

DAVIS LANGDON & SEAH

QUANTITY SURVEYORS: CONSTRUCTION COST CONSULTANTS

威寧謝：工料測量師及建設本值顧問

Facsimile Message



Mr. Kenneth Ng/Ms. Carol Tam

Goldon Investment Ltd.

No: 21046733 ✓

al pages (including this cover sheet):

From: Frank Kwok/Gloria Au-Yeung

Date: 25 January 1999

Ref: DLS/HK/99/2190

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THE SUPERSTRUCTURE CONTRACT

CITIC TOWER

1. 8822, OFF HARCOURT ROAD, HONG KONG

REVISED DRAFT COMMENTS ON CLAIMS SUBMITTED BY THE MAIN CONTRACTOR

URGENT

Further to our draft comments dated 15th January 1999 ref. DLS/HK/99/1310 on the
mentioned, we attach herewith our revised draft comments incorporating the
general principle on the acceleration and disruption for your further perusal and
comment as requested.

Yours

[Signature]

and on behalf of

DAVIS LANGDON & SEAH HONG KONG LTD.

*No Acceleration Cost
entitled*

FAX OUT/IN	
DAVIS LANGDON & SEAH	
HONG KONG CHINA LTD.	
REC'D: 25 JAN 1999	
EXT'D:	
FILE:	

HK-3334/L&E

15th January 1999

Goldon Investment Ltd.

32/F CITIC Tower

1 Tim Mei Avenue

Central

HONG KONG

Attn: Mr. Kenneth Ng/Ms. Carol Tam

Dear Sirs,

THE SUPERSTRUCTURE CONTRACT

CITIC TOWER

1. 8822, OFF HARCOURT ROAD

HONG KONG

COMMENTS ON CLAIMS SUBMITTED BY THE MAIN CONTRACTOR

We refer to Hip Hing - Kumagai JV's letter dated 29th April 1998 ref. S3837/H9607-M01/TC
claiming extension of time and loss and expense for the captioned contract. Further to our previous
advices on 21st May 1998 and 8th June 1998, we would further comment on same as below :-

A) Acceleration

The fundamental obligation of the Contractor under the Conditions of Contract is to work
regularly and diligently throughout the Contract Period even though there are disruptions to
their regular progress of works by Architect's instructions or otherwise which are responsible
by the Employer. In the event of such disruptions and pursuant to the Contractor's claim and
substantiation, extension of time may be granted if the Architect considers same necessary.

The Contractor is also only required to work regularly and diligently in the extended contract
period and in the period beyond the contract date for completion during which no further cost is
being granted. Therefore, the contractor's own initiative to carry out acceleration or
mitigation measures may reflect that :-

- the contractor have no confident in obtaining extension of time (eot) under the contract,
or have tried to catch up their own culpable delay, and therefore, accelerate to minimize
the Liquidated & Ascertained Damages which may be deducted; and/or
- the contractor may still target to achieve an early completion of the contract which
entitle them to "Bonus payment" under the "Bonus Scheme" of this Contract.

Although the Contractor may have implemented acceleration measures, they would not be
entitled to any payment nor compensation under the Contract as no acceleration instructions
have been given and unless early completion of the Works is achieved.

1s.

DRAFT

*L/E
cc) 7.
[Signature]*

B) **Disruption**

Disruption can be categorized into two main headings :-

- disruption to works affecting the critical path of the works; and
- disruption to works not affecting the overall progress of the Works.

For disruption to works affecting the critical path, extension of time would be granted and the associated loss and expense based on the Architect's proposed extension of time of 51 days are covered in detail in item D(a) below.

Regarding the disruption to works not affecting the overall progress, we have already assessed the extra costs such as double handling, replacement costs, etc. which have been properly identified by the contractor and clearly covered by Architect's instructions in our valuations of variations.

All other disruptions (e.g. Loss of Productivity) which have not been properly identified by the Contractor should be substantiated in detail to the satisfaction of the Architect as mentioned in item D(b) below.

C) **Extension of Time**

Hip Hing-Kumagai is claiming 225 days extension of time under eleven categories alleging late instructions, late nomination of sub-contracts and additional works instructed.

Since the Architect is in a better position to comment on the progress of works related to his instructions, we would follow the Architect's assessment on the extension of time for our comments on the loss and expense claimed by the Main Contractor in the next section. However, we would like to remind the Architect the following in his assessment of the extension of time :-

- whether the Contractor contributes to the delay caused by the default on the part of the Employer;
- whether there are concurrent delay amongst the eleven categories; and
- whether the Contractor have used constantly his best endeavour to prevent delays.

D) **Loss and Expense**

The claim submitted by Hip Hing-Kumagai covers the loss and expense of the Main Contractor only and can be divided into two categories:- a) loss and expense due to prolonged contract period; and b) loss and expense due to disruption of work not on the critical path.

a) **Loss and Expense due to Prolongation of the Contract Period**

Contractually speaking, the entitlement of the contractor for loss and expense shall be the actual direct loss and/or expense incurred and properly substantiated instead of the amount calculated from a formula. Based on our past experience, assessment of the actual expenditure incurred by the Contractors, although at the expense of time, could still be done accurately, however, it is difficult or impractical to identify the actual extra costs and expense which are accountable for the disruption. This is because the actual cost of the contractor may be due to over or uncontrolled expenditure due to their own special circumstances which should not be responsible by the Employer.

To identify and assess the reasonable cost from the unreasonable high expenditure, arbitrary assumptions and percentages have to be made and at the end the percentage error in assessment due to these numerous assumptions may be more than outweigh the errors or discrepancies made in the assumptions for the global formula method.

Therefore, we suggest that formula approach be adopted and would comment on Hip Hing-Kumagai proposed formula as below :-

i) **Site Overheads**

Based on formula approach, we accept Hip Hing-Kumagai's (the "Contractor") proposal that site overheads be calculated based on the time related preliminary costs as priced in Bill No. 1 - Preliminaries and as apportioned in the progress payment. However, the following items which have not been affected should be excluded :-

- attendance on P.C. Sums in Bill No. 8 as these are the specified attendance to the nominated sub-contractors which are related to the amount of works of the sub-contractors and not directly related to the time related costs.
- "insurance and bond" which should be based on actual costs which require no arbitrary apportionment.
- "contractor's lift" as the actual services of the lift provided has been delayed and shortened than originally planned due to delay of the contractor.
- "hoardings, screens, walkways" as the provisions of these items have not been prolonged.
- "temporary platform, etc." as this is for the temporary working area at the very initial start of the contract only.

Should actual cost but why formula?

not by Architect

D) Loss and Expense (Cont'd)a) Loss and Expense due to prolongation of the Contract Period (Cont'd)i) Site Overheads (Cont'd)

Therefore the additional site preliminaries calculated as attached Appendix 'A' is \$98,207.73 per day instead of \$153,465.00/day as claimed by the contractor.

ii) Actual Amount Spent for Insurance and Bond (Site Overheads)

As discussed, the extra insurance and bond could be assessed without arbitrary apportionment and assumption and subject to the contractors substantiation, the extra cost should be around \$529,080.63 as calculated in the Appendix 'A'.

iii) Head Office Overheads

We accept that the Contractor would incur extra head office overheads during the extended contract period and we also consider that the 6.5% claimed by the Contractor as head office overheads is acceptable. However, we opine that the basis for the calculation of the head office overheads should be based on the turnover of the Contractor which should be calculated from the :-

Original Contract Sum	
Less: - site overheads	
- Provisional Sums and Prime Cost Sums; and	
- the provisional dayworks bills	

Less: - Preliminary
- P.C. Sum
- Provisional Sum (incl. Anticipation)
- Daywork
- etc. rates

instead of the overall contract sum (which included the turnover of his nominated sub-contractors) as claimed by Hip Hing-Kumagai.

As calculated in the Appendix 'A', the additional head office overheads based on 15% profit and head office overhead with 7.5% for head office overheads is \$22,857.80 per day instead of \$31,673.11/day as claimed by the Contractor.

iv) Inflationary Costs on Original Contract Amount

The basis of this contract is lump sum fixed price without fluctuation which should have been allowed by the contractor at their own risk. Therefore, claims under this heading are not acceptable. **doubt it**

D) Loss and Expense (Cont'd)a) Loss and Expense due to prolongation of the Contract Period (Cont'd)v) Inflationary Costs on Additional Site and Head Office Overheads

We consider this head of claim admissible. If we use the inflationary rate claimed by contractor of 8.66% per annum instead of our previous assumption of 15% per annum, the inflationary costs on additional site and head office overheads as calculated in the attached Appendix 'A' is \$350,638.23 instead of \$1,440,932 as claimed by the contractor.

vi) Finance Charges

We consider this head of claim acceptable but the duration for the calculation of the finance charges should be counted from the mid point of the extended period (as the loss increased gradually with average at the mid point of the time extended) instead of the mid point of the original contract period because the loss and expense for the prolongation of the contract period would not incur until the end of the original contract period as we assume constant/flat overheads throughout the contract period and the loss and expense of the overheads of the affected activities have been paid during the original contract period against the original preliminaries priced.

Therefore the finance charge calculated as Appendix 'A' is \$1,230,537.04 instead of \$7,774,132.00 as claimed by the Contractor.

(Note: For assessment purpose, we have assume the average interest rate to be 11% compound interest to simplify calculation.)

viii) Finance Charges on Retention

In the original contract, the Contractor have to allow for the finance charges for the withholding of retention until the specified period. Such allowance should have been included in the head office overhead which consideration have already been given. Therefore, no further finance charges for deferred release of retention would be entitled.

viii) Mitigation Measures

According to our records no acceleration instructions have been given, and therefore no compensation for such measures which may have been adopted by the Contractor would be paid, in particular, the same have been spelt out in the "bonus clauses" of the Contract as above-mentioned.

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D) Loss and Expense (Cont'd)a) Loss and Expense due to prolongation of the Contract Period (Cont'd)ix) Loss of Profit (Opportunity Costs)

This head of claim would only be admissible if the contractor could prove to the satisfaction of the Architect that the amount of loss and expense withheld by the extension of the contract period and the outstanding work would affect his opportunity of taking up new projects. Since both Hip Hing and Kumagai are big contractors with turnovers much more than the amount of loss and expense assessed and the amount of outstanding work, we consider their entitlement under this claim head not acceptable.

x) CITA Levy

Since all the levies should have been priced in the preliminaries of the contract which extra entitlement have already been consider, we consider this extra cost not admissible.

b) Loss and Expense due to Disruption of Work not on the Critical Path (Loss of Productivity)

Although admissible, the loss of productivity for works not on critical path is related to the works which have been disrupted and must be identified and proved to the satisfaction of the Architect before assessment could be made because the loss of productivity may be due to the inefficiency or otherwise of the Contractor which should not be responsible by the Employer.

Therefore no additional cost should be paid unless the Contractor could identify to the satisfaction of the Architect that certain items of the works have been disrupted.

c) Extra Preliminaries after Practical Completion

Since there were instructions and works carried out after the proposed date of practical completion (3th October 1997), the Contractor would definitely incur extra preliminaries for these activities which should be based on a relatively small site set up and provision.

In order to assess and allow for this cost, we have assumed 20% on the amount of work carried out as the extra preliminaries which is equal to

HK\$20,000,000.00 x 20% = 4,000,000.00 (subject to agreement on the final account)

E) Conclusion

Subject to the above, we consider the overall loss and expense assessed based on the Architect's proposed extension of time of 51 days and the above principle at \$12,293,577.53 as shown in Appendix 'B' is an reasonable assessment on the extra cost incurred by the contractor due to disruption to the regular progress of their works.

Should you have any queries, please contact us.

Yours faithfully,

For and on behalf of
DAVIS LANGDON & SEAH HONG KONG LIMITED

Encls.

c.c. P&T Architects & Engineers Ltd. - Mr. K. L. Lam
Ove Arup & Partners HK Ltd. - Mr. George Chan

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THE SUPERSTRUCTURE CONTRACT
CITIC TOWER
11.8822 HARCOURT ROAD, HONG KONG
PRELIMINARY ASSESSMENT ON LOSS AND EXPENSE
INCURRED BY MAIN CONTRACTOR DUE TO EXTENSION OF TIME (ASSUME EOT UP TO 8TH OCT 97)

Appendix 'A'

Contract Information

Contract Sum	\$773,648,011.53
Contract Period	440 days
Amount of Preliminaries	\$64,125,623.28
Running Costs of Prelimin.	\$43,211,223.28 (refer our Valuation of Interim Certificate No.1-excluding bond, insurance, temporary latrines, contractor's lift, hoardings, screeds and walkway, temporary platform)
Amount of Daywork Schedule	\$491,900.00
Provisional & P.C. Sums	\$554,816,540.00

Assumptions

Inflation per year	8.65% (based on Contractor's claim)
Interest Rate	11% (prime rate plus 1 - refer note (ii))
EOT granted	51 days (assume from 18.8.97 to 8.10.97 - to be assessed by Architect)
Period for Assessment of EOT claim	17 months (say from Date for Completion - 8.97 to 1.99)
Period for Agreement	1 month (say from date of assessment - 1.99 to 2.99)

Calculations

	Cost/Day \$/day	Total (51 days) \$
A) Additional Site Preliminaries excl. insurance & bond in (D)		
Running Costs of Prelimin. Contract Period		
= $\frac{43,211,223.28}{440}$	98,207.33	5,008,573.83
B) Head Office Overhead (assume 15% Profit & O.H. with 7.5% for Overheads)		
$\frac{(\text{Contract Sum} - \text{Preliminaries} - \text{Amount of Daywork Schedule} - \text{Prov. \& P.C. Sums}) \times 7.5\%}{440 \times 115\%}$		
= $\frac{(773,648,011.53 - 64,125,623.28 - 491,900.00 - 554,816,540.00) \times 7.5\%}{440 \times 115\%}$	22,857.80	1,165,747.80
C) Inflationary Cost on Additional Site Preliminaries and Overheads		
$\frac{[(A) - (B)] \times (440 + 51) \times 8.65\%}{365 \times 2}$		
= $\frac{(98,207.33 + 22,857.80) \times (440 + 51) \times 8.65\%}{365 \times 2}$	7,051.73	359,638.23
D) Actual Amount spent for:-		
i) Bond (to be substantiated by Main Contractor) (say)	1,000.00	
ii) Insurance (to be substantiated by Main Contractor)		
CAR - 1,934,120.00 / 548 (based on premium for original contract)		
EC - 3,202,902.72 / 548	9,374.13	
	10,374.13	529,080.63
E) Finance Charge on Loss and Expense		
$\{ (A) + (B) + (C) + (D) \} \times \{ (1 + 0.11/365)^{533} - 1 \}$		
= $(5,008,573.61 + 1,165,747.73 + 359,638.15 + 529,080.63) \times \{ (1 + 0.11/365)^{533} - 1 \}$		1,230,537.04
F) GRAND TOTAL of (A), (B), (C), (D) & (E)	\$	8,293,577.53

Note: (i) For preliminary assessment we have assumed the average rate of 11% for the inflation to simplify calculation.
(ii) This assessment excludes the loss and expense of the NSC and the loss and expense for disruption to regular progress of work not on critical path which should be further substantiated by the Main Contractor.

THE SUPERSTRUCTURE CONTRACT
CITIC TOWER
11.8822, OFF HARCOURT ROAD,
HONG KONG

Appendix 'B'

COMMENTS ON CLAIMS
SUBMITTED BY THE MAIN CONTRACTOR

SUMMARY OF LOSS AND EXPENSES

	\$
a. Loss and Expense due to Prolongation of the Contract Period	
i. Site overheads	5,008,573.83
ii. Actual amount spent for insurance and bond	509,080.63
iii. Head office overheads	1,165,747.80
iv. Inflationary costs on original contract amount	0.00
v. Inflationary costs on additional site and head office overheads	359,638.23
vi. Finance charges	1,230,537.04
vii. Finance charges on retention	0.00
viii. Mitigation measures	0.00
ix. Loss of profit (opportunity costs)	0.00
x. CITA Levy	0.00
b. Loss and Expense due to Disruption of Work not on the Critical Path	
i. Loss of productivity	0.00 *
c. Extra preliminaries after Practical Completion	4,000,000.00
Total	\$12,293,577.53

* Subject to further substantiation from the Contractor.

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