### Table B-1: Total shear stress at cross section 1 for depth ratio 0.285

<table>
<thead>
<tr>
<th>Location</th>
<th>Bottom width, b (cm)</th>
<th>Depth of flow, h (cm)</th>
<th>Area (m²)</th>
<th>Wetted Perimeter, P (m)</th>
<th>Hydraulic Radius, R = A/P (m)</th>
<th>Longitudinal slope, S</th>
<th>Shear Velocity, Vf (m/s)</th>
<th>Shear Stress, τ (N/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right floodplain</td>
<td>144</td>
<td>10</td>
<td>0.14</td>
<td>1.54</td>
<td>0.09350</td>
<td>0.001821</td>
<td>0.04087</td>
<td>1.67040</td>
</tr>
<tr>
<td>Main channel</td>
<td>46</td>
<td>35</td>
<td>0.16</td>
<td>0.96</td>
<td>0.16770</td>
<td>0.001826</td>
<td>0.05481</td>
<td>3.00416</td>
</tr>
<tr>
<td>Left floodplain</td>
<td>52</td>
<td>10</td>
<td>0.05</td>
<td>0.62</td>
<td>0.08387</td>
<td>0.001823</td>
<td>0.03872</td>
<td>1.49991</td>
</tr>
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### Table B-2: Total shear stress at cross section 2 and cross section 4 for depth ratio 0.285

<table>
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<tr>
<th>Location</th>
<th>Bottom width, b (cm)</th>
<th>Depth of flow, h (cm)</th>
<th>Area (m²)</th>
<th>Wetted Perimeter, P (m)</th>
<th>Hydraulic Radius, R = A/P (m)</th>
<th>Longitudinal slope, S</th>
<th>Shear Velocity, Vf (m/s)</th>
<th>Shear Stress, τ (N/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right floodplain</td>
<td>100</td>
<td>10</td>
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<td>1.1</td>
<td>0.09090</td>
<td>0.001821</td>
<td>0.04029</td>
<td>1.62400</td>
</tr>
<tr>
<td>Main channel</td>
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<td>35</td>
<td>0.16</td>
<td>0.96</td>
<td>0.16770</td>
<td>0.001826</td>
<td>0.05481</td>
<td>3.00416</td>
</tr>
<tr>
<td>Left floodplain</td>
<td>100</td>
<td>10</td>
<td>0.01</td>
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<td>0.09090</td>
<td>0.001823</td>
<td>0.04032</td>
<td>1.62578</td>
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### Table B-3: Total shear stress at cross section 3 for depth ratio 0.285

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<th>Depth of flow, h (cm)</th>
<th>Area (m²)</th>
<th>Wetted Perimeter, P (m)</th>
<th>Hydraulic Radius, R = A/P (m)</th>
<th>Longitudinal slope, S</th>
<th>Shear Velocity, Vf (m/s)</th>
<th>Shear Stress, τ (N/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right floodplain</td>
<td>52</td>
<td>10</td>
<td>0.05</td>
<td>0.62</td>
<td>0.08387</td>
<td>0.001821</td>
<td>0.03870</td>
<td>1.49827</td>
</tr>
<tr>
<td>Main channel</td>
<td>46</td>
<td>35</td>
<td>0.16</td>
<td>0.96</td>
<td>0.16770</td>
<td>0.001826</td>
<td>0.05481</td>
<td>3.00416</td>
</tr>
<tr>
<td>Left floodplain</td>
<td>144</td>
<td>10</td>
<td>0.14</td>
<td>1.54</td>
<td>0.09350</td>
<td>0.001823</td>
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### Table B-4: Total shear stress at cross section 1 for depth ratio 0.375

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<th>Bottom width, b (cm)</th>
<th>Depth of flow, h (cm)</th>
<th>Area (m²)</th>
<th>Wetted Perimeter, P (m)</th>
<th>Hydraulic Radius, R = A/P (m)</th>
<th>Longitudinal slope, S</th>
<th>Shear Velocit y, Vf (m/s)</th>
<th>Shear Stress, τ (N/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right floodplain</td>
<td>144</td>
<td>15</td>
<td>0.21</td>
<td>1.59</td>
<td>0.13584/9</td>
<td>0.001821</td>
<td>0.04926</td>
<td>2.42681</td>
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<tr>
<td>Main channel</td>
<td>46</td>
<td>40</td>
<td>0.18</td>
<td>0.96</td>
<td>0.19166/7</td>
<td>0.001826</td>
<td>0.05859</td>
<td>3.43334</td>
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<tr>
<td>Left floodplain</td>
<td>52</td>
<td>15</td>
<td>0.07</td>
<td>0.67</td>
<td>0.11641/8</td>
<td>0.001823</td>
<td>0.04563</td>
<td>2.08198</td>
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### Table B-5: Total shear stress at cross section 2 and cross section 4 for depth ratio 0.375

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<th>Location</th>
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<th>Depth of flow, h (cm)</th>
<th>Area (m²)</th>
<th>Wetted Perimeter, P (m)</th>
<th>Hydraulic Radius, R = A/P (m)</th>
<th>Longitudinal slope, S</th>
<th>Shear Velocit y, Vf (m/s)</th>
<th>Shear Stress, τ (N/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right floodplain</td>
<td>100</td>
<td>15</td>
<td>0.15</td>
<td>1.15</td>
<td>0.13043/5</td>
<td>0.001821</td>
<td>0.04827</td>
<td>2.33008</td>
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<tr>
<td>Main channel</td>
<td>46</td>
<td>40</td>
<td>0.18</td>
<td>0.96</td>
<td>0.19166/7</td>
<td>0.001826</td>
<td>0.05859</td>
<td>3.43333</td>
</tr>
<tr>
<td>Left floodplain</td>
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<td>15</td>
<td>0.15</td>
<td>1.15</td>
<td>0.13043/5</td>
<td>0.001823</td>
<td>0.04829</td>
<td>2.33264</td>
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### Table B-6: Total shear stress at cross section 3 for depth ratio 0.375

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<th>Location</th>
<th>Bottom width, b (cm)</th>
<th>Depth of flow, h (cm)</th>
<th>Area (m²)</th>
<th>Wetted Perimeter, P (m)</th>
<th>Hydraulic Radius, R = A/P (m)</th>
<th>Longitudinal slope, S</th>
<th>Shear Velocit y, Vf (m/s)</th>
<th>Shear Stress, τ (N/m²)</th>
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</thead>
<tbody>
<tr>
<td>Right floodplain</td>
<td>52</td>
<td>15</td>
<td>0.07</td>
<td>0.67</td>
<td>0.11641/8</td>
<td>0.001821</td>
<td>0.04560/4</td>
<td>2.07969/1</td>
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<tr>
<td>Main channel</td>
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<td>40</td>
<td>0.18</td>
<td>0.96</td>
<td>0.19166/7</td>
<td>0.001826</td>
<td>0.05859/5</td>
<td>3.43333/7</td>
</tr>
<tr>
<td>Left floodplain</td>
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<td>15</td>
<td>0.21</td>
<td>1.59</td>
<td>0.13584/9</td>
<td>0.001823</td>
<td>0.04929</td>
<td>2.42947/4</td>
</tr>
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<td>Cross section 1</td>
<td>Right Floodplain $\alpha$</td>
<td>Right Floodplain $\beta$</td>
<td>Main Channel $\alpha$</td>
<td>Main Channel $\beta$</td>
<td>Left Floodplain $\alpha$</td>
<td>Left Floodplain $\beta$</td>
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<td></td>
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<tr>
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<td>----------------------</td>
<td>----------------------</td>
<td>--------------------------</td>
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</tr>
<tr>
<td>No Encroachment (D=0.285)</td>
<td>1.1103</td>
<td>1.0354</td>
<td>1.0117</td>
<td>1.0040</td>
<td>1.0654</td>
<td>1.0216</td>
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<tr>
<td>Encroachment at bend on left side (D=0.285)</td>
<td>1.0200</td>
<td>1.0067</td>
<td>1.0492</td>
<td>1.0170</td>
<td>1.0808</td>
<td>1.0261</td>
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<tr>
<td>Encroachment at bend on both side (D=0.285)</td>
<td>1.0491</td>
<td>1.0165</td>
<td>1.1030</td>
<td>1.0362</td>
<td>1.0564</td>
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<td>1.4466</td>
<td>1.1491</td>
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<td>1.0431</td>
<td>1.0203</td>
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<td>1.3704</td>
<td>1.1254</td>
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<td>1.0069</td>
<td>1.4723</td>
<td>1.1562</td>
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<tr>
<td>Encroachment at bend on left side (D=0.375)</td>
<td>1.2670</td>
<td>1.0906</td>
<td>1.0561</td>
<td>1.0197</td>
<td>1.1318</td>
<td>1.0443</td>
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<td>Encroachment at bend on both side (D=0.375)</td>
<td>1.4887</td>
<td>1.1632</td>
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<td>1.0035</td>
<td>1.1678</td>
<td>1.0572</td>
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<td>1.2394</td>
<td>1.0800</td>
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<td>1.0041</td>
<td>1.0659</td>
<td>1.0220</td>
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<td>1.1239</td>
<td>1.0340</td>
<td>1.0117</td>
<td>1.4473</td>
<td>1.1504</td>
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</table>
Table B-8: Coriolis coefficient $\alpha$ and Boussinesq coefficient $\beta$ for cross section 2.

<table>
<thead>
<tr>
<th>Cross section 2</th>
<th>Right Floodplain $\alpha$</th>
<th>Right Floodplain $\beta$</th>
<th>Main Channel $\alpha$</th>
<th>Main Channel $\beta$</th>
<th>Left Floodplain $\alpha$</th>
<th>Left Floodplain $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Encroachment (D=0.285)</td>
<td>1.1341</td>
<td>1.0445</td>
<td>1.1558</td>
<td>1.0550</td>
<td>1.0822</td>
<td>1.0276</td>
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<tr>
<td>Encroachment at bend on left side (D=0.285)</td>
<td>1.4062</td>
<td>1.1373</td>
<td>1.0650</td>
<td>1.0211</td>
<td>1.2499</td>
<td>1.0904</td>
</tr>
<tr>
<td>Encroachment at bend on both side (D=0.285)</td>
<td>1.1383</td>
<td>1.0482</td>
<td>1.1292</td>
<td>1.0437</td>
<td>1.0808</td>
<td>1.0269</td>
</tr>
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<td>1.0595</td>
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<tr>
<td>Encroachment at crossover on both side (D=0.285)</td>
<td>0.0000</td>
<td>0.0000</td>
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<td>1.0431</td>
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<tr>
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<td>1.2269</td>
<td>1.0788</td>
<td>1.1959</td>
<td>1.0696</td>
<td>1.5125</td>
<td>1.1755</td>
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<td>Encroachment at bend on left side (D=0.375)</td>
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</tr>
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<td>1.1279</td>
<td>1.0431</td>
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<td>1.0065</td>
<td>1.5091</td>
<td>1.1826</td>
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<tr>
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<td>1.1296</td>
<td>1.0451</td>
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<td>1.0133</td>
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<tr>
<td>Encroachment at crossover on both side (D=0.375)</td>
<td>-</td>
<td>-</td>
<td>1.0560</td>
<td>1.0183</td>
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</table>
Table B-9: Coriolis coefficient $\alpha$ and Boussinesq coefficient $\beta$ for cross section 3.

<table>
<thead>
<tr>
<th>Cross section 3</th>
<th>Right Floodplain $\alpha$</th>
<th>Right Floodplain $\beta$</th>
<th>Main Channel $\alpha$</th>
<th>Main Channel $\beta$</th>
<th>Left Floodplain $\alpha$</th>
<th>Left Floodplain $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Encroachment (D=0.285)</td>
<td>1.1061</td>
<td>1.0345</td>
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<td>1.0157</td>
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<td>Encroachment at bend on left side (D=0.285)</td>
<td>1.1093</td>
<td>1.0382</td>
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<tr>
<td>Encroachment at bend on both side (D=0.285)</td>
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<td>1.3661</td>
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<td>1.1313</td>
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<td>1.1486</td>
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<td>1.0090</td>
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<tr>
<td>Encroachment at bend on both side (D=0.375)</td>
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<td>-</td>
<td>1.0432</td>
<td>1.0145</td>
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<td>1.5057</td>
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<td>1.0108</td>
<td>1.2404</td>
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<tr>
<td>Encroachment at crossover on both side (D=0.375)</td>
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</table>
Table B-10: Coriolis coefficient $\alpha$ and Boussinesq coefficient $\beta$ for cross section 4.

<table>
<thead>
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<th>Cross section 4</th>
<th>Right Floodplain $\alpha$</th>
<th>Right Floodplain $\beta$</th>
<th>Main Channel $\alpha$</th>
<th>Main Channel $\beta$</th>
<th>Left Floodplain $\alpha$</th>
<th>Left Floodplain $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Encroachment (D=0.285)</td>
<td>1.0433</td>
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<td>1.0614</td>
<td>1.0193</td>
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<td>1.0246</td>
</tr>
<tr>
<td>Encroachment at bend on left side (D=0.285)</td>
<td>1.2271</td>
<td>1.0817</td>
<td>1.2294</td>
<td>1.0727</td>
<td>1.1778</td>
<td>1.0585</td>
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<td>1.0257</td>
<td>1.0086</td>
<td>1.2066</td>
<td>1.0667</td>
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</tr>
<tr>
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<td>1.1184</td>
<td>1.0392</td>
<td>1.0959</td>
<td>1.0329</td>
<td>1.1193</td>
<td>1.0394</td>
</tr>
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<td>1.3710</td>
<td>1.1226</td>
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<td>1.0085</td>
<td>1.3269</td>
<td>1.1191</td>
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<tr>
<td>No Encroachment (D=0.375)</td>
<td>1.3411</td>
<td>1.1158</td>
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<td>1.0240</td>
<td>1.2080</td>
<td>1.0712</td>
</tr>
<tr>
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<td>1.4201</td>
<td>1.1396</td>
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<td>1.1889</td>
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<td>1.0614</td>
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<td>1.0280</td>
<td>1.1714</td>
<td>1.0571</td>
</tr>
<tr>
<td>Encroachment at crossover on both side (D=0.375)</td>
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<td>1.1714</td>
<td>1.0720</td>
<td>1.0241</td>
<td>1.1256</td>
<td>1.0443</td>
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