

Istanbul Metropolitan Municipality-Dept. of Transportation
Şehzadebaşı Cad 25,
34134 Fatih Istanbul, Turkey
Golden Horn Swing Bridge Installation Project
Tender HB-S/2021
Contract Specifications
Project data

WBS: Tasks & Resources Assignments

Phase Id	Element Id	WBS	Resource Initials	Task / Resource Name	Duration	Work	Assignment Units	Cost
		0		2-5-Tender-CS-TS-0				
31-30 50 14		1		Contract Award Phase				
		1.1		Award date (M0.1)	0 days			
		1.2		Contract Bonds effective	45 days			
			<i>O14.PM</i>	<i>Project Manager</i>			100%	
		1.3		Notice to proceed (M0.2)	0 days			
31-20 20 14		2		Final Design Phase				
	21-01 10 20 15	2.1		Bored Piles	60 days			
			<i>O1</i>	<i>Owner Resources</i>				
	21-01 40 40	2.2		Pits and Bases	25 days			
			<i>O1</i>	<i>Owner Resources</i>				
	21-06 10 20 70	2.3		Towers	20 days			
			<i>O1</i>	<i>Owner Resources</i>				
	21-07 20 60 70	2.4		Site Bridges				
		2.4.1		Approach Viaduct	90 days			
			<i>O1</i>	<i>Owner Resources</i>				
		2.4.2		Central Cable stayed spans	150 days			
			<i>O1</i>	<i>Owner Resources</i>				
		2.4.3		FD-Swing Bridge (M1)				
		2.4.3.1		Cylinder and Locking Devices				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		256 hrs		50%
			<i>O14.ME</i>	<i>Turkish Mechanical Engineer</i>		2,048 hrs		400%
		2.4.3.2		Machinery Room				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		340 hrs		50%
			<i>O14.ME</i>	<i>Turkish Mechanical Engineer</i>		2,720 hrs		400%
		2.4.3.3		Swing Bridge Deck				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		292 hrs		50%
			<i>O14.ME</i>	<i>Turkish Mechanical Engineer</i>		2,336 hrs		400%
31-40 20 17		3		Permitting Phase				
	21-07 20 60 70	3.1		Site Bridges	180 days			
			<i>O1</i>	<i>Owner Resources</i>				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		720 hrs		50%
31-40 20 34		4		Coordination Phase				
	21-07 20 60 70	4.1		Site Bridges	60 days			
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		240 hrs		50%
31-40 20 14		5		Subcontracting Phase				
	21-07 20 60 70	5.1		Site Bridges				
		5.1.1		Swing Bridge				
		5.1.1.1		Machinery Room				
		5.1.1.1.1		RFP				
			<i>O14.PA</i>	<i>Purchasing Agent</i>		40 hrs		100%
		5.1.1.1.2		BID preparation	15 days			
			<i>S</i>	<i>S/Contractor</i>				
		5.1.1.1.3		BID evaluation				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		32 hrs		100%
			<i>O14.PA</i>	<i>Purchasing Agent</i>		32 hrs		100%
		5.1.1.1.4		S/Contract execution				
			<i>O14.PA</i>	<i>Purchasing Agent</i>		16 hrs		100%
			<i>S</i>	<i>S/Contractor</i>		8 hrs		100%
		5.1.1.2		Swing Bridge Deck				
		5.1.1.2.1		RFP				
			<i>O14.PA</i>	<i>Purchasing Agent</i>		40 hrs		100%
		5.1.1.2.2		BID preparation	15 days			
			<i>S</i>	<i>S/Contractor</i>				
		5.1.1.2.3		BID evaluation				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		32 hrs		100%
			<i>O14.PA</i>	<i>Purchasing Agent</i>		32 hrs		100%
		5.1.1.2.4		S/Contract execution				
			<i>O14.PA</i>	<i>Purchasing Agent</i>		16 hrs		100%
			<i>S</i>	<i>S/Contractor</i>		8 hrs		100%
31-25 10 21		6		Fabrication Drawing Preparation Phase				
	21-07 20 60 70	6.1		Site Bridges				
		6.1.1		Swing Bridge				
		6.1.1.1		Cylinder and Locking Devices	20 days			
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>				100%
			<i>S</i>	<i>Supplier</i>				100%
		6.1.1.2		Machinery Room	15 days			
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>				100%
			<i>S</i>	<i>S/Contractor</i>				100%
		6.1.1.3		Swing Bridge Deck	30 days			
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>				100%
			<i>S</i>	<i>S/Contractor</i>				100%
31-40 30 21		7		Product Purchasing Phase				
	21-07 20 60 70	7.1		Site Bridges				
		7.1.1		Swing Bridge				
		7.1.1.1		Cylinder and Locking Devices				
		7.1.1.1.1		RFP				
			<i>O14.PA</i>	<i>Purchasing Agent</i>		40 hrs		100%
		7.1.1.1.2		BID preparation	15 days			

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			<i>S</i>	<i>Supplier</i>				
		7.1.1.1.3		BID evaluation				
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>		32 hrs	100%	
			<i>O14.PA</i>	<i>Purchasing Agent</i>		32 hrs	100%	
		7.1.1.1.4		Supply Contract execution				
			<i>O14.PA</i>	<i>Purchasing Agent</i>		12 hrs	100%	
			<i>S</i>	<i>Supplier</i>		12 hrs	100%	
		7.1.1.2		Deck materials	10 days			
			<i>O14.PA</i>	<i>Purchasing Agent</i>		80 hrs	100%	
		7.1.1.3		Electric & mechanical components	10 days			
			<i>O14.PA</i>	<i>Purchasing Agent</i>		80 hrs	100%	
31-40 40 14 21		8		Off-Site Fabrication Phase				
	21-07 20 60 70	8.1		Site Bridges				
		8.1.1		Swing Bridge				
		8.1.1.1		Cylinder and Locking Devices	280 days			
			<i>S</i>	<i>Supplier</i>				
			<i>O14.MAT</i>	<i>Swing Bridge Materials</i>				€ 1,540,200.00
		8.1.1.2		Deck materials	60 days			
			<i>S</i>	<i>Supplier</i>				
		8.1.1.3		Electric & mechanical components	60 days			
			<i>S</i>	<i>Supplier</i>				
31-40 30 27		9		Product Delivery Phase				
	21-07 20 60 70	9.1		Site Bridges				
		9.1.1		PD-Swing Bridge (M2)				
		9.1.1.1		Cylinder and Locking Devices	25 days			
			<i>O14.PA</i>	<i>Purchasing Agent</i>			100%	
			<i>O14.F.CH</i>	<i>Ship Freight (Origin China)</i>			11 TEU-CN	
		9.1.1.2		Deck materials	5 days			
			<i>O14.PA</i>	<i>Purchasing Agent</i>			100%	
			<i>O14.F.TK</i>	<i>Ship Freight (Origin Turkey)</i>			32 TEU-TK	
		9.1.1.3		Electric & mechanical components	5 days			
			<i>O14.PA</i>	<i>Purchasing Agent</i>			100%	
			<i>O14.F.TK</i>	<i>Ship Freight (Origin Turkey)</i>			4 TEU-TK	
31-40 40 14 14		10		Assembly Phase				
	21-07 20 60 70	10.1		Site Bridges				
		10.1.1		Swing Bridge				
		10.1.1.1		Cylinder and Locking Devices	152 days			
			<i>O14.TW</i>	<i>Team of Turkish Workers (5 Workers each)</i>			400%	
			<i>O14.MAT</i>	<i>Swing Bridge Materials</i>				€ 1,206,800.00
		10.1.1.2		Swing Bridge Deck	88 days			
			<i>O14.TW</i>	<i>Team of Turkish Workers (5 Workers each)</i>			400%	
			<i>O14.MAT</i>	<i>Swing Bridge Materials</i>				€ 5,543,954.00
31-40 40 14 11		11		Erection Phase				
	21-01 10 20 15	11.1		Bored Piles	60 days			
			<i>O1</i>	<i>Owner Resources</i>				
	21-01 40 40	11.2		Pits and Bases	25 days			
			<i>O1</i>	<i>Owner Resources</i>				
	21-06 10 20 70	11.3		Towers	20 days			
			<i>O1</i>	<i>Owner Resources</i>				
	21-07 20 60 70	11.4		Site Bridges				
		11.4.1		Approach Viaduct	90 days			
			<i>O1</i>	<i>Owner Resources</i>				
		11.4.2		Central Cable stayed spans	150 days			
			<i>O1</i>	<i>Owner Resources</i>				
		11.4.3		Swing Bridge				
		11.4.3.1		Cylinder and Locking Devices	50 days			
			<i>O14.TW</i>	<i>Team of Turkish Workers (5 Workers each)</i>			400%	
		11.4.3.2		Machinery Room	85 days			
			<i>O14.TW</i>	<i>Team of Turkish Workers (5 Workers each)</i>			400%	
			<i>O14.MAT</i>	<i>Swing Bridge Materials</i>				€ 3,095,000.00
		11.4.3.3		Swing Bridge Deck	30 days			
			<i>O14.TW</i>	<i>Team of Turkish Workers (5 Workers each)</i>			400%	
31-40 50 11		12		Commissioning Start-Up Phase				
	21-07 20 60 70	12.1		CS-Site Bridges (M3)				
		12.1.1		Swing Bridge	32 days			
			<i>O14.PE</i>	<i>Turkish Project Engineer</i>			100%	
			<i>O14.ME</i>	<i>Turkish Mechanical Engineer</i>			400%	
			<i>O14.TW</i>	<i>Team of Turkish Workers (5 Workers each)</i>			400%	

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OBS / ResBS

Group	Resource Name	Type	Material Label	Initials	Max. Units	Std. Rate
Obs.1	Owner Resources	Work		O1		
Obs.2	Authority	Work		A		
Obs.14	Project Manager	Work		O14.PM	100%	€180.00/hr
Obs.14	Turkish Project Engineer	Work		O14.PE	100%	€60.00/hr
Obs.14	Turkish Mechanical Engineer	Work		O14.ME	400%	€43.00/hr
Obs.14	Purchasing Agent	Work		O14.PA	100%	€80.00/hr
Obs.14	Supplier	Work		S		
Obs.14	S/Contractor	Work		S		
Obs.14	Team of Turkish Workers (5 Workers each)	Work		O14.TW	800%	€150.00/hr
Obs.14	Swing Bridge Materials	Cost		O14.MAT		
Obs.14	Ship Freight (Origin China)	Material	TEU-CN	O14.F.CH		€ 1,440.00
Obs.14	Ship Freight (Origin Turkey)	Material	TEU-TK	O14.F.TK		€ 212.00