PUBLIC UTILITY DISTRICT NO. 1 OF CHELAN COUNTY

BID NO. 19-87
TUMWATER FISHWAY ENTRANCE STRUCTURE FOUNDATION MAINTENANCE

CLARIFICATIONS NO. 1
(Clarifications do not change the Bid Documents)

Questions from Pre-Bid Meeting

**NOTE: Attendance at the Pre-Bid Meeting was mandatory**

1) What is the flow rate in the Tumwater fish ladder?

Answer: When SG19 (High Flow Entrance) is in operation, the fishway flow (ladder + auxiliary water [AWS] system) will be on the order of 110 to 130 cfs.

2) Is it acceptable to drill and place anchors into the crest of the dam to help support the cofferdam?

Answer: Yes; however, anchor use should be minimal to maintain the integrity of the existing concrete. The plan for anchor placement/installation will be subject to approval by the District. Upon completion of the work, anchors shall either be removed and the remnant holes filled with grout, or anchors shall be cut off 1 inch below the surface then covered with epoxy grout.

3) What is maximum river flow Chelan PUD will expect the Contractor to perform in-water work?

Answer: The Contractor is encouraged to review the historical streamflow data in Exhibit V of the Contract Documents, including the monthly flow-duration curves. The median (50 percent exceedance) streamflows per USGS gage 12457000 Wenatchee River at Plain, WA are as follows:

- November – 980 cfs
- December – 940 cfs
- January 840 cfs
- February 790 cfs
- March – 970 cfs

The streamflow of 3,400 cfs observed during the Pre-Bid Meeting on February 11, 2020 has a 3 percent chance of occurring in February.
The Contractor is also encouraged to monitor weather and hydrologic predictions for the site, as described in Specification Section 31 32 23 Article 3.02. This following web link to the Northwest River Forecast Center flow provides predictions for the Wenatchee River at Peshastin: https://www.nwrfc.noaa.gov/river/station/flowplot/flowplot.cgi?lid=PESW1. This gage and forecast area is located downstream of the site and includes several other large tributaries to the Wenatchee River, but may be useful in qualitatively predicting short-term streamflow trends at the site.

Following review of the Contractor’s Work Schedule, the District and Contractor shall identify a mutually-agreeable date to initiate the in-water work in consideration of current streamflows, weather forecasts and other environmental factors that may impact successful completion of the work.

The Design River Flow for the temporary River Diversion is 6,000 cfs (average daily streamflow) per Specification Section 31 32 23. The District will accept a cofferdam designed to function up to a minimum streamflow of 2,500 cfs without overtopping; however, the cofferdam must be designed to accommodate the full overtopping and other conditions associated with the 6,000 cfs Design River Flow with no significant damage.

At streamflows above 2,500 cfs and when in-water work cannot be performed in accordance with the Specifications, the District (at the District’s sole discretion) will either pay the Contractor a daily standby rate until streamflows subside or discontinue the work and pay the Contractor demobilization costs.

The Contractor shall maintain and operate the temporary River Diversion in good working order from the time it is installed until it is removed. Maintenance shall include reasonable efforts to prevent damage to the Dam, fishway and associated structures, and to prevent obstruction of the active fishway entrance. The Contractor shall be responsible for the proper maintenance and operation of the temporary River Diversion for all streamflows up to and including the River Design Flow. The Contractor shall be responsible for, and shall repair at Contractor’s sole expense, any damage to the District’s facilities or other facilities downstream caused by failure of the River Diversion.

Please note, Contractor must remove the temporary River Diversion in its entirety prior to March 27, 2021.

4) Has WSDOT been notified of this upcoming project?

Answer: Yes, WSDOT has been notified. A traffic control plan approved by WSDOT will be required if the Contractor plans to temporarily block SR 2.
5) Can temporary formwork for grouting be made permanent and left in-place or is removal required?

Answer: Refer to Specification Section 31 32 23 Underwater Grouting for Void Repair and Scour Protection, Articles 1.01.C.7, 2.08.H, and 3.04.K.

- Formwork and grout pipes extending outward beyond the void repair neatlines shown shall be removed following completion of grouting.
- Durable formwork which is integral to the grout repair (i.e. grout bags) may be permitted to remain following grouting if approved in writing by the District.

6) What is the load capacity for the zone behind viewing area retaining wall?

Answer: Refer to Exhibit T Contract Drawings, Sheet 3 of 6 Drawing # 4043-50CI-0008 to locate the wall segments referenced in the table below.

<table>
<thead>
<tr>
<th>Wall Segment</th>
<th>Wall Height, H (ft)</th>
<th>*Load Exclusion Zone Width behind top of wall (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2-1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>T2-2</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>T2-3</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>T2-4</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>T2-5</td>
<td>14</td>
<td>7</td>
</tr>
</tbody>
</table>

*LOAD EXCLUSION ZONES: Existing cantilever retaining walls are designed to support a maximum surcharge of 200 psf within the load exclusion zone. Provide bearing pads to distribute loads to less than this amount or for loads greater than this provide dunnage and support systems designed and sealed by a Professional Engineer registered in the State of Washington as necessary to exclude loads from the load exclusion zone.

Contractor shall also note that existing fishway grating is designed to carry only 100 psf. All equipment loads on the fishway will be supported on dunnage or other support system designed and sealed by Professional Engineer registered in the State of Washington as necessary to span between concrete wall elements without loading grating or grating support beams.

7) What is the load capacity for the zone behind viewing area retaining wall?

CLARIFICATIONS
Per Specification Section 015000 Article 3.01.A, limited electric power is available at or near the Project site. This should be interpreted to mean electric power, subject to availability, is limited to 110V convenience outlets near the upper end of the fishway.

The action submittals in Specification Section 31 32 23 Article 1.06 are summarized as follows:

- The initial sequence of work shall be to prepare the River Diversion Plan, install river diversion, and then complete the pre-construction dive inspection. It is the District’s expectation that the Contractor will be working to complete these initial tasks as quickly as possible.

- Following Pre-Construction Dive Inspection:
  - Submit Pre-Construction Dive Inspection Report within 3 calendar days of dive inspection completion.
  - Submit Underwater Grouting Plan within 5 calendar days of pre-construction dive inspection completion.
  - Contractor and Grouting Specialist shall participate in an in-person on-site meeting with the Engineer and the District at District’s office in Leavenworth within 2 Calendar days of submission of the Underwater Grouting Plan.

The post-construction dive inspection should be performed immediately following completion of the grout work. A Post-Construction Dive Inspection Report shall be submitted within 3 calendar days of completion of the post-construction dive inspection. District approval is required prior to removal of the River Diversion.

In Exhibit W – Bidder’s Data 2.b, the River Diversion Plan does not need to be submitted with the bid.

END OF CLARIFICATIONS