wellfields and pipelines and all aspects of coordination of the AWPP with the USUG water supply system”.</i></p> <p>a) Please confirm that the monitoring and control of the wellfields and pipelines, which are out of the limits of the AWPP, is in the scope of this Bid.</p> <p>b) If yes, please let us know the signals requested to be monitored and the control actions (start, stop, open, close, etc...) to be considered in AWPP monitoring and control system.</p>
<b>Answer 214:</b>	<p>a) Training in the monitoring and control of the wellfields and pipelines are in the scope of this Bid as stated in section 01951.</p> <p>b) Wells and conveyance construction will be via separate construction packages (CP-1 and CP-3 respectively). Signals from these remote locations will be delivered to the Fiber Splice Box which will be located adjacent to the Structure 10 Flow Valve Vault at the entrance to the AWPP. See Sheet 00 E -011 of the contract drawings. It is anticipated that flow, pressure, pump status (running/stopped), and general alarms will be reported to the AWPP monitoring and control system. The AWPP control system shall determine a flow rate of water which will be provided from the well fields and from individual wells and the AWPP operators shall be able to select which wells are providing flow at any given time. The AWPP control system shall also manage redundancy change over and rotation of wells in a manner to be agreed with the Engineer to address issues such as mechanical exercising of the wells.</p>
<b>Question 215:</b>	<p>With regard to the answers to Clarification questions issued on January 25,2021:</p> <p>a) Answer 19: b) section 11217 in the specifications governs the scope of supply</p> <p>b) Answer 19: d) e) and f) the drawings and specifications govern the contractor’s scope of services</p> <p>c) Answer 20: refer to mechanical drawing sheet for size of aeration units</p> <p>d) Answer 53: The specification determines the type of the pump.</p> <p>e) Answer 69: The drawings and Specifications generally describe the scope of work.</p> <p>f) Answer 84 and 85: Bidders are responsible for estimating quantities based on the Drawings and Specifications.</p> <p>As explained in the above-mentioned answers, the Bidder shall consider the technical specifications and the drawings for their Bid. In case of contradiction between the Drawings and Technical Specifications, which document prevail?</p> <p>Please confirm.</p>
<b>Answer 215:</b>	<p>Please refer to the responses to Question 19 of Clarification #1 issued on January 25, 2021, together with the response to Question 161 of Clarification #3 issued on February 4, 2021.</p>
<b>Question 216:</b>	<p>Section 01650, 1-15 Test on Completion Phase 1 / 90 days testing, A7 : <i>Chemicals, air,</i></p>

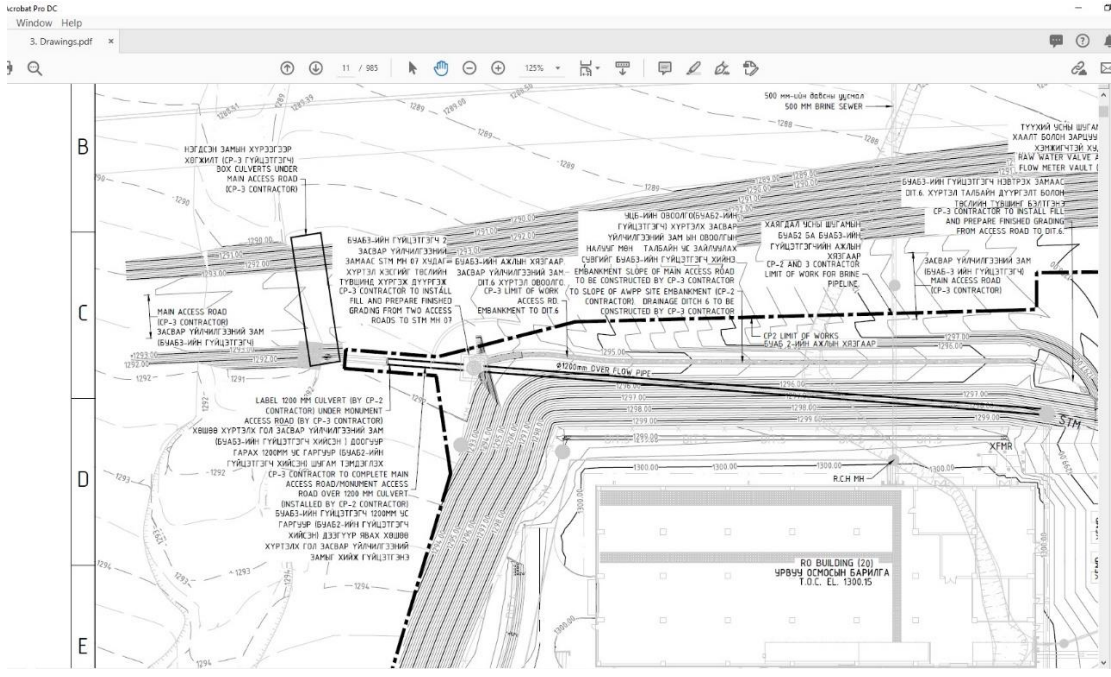
	<p><i>power, and water shall be provided by the Contractor at no additional cost to the Owner.</i></p> <p><i>Section 01650, 1-16 Test on Completion Phase 2 / 30 days testing, H6 : It is the sole responsibility of the Contractor to provide all materials and labor required to operate the plant under these conditions for the full duration of the 30 day commissioning period. This includes but is not limited to power, consumables, chemicals, and spare parts.</i></p> <p><i>Section 01650, 1-17 Test on Completion Phase 3 / 90 days testing, A : It is the sole responsibility of the Contractor to provide all materials and labor required to operate the plant under these conditions for the full duration of 90 day Acceptance Testing. This includes but is not limited to consumables, chemicals and spare parts.</i></p> <p>a) We understand that cost of the chemicals, power and spare parts are under the responsibility of the Contractor during the 210 days (7 months) testing period. Please confirm.</p> <p>b) If yes, please provide us the quantity of the chemicals to be used in the AWPP according to the Engineer design .</p>
<b>Answer 216:</b>	<p>a) This is correct, as stated in section 01650 1.03.A. Note also that the Contractor shall provide “spare parts and chemicals to enable operation of the AWPP for one year” after Taking Over Certificate is issued, see section 01952.</p> <p>b) Refer to specification 01952, clause 1.09, “Contractor shall provide at own cost, as part of Support to Owner under this specification, spare parts as required in other specifications and ensure that all chemical storage tanks are full at the time of taking over”. The Contractor shall plan its activities as required under 01650 and provide sufficient chemicals to meet those plans. During the 90 day Phase 3 the Contractor may assume that the total average demand does not exceed 50,000m<sup>3</sup>/day. The estimated daily use of chemicals is as follows: 40% ferric chloride 200-500 L/day; 25% NaOH 400-600 L/day; floc aid polymer 40-80 L/day; anti-scalant 30-70 L/day; 15% sodium hypochlorite 185-250 L/day; dry sodium bisulfite 75-100 kg/day; phosphate 100-200 L/day. The contractor shall provide any chemicals required for treatment of up to an average of 50,000m<sup>3</sup>/day even if it exceeds these estimates.</p>
<b>Question 217:</b>	<p>Section 01650, 1.17 Test on Completion phase, D.2 Daily grab sampling to be measured in the AWPP lab as on-site analytical. Please confirm that these samples can be tested in the site laboratory to be constructed in the scope of this Bid.</p>
<b>Answer 217:</b>	<p>pH, Fe, Mn, UV254 and Alkalinity can be measured in the onsite laboratory. This is correct. As stated in 1.17.D.2, the daily grab sampling will be measured in the AWPP lab (to be constructed in the scope of this Bid) as on-site analytical.</p> <p>The weekly grab sampling shall be measured by a third party outside certified lab, as stated in 1.17.D.3.</p>
<b>Question 218:</b>	<p>Since the design is completed by the Designer and no engineering is asked from the Bidder. In addition to that all mechanical, hydro mechanical, electrical, control and automation equipment specified by the Designer also.</p>

	Under these conditions; Please confirm that there is no process guarantee under the responsibility of the Contractor (such as but not limited to raw water and treated water flow, performances of the individual units/process, treated water quality, chemical consumption, electrical consumption figures, etc.).
<b>Answer 218:</b>	Please refer to the response to Question 159 of Clarification #3 issued on February 4, 2021.
<b>Question 219:</b>	With regard to the Answer to Clarification questions issued on January 25, 2021 – Answer 50: <i>Bidders shall submit price and quantity in accordance with IFB, Section IV, Letter of Bid, in the Lump Sum Bill of Quantities.</i> We do not see any quantities in the Letter of Bid. Please explain us what the Employer means by “ <i>quantity</i> ” in the Letter of Bid.
<b>Answer 219:</b>	Section 01025 states in 1.02.A.3 that “All Work under this Contract shall be under the firm fixed unit price for each item of the Work listed in the Letter of Bid.” The Letter of Bid shows a series of lump sum items.
<b>Question 220:</b>	Drawing notes #7 says that “ <i>It is the responsibility to Contractor to verify the location, size and depth of all utilities prior to construction</i> ”  All dimensions of the structures were dimensioned and projected by the Designer. Most probably the designer considered the dimensions of the equipment which manufactured by particular manufacturers. So, if some equipment proposed by the Tenderer requires more (or less) area; in this case, it may be necessary to enlarge (or reduce) some structures. Who will bear the increased (or decreased) costs in this application?
<b>Answer 220:</b>	Note 7 on Drawing 00 C-001 is a general note regarding any existing buried utilities that may be encountered on the site. If the Bidder proposes equipment that requires changes to the design, the Bidder will be responsible for any costs.
<b>Question 221:</b>	Section 01300 – Submittals procedures, 1.01 – CC, it is stipulated that “ <i>Engineer’s submittal review period shall be 30 consecutive calendar days and shall commence on the first calendar day following receipt of the submittal or resubmittal in Engineer’s office</i> ”  Please confirm that there is no limit for the resubmittal number and that the resubmittals will not reveal any additional cost to the Contractor. Since the submittal review period is 30 calendar day including weekend and holidays, please confirm that Engineer work on weekend and holiday will not reveal any additional cost to the Contractor.
<b>Answer 221:</b>	The review period shall be defined as 30 calendar days. For each resubmittal, the Engineer will be allowed 30 calendar days from the date of resubmittal.  Section 01300, paragraph 1.01.JJ states the following: “ <i>If more than one resubmittal is required because of failure of the Contractor to provide all previously requested corrected data or additional information, the Contractor shall reimburse Owner for the charges of Engineer for review of the additional resubmittals. This does not include initial submittal data such as shop tests and field tests that are submitted after initial submittal.</i> ”

<p><b>Question 222:</b></p>	<p>Section 13530 Filter underdrain system, 1.03 – System description 9 - Media:</p> <p>a) Depth of media</p> <ol style="list-style-type: none"> <li>i. Sand 200 mm</li> <li>ii. Granular activated carbon (GAC) : 1520 mm</li> </ol> <p>Section 13540 Filter media, Part 2 - 2.04 Filter Media C – Dual Media Filter Bed:</p> <p>Filter media consisting of two layers having in place depth of 900 mm (36-in) and composed of the following from bottom to top of bed.</p> <ol style="list-style-type: none"> <li>1) 300 mm (12-in) of silica sand</li> <li>2) 600 mm (24-in) of anthracite coal</li> </ol> <p>In order to clarify these different requirements stipulated in the technical specifications:</p> <ol style="list-style-type: none"> <li>a) Please confirm if anthracite or GAC is to be supplied.</li> <li>b) Please confirm required depth of sand, required depth of GAC and/or required depth of anthracite.</li> <li>c) Please confirm if two-stage filtration is required (Anthracite + silica sand filters and GAC filters)</li> </ol>
<p><b>Answer 222:</b></p>	<ol style="list-style-type: none"> <li>a) Anthracite shall be provided in accordance with specification 13540 2.04 C.</li> <li>b) The depth of anthracite is 600 mm and the depth of sand is 300 mm in accordance with specification 13540 2.04 C.</li> <li>c) The filters shall be comprised of dual media, which is anthracite on top of sand, in the same filter box. There is no GAC.</li> </ol>
<p><b>Question 223:</b></p>	<p>Drawing 00-C-102: The existing fiber optic cable to decommission and remove/relocate.</p> <ol style="list-style-type: none"> <li>a) Please inform us if the existing fiber optic cable will be relocated or not.</li> <li>b) If yes, please give the new installation itinerary of the fiber optic cable.</li> <li>c) Please confirm that “CP2 limit of works” mentioned on the drawing 00-C-102 is the limits of the existing fiber optic cable to be removed.</li> </ol>
<p><b>Answer 223:</b></p>	<ol style="list-style-type: none"> <li>a) The existing FO cable must be relocated prior to sitework in that part of the site. All FO relocations required as part of BWSE work are part of the CP-3 package. In the specific case, coordination with CP-3 contractor will be required to ensure FO is relocated in time to allow CP-2 Contractor to begin sitework according to schedule.</li> <li>b) The new route for the FO cable is shown in Design Drawings of the CP-3 Conveyance package. The Bidder may assume this is to be performed by others.</li> <li>c) The “CP2 limit of works” mentioned in drawing 00-C-102 does not take into account the FO cable new route, which is CP-3 Contractor work.</li> </ol>
<p><b>Question 224:</b></p>	<p>Section 01010 – Summary of Work, 1.01 Scope, 2.d mention that “<i>high voltage transmission lines and substations to feed power to CP2 and CP3 and external heat supply for CP2 will be provided under separate contracts that will be tendered by the GoM</i>”</p>

	<p>a) We would like to have some brief information about this tender. Is this package have been tendered or not? If not, when it will be tendered?</p> <p>b) Please also confirm that at the moment of AWPP test period, the energy lines will be ready and will be tested and configured before AWPP testing period, as shown on the construction schedule, line 338.</p>
<b>Answer 224:</b>	<p>a) This procurement package has not been released yet. It will be released in the near future and coordinated with this project.</p> <p>b) The Bidder may assume that power supply is available to the site at the date shown on the construction schedule. If it is not available, the Employer will work with the Contractor to provide a temporary power supply.</p>
<b>Question 225:</b>	Drawing E-003, E-004 and E-006, there are HV-1 and HV-2 cables from MV.MH-A2 and MV.MH-B2 to Electrical Utility Substation. All cables between electrical building to the electrical utility substation are under the scope of this tender or the tenderer shall consider these cables up to the limit of CP2. Please confirm.
<b>Answer 225:</b>	Confirmed. Contractor shall be prepared to coordinate with others for these lines. MV cables for HV-1 and HV-2 duct banks shall be provided under CP-2 as indicated on Contract Drawings and shall stop at MV.MH-A1 and MV.MH-B1. Cables shall be coiled in the manholes with a slack of 5 meters minimum. The cables slack shall be provided as noted so that the CP-4 substation contractor can provide its MV cables from the substation to the manholes and splice both lines at the indicated manholes.
<b>Question 226:</b>	<p>Section 01740, article 1.09 Defects Liability Period mention that <i>“the Contractor shall guarantee all work performed and all the materials furnished under the contract against any defects in materials and workmanship for a period of three years. Included in this three-year period is one-year period for post-commissioning final equipment calibration and other final adjustment to the works”</i></p> <p>Manufacturers, mostly and generally, have difficulties to provide a minimum warranty of 4 years after the supply of their equipment. We are familiar to this difficulty from our other contracts.</p> <p>The Contractor will provide this guarantee until the end of the Defect Liability Period against any failure that may occur. But the manufacturer cannot give 4-5 year warranty. Does the Employer require 3 year warranty during the DLP from the manufacturer? Please advise.</p>
<b>Answer 226:</b>	As stated in the Appendix to Bid 1.1.3.7 Defects Notification Period: <i>“The Defects Notification Period will be Twelve (12) Months following the issuance of the Taking Over Certificate.”</i>
<b>Question 227:</b>	<ul style="list-style-type: none"> <li>- Section 11374 – Article 2.05 / B.1 : All components of the Aerator Units shall be type 6061 aluminum.</li> <li>- Section 15806 – Article 2.37 / A.2 : Process areas : Provide aluminum or galvanized, rectangular duct construction.</li> </ul> <p>For the selection of air duct material, please confirm if the Bidder can select ducts in</p>



	<p>aluminum or galvanized as stipulated in section 15806, or if the Bidder must consider aluminum as stipulated in section 15806.</p>
<p><b>Answer 227:</b></p>	<p>For the Aerator Units in Section 11374, the ductwork shall be aluminum. All other ductwork (except chemical storage areas) shall be aluminum or galvanized sheet metal per the requirements of Section 15806 2.37.A.1-A.</p>
<p><b>Question 228:</b></p>	<p>Drawing C-103: Left upper corner of the plan, Ditch to river stream (CP3) between the outfall and outfall 2 is written as out of the CP2 contract limits.</p> <p>Please confirm that the outfall at the left upper corner of the plan and whole ditch to river stream is out of the scope of the tender.</p>
<p><b>Answer 228:</b></p>	<p>All work shown within the CP-2 Limit of Work, including the Ditch to river stream, is to be included in the CP-2 Contract Limits. Please refer to the drawing 00-C-090 (11/985).</p> 
<p><b>Question 229:</b></p>	<p>D-504 process flow diagram IV: FIL.P pumps in the filtered water are 3 units for the Phase-I. This pump are for pumping the water from filtered water to the cartridge filter.</p> <p>According to our understanding, the number of pump in Phase I is 2 + 1 standby. The pump capacity mentioned in D-006 as 750 m<sup>3</sup>/h/pump, which means that the flow to cartridge filter is 36.000 m<sup>3</sup>/day.</p> <p>On the other hand, according to D-011, the flow through the process for reverse osmosis system is mentioned as 53.053 m<sup>3</sup>/day.</p> <p>Please advise about this contradiction between cartridge filter flow 36.000 m<sup>3</sup>/day and RO flow 53.053 m<sup>3</sup>/day.</p>

<b>Answer 229:</b>	This is not a contradiction. The hydraulic profile on Sheet D-011 assumes that there will be 9 RO skids in place in the future at higher flows. The hydraulic profile is developed to assess the head loss under worse case (future) conditions. It is not presented to size unit processes. Please refer to the appropriate specification for all treatment and pumping systems sizing.
<b>Question 230:</b>	<ul style="list-style-type: none"> <li>- D-011 hydraulic profile: filter capacity is mentioned as 90.234 m<sup>3</sup>/day (for 5 filter, 1 in standby).</li> <li>- D-504 process flow diagram IV : the water coming from the UV is completely sent to the cartridge filter, that is, to the R.O system. However, the maximum capacity of the cartridge filter is 45.000 m<sup>3</sup>/day, by starting the standby pump.</li> </ul> <p>When examining the R.O by-pass system, in the drawing D-504, we saw on/off isolation valves that do not have flow adjustment feature. In this case, our opinion is that we do not have the opportunity to adjust the flow of water that will go through the R.O system and at the same time to be bypassed by the R.O system.</p> <p>What is your opinion? Please clarify.</p>
<b>Answer 230:</b>	It is not the intent that the water from UV will all be sent to cartridge filters, only a portion. FIL pumps will be equipped with variable frequency drives and a downstream flow meter for flow control. Refer to Sheet 20 DI – 601 for controls schematic.
<b>Question 231:</b>	According to the Drawing # 99-D-802 Detail K, it shows us "pipe and valve connection at building wall".
<b>Answer 231:</b>	Correct. This is a standard detail for any application where a pipe and valve may penetrate a concrete wall.
<b>Question 232:</b>	With regard to the BoQ. Please provide the Cable Schedule for Power cables to understand the loops and voltage ratings of the cables.
<b>Answer 232:</b>	Bidders are responsible for estimating quantities based on Drawings and Specification.
<b>Question 233:</b>	With regard to the BoQ, Please provide the cable schedule of Instrument and Telecom Cables.
<b>Answer 233:</b>	See response to Question 232. Please refer to the I/C and electrical drawings for the extent and rating of cables.
<b>Question 234:</b>	With regard to the BoQ, It is requested to provide the Instruments Index.
<b>Answer 234:</b>	See response to Question 232. Please refer to the I/C and electrical drawings and Specifications for the extent of cables.
<b>Question 235:</b>	<p>With regard to MN 001_MCA_AWPP BOQ_REV-01. Please provide detailed description for following BOQ Items (whether is it pipe or fittings)</p> <ul style="list-style-type: none"> <li>a) 100 mm Ductile Iron SR</li> <li>b) 100 mm , Ductile Iron Flanged LR</li> <li>c) 100 mm Ductile Iron Flanged SR</li> </ul>

	<p>d) 150 mm , DI Mechanical Joint</p> <p>e) 150 mm<math>\phi</math>-150 mm<math>\phi</math> 90°/SR Elbow Iron, Ductile</p> <p>f) 150 mm Welded Carbon Steel - Sch 80 - SR</p>
<b>Answer 235:</b>	Engineer's tabulation of quantity is provided only for reference to bidders. Please refer to the drawings and specifications for pipe sizes.
<b>Question 236:</b>	With regard to MN 001_MCA_AWPP BOQ_REV-01. Please provide all Manual Valve data sheets & Instrument Valve Data sheets
<b>Answer 236:</b>	Engineer's tabulation of quantity is provided only for reference to bidders. Please refer to the drawings and specifications for valves.
<b>Question 237:</b>	With regard to MN 001_MCA_AWPP BOQ_REV-01. Please provide Piping Material Specification (PMS).
<b>Answer 237:</b>	Engineer's tabulation of quantity is provided only for reference to bidders. Please refer to the specifications and drawings piping materials and Addendum #4 to the Bidding Document released on February 5, 2021.
<b>Question 238:</b>	<p>With regard to Section 13025, 13025A, in the answer 59 of the Clarification questions issued on January 25, 2021 it is stated in the document 13025A that the design permeate flow rate per train of RO membrane system is 4542 m<sup>3</sup>/d &amp; Minimum system recovery as 75%. So, the total flow to RO Membrane system per train is 6056 m<sup>3</sup>/d. Which multiplied by 6 trains is 36336 m<sup>3</sup>/day. This is approximately 35% of 105000 m<sup>3</sup>/day (treated water).</p> <p>As per document 13025, however, the RO system is designed to treat 60% of the coagulated and filtered water. Please clarify.</p>
<b>Answer 238:</b>	The RO system is designed to treat 60% of the filtered water while the AWPP is operating to produce the average daily demand of 50,000 m <sup>3</sup> /day of finished water. Under the maximum daily demand of 75,000 m <sup>3</sup> /day of finished water, the RO system will treat up to approximately 35% of the filtered water. The RO skids shall be sized in accordance with 13025 and 13025A.
<b>Question 239:</b>	With regard to the Floating Decanter - 40 DI-601. Please provide details of Floating Decanter (SWW.DEC-1/2) for Spent Washwater Recovery Tanks.
<b>Answer 239:</b>	Each SWW tank shall be equipped with a floating decanter capable of up to 170 m <sup>3</sup> /hr (750 gpm) of decanting. Basis of design is Skim-Pak model 11810-DH or equal. The unit shall be a swing arm system comprised of 304 stainless steel. Contractor may use a single skimmer or a dual skimmer system if preferred.
<b>Question 240:</b>	With regard to the chemicals used in water treatment. Please provide MSDS or details of chemicals to be used (Anti-scalant, Sodium Hypochlorite, Caustic Soda, Phosphate, Ferric Chloride, Sodium Bisulfite, polymer).
<b>Answer 240:</b>	The Bidder does not require this information in the bidding stage. Please refer to 00 D – 008 for strength of chemicals. The chemical data sheets can be provided by the (local) chemical supplier.

**Question 241:**

With regard to the Price Schedule. We understand, during the Pre-Bid meeting that Contractor has to submitted page#1/159 and 2/159 at this stage.

AECOM Water  
Construction Cost Estimate (Revised Site Location)  
Advanced Water Purification Plant (AWPP)  
Ulaanbaatar, Mongolia  
DRAFT 100% Design Estimate  
Level I

JOB NO : 60598209.07.100.01.10  
DATE : November 10, 2020  
LOCATION : Ulaanbaatar, Mongolia  
PREPARED BY: R. Mastrogliacomo  
CHECKED BY: B. Clune

CLIENT : Government of Mongolia  
PROJECT : Advanced Water Purification Plant (AWPP)

\*\*\*\*\*  
GRAND SUMMARY  
\*\*\*\*\*

PROCESS AREA	DESCRIPTION	ROUNDED TOTAL
00	Sitework	
10	AWPP Building	
20	Reverse Osmosis (RO)	
30	Clearwell & Finished Water & Backwash Water PS	
40	Residuals Handling Building	
50	Generator Building	
60	Guardhouse	
70	Flow Meter Vault	
	SHIPPING EXPENSES	\$ -
	LOCAL UTILITY BRINGS POWER TO THE SITE	\$ -
	INSTALLATION AT SITE	\$ -
	OSM Preparatory Work	\$ -
	OSM Option Year 1	\$ -
	OSM Option Year 2	\$ -
	<b>GRAND TOTAL</b>	\$ -

\*- Refer to Contract Package CP-3

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AECOM Water  
Construction Cost Estimate (Revised Site Location)  
Advanced Water Purification Plant (AWPP)  
Ulaanbaatar, Mongolia  
DRAFT 100% Design Estimate

JOB NO : 60598209.07.100.01.10  
DATE : November 10, 2020  
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CLIENT : Government of Mongolia  
PROJECT : Advanced Water Purification Pl

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SUMMARY by CSI  
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CSI CODE	DESCRIPTION	Manhours	MATERIAL	LABOR	EQUIPMENT	SUB TOTAL	OSP	Contingency	Escalation	ROUNDED TOTAL	Percentage %
2	Civil/Site Work										
3	Concrete										
4	Masonry										
6	Metals										
6	Wood & Plastic										
7	Thermal/Moisture Protection										
8	Doors & Windows										
9	Partitions										
10	Specialties										
11	Equipment										
12	Furnishings										
13	Instrumentation & Controls										
14	Conveying Systems										
16	Electrical										
16	Piping										
15.4	Plumbing										
15.5	Fire Protection										
15.6	HVAC										
											0%

	SHIPPING EXPENSES	\$ -
	LOCAL UTILITY BRINGS POWER TO THE SITE	\$ -
	INSTALLATION AT SITE	\$ -
	OSM Preparatory Work	\$ -
	OSM Option Year 1	\$ -
	OSM Option Year 2	\$ -
	<b>GRAND TOTAL</b>	\$ -

The above represents a CSI breakdown of design engineer's estimate. This is provided to augment the Contractor's understanding of the design, however it does not replace Contractor's necessary due diligence to fully evaluate the Bill of Materials (BOM), nor does it replace or supplement the BOM. Neither the MCA nor AECOM shall not be held liable or accountable in damages or otherwise to the Contractor, or to any other Member, for any good faith error or judgment or any good faith error or omission of fact or law in connection with this list of quantities derived from the Engineer's Opinion of Probable Cost. To the maximum extent permitted by law, the Contractor does hereby, internally, defend and agree to hold MCA and AECOM wholly harmless from and against any loss, expense or damage (including, without limitation, attorney's fees and costs) suffered by the Contractor for any reliance on this information.

The detail breakup from Page 3 onwards shall be provided after Contract award. Please Confirm.

**Answer 241:**

Bidders shall submit price in the Lump Sum Bill of Quantities Table in the IFB Section IV, Letter of Bid. Refer to the response to Question 78 of Clarification #2 issued on January 25, 2021. The Contractor selected for the project shall submit a Schedule of Values after award.

**In accordance with ITB 8.1 MCA-Mongolia has responded in writing to all clarification requests on or before 10am February 02, 2021 Ulaanbaatar time (GMT+8), Mongolia – this being 28 days before the submission deadline.**

**With the abovementioned deadline now having expired, no further Bidder Clarification requests regarding this bidding document shall be responded to.**