

## Estimating

## What's the Difference Between Unit Price and Lump Sum Bids?

**Executive Summary.** Prices in construction bids are usually received in one of two ways: unit prices or lump sum. Here we discuss differences and pros and cons

of collecting construction bids via these two methods.

**Two ways.** Pricing for construction jobs usually is submitted to an Owner one of two ways:

1. **Unit Price** – a unit price bid is when the project is broken down into price per unit. Look now in your office or home: you have a desk, a table, a chair, a window, and a ceiling. A unit price bid would ask for the price per unit (i.e. price per each desk, price per each table, price per each chair, et cetera). The quantities of these items times their unit price would all add up at the bottom to the total price to the Owner. To the right is a real life example of a water line project which asks for unit prices.

		JOB 19-012		
ITEM EST NO QTY	DESCRIF	PTION	UNIT PRICE	TOTAL
	PART A -		CH WATER MAIN	
	FANTA-	NOAD. 0-INC	OH WATER MAIN	
1. 1835	Cu. Yds., trench excavation without classification, inclusive of backfill and pipe cushion for water mains and appurtenances along City, City-maintained, and private rights-of-way, in place complete.			
	Per Cu. \	∕d.	\$	\$
2. 700	Cu. Yds., crushed rock backfill for trench bottom as required, in place complete.			
	Per Cu. \	∕d.	\$	\$
3. 2100	Sq. Yds., 4-inch thick (minimum) asphalt concrete pavement, inclusive of granular base and subbase courses for repaving all trenches within the City and City-maintained roads, in place complete.			
	Per Sq. \	∕d.	\$	\$
4. 2100	Sq. Yds., City and County Asphalt Concrete Mix No. 4 for temporary repaving of all trenches, within City, City-maintained, and private rights-of-way, in place complete.			
	Per Sq. \	∕d.	\$	\$
5. 12	Lin. ft., restoration of tile and CRM walls, disturbed or removed during construction, in place complete.			
	Per Lin. I	₹t.	\$	\$
6. 55	Cu. Yds., DWS 2500 concrete for reaction blocks, test blocks, concrete beams, driveways, sidewalks, slabs, offset concrete blocks, inclusive of necessary structural struts, straps, rods, reinforcing steel and appurtenances, in place complete.			
	Per Cu. \	rd.	\$	\$
7. 20	Each, valve box for gate valve, in place complete.			
	Each		\$	\$
Proposal ADDENDUM N	0. 1	- 2.1 -		

Unit Price Bid.



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**2.** <u>Lump Sum</u> – a lump sum price ignores the price per desk and price per chair, et cetera and simply asks for the price for the whole room. Below is another real life example of a lump sum bid request:



Notice to the right of this single line item bid form there are se3veral commodity codes. The Owner is saying "we have lots of different types of work in this job, but we're not interested in unit prices, just give us a price for the whole job." The different types of work are listed below, and likely could be quantified, but for whatever reason the Owner is not interested in pricing to any more detail than the lump sum number.

238120 Concrete reinforcement placement
237110 Utility line (i.e., sewer, water), construction
238110 Concrete pouring
238110 Footing and foundation concrete contractors
237110 Water system storage tank and tower construction
237110 Water well pump and well piping system installation
238120 Steel reinforcing contractors

**Pros and cons.** Well, it depends on which party you're referring as to whether or not it's a pro or con:

• <u>Historical pricing</u> – if an Owner has collected unit prices over time, he/she will know the average cost for each of the items 1 through 7 on the previous



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- page. This is a pro to the Owner during the budget phase because the Owner can quickly determine the order of magnitude of a project
- **Unbalancing the bid** a Contractor can take advantage of a mistake by the Engineer if a quantity is known prior to bid as having an overage or underage in quantity. Artificially increasing or decreasing a bid price, knowing the final quantity will overrun or underrun, can increase profit on a project.
- <u>Change order negotiation</u> many Owners will directly, or indirectly, state in the Contract that extra work shall be awarded, or deductive work credited, based upon the unit prices in the proposal. The knife can cut both ways, but it does make the process easier.
- Owner pays for what they get on the first page, item 7 is for gate valves complete. The quantity is 20 each. If only 18 are installed, the Owner will only pay for eighteen. If the quantity goes over, the Owner will pay for the additional gate valves at the unit price.

My story. I've done plenty of jobs both ways. The tricky Owners have the language that makes it perfectly ambiguous as to whether or not the full quantities will be paid regardless of what is installed in the field. The language goes like this: "Quantities on the proposal are for information only and the unit prices shall be used for negotiation purposes only." Inevitably, we install 22 gate valves and the Owner doesn't way to pay for the two extras, but when we install 18 gate valves they want the credit back for the two. This bit me on a private job where I majorly unbalanced the price of dust fence. The quantity wasn't wrong, I unbalanced the price per lineal foot of fence because it was an early item and I wanted to collect more cash. Well, the Owner deleted much of the dust fence and when I had to give back half of the quantity, we gave back a lot of profit. Ouch.

On the flip side, I majorly underbalanced the asphalt on a job (and knew at bid time the asphalt wouldn't be installed) and then they deducted the asphalt out of the project. We picked up a lot of profit on the job on this bid item because our price for asphalt was far under cost.

Work safe!

