

# INVITATION FOR BIDS

Date: 30-November-2022  
 Name of Country: Kingdom of Cambodia  
 Name of Project: The Bakheng Water Supply Project – Stage 2  
 IPC No: BKG2-02-PTM-A-PPWSA/AFD

1. The Phnom Penh Water Supply Authority (PPWSA) has received funds from the Agence Française de Développement (AFD) towards the cost of The Bakheng Water Supply Project – Stage 2. It is intended that part of the proceeds of these funds will be applied to eligible payments under the contract for The Supply and Delivery of Ductile Iron Pipes and Fittings for Primary Transmission Main.

2. The Phnom Penh Water Supply Authority now invites sealed bids from eligible bidders for the procurement of Ductile Iron Pipes and Fittings for Primary Transmission Main:

All items, including quantity 0, shall be filled

Item	Description	Unit	Quantity
<b>1</b>	<b>Ductile Iron Pipe - Spigot Socket with Push-on Joint (Standard Joint) including EPDM elastomer gasket.</b>		
1.1	DN 1600 (Pipe length 8.18 m), Class C25, Standard	m	3,255.64
1.2	DN 1400 (Pipe length 8.17 m) Class C25, Standard	m	6,160.18
1.3	DN 1200 (Pipe length 8.19m) Class C25, Standard	m	4,651.92
1.4	DN 1000 (Pipe length 6.96 m) Class C25, Standard	m	4,614.48
1.5	DN 800 (Pipe length 6.95 m) Class C25, Standard	m	875.70
1.6	DN 600 (Pipe length 6 m) Class C30, Standard	m	1,854.00
1.7	DN 500 (Pipe length 6 m ) Class C30, Standard	m	0.00
1.8	DN 400 (Pipe length 6 m) Class C30, Standard	m	24.00
1.9	DN 300 (Pipe length 6 m) Class C40, Standard	m	42.00
1.10	DN 250 (Pipe length 6 m) Class C40, Standard	m	0.00
1.11	DN 200 (Pipe length 6 m) Class C40, Standard	m	366.00
1.12	DN 150 (Pipe length 6 m ) Class C40, Standard	m	390.00
1.13	DN 100 (Pipe length 6 m) Class C40, Standard	m	354.00
<b>2</b>	<b>Ductile Iron Pipe - Spigot Socket with Self Anchored Joint (type indicated below or equivalent) including EPDM elastomer gasket and complete accessories for self anchored joint.</b>		
2.1	DN 1600 (Pipe length 8.09m) Class C25 , Standard UNI Ve + WB	m	242.70
2.2	DN 1400 (Pipe length 8.09m) Class C25 , Standard UNI Ve + WB	m	275.06
2.3	DN 1200 (Pipe length 8.15m) Class C25 Standard Ve + WB	m	383.05
2.4	DN 1000 (Pipe length 6.88m) Class C30 Standard Ve + WB	m	344.00
2.5	DN 800 (Pipe length 6.89 m) Class C30 Standard Ve + WB	m	220.48
2.6	DN 600 (Pipe length 6 m) Class C30 Standard Ve + WB	m	402.00
2.7	DN 500 (Pipe length 6m) Class C30 Standard Ve + WB	m	30.00
2.8	DN 400 (Pipe length 6m) Class C30 Standard Vi	m	174.00
2.9	DN 300 (Pipe length 6m) Class C40 Standard Vi	m	186.00
2.10	DN 250 (Pipe length 6m) Class C40 Standard Vi	m	12.00
2.11	DN 200 (Pipe length 6) Class C40 Standard Vi	m	156.00
2.12	DN 150 (Pipe length 6) Class C40 Standard Vi	m	60.00
<b>3</b>	<b>Ductile Iron - Double flanged pipe (welded with length ... mm) complete and including gaskets, bolts, nuts and washers for both sides.</b>		
3.1	DN 1600, L=1000 mm	U	0
3.2	DN 1400, L=1000 mm	U	0
3.3	DN 1200, L=1000 mm	U	0
3.4	DN 1000, L=1000 mm	U	0
3.5	DN 800, L=800 mm	U	0
3.6	DN 600, L=600 mm	U	0
3.7	DN 400, L=250 mm	U	1
3.8	DN 300, L=600 mm	U	13
3.9	DN 200, L=250 mm	U	10
3.10	DN 150, L=250 mm	U	2
3.11	DN 100, L=250 mm	U	3
<b>4</b>	<b>Double flange anchoring pipe with puddle flange complete and including gaskets, bolts, nuts and washers (Integral with length ....mm)</b>		
4.1	DN 1600, L=2 m Flange: Integral	U	6
4.2	DN 1600, L=1 m Flange: Integral	U	0
4.3	DN 1400, L=1 m Flange: Integral	U	4
4.4	DN 1400, L=2 m Flange: Integral	U	0
4.5	DN 1200, L=1 m Flange: Integral	U	6
4.6	DN 1000, L=1 m Flange: Integral	U	6
4.7	DN 800, L=1 m Flange: Integral	U	6
4.8	DN 600, L=1 m Flange: Integral	U	26
4.9	DN 500, L=1 m Flange: Integral	U	8
4.10	DN 400, L=600 mm Flange: Integral	U	30
4.11	DN 300, L=600 mm Flange: Integral	U	14
4.12	DN 200, L=600 mm Flange: Integral	U	0
4.13	DN 200, L=500 mm Flange: Integral	U	15
4.14	DN 150, L=600 mm Flange: Integral	U	0
4.15	DN 150, L=500 mm Flange: Integral	U	0
<b>5</b>	<b>Flanged spigot pipe complete and including gaskets, bolts and nuts (welded with length ....mm)</b>		
5.1	DN 1600, L=780mm, flange: fixed	U	0
5.2	DN 800, L=600mm, flange: fixed	U	2
5.3	DN 600, L=600mm, flange: fixed	U	0
5.4	DN 500, L=600mm, flange: fixed	U	0
5.5	DN 400, L=600mm, flange: fixed	U	0
5.6	DN 300, L=600mm, flange: fixed	U	3
5.7	DN 250, L=600mm, flange: fixed	U	0
5.8	DN 200, L=500mm, flange: fixed	U	0
5.9	DN 150, L=500 mm flange: fixed	U	0
<b>6</b>	<b>Flange socket with Self Anchored Joint (indicated type or equivalent) complete and including EPDM elastomer gasket, accessories for self anchored joint and accessories (gasket, bolts, nuts and washers) for flange.</b>		
6.1	DN 1600 Standard UNI Ve; Flange: fixed	U	7
6.2	DN 1400 Standard UNI Ve; Flange: fixed	U	4
6.3	DN 1200 Standard Ve; Flange: fixed	U	4
6.4	DN 1000 Standard Ve; Flange: fixed	U	7
6.5	DN 800 Standard Ve; Flange: fixed	U	9
6.6	DN 600 Standard Ve; Flange: rotatable	U	42
6.7	DN 500 Standard Ve; Flange: rotatable	U	14
6.8	DN 400 Standard Vi; Flange: rotatable	U	39
6.9	DN 300 Standard Vi; Flange: rotatable	U	53
6.10	DN 250 Standard Vi; Flange: rotatable	U	2
6.11	DN 200 Standard Vi; Flange: rotatable	U	49
6.12	DN 150 Standard Vi; Flange: rotatable	U	6
6.13	DN 100 Standard Vi; Flange: rotatable	U	0
<b>7</b>	<b>Double socket bend with Self Anchored Joint (indicated type or equivalent) complete and including EPDM elastomer gaskets and accessories for self anchored joint</b>		
7.1	DN 2000, 22.5° Standard Plk	U	0
7.2	DN 1600, 11.25° Standard UNI VE	U	1
7.3	DN 1400, 45° Standard UNI VE	U	0
7.4	DN 1400, 11.25° Standard UNI VE	U	1
7.5	DN 1200, 45° Standard VE	U	0
7.6	DN 1200, 22.5° Standard VE	U	1
7.7	DN 1200, 11.25° Standard VE	U	3
7.8	DN 1000, 45° Standard VE	U	0
7.9	DN 1000, 22.5° Standard VE	U	0
7.10	DN 1000, 11.25° Standard VE	U	0
7.11	DN 800, 45° Standard VE	U	6
7.12	DN 800, 22.5° Standard VE	U	0
7.13	DN 800, 11.25° Standard VE	U	2
7.14	DN 600, 90° Standard VE	U	1
7.15	DN 600, 45° Standard VE	U	5
7.16	DN 600, 22.5° Standard VE	U	1
7.17	DN 600, 11.25° Standard VE	U	1
7.18	DN 500, 45° Standard VE	U	0
7.19	DN 500, 22.5° Standard VE	U	0
7.20	DN 500, 11.25° Standard VE	U	0
7.21	DN 400, 90° Standard Vi	U	0
7.22	DN 400, 45° Standard Vi	U	0
7.23	DN 300, 90° Standard Vi	U	0
7.24	DN 300, 45° Standard Vi	U	17

Item	Description	Unit	Quantity
7.25	DN 300, 11.25° Standard Vi	U	1
7.26	DN 250, 45° Standard Vi	U	10
7.27	DN 200, 90° Standard Vi	U	8
7.28	DN 200, 45° Standard Vi	U	0
7.29	DN 150, 90° Standard Vi	U	0
<b>8</b>	<b>All flanged bend complete and including gaskets, bolts, nuts and washers for both sides.</b>		
8.1	DN 1200, 45° fixed flange	U	0
8.2	DN 800, 45° fixed flange	U	0
8.3	DN 600, 45° rotatable flange	U	0
8.4	DN 600, 11.25° rotatable flange	U	0
8.5	DN 300, 90° rotatable flange	U	3
8.6	DN 300, 45° rotatable flange	U	0
8.7	DN 200, 90° rotatable flange	U	7
8.8	DN 100, 90° rotatable flange	U	0
<b>9</b>	<b>Double socket tee DN 1 with Flanged Branch DN 2, Push-on Joint joint, complete and including EPDM elastomer gaskets for sockets and accessories (gasket, bolts, nuts and washers) for flange.</b>		
9.1	DN 1600/1000; Standard; fixed flange	U	1
9.2	DN 1600/600; Standard; rotatable flange	U	0
9.3	DN 1400/600; Standard; rotatable flange	U	3
9.4	DN 1400/400; Standard; rotatable flange	U	3
9.5	DN 1400/300; Standard; rotatable flange	U	0
9.6	DN 1200/600; Standard; rotatable flange	U	1
9.7	DN 1200/400; Standard; rotatable flange	U	1
9.8	DN 1200/300; Standard; rotatable flange	U	0
9.9	DN 1200/200; Standard; rotatable flange	U	0
9.10	DN 1000/600; Standard; rotatable flange	U	0
9.11	DN 1000/400; Standard; rotatable flange	U	3
9.12	DN 1000/300; Standard; rotatable flange	U	0
9.13	DN 1000/200; Standard; rotatable flange	U	6
9.14	DN 800/400; Standard; rotatable flange	U	1
9.15	DN 800/250; Standard; rotatable flange	U	0
9.16	DN 800/150; Standard; rotatable flange	U	1
9.17	DN 600/600; Standard; rotatable flange	U	0
9.18	DN 600/400; Standard; rotatable flange	U	2
9.19	DN 600/300; Standard; rotatable flange	U	9
9.20	DN 600/100; Standard; rotatable flange	U	0
9.21	DN 500/300; Standard; rotatable flange	U	0
9.22	DN 500/100; Standard; rotatable flange	U	0
9.23	DN 400/400; Standard; rotatable flange	U	0
<b>10</b>	<b>Double socket tee DN 1 with Flanged Branch DN 2, Self Anchored Joint (indicated type or equivalent), complete and including EPDM elastomer gaskets for sockets, accessories for self anchored joint and accessories (gasket, bolts, nuts and washers) for flange ISO PN10.</b>		
10.1	DN 1600/1600; Standard UNI VE; Flange: Fixed	U	2
10.2	DN 1600/1000; Standard UNI VE; Flange: Fixed	U	1
10.3	DN 1400/600; Standard UNI VE; Flange: Rotatable	U	0
10.4	DN 1200/1200; Standard VE; Flange: Fixed	U	0
10.5	DN 1200/1000; Standard VE; Flange: Fixed	U	0
10.6	DN 1200/600; Standard VE; Flange: Rotatable	U	0
10.7	DN 1200/400; Standard VE; Flange: Rotatable	U	0
10.8	DN 1200/200; Standard VE; Flange: Rotatable	U	0
10.9	DN 1000/1000; Standard VE; Flange: Fixed	U	0
10.10	DN 1000/600; Standard VE; Flange: Rotatable	U	0
10.11	DN 1000/200; Standard VE; Flange: Rotatable	U	1
10.12	DN 800/600; Standard VE ; Flange: Rotatable	U	1
10.13	DN 800/400; Standard VE ; Flange: Rotatable	U	0
10.14	DN 600/600; Standard VE ; Flange: Rotatable	U	1
10.15	DN 600/400; Standard VE; Flange: Rotatable	U	3
10.16	DN 600/100; Standard VE; Flange: Rotatable	U	5
10.17	DN 500/500; Standard VE; Flange: Rotatable	U	0
10.18	DN 400/400; Standard Vi ; Flange: Rotatable	U	0
10.19	DN 400/300; Standard Vi; Flange: Rotatable	U	3
10.20	DN 300/300; Standard Vi; Flange: Rotatable	U	1
10.21	DN 250/250; Standard Vi; Flange: Rotatable	U	0
10.22	DN 200/200; Standard Vi; Flange: Rotatable	U	1
<b>11</b>	<b>Double socket invert level tee DN 1 Push-on Joint with flanged branch DN 2, complete and including EPDM elastomer gaskets for sockets and accessories (gasket, bolts, nuts and washers) for flange</b>		
11.1	DN 1600/400; Standard; Flange: Rotatable	U	1
11.2	DN 1600/300; Standard; Flange: Rotatable	U	3
11.3	DN 1400/300; Standard; Flange: Rotatable	U	3
11.4	DN 1400/250; Standard; Flange: Rotatable	U	1
11.5	DN 1200/300; Standard; Flange: Rotatable	U	1
11.6	DN 1200/200; Standard; Flange: Rotatable	U	2
11.7	DN 1000/200; Standard; Flange: Rotatable	U	7
11.8	DN 800/200; Standard; Flange: Rotatable	U	1
11.9	DN 600/150; Standard; Flange: Rotatable	U	3
11.10	DN 500/150; Standard; Flange: Rotatable	U	0
<b>12</b>	<b>Double socket invert level tee DN 1 with Self Anchored joint (indicated type or equivalent) with flanged branch DN 2, complete and including EPDM elastomer gaskets, bolts, nuts and washers) for flange</b>		
12.1	DN 2000/300; Standard Plk; Flange: Rotatable	U	0
12.2	DN 1600/300; Standard UNI VE; Flange: Rotatable	U	2
12.3	DN 1400/300; Standard UNI VE; Flange: Rotatable	U	3
12.4	DN 1400/250; Standard UNI VE; Flange: Rotatable	U	0
12.5	DN 1200/300; Standard VE; Flange: Rotatable	U	1
12.6	DN 1200/200; Standard VE; Flange: Rotatable	U	5
12.7	DN 1000/200; Standard VE; Flange: Rotatable	U	2
12.8	DN 800/200; Standard VE; Flange: Rotatable	U	0
12.9	DN 600/150; Standard VE; Flange: Rotatable	U	7
12.10	DN 500/150; Standard VE; Flange: Rotatable	U	0
<b>13</b>	<b>All Socket Tee DN1 with Socket Branch DN2, Self Anchored Joint on all 3 sockets (indicated type or equivalent), complete and including EPDM elastomer gaskets and accessories for self anchored joint</b>		
13.1	DN 500/500; Standard Ve	U	0
13.2	DN 300/300; Standard Vi	U	0
13.3	DN 300/200; Standard Vi	U	1
13.4	DN 250/250; Standard Vi	U	0
13.5	DN 200/200; Standard Vi	U	6
<b>14</b>	<b>All Flange Tee complete and including EPDM elastomer gaskets and accessories (gasket, bolts, nuts and washers) for flange</b>		
14.1	DN 1400/300; Flange: Rotatable branch	U	0
14.2	DN 600/600; Flange: All rotatable	U	2
14.3	DN 600/300; Flange: All rotatable	U	0
14.4	DN 500/300; Flange: All rotatable	U	0
14.5	DN 500/100; Flange: All rotatable	U	0
14.6	DN 400/400; Flange: All rotatable	U	0
14.7	DN 400/300; Flange: All rotatable	U	0
14.8	DN 400/80; Flange: All rotatable	U	0

Item	Description	Unit	Quantity
14.9	DN 300/300; Flange: All rotatable	U	6
14.10	DN 300/200; Flange: All rotatable	U	4
14.11	DN 250/250; Flange: All rotatable	U	0
14.12	DN 250/200; Flange: All rotatable	U	0
14.13	DN 200/200; Flange: All rotatable	U	0
<b>15</b>	<b>All Flanged Invert Level Tee DN 1 with flanged branch DN 2 complete and including gaskets, bolts, nuts and washers for all sides.</b>		
15.1	DN 2000/400; Flange: Rotatable branch	U	0
15.2	DN 1400/300; Flange: Rotatable branch	U	0
15.3	DN 1200/200; Flange: Rotatable branch	U	0
<b>16</b>	<b>Double Socket Concentric Taper DN 1/DN 2 with Self Anchored Joint (indicated type or equivalent), complete and including EPDM elastomer gaskets and accessories for self anchored joint</b>		
16.1	DN 1600/1400; Standard UNI VE	U	1
16.2	DN 140		