

Starting the bid: project take-offs

Part II of III: Professional estimators don't confuse quantity take-off with a separate assignment, pricing.

by Sylvia Hollman Fee

■ From practice to trial, knowing materials, methods and variable conditions will sharpen your estimating skills.

Experience can expand your profit margin in a given market. Your estimate and bid price are based on two factors: (1) your company's history and (2) the facts of the potential new job.

Some of the factors you consider each time are routine: travel costs, costs of bonds, specific site conditions, and specialties such as irrigation or required heavy equipment. Other factors may be special and unique to the job, such as the relationships between those parties involved.

Whatever the specifics, it is vital to map out the scope of work involved in the job and the key players to manage the project. If you discover inconsistencies in the work outline, you can take into consideration the costs that deviate from your own firm's standards. This holds true whether the specifications are given by architects and owners or proposed by the landscaper making the bid.

The Landscape Project Analysis form (Fig. A) provides a format for recording and evaluating vital aspects of the project estimate. When you have recorded all the elements of the project and decided that the job is appropriate for your firm, your systematic estimate is under way.

Setting up—To perform a unit price estimate, some unit of measurement must be assigned to every cost associated with a job. For example, portable toilets are required on a highway job, so the unit of measurement will be each portable toilet.

Some required items are mentioned briefly in requests for bids. You must be sure to obtain all the site drawings, specifications and information collected on-site.

A quantity take-off lists the materials, number of man-hours, equipment and any other items required to complete the job. Take your time. Keep in mind that this information-gathering is the basis for your pricing and bid. Accuracy is vital for your bottom-line profit.

The quantity take-off is a separate assignment from pricing; professional estimators do not confuse these tasks. You can guard against error by using a pre-printed form such as that shown in Fig. B.

'Taking off'—To do a take-off from a plan drawing, read and make notations in a planned sequence. This is done by making lists of all work and materials of the same type, such as all grass sod areas and all paved walkway areas of similar materials. Shade and color measured areas on plans as you go.

Areas may be measured in square feet, yards, linear feet, volume and so on, as long as

you record the unit of measure on the take-off form. Measure and record items for surface cover, or volume of materials, length of border, amount of time, etc. Remember the methods and amount of work to do a job all have an associated cost that must be recovered.

A systematic method is useful for future reference and/or communication with others. This listing includes all items such as work days for specific earth-moving equipment, man-hours for clean-up and other requirements.

LANDSCAPE PROJECT ANALYSIS FORM

Date _____ To _____

Travel Time From _____ To _____

Travel Miles _____

Travel Minutes _____ Location _____

Project _____ Project Manager _____

Owner _____

Landscape Architect _____

Contractor: General _____

Building Type _____ Quality _____ Economy _____ Average _____ Custom _____ Luxury _____

Describe _____ S.F. _____

Size: _____ S.F. _____

Ground floor area of building _____ S.F. _____

Outdoor surface parking _____ S.F. _____

Number of parking spaces required _____ S.F. _____

Lawn area _____ S.F. _____

Landscape planting area _____ S.F. _____

Other area _____ None _____ Other _____

*Zoning _____ Residential _____ Commercial _____ Industrial _____

Zoning Requirements _____

ESTIMATE DATA

Budget due: _____ 19 _____

Schematic estimate due: _____ 19 _____ a.m./p.m.

Preliminary estimate due: _____ 19 _____

Bid/Final estimate due: _____ 19 _____

Working drawings _____

LABOR MARKET

Describe _____ Highly competitive _____ Normal _____ Union _____ Nonunion _____

TAXES Tax Exempt. No Yes % State _____ % County _____ % City _____ % Other _____

Type _____ Amount _____

BOND Not required Required _____

Start date _____ Construction duration _____ Filed bids _____

BIDDING DATE Open competitive _____ Selected committee _____ Negotiated _____

CONTRACT Single _____ Multiple Describe _____ Yes _____

Multiple type assigned to general contractor _____ No _____

Fig. A

Means Forms QUANTITY SHEET

PROJECT: Office Building

LOCATION: _____ SHEET NO. 3 of 7

ESTIMATE NO. 91-1 DATE 1991

TAKE OFF BY: SHF PROJECT: _____ CHECKED BY: JDM

| DESCRIPTION | DIMENSIONS | | | Area | S.L.P. | Risers | Length | Volume |
|-------------------|------------|-------|----|-----------|--------|--------|--------|--------|
| | L | W | D | | | | | |
| Hard Construction | | | | | | | | |
| Bluestone | | | | | | | | |
| Flagging | 20' | 8.5' | | 170 SF | | | | |
| | 16.5' | 5' | | 82.5 SF | | | | |
| | 12.5' | 6.5' | | 81.25 SF | | | | |
| | 11.00' | 8.00' | | 88 SF | | | | |
| | 9' | 8' | | 72 SF | | | | |
| 5% waste | | | | 131.75 SF | | | | |
| Total | | | | 450 SF | | | | |
| Steps | | | | | | | | |
| Concrete Slab | 5' | 5' | | 25 SF | | | | |
| Gravel Base | | | 4" | 150 SF | | | | |
| | | | 4" | 150 SF | | | | |
| RR Tie | | | | | | | | |
| Steps | 14' | 4' | | 56 SF | | | | |
| Edging | 24' | | | 24 LF | | | | |
| Retaining Wall | 25' | | | 25 LF | | | | |
| | 4' | 60' | | 24 LF | | | | |
| Fieldstone Edging | 15' | | | 15 LF | | | | |
| Crushed Bluestone | 227' | 5' | 3" | 1135 SF | | | | |

Fig. B

Notice in Fig. B that the surface material measured by noted dimensions with irregular areas is accompanied by a waste allowance. The required depth of the concrete slab is listed, so volume of material may be priced later. The area of crushed stone is listed and then converted to a volume of material so that item may be priced correctly when costs are added.

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Figures reproduced from Means Landscape Estimating, by Sylvia Fee, R.S. Means Co., Inc. (800) 334-3509.

NEXT MONTH:
Pricing the take-off