Creativity in Construction Management

Today’s Contractor Has More Than Just Time and Material to Contend With

The construction manager must deal with strict competition, a price-cost earnings squeeze, and uncertainty of material and labor resources. Advancement in technology and changes in government regulation contribute to the ever-changing environment in which the contractor must compete.

Being a skilled technician is not enough to be successful in this environment. Good management skills are essential. Thus, while contractors have the specific technical skills and experience, they often seek outside assistance in finance, administration, operating systems and controls, personnel, and tax planning. One of the sources of professional assistance available to the contractor is his CPA.

The contractor can expect his accountant to do much more than audit financial statements and prepare tax returns. Because the CPA works closely with many people in the company, the accountant can present objective insights into a client’s organization, people, operations, goals, and concerns, and can help the contractor identify opportunities for more efficient management.

The accountant can also assist the contractor in identifying and presenting the management information he needs for day-to-day operations. Having this information readily available also facilitates communication with lenders and sureties, always an essential consideration in the construction industry.

Overall business planning is an area in which the contractor finds the experience and judgment of his accountant of value. Beginning with the goals and objectives of the owners and managers, the business plans should include market strategy, financial strategy (including return on alternative uses of capital), methods to maximize bank credit and bonding capacity, operating and reporting systems, cash plans and budgets, organization charts, job descriptions, incentive compensation programs, and equipment management philosophies, to name only a few.

I’ve selected for discussion in this article a few vital areas in which the contractor and his auditor can work together. These areas are cash planning, tax deferral, estimating and bidding, job planning and management, equipment management, and job costing.

Cash Planning Takes Care

Contractors naturally need cash for their daily operations. But because cash is unproductive—if it is held in excessive amounts, contractors should carefully manage the amount of cash held at any time.

Cash planning in construction is largely a job-by-job process. When a contractor has an opportunity to bid for a job he must consider his cash needs in view of his bank commitments, incoming revenues, vendor payments, contractor payments, payroll, etc. The accountant can help the contractor consider the accounting and business implications in structuring a contract and manage a job to optimize cash flow. For example:

- Can the contractor schedule

Continued on page 25
progress payments earlier to minimize cash drain?

- Should the contractor engage his own subcontractor so that he can defer cash payment for labor?

The contractor’s cash planning system should use existing job costs and other accounting data. After considering historical results, the contractor must carefully anticipate changes in the company’s operating environment. Unplanned contingencies (such as overruns) or planned expansions of operations (such as new contracts) must be translated into projected cash requirements along with the cash needs of regular business operations. This information is included in a systematic cash flow forecast, usually on a monthly basis.

Another important aspect of cash planning is estimating the level of cash disbursements. Normal cash disbursements may be estimated and calendarized by using accounting data, such as payroll reports and accounts payable agings, if they are prepared regularly.

Purchase commitments, another essential consideration, must be analyzed to determine the expected receipt date of materials or services and the monthly profile of these payments. In addition to commitments, special purchases (purchases not made in the course of normal operations) must be included in cash disbursements.

Estimating the dollar impact of events not yet reflected in financial data allows management to determine the impact of these events on future cash balances. Management can then supplement the cash needs by arranging credit lines before they are needed or cut back expansion plans if they cannot be supported by available or borrowed cash.

**Tax Deferrals Maximize Cash**

The successful contractor maximizes cash by minimizing or deferring tax payments whenever possible. Cash retained in the contractor’s business through tax deferral is available to meet cash flow needs.

To minimize or defer taxes, the contractor must evaluate the tax aspects of every significant business transaction in conjunction with other business factors. For example, he needs to be aware of the alternative accounting methods used to determine taxable income and the various techniques available to minimize effective tax rates and to gain tax advantages both for the corporation and for its shareholders.

There is no requirement that a contractor use the same accounting...
method for both financial reporting and tax purposes. The contractor’s accountant is familiar with both the financial reporting and tax effects of each accounting method. To maximize tax deferral benefits, it is often necessary to use different accounting methods for determining taxes and for financial reporting.

The advantages and disadvantages of each method should be considered in evaluating the tax impact. For instance, if a contractor’s payables exceed his receivables, the accrual method of accounting would result in a net tax deferral. Thus, by carefully selecting an accounting method, a contractor can defer taxes for every year except the year of his business’s termination. Taxes deferred from one year to another are worth, at a minimum, the interest that the contractor would have to pay if he had to borrow money or the return which he would earn on the cash retained by the deferral.

Data is Vital in Estimating/Bid

While preparing construction project bids from plans and specifications is often a complicated and burdensome task, bidding is probably the most important facet of a contracting operation.

Unfortunately, the time in which a contractor must determine material, labor and other costs to prepare a bid is often short, which increases the possibility of errors. Rigid specifications allow little room for variances, and the bidder often must identify special terms, conditions and circumstances.

He must also pin down general and vague terms before he prepares a bid. A contractor’s accountant can assist in weeding through the complexity of a contract and in determining the contract’s implications.

The ability to generate consistent and accurate estimates is the hallmark of a profitable contractor. Basic control documents, such as specification checklists, pre-printed estimate forms, and bid summary sheets, help achieve consistency and accuracy. In evaluating terms and conditions of a proposed job, it is generally helpful to prepare a checklist of terms and conditions to insure that all out of the ordinary terms are identified.

After the contractor decides to bid, he prepares a listing of items required in the specification to insure all items are included in the final tabulation.

It is often helpful to develop a preprinted bid summary form which lists all major items and provides a space for appropriate specifications. From this worksheet, the items that will be subcontracted are determined.

After the contractor estimates required materials, he enters them on a major item recap sheet for pricing
and enters them in the bid summary form. Then when all quotes from subcontractors and material suppliers are submitted, the bid can be summarized. The bid summary form should provide space for a number of quotes. It should also provide a column to list changes due to quote discounts, judgments regarding quote errors, and other acceptable changes to the quotes.

Inaccurate bids can be more costly than errors in the building process. A contractor should undertake a thorough and systematic review of his estimating and bidding practices. He needs a system which is comprehensive but not cumbersome and which minimizes miscalculations and omission of necessary items.

Since the building of an estimate is a data gathering job, the contractor can look to his accountant for assistance in developing an estimate/bid system.

Considerable construction time and profits are also lost when jobs are improperly planned and scheduled. Through effective scheduling techniques, most conditions and events can be anticipated and enough lead time provided to allow for corrective measures. Of the many scheduling techniques in use, the most common are bar charts, program evaluation and review, and critical path planning and control.

The bar chart, probably the oldest technique, simply plots the various project components and their contract value using estimated start and completion dates. Under this technique, when construction is accelerated all phases of the project are accelerated. Typically, bar charts are useful only on small projects with few operations.

The cost of equipment, too, whether it is purchased or rented, is often a substantial portion of construction project costs. In fact, it is often the "make or break" item in a job. An accurate estimate of equipment cost should be reflected in the bid.

Contractors need a current, reliable, and easy-to-use information system which can provide them with sound information for making decisions on the purchase, disposal, utilization, and maintenance of equipment.

One of the first ways in which an accountant can work with the contractor is to assist him in defining his equipment strategies. For example, is equipment treated as a profit or service center? How are we going to allocate equipment costs? How do we handle estimating costs for a job involving equipment which is idle or fully depreciated? Most successful contractors have clearly defined ways to answer these questions.

Job Cost Control And Analysis

There is a twofold need for analyzing and controlling job costs. Continued on page 29
The primary reason is to stay abreast of current operations in order to avoid problems or to respond to opportunities in a way that uses valuable resources.

Another reason is to learn from your successful and unsuccessful jobs early enough to use the information in improving future operations.

For example, by maintaining and analyzing accurate costs, a contractor is able to estimate the cost of new work with confidence. Any cost system that is valuable to a contractor must be simple and accurate and it must furnish, with the least possible clerical labor, all the desired information for each class of work.

Cost accounting for each construction project is necessary to maintain control during the construction period and to determine profitability once the job is completed. A complete cost schedule giving all the operations encountered in building or other construction work is an example of a helpful tool.

Costs, compiled in hours or dollars, can be summarized into principal sub divisions, such as excavating, carpentry, masonry, etc., and compared to original estimates. The costs are broken down into materials, sub contracts, general expenses, and direct labor components.

The job cost schedule becomes the cost control center for the data recorded in the purchase cash disbursements, payroll, petty cash, and general journals.

Beside the job cost schedule, a variety of unit cost reports which compare actual job results to estimates for a given operation can be helpful.

The contractor should use requisitions, control forms and procedures for stockroom purchases, issues and returns; back charges to subcontractors who have not satisfactorily completed their work; and offsets where there is an account receivable from and an account payable to the same company.

Job accounting by itself is limited since it is based largely on historical costs. The key point, however, is that the contractor has to collect cost data for various reasons anyway, and if he does it at the right time in the right way, he can accomplish important management tasks. The contractor’s accountant, who should be sensitive to these concerns, can assist the contractor to define a job cost system from a meaningful management vantage point.

**Conclusion**

Within the constraints and latitudes of the construction environment, the contractor-businessman considers his CPA an important resource for professional assistance beyond the scope of “normal” accounting and tax work. The contractor should look to his accountant to review and evaluate his systems, procedures, and controls, and to suggest improvements.

More importantly, the auditor can serve as an advisor or counselor who can help the contractor answer such critical management questions as:

- How can I ensure my cash is being managed at the most effective levels possible?
- Are there any additional opportunities for tax deferrals?
- Can I improve the operational efficiency of my business?
- Is there an easier, more effective way to plan and manage my jobs, including cost compilation?
- Is there a smarter way to estimate and bid than my informal judgment approach?
- What is the minimum “key” information I need to closely manage the business?
- Etc., etc., etc.

The contractor’s auditor should be in a position to provide a full range of high-quality and timely professional services to meet the needs of the creative construction manager.

(Editor’s Note: This article was written by Vince DiBianca, manager of the Touche Ross Executive Office and program support administrator for real estate and construction.)