Equipment Ownership Cost as an Element of Job Costs
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To contractors and subcontractors whose work requires the use of expensive equipment, equipment cost, whether for
rented or owned equipment, is a major element of job costs. While some elements of equipment cost may be determined from a
contractor's books and records, more often than not, the real cost is not simply something that can be determined from a
bookkeeping entry. In the case of rented equipment, rental payments made to the leasing company will appear as an
expense item. This will not be the case where the equipment is owned rather than leased. Moreover, unless a piece of equipment is
rented for, and charged as, a cost item against a particular job, the rent paid will have to be allocated among the jobs on which the
equipment is used to obtain the actual cost for a particular work.

In addition to the rental cost, there are operating costs such as fuel, oil, fillers, grease, minor repairs and other normal
maintenance costs. In addition to rental costs, the leasing company may charge for delivery of the equipment and there may be
permitting costs, especially with regard to large items of equipment. Some equipment leases also place the burden of making major
repairs on the contractor. Property taxes may also be passed on to the contractor under the lease.

In the case of owned equipment, the contractor will still have the costs of operating and maintaining the equipment. But
instead of rental cost, the contractor's books and records normally will reflect only such things as depreciation, interest on monies
borrowed to purchase the equipment, insurance and property taxes.

The ability to measure both the ownership and operating costs of each piece of equipment on each job becomes
particularly important in connection with the pricing of change orders as well as the cost of delays. In this regard, the necessity of
maintaining accurate job cost records cannot be over emphasized. Where possible, a system of accounting should be used which
will allow the allocation of equipment ownership and operating costs to each job. Complete daily reports should be maintained
with a listing of each item of equipment being used on a project. If, because of delays, an item or items of equipment are forced
to remain idle, this should be noted in the daily reports.

Some contracts will provide agreed upon hourly or daily rates for owned equipment and mandate that those rates be used in
pricing changes in the work. The terms of any such contract should be carefully reviewed to ascertain what cost elements are or are
not included in the agreed upon rates.

In other cases, rates for equipment costs are negotiated on an ad hoc basis only as the need arises.

The rules governing the pricing of equipment costs may also vary depending upon whether the job is federal, state or
local, or private. The decisions of the courts in Virginia also give some guidance on how equipment costs may be proven in the
event of a dispute over the method of pricing equipment costs although such guidance may be of limited application.

Some contracts and some court decisions specify that the contractor is only entitled to the "actual cost" of equipment used in
the performance of extra work. The problem here is defining what is meant by the term "actual cost." The federal regulations also
express a strong preference for "actual costs" and mandate the use of "actual costs" when they can be derived from the contractor's
books and records.

For computing the costs of owned equipment, there are at least four equipment rate guides which may be available for
use where the contractor's accounting system does not permit its equipment costs to be easily identified and segregated. Whether
the use of these rate guides to determine owned equipment cost will be accepted or not will usually depend upon whether the
project is a federal or federally funded project, a state or local public project, or a private project. The terms of the contract itself, and
the decision of the courts as to the allowability of the use of a particular rate guide to establish the ownership cost of the equipment,
may also be determinative on whether a particular rate guide can be used to establish ownership cost.

According to Equipment Watch, the publisher of the Rental Rate Blue Book, 47 state DOT's and numerous municipalities
specify the use of the Blue Book for pricing significant costs.

In Virginia, the use of the Blue Book as a measure of the "actual cost" of equipment on VDOT projects has had mixed
Appeals rejected the use of the Blue Book as hearsay even though VDOT's Road and Bridge Specifications mandate the use of the
Blue Book in pricing equipment costs for force account work. However, in Commonwealth v. AMEC Civil, LLC, 289 Va. 396 (2010),
the Virginia Supreme Court affirmed the trial court's acceptance of the Blue Book as "a standard used in the profession" for
estimating "actual costs" for owner furnished equipment. The important thing to be noted from these two decisions is that to avoid
the rejection of the use of the Blue Book as "hearsay", it is necessary that an expert testify that he used the Blue Book to arrive at
his estimate of the "actual cost" of the equipment. The reason for this is that an expert, unlike a lay witness, is permitted to rely
upon hearsay in forming his or her opinion as to which he or she will give testimony.

On federal projects, or when federal funding is involved in state DOT projects, federal policy, as set forth in Part 31, Title
48, Code of Federal Regulations, prefers the use of actual equipment cost when such can be derived from the contractor's
accounting records. If not, then a predetermined rate schedule which includes only amounts for cost elements allowed by the
regulations should be used.

In addition to the Blue Book and the Corps of Engineer's rates, the Associated Equipment Distributors (AED) publishes a
rental rate guide and the Associated General Contractor of America (AGC) publishes an equipment ownership guide which has
rates for owned equipment.
An interesting feature of the federal regulations is that allowable ownership costs may include, in addition to depreciation and operating costs, “Cost of Facilities Capital” (CFC). (CFR 31. 205-10 & 9904.414). The definition of that term contained in the regulations suggest that CFC is a measurement of the amount of revenue the contractor did earn while the contractor’s capital investment was tied up in equipment on a project and thus was not available to generate revenue on another project. While the writer knows of no court decision where CFC was allowed an element of ownership cost, when the contractor’s equipment is forced to sit idle on a project because of delay or a work suspension, it would seem that the revenue which could be earned if the contractor were able to use the equipment on another job but which could not be earned because the equipment could not be utilized while tied up on the delayed job, is a legitimate element of ownership cost.

The Army Corps of Engineer’s Equipment Rate Schedule is also referred to in the regulations as a predetermined rate schedule which can be used by state DOT’s in pricing contract charges. The Corps of Engineer’s Rate Schedule is also mandated for use on Corps of Engineer’s projects and by many other federal agencies to determine the cost of owned equipment. As a cautionary note, the United States Court of Federal Claims has made it clear that the purpose of the Corps of Engineers’ rates is to supply equipment cost rates “in default of better information from a contractor’s books and records” and the use of these rates is improper where the purpose is to inflate the amount of a claim. Dalwood Engineering & Construction Co., Ltd. v. U.S., 73 Fed. Cl. 547, 591 (2000). The Corps of Engineers rate manual is found at FAR 32.105(d) (2) (i) (B).

Because the Corps of Engineer’s rates are generally lower than the Blue Book rates, contractors naturally will prefer the use of the Blue Book rather than the Corps of Engineer’s option to use the Blue Book rates if available. Contractors should be cautious here, however, because if the use of the Blue Book should be rejected as a valid tool for measuring the cost of owning a piece of equipment, the Contractor’s claim may be denied for a lack of proof as to its ownership cost.

Because both the courts and federal policy show a strong preference for “actual cost” rather than using a rate schedule to determine ownership cost, where feasible, contractors, working with their accountant should attempt to establish an accounting system which will permit the segregation and allocation of equipment costs among the projects where the equipment is being utilized. Hourly rates may also be established internally for each item of equipment based upon, for example, on total anticipated ownership and operating costs on the expected useful life of the equipment divided by the total estimated number of hours in the useful life of the equipment.

One very troublesome issue is whether an item of fully depreciated equipment has any ownership costs other than perhaps such things as interest on money borrowed to purchase the equipment, insurance and property taxes on the equipment. Some courts say that, since the original cost of the equipment has been recovered through depreciation, there is no longer any ownership cost as such. Yet a price of equipment can be fully depreciated for tax and accounting purposes well before the end of its useful life and the equipment may have many hours remaining on its useful life. In such case, how is the true cost of ownership determined? As the federal regulations suggest, is the loss of revenue from the use of the equipment while it sits idle or a delayed or suspended project a real item of cost?

In Asphalt Paving Co., v. US F&G, 671 P.2d 1013 (Colo. App 1983), US F&G contested the use by a highway contractor of the rental rates compiled by the Colorado Department of Highways as not being a reasonable reflection of the contractor’s costs because the equipment was owned equipment and had been fully depreciated. Because the equipment was not rental equipment and because there was no claim that the contractor would have rented its equipment to others at the Department of Highway’s rates, the court held that the Department’s rental rate did not reflect the contractor’s equipment costs for the purpose of awarding damages for breach of contract. The court did not comment on the argument that the equipment was fully depreciated. Nevertheless, because the record unveiled that the rates upon which the contractor would normally have based its bid were available and were a reasonable estimate of the contractor’s costs to complete the job, the case was remanded to the trial court for supplemental finding on the reasonable charge for the equipment.

In West v. Hampton Township Sanitary Authority, 661 A. 2d 459 (Pa. 1995), one issue before the court was whether a factor for equipment should be used in calculating a developer’s costs for the purpose of determining water and sewage tapping and connection fees when the equipment had been fully depreciated. On this issue, the court said, 661 A.2d ct 467:

“...we reject the court’s argument that fully depreciated equipment that is still in use should also be excluded from the calculation. Equipment that is fully depreciated, but still in use, clearly benefits new users in part. Accordingly, they should have to pay their fair share of that cost”

On the other hand, in Union Boiler Works v. Caldera, 156 F. 3d 1374 (Fed. Cir 1998), the court denied the contractor’s claim for an equitable adjustment for lost opportunity rental income associated with the Army’s use of its temporary boiler on the basis that the claimed rental costs were barred under 48 C.F.R. §31.205-11(l) which provides that:

“...No depreciation or rental shall be allowed on property fully depreciated by the contractor. However, a reasonable charge for using fully depreciated property may be upon agreed upon and allowed...”

Thus, since the parties had not agreed upon a reasonable charge, rental costs on the fully depreciated equipment was disallowed by the regulation. The court also went on to say that, while lost opportunity income may be an economic cost, it is not a “rental cost” addressed by the regulation and is therefore not recoverable.

In Conois v. City of Springfield, 319 S.W. 2d 523 (Mo. 1958), an action against the city for breach of a contract for the collection of garbage, the plaintiff included no cost for fully depreciated equipment in its calculation of its claim for lost profits. After the jury returned a verdict for the plaintiff, the city moved for a new trial claiming that the jury failed to consider as items of plaintiff’s costs the reasonable value of plaintiff’s own services and wear and tear on plaintiff’s equipment. On appeal from the trial court’s order granting a new trial the court said that even though plaintiff had fully depreciated its equipment, the city was not bound by the plaintiff’s bookkeeping methods and wear and tear on the equipment was not an item of expense which should be considered in arriving at plaintiff’s loss of profits.

If there is any lesson to be learned from the cases just discussed, it is that there is no hard and fast rule as to whether a contractor may validly claim equipment costs on federal projects where the equipment is fully depreciated. The regulations do seem to provide an answer namely, that it is improper to claim rental or ownership costs based on the Corps of Engineer’s rates for fully depreciated equipment absent an agreement on the use of such rates. In fact, the inclusion of amounts in a claim for equipment depreciation and its cost can potentially be considered to be a violation of the Federal False Claim’s Act. Id. Dalwood Engineering & Construction Co., Ltd. v. U.S., 547 Fed.Cl. 591-597.

When there is a delay or work suspension resulting in equipment sitting idle on the job site, there will, of course, be little or no operating costs, except perhaps some maintenance costs performed while the equipment was sitting idle and the decisions of
some courts require that equipment costs be reduced by 50% while the equipment is idle. See e.g. *L.L. Hall Construction Co. v. United States*, 379 F.2d 559 (1960) and *W.G. Cornell Co. v. Ceramic Coating Co., Inc.*, 629 F.2d 990 (D.C. App. 1980), where the court allowed the use of the Blue Book to establish the equipment costs but said that the rates should be cut by fifty percent when the equipment is idle. See also *Blake Construction Company*, GSBCA 1176, 66-1 BCA ¶ 5589 (1966), where the GSA Board of Contract Appeals rejected the AED rates and found that the AGC rates were more appropriate.

Help is available where a contractor is confronted with the need to price its equipment costs on a project for the purpose of a claim for a contract price adjustment. There are construction cost consultants who have the experience necessary to develop an estimate of the “actual cost” of a contractor’s equipment. The contractor should also seek assistance from its accountant and its attorney if it is anticipated that the pricing of its equipment costs may be challenged, especially where equipment costs are substantial and are a major element of the claim or proposed contract price adjustment. But the fact that there are professionals available to help a contractor determine the cost of its equipment does mean that it is not necessary to maintain the records from which the data essential to establishing equipment cost may be derived. These records should not only reflect the consistent method for charging equipment costs to a particular contract based upon an hourly or daily rate, but records need to be kept as to when a particular item was at a project site, when it was operating and when it was on standby. The number of additional hours or days each item of equipment was on the job site should also be recorded. The importance of documenting equipment costs was illustrated in *Ray Lowder, Inc. v. States Highway Commission*, 217 S.E. 2d 682 (N.C. Ct. App. 1975), where the trial court’s award of $350,000.00 in equipment costs to a Highway contractor was reversed because the contractor’s records did not reflect which equipment was at the project site and the times it was operating.