I. Scope
The contractor shall provide ______(quantity) multistage centrifugal pump unit/s, Model SSV as manufactured by Goulds Pumps, ITT Industries or equal. All pump units shall be from one manufacturer and provided complete including electric motor drive.

II. Conditions of Service

A. Equipment Item Number _________ _________ _________
B. Flange Inside Diameter _________ _________ _________
   Note: Suction and discharge must be equal.
C. Primary Service Condition
   Capacity (GPM) _________ _________ _________
   Total Head (feet) _________ _________ _________
   Efficiency (%) _________ _________ _________
D. Minimum Shutoff Head _________ _________ _________
E. Minimum Flow Allowed _________ _________ _________
F. Operating Speed _________ _________ _________
G. Maximum Motor HP _________ _________ _________

III. Pump Construction
Each pump shall include the following design features:

A. Pump End Components
   A.1 Casing
   The pump casing shall be of deep drawn, laser welded AISI 304L or 316L stainless steel and shall be capable of withstanding maximum working pressures of 360 psi. Piping connections shall be in-line (optional top/bottom) and shall be compatible with ANSI raised face flanges (optional NPT or Victaulic).

   A.2 Wear Ring
   Wear rings shall be provided within each stage. Wear rings must be self centering and easily replaceable.

   A.3 Impeller
   Impellers shall be of enclosed design and constructed of AISI 316L stainless steel. Impellers shall provide internal thrust balance in each stage.
A.4 Diffuser Bowl
Each stage shall have a bowl with attached diffuser and be constructed of AISI 304L or 316L stainless steel.

A.5 Seal Housing
The seal housing shall be of concave design and shall hold the seal faces below the topmost part of the pump casing.

A.6 Mechanical Seal
The pump shaft seal shall be one of the following configurations as indicated.

<table>
<thead>
<tr>
<th>Rotary Face</th>
<th>Stationary Face</th>
<th>Elastomer</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Temperature</td>
<td>Silicon Carbide</td>
<td>Viton or EPR</td>
</tr>
<tr>
<td>Carbon</td>
<td>Graphite Filled</td>
<td></td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>Silicon Carbide</td>
<td>EPR</td>
</tr>
<tr>
<td>Graphite Filled</td>
<td>Graphite Filled</td>
<td></td>
</tr>
</tbody>
</table>

A.7 Shaft Sleeve and Bearing
The pump shall have shaft sleeves made of Tungsten Carbide and ceramic bearings. Shaft height shall be set with a standard spacer.

IV. Electric Motor
The pump drive motor shall be NEMA standard design TC frame suitable for vertical mounting and close coupled to the pump unit. Motors shall be of standard manufacturers catalog design and must not use special bearings as a thrust handling device. The motor rating shall be:

_____ HP, _____ RPM
_____ phase, _____ Hz, _____ volts

_________________________ Enclosure (ODP/TEFC/XP)
High Efficiency, 1.15 Service Factor

V. Testing
A. Each pump shall be hydrostatically tested by the manufacturer in accordance with Hydraulic Institute Standards at a minimum of 350 PSI.

B. Production performance testing will be conducted by the manufacturer on each pump unit. Head at three operating points (70% of BEP, BEP and 120% of BEP) will be measured to verify performance.