

3/22/2018

Feasibility Study - Cost of Positions to Bring In House

Position Title	Closest City Title	Estimated # Needed Sewers
Masons	Bricklayer, Buildings	2
Concrete Finisher	Cement Finisher	7
Civil Engineer II	Civil Engineer II	8
Civil Engineer III	Civil Engineer III	
Engineering Drafting Tech IV	Engineering Drafting Tech IV	
Construction Foreman	Infrastructure Repair Crew Leader	4
Repair Worker	Infrastructure Repair Worker	14
Construction Surveyor	No Current City Title	
Surveying Crew Manager	No Current City Title	
Equipment Operators	Operations Driver Worker	50
Top Man	Sewer Laborer II	8
Pipe Layer	Water Repair Worker	7
Formsetter	Infrastructure Repair Worker	
Superintendent	No Current City Title	
Electrician Manager	Electrical Services Manager	
Welder	Electrical Services Welder	
Advanced Electrical Laborers	Electrical Workers	
Iron Worker	Ironworker	
Laborers (Electrical Services)	Laborers (Electrical Services)	
Construction Foreman	Municipal Services Electrician	
Journeyman Electrician	Municipal Services Electrician	2
Electrical Laborers	Special Laborer (Electrical Services)	
Traffic Sign Worker	Traffic Sign Worker	
Building Maintenance Manager	Building Services Manager	
Carpenters	Carpenter	
Carpentry Manager	Carpenter Supervisor	
Roofing Supervisor	Carpenter Supervisor	
Cement Finisher Helper	Cement Finisher Helper	
Mason Helper	City Laborer	
Construction Management Engineer	Construction Management Engineer	
Engineering Tech I	Engineering Tech I	
Iron Worker Supervisor	Iron Worker Supervisor	
Registered Land Surveyor	Land Surveyor	
Controls Technician	No Current City Title	
Coating Applicator	No Current City Title	
HVAC/Plumbing Manager/Super	No Current City Title	
Plumbers Apprentice	No Current City Title	

Roofer	No Current City Title	
Security Officers	No Current City Title	
Painters	Painter	
Painter Bridge and Iron	Painter Bridge and Iron	
Painting Manager	Painter Supervisor, House	
Special Equipment Operator II	Special Equipment Operator II	
Special Equipment Operator III	Special Equipment Operator III	
Urban Forestry Laborer	Urban Forestry Laborer	
HVAC/Steamfitter	Water Plant Steamfitter/HVAC Specialist	
Communication Assistant IV	Communication Assistant IV	
Communication Assistant III	Communications Assistant III	
Riggers/Crane Operator	Harbor Crane Operator	
Concrete Saw Cutters	Infrastructure Repair Worker	
Mechanical Repairperson	Machine Repair Person	9
Millwright	Machine Repair Person	
Mechanical Projects Manager	Mechanical Engineer III	
Plumbers MASTER	No Current City Title	
Construction Foreman	Water Chief Repair Person	
Operations Manager	Water Distribution Operations Manager	
Scheduling Manager	Water Distribution Scheduling Manager	
Field Supervisor	Water Field Supervisor	
Automation Technicians	Water Plant Automation Controls Engineer	
Automation Manager	Water Plant Automation Manager	
Instrumentation Technicians	Water Plant Automation Technician	
Management Level positions	Water Plant Maintenance Manager	
Pipe Tappers	Water Repair Worker	
Repair Worker	Water Repair Worker	
Construction Foreman	Sewer Repair Crew Leader	17
Management Level positions	Sewer Services District Manager	4
Construction Laborer	City Laborer	44
Bridge Laborer I	Bridge Operator	
Bridge Laborer II	Bridge Operator Lead Worker	
Carpenter Leadworker	Carpenter Leadworker	
MKE Park Design Coordinator	No Current City Title	
MKE Park Const. Inspect. Coord.	No Current City Title	

Sewers

Total Number of New Positions	176
Total Cost of Base by Section	\$ 8,149,238.73
Total Fringe by Section	\$ 4,306,057.74
Total w/ Indirect and Fringe	\$ 12,455,296.47

Estimated # Needed Water	Estimated # Needed Streets	Estimated # Needed ES	Estimated # Needed B&B	Total Needed	Pay Range
2	1	4	4	13	7QN
3	6	4	6	26	7KN
1				9	2GN
1				1	n/a
2				2	3NN
	7		3	14	8IN
				14	8FN
6	2			8	n/a
1				1	n/a
114	25	41	3	233	8KN
	1			9	8FN
	1			8	8LN
	6			6	8FN
	4			4	n/a
1		2		3	1GX
2				2	7HN
		6		6	7FN
		4	8	12	7MN
			3	3	8EN
		6		6	7QN
5		18	1	26	7QN
		45		45	8GN
		3		3	8GN
1				1	1CX
4			6	10	7KN
1				1	7ON
			1	1	7ON
			10	10	8FN
			2	2	8DN
			2	2	1IX
			1	1	3BN
			1	1	7NN
			1	1	2IN
			1	1	n/a
			4	4	n/a
1			1	2	n/a
			1	1	n/a

				0	n/a
6				6	n/a
4		4	5	13	7IN
			5	5	7JN
1			1	2	7MN
			6	6	8ON
			2	2	8PM
			3	3	8EN
7			2	9	7JN
3				3	6JN
2				2	6HN
4			2	6	8QN
3				3	8FN
17				26	7JN
2				2	7JN
1				1	2IN
5				5	n/a
31				31	1BX
1				1	1GX
5				5	1FX
5				5	1BX
2				2	2IN
1				1	1HX
2				2	3MN
3				3	1DX
4				4	8LN
12				12	8LN
				17	8KN
				4	1FX
74	20	62	14	214	8DN
			9		8GN
			7		8IN
			1		7MN
			1		n/a
			1		n/a

Water	Streets	ES	B&B	All DPW
340	73	199	118	887
\$ 16,562,618.98	\$ 3,365,275.05	\$ 9,215,471.07	\$ 6,164,292.25	\$ 43,456,896.08
\$ 7,787,743.44	\$ 1,816,912.00	\$ 4,975,432.83	\$ 3,328,101.39	\$ 22,214,247.41
\$ 24,350,362.42	\$ 5,182,187.05	\$ 14,190,903.90	\$ 9,492,393.64	\$ 65,671,143.49

City Min	City Max	Mid
\$ 70,040.62	\$ 70,502.90	\$ 70,271.76
\$ 58,549.40	\$ 59,389.72	\$ 58,969.56
\$ 58,372.00	\$ 72,062.90	\$ 65,217.45
\$ 66,324.44	\$ 81,844.36	\$ 74,084.40
\$ 44,948.54	\$ 61,296.04	\$ 53,122.29
\$ 41,699.58	\$ 47,076.90	\$ 44,388.24
\$ 38,350.00	\$ 43,335.24	\$ 40,842.62
\$ 47,534.00	\$ 59,268.00	\$ 53,401.00
\$ 53,585.00	\$ 69,999.00	\$ 61,792.00
\$ 40,643.20	\$ 53,000.22	\$ 46,821.71
\$ 38,784.98	\$ 43,335.24	\$ 41,060.11
\$ 45,327.10	\$ 51,517.44	\$ 48,422.27
\$ 38,350.00	\$ 43,335.24	\$ 40,842.62
\$ 75,000.00	\$ 75,000.00	\$ 75,000.00
\$ 66,434.68	\$ 93,009.80	\$ 79,722.24
\$ 45,684.60	\$ 52,049.14	\$ 48,866.87
\$ 39,137.80	\$ 48,402.38	\$ 43,770.09
\$ 61,784.58	\$ 63,002.94	\$ 62,393.76
\$ 37,502.40	\$ 41,564.64	\$ 39,533.52
\$ 63,169.34	\$ 72,221.24	\$ 67,695.29
\$ 63,169.34	\$ 72,221.24	\$ 67,695.29
\$ 40,159.86	\$ 44,399.16	\$ 42,279.51
\$ 40,159.86	\$ 44,399.16	\$ 42,279.51
\$ 51,468.82	\$ 72,062.90	\$ 61,765.86
\$ 59,389.72	\$ 59,389.72	\$ 59,389.72
\$ 65,755.04	\$ 65,839.02	\$ 65,797.03
\$ 65,755.04	\$ 65,839.02	\$ 65,797.03
\$ 38,784.98	\$ 43,335.24	\$ 41,060.11
\$ 31,408.52	\$ 40,450.02	\$ 35,929.27
\$ 75,478.26	\$ 105,669.20	\$ 90,573.73
\$ 33,101.90	\$ 39,969.80	\$ 36,535.85
\$ 65,839.02	\$ 65,839.02	\$ 65,839.02
\$ 66,324.44	\$ 81,844.36	\$ 74,084.40
\$ 39,952.00	\$ 39,952.00	\$ 39,952.00
\$ 58,240.00	\$ 58,240.00	\$ 58,240.00
\$ 63,119.00	\$ 81,869.00	\$ 72,494.00
\$ 50,555.00	\$ 50,555.00	\$ 50,555.00

\$ 38,153.00	\$ 52,844.00	\$ 45,498.50
\$ 29,761.00	\$ 38,990.00	\$ 34,375.50
\$ 56,364.36	\$ 56,364.36	\$ 56,364.36
\$ 57,877.04	\$ 57,877.04	\$ 57,877.04
\$ 62,729.94	\$ 63,002.94	\$ 62,866.44
\$ 58,759.48	\$ 58,759.48	\$ 58,759.48
\$ 52,532.74	\$ 60,382.40	\$ 56,457.57
\$ 37,502.40	\$ 41,564.64	\$ 39,533.52
\$ 53,162.20	\$ 57,877.04	\$ 55,519.62
\$ 39,611.26	\$ 44,545.54	\$ 42,078.40
\$ 37,830.26	\$ 41,863.38	\$ 39,846.82
\$ 62,930.90	\$ 68,582.80	\$ 65,756.85
\$ 38,350.00	\$ 43,335.24	\$ 40,842.62
\$ 47,588.32	\$ 57,877.04	\$ 52,732.68
\$ 47,588.32	\$ 57,877.04	\$ 52,732.68
\$ 58,462.30	\$ 81,844.36	\$ 70,153.33
\$ 53,264.00	\$ 67,028.00	\$ 60,146.00
\$ 48,669.92	\$ 67,615.60	\$ 58,142.76
\$ 66,434.68	\$ 93,009.80	\$ 79,722.24
\$ 62,338.38	\$ 87,270.30	\$ 74,804.34
\$ 48,669.92	\$ 67,615.60	\$ 58,142.76
\$ 51,468.82	\$ 72,062.90	\$ 61,765.86
\$ 62,338.38	\$ 87,270.30	\$ 74,804.34
\$ 47,779.42	\$ 54,669.42	\$ 51,224.42
\$ 54,864.68	\$ 76,806.08	\$ 65,835.38
\$ 45,327.10	\$ 51,517.44	\$ 48,422.27
\$ 45,327.10	\$ 51,517.44	\$ 48,422.27
\$ 44,188.82	\$ 53,000.22	\$ 48,594.52
\$ 62,388.38	\$ 87,270.30	\$ 74,829.34
\$ 31,408.52	\$ 40,450.02	\$ 35,929.27
\$ 40,020.50	\$ 44,399.16	\$ 42,209.83
\$ 41,699.58	\$ 47,076.90	\$ 44,388.24
\$ 62,582.78	\$ 63,002.94	\$ 62,792.86
\$ 93,600.00	\$ 93,600.00	\$ 93,600.00
\$ 101,441.60	\$ 101,441.60	\$ 101,441.60

Notes

Econ Research Institute survey mean for Milwaukee area - Surveyor

Econ Research Institute survey mean for Milwaukee area - Surveyor Lead

Unable to find reliable salary source - used sample of private jobs posted online

Econ Research Institute survey mean for Milwaukee area - Controls Technician

From B&B City contract records

Econ Research Institute survey mean for Milwaukee area - Plumber Supervisor

Econ Research Institute survey mean for Milwaukee area - Plumber 25th Percentile, 2 year experience

Econ Research Institute survey mean for Milwaukee area - Roofer

Econ Research Institute survey mean for Milwaukee area - Security Guard

Econ Research Institute survey mean for Milwaukee area - Plumber

1 Project Foremen, 3 Concrete Foremen, 1 Asphalt Foreman

Econ Research Institute survey mean for Milwaukee area - Water Maintenance Worker

Wages estimated by B&B

Wages estimated by B&B

3/22/2018

Sewers - List of positions submitted

This list supplements the main costing spreadsheet by providing a key to help discern what city job title a department's functional title is assigned to in the main costing spreadsheet.

Functional Title	Count	Closest City Title
Masons	2	Bricklayer, Buildings
Concrete Finisher	7	Cement Finisher
Construction Laborer	44	City Laborer
Civil Engineer II	8	Civil Engineer II
Construction Foreman	4	Infrastructure Repair Crew Leader
Repair Worker	14	Infrastructure Repair Worker
Mechanical Repairperson	9	Machine Repair Person
Journeyman Electrician	2	Municipal Services Electrician
Pipe Layer	7	Water Repair Worker
Equipment Operators	50	Operations Driver Worker
Top Man	8	Sewer Laborer II
Construction Foreman	17	Sewer Repair Crew Leader
Management Level positions	4	Sewer Services District Manager

3/22/2018

Streets - List of positions submitted

This list supplements the main costing spreadsheet by providing a key to help discern what city job title a department's functional title is assigned to in the main costing spreadsheet.

Functional Title	Count	City Title
Mason	1	Bricklayer, Buildings
Concrete Finisher	6	Cement Finisher
Laborer	20	City Laborer
Foreman	7	Infrastructure Repair Crew Leader
Formsetter	6	Infrastructure Repair Worker
Superintendent	4	No Current City Title
Construction Surveyor	2	No Current City Title
Operator	12	Operations Driver Worker
Truck Drivers	13	Operations Driver Worker
Top Man	1	Sewer Laborer II
Pipe Layer	1	Water Repair Worker

3/22/2018

Building & Bridges - List of positions submitted

This list supplements the main costing spreadsheet by providing a key to help discern what city job title a department's functional title is assigned to in the main costing spreadsheet.

Functional Title	Count	City Title
Mason	4	Bricklayer, Buildings
Bridge Laborer I	9	Bridge Operator
Bridge Laborer II	7	Bridge Operator Lead
Carpenter	6	Carpenter
Carpenter / Lead Worker	1	Carpenter Leadworker
Roofer Supervisor	1	Carpenter Supervisor
Cement Finisher	6	Cement Finisher
Cement Finisher Helper	10	Cement Finisher Helper
City Laborers (seasonal)	4	City Laborer
General Laborer	8	City Laborer
Laborer (Paving)	4	City Laborer
Mason Helper	2	City Laborer
Construction Management Engineer	2	Construction Management Engineer
Engineering Technician I (Surveyor)	1	Engineering Tech I
Crane Operator	2	Harbor Crane Operator
Foreman	3	Infrastructure Repair Crew Leader
Ironworker Supervisor	1	Iron Worker Supervisor
Ironworker	8	Ironworker
Laborer (Electrical Services)	3	Laborers (Electrical Services)
Registered Land Surveyor	1	Land Surveyor
Electrician	1	Municipal Services Electrician
Coating Applicator*	4	No Current City Title
Controls Technician	1	No Current City Title
MKE Parks Construction & Inspection Coord.	1	No Current City Title
MKE Parks Engagement & Design Coordinator	1	No Current City Title
Plumber Apprentice	1	No Current City Title
Plumber Supervisor	1	No Current City Title
Truck Driver	3	Operations Driver Worker
Painter	4	Painter
Painter (Sprayer)	1	Painter
Painter, Bridge and Iron	5	Painter Bridge and Iron
Painter Supervisor	1	Painter Supervisor, House
Special Equipment Operator II	6	Special Equipment Operator II
Special Equipment Operator III	2	Special Equipment Operator III
Urban Forestry Laborer	3	Urban Forestry Laborer
HVAC Technician	1	Water Plant Steamfitter/HVAC Specialist

Steamfitter	1	Water Plant Steamfitter/HVAC Specialist
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3/22/2018

Water - List of positions submitted

This list supplements the main costing spreadsheet by providing a key to help discern what city job title a department's functional title is assigned to in the main costing spreadsheet.

Functional Title	Count	City Title
Masons	2	Bricklayer, Buildings
Building Maintenance Manager	1	Building Services Manager
Carpenters	4	Carpenter
Carpentry Manager	1	Carpenter Supervisor
Concrete Finisher	3	Cement Finisher
Concrete Laborer	9	City Laborer
Construction Laborer	53	City Laborer
Roofer	6	City Laborer
Traffic Control Laborer	6	City Laborer
Civil Engineer II	1	Civil Engineer II
Civil Engineer III	1	Civil Engineer III
Communication Assistant IV	3	Communication Assistant IV
Communication Assistant III	2	Communications Assistant III
Electrician Manager	1	Electrical Services Manager
Welder	2	Electrical Services Welder
Engineering Drafting Tech IV	2	Engineering Drafting Tech IV
Riggers	4	Harbor Crane Operator
Concrete Saw Cutters	3	Infrastructure Repair Worker
Mechanical Repairperson	17	Machine Repair Person
Millwright	2	Machine Repair Person
Mechanical Projects Manager	1	Mechanical Engineer III
Journeyman Electrician	5	Municipal Services Electrician
Construction Surveyor	6	No Current City Title
HVAC/Plumbing Manager	1	No Current City Title
Plumbers	5	No Current City Title
Security Officers	6	No Current City Title
Surveying Crew Manager	1	No Current City Title
Dump Truck Driver	66	Operations Driver Worker
Equipment Operator	44	Operations Driver Worker
Equipment Truck Drivers	4	Operations Driver Worker
Painters	4	Painter
Painting Manager	1	Painter Supervisor, House
Asphalt Foreman	1	Water Chief Repair Person
Concrete Foreman	3	Water Chief Repair Person
Construction Foreman	10	Water Chief Repair Person
Field Supervisor	5	Water Field Supervisor
Project Foreman	17	Water Chief Repair Person
Operations Manager	1	Water Distribution Operations Manager
Scheduling Manager	5	Water Distribution Scheduling Manager
Automation Technicians	2	Water Plant Automation Controls Engineer
Automation Manager	1	Water Plant Automation Manager

Instrumentation Technicians	2	Water Plant Automation Technician
Management Level Positions	1	Water Plant Maintenance Manager
North Maintenance Manager	1	Water Plant Maintenance Manager
South Maintenance Manager	1	Water Plant Maintenance Manager
HVAC/Steamfitter	7	Water Plant Steamfitter/HVAC Specialist
Pipe Tappers	4	Water Repair Worker
Repair Worker	12	Water Repair Worker

3/22/2018

ES - List of positions submitted

This list supplements the main costing spreadsheet by providing a key to help discern what city job title a department's functional title is assigned to in the main costing spreadsheet.

Functional Title	Count	City Title
Mason	4	Bricklayer, Buildings
Concrete finisher	4	Cement Finisher
Labor	62	City Laborer
New Managers	2	Electrical Services Manager
Electrical Worker	6	Electrical Workers
Iron worker	4	Ironworker
Electrician	18	Municipal Services Electrician
Foreman	6	Municipal Services Electrician
Driver	22	Operations Driver Worker
Operator	19	Operations Driver Worker
Painter	4	Painter
Boring Machine Operator	1	Special Laborer (Electrical Services)
Special Labor	44	Special Laborer (Electrical Services)
Sign Worker	3	Traffic Sign Worker