

Tendering System for and Supervision Cost of Public Housing Projects Managed by Housing Authority

Purpose

The purpose of this paper is to inform Members of the issues of concern raised at the special meeting of the LegCo Panel on Housing held on 14 December 1999.

Prevailing Tendering System

List Management of Contractors and Consultants

2. Tenders for works contracts are invited from contractors on the Housing Authority (HA) Lists (for building works, building services installations and large diameter bored piles) or the Works Bureau Lists (for land piling and civil engineering works) as appropriate. Tenders for consultancy contracts are invited from consultants on the Architectural & Associated Consultants Selection Board (AACSB) Lists managed by ASD. All the lists are constantly updated taking into account quarterly reviews of performance. For the Works Bureau or AACSB Lists, the HA will add on its own performance reviews to determine eligibility of the contractors and consultants to tender for the HA contracts.

Building Works Contracts

3. A shortlisting exercise is first carried out based on the listing status, current workload, and PASS^{Note 1:} scores. The number of tendering opportunities is allocated to contractors under the Preferential Tender Opportunity System proportionate to their PASS scores. Contractors in the lowest quartile are not allowed to tender for the next quarter. Those in the top quartile are given full opportunities to tender for the next quarter. Those in the middle will be given tendering opportunities for the next quarter pro-rata to their scores. For some complex projects, only the best performing contractors are shortlisted. In this way about 10 to 12 contractors are shortlisted for submission of tenders for each contract. Award of contract is subject to scrutiny of tenderers' past performance, workload, financial capacity, and any required submission to meet technical requirements, as well as tender prices, and hence the lowest tenders may not necessarily be awarded.

Note 1: PASS refers to the Performance Assessment Scoring System which has been adopted since 1990 as a key device to assess contractors' performance.

4. A new Preferential Tender Award System has been introduced for contracts tendering out from September 1999 to account for past performance in the award of tender. Shortlisting of tenderers, allocation of tendering opportunities, and scrutiny of tenders remain the same as before. But the tender with the highest Preferential Tender Score is recommended for award. The Preferential Tender Score is built up from the Price Score and the Performance Score with a relative weighting of 80% to 20%. The Price Score is computed from comparing the tender sum to the lowest tender sum and by making pro-rata deduction. The Performance Score is derived from the latest PASS 6-month composite score, with deduction based on the number of consecutive adverse reports received during the past 12 months.

5. In addition, a bonus scheme has been introduced for contracts tendering out from September 1999. A direct monetary bonus of 0.05% of the Net Contract Sum will be awarded for each point scored above the relevant Benchmark Score, after the Completion Certificate or Maintenance Certificate has been issued. The maximum bonus is 1.0% of the Net Contract Sum or \$7.5M, whichever is the less.

Other Works Contracts

6. There are other works contracts like piling contracts and building services nominated subcontracts. The contractors are subject to list management and the tenders are subject to scrutiny of tenderers' past performance, workload, financial capacity, and any required submission to meet technical requirements, as well as tender prices. Normally the lowest of the tenders passing the scrutiny will be awarded.

Consultancy Contracts

7. When required, architect-led consultants are selected by means of open tenders under the Two-envelope System of technical and fee proposals. The HA appoints architectural consultants to undertake projects, who are responsible to appoint their own subconsultants, if necessary. Architectural consultants and their subconsultants have to be on the AACSB lists of consultants. Consultants are banded into two lists, List 1 for those with active HA commissions, and List 2 for those without. Projects are divided into two categories, Category A projects requiring high design input, normally non-standard blocks and Category B projects requiring low design input, normally standard domestic blocks. List 1 consultants are permitted to undertake both Categories A and B projects and List 2 consultants only Category B projects.

8. Architectural consultants are first invited to express interest to tender for the HA projects. Interested consultants will undergo a pre-qualification check of resources. Qualified tenderers are allocated with projects for tender by drawing lots. They will submit two envelopes for each tender. Envelope 1 contains a technical submission on company profile, experience and available working time of staff including those of subconsultants for the project, and supporting facilities. Envelope 2 contains a fee proposal with breakdown for all disciplines. Tenders are selected based on the highest combination of technical and fee scores, with a relative weighting of 50:50 for Category B projects and 70:30 for Category A projects.

Public Housing Contracts Not Awarded to the Lowest Tenders

9. The Housing Department (HD) has got a readily retrievable computer database of contract information for the past three years. The percentages of contracts which have not been awarded to the lowest tenders are as follows-

Year		New Works Contracts		Maintenance Works Contracts	
		NW1	NW2	M1	M2
Note 2:					
1997	No. of projects not awarded to the lowest tenders	0	1	1	8
	Total no. of projects awarded	4	28	22	52
	% of projects not awarded to the lowest tenders	0%	3.6%	4.6%	15.4%
1998	No. of projects not awarded to the lowest tenders	0	9	5	1
	Total no. of projects awarded	8	65	22	33
	% of projects not awarded to the lowest tenders	0%	13.9%	22.7%	3.0%
1999	No. of projects not awarded to the lowest tender	1	2	0	0
	Total no. of projects awarded	3	26	4	31
	% of projects not awarded to the lowest tenders	33.3%	7.7%	0%	0%

Note 2: The classification of contracts into 1 or 2 is made according to the contract sum. 1 refers to contracts up to \$450 million while 2 refers to those with unlimited value.

Supervision Cost of Public Housing Projects

10. The cost of resident site staff including resident engineers, clerks of works, building services inspectors, and works supervisors for public housing projects is about 2.5% of construction cost. This cost does not include the cost of professionals of various disciplines and ranks who station in the office but spend a proportion of their time on site carrying out supervision work. Making allowance for these office staff, the total supervision cost is about 4% of construction cost.

Housing Department
January 2000

Tendering System for and Supervision Cost of Public Works Projects

Purpose

The purpose of this paper is to inform Members of the issues of concern raised at the special meeting of the LegCo Panel on Housing held on 14 December 1999 on public works projects.

Relative Weightings between Tender Price and Performance

2. When evaluating the tenders for normal works contracts, the weightings given to tender price and quality (experience, past performance, resources, technical capability and other criteria commensurate with the nature of works) are normally 80 and 20 respectively. Only under exceptional circumstances should the weightings go beyond 70 and 30.

3. When evaluating the proposals for consultancy assignments, the weightings given to consultancy fee and quality (consultant's experience, response to the clients' consultancy brief, approach to cost-effectiveness, methodology and work programme, staffing) depend on the type of the projects. The weightings for the different types of projects are:-

- (a) Multi-disciplinary projects that require special emphasis on technical input, including Feasibility Studies and Investigation-stage consultancies and Design & Construction consultancies of above average complexity:-

Fee: 20%

Quality: 80%

- (b) Less complex Feasibility Studies and Investigation-stage consultancies, and Design & Construction consultancies of average complexity :-

Fee: 30%

Quality: 70%

- (c) Technically straightforward Design & Construction consultancies :-

Fee: 40%

Quality: 60%

Public Works Contracts Not Awarded to the Lowest Tenders

4. The percentage of public works contracts which has not been awarded to the lowest tender over the past five years are as follows:

Contracts: 10%

Consultancies: 54%

Supervision Cost of Public Works Projects

5. The cost for employing resident professional and technical site staff for undertaking site supervisory duties for a project depends on the nature and complexity of the project. For public works projects, the average percentage of the cost is around 7% of the total project costs.

Works Bureau
January 2000

Report on a Piling Contractor's Case

This is a full report on the case in which a piling contractor was convicted in 1998 of a fine of \$7,500 for substandard piles.

(1) **The Site**

Air Cargo Terminal, Chek Lap Kok Lot 1

(2) **The Accused**

The subcontractor for piling works of the development.

(3) **Facts of the Case**

8 out of 800 steel H-piles were not constructed in accordance with the piling plans approved by the Buildings Department (BD), in that at 2.5m to 3m below ground level the upper portions of the said steel H-piles were not connected directly in vertical alignment to the corresponding lower portions. One of the defective piles was discovered by the resident engineer when he instructed the contractor to expose for inspection the subject pile which was struck and damaged by a construction plant during the carrying out of superstructural work around the end of January in 1997. The registered structural engineer (RSE) for the development reported the irregularity to BD in mid-February 1997. Following tests carried out on 86 piles and excavation to expose 326 piles, 7 more defective piles were discovered.

(4) **Prosecution and Results**

The said subcontractor was prosecuted under BO s40(2A)(b) for piling works which deviated from approved plans. He was convicted by way of a guilty plea on 20.3.98 and was fined \$7,500.

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(5) Remedial Works

The defective welded connections were removed and re-welded in accordance with the approved plans. The affected ground floor slabs were redesigned so as to take into account the effect of eccentricities of the displaced piles. The RSE also carried out load tests on the completed pile foundations and upon completion of the building, certified that it was structurally safe. The completed building was inspected by BD prior to the issue of the occupation permit on 9.6.98.

Buildings Department
January 2000

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