

Design Standards Letter

Letter Number: G-1969-32

Letter Date: 06/10/1969

Effective Date: 06/10/1969

Section/Plan No.: None

Subject: Estimating

Body

ALL DIVISION AND DISTRICT ENGINEERS

In recent lettings a considerable variance between the low bid and the engineers estimate has occurred. While there is no hard and fast rule regarding the percentage which the low bid may exceed the engineers estimate, there is a tendency to review quite critically bids that exceed the engineers estimate by 10% or more and rejection of such bids has occurred.

We realize that we have experienced another round of wage adjustments for various crafts and higher project costs will result. This factor can be taken into account, but it in itself is not the cause of the wide variance. In reviewing this condition, we feel there is considerable reason to question quite critically why the engineers estimate is 10% or more below the low bid.

The greatest portion of variance has occurred on urban type projects. Some essentially rural projects involving additional lanes adjacent to a pavement in place have resulted in considerable variance. Because of the individual characteristics each project has, it is essential that each project be estimated on an individual basis. Average unit prices, as prepared by the Division of Construction, should serve only as a guide in determining unit prices. All factors of a project must be given full consideration. These factors can consist of, but are certainly not limited to, the following:

1. Terrain and geology.
2. Development; urban, suburban, rural, industrial, commercial, recreational, residential.
3. Traffic handling procedures; road closed to through traffic, carry through traffic over construction, magnitude of local traffic, bypasses provided, stage construction required, winter carry over of traffic handling operation, work adjacent to traffic, etc.

4. Required delays to sequence of construction; relocation of utilities, foundation problems, surcharge, delay in driving piling, etc.
5. Size of project and magnitude of various items of work within a project. A 0.1 mile project cannot be compared with a 10 mile project; a resurfacing project, which includes a very small amount of dirt work for outlet and channel cleanout, will not be comparable in excavation prices with a project involving large quantities of earthwork.
6. A review of the Job Special Provisions prepared for the project to assure that unit prices reflect the conditions and requirements being specified.
7. A review of local conditions; ;city ordinances effecting blasting, air pollution and noise abatement, etc., special erosion control measures, water pollution measures, etc.
8. Unit prices used on previous projects of a similar nature let 6 month or more prior should be updated to reflect current prices.

Following such an evaluation, the estimate prepared by the District should reflect the complexity of the project. It is not the intent of the Main Office to make an evaluation since this is the Districts' responsibility. We will, however, keep a close surveillance on price trends and will make appropriate adjustments for this purpose.

With this procedure the engineers estimate can be a very useful tool in evaluating a contractors bid. It is definitely not the intention that estimates be padded to guarantee the award of a contract, but it is equally true that we do not want to reject a bid because insufficient attention was used in preparing the engineers estimate.

Your immediate attention is requested in this matter.

Leland D. Fletcher
Division Engineer
Surveys and Plans