

Job 109

Main Variations Analysis

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J109-Main Variations Analysis

Introduction

The aim of this report is to analyze our contractual entitlements pertaining to the main variations of Job 109, it also examines the adequacy of the adopted calculation methodologies.

However, the aim is not to decide to pursue only our entitled variations, but merely to know where we stand then we can decide where to go.

Contractual Grounds

The following are the main contractual grounds that apply to this report:-

1. Lumpsum Contract

The Lumpsum contract is otherwise termed as Drawings and Specifications contract, which is a more accurate description of the methodology applied. In these types of contracts, BOQ is of no relevance and sometimes even not provided.

Hence, the existence or non existence of an item in the BOQ does not relate to the contractor's scope of works, instead this test is only applied to drawings and specifications.

(Condition of Contract, Clause 5 (2))

2. Sufficiency of Tender

One of the risks associated with tendering in general and Lumpsum tenders in particular is the sufficiency of tender. The contractor bears this responsibility solely and his only recourse will be raising queries during tenders for any ambiguous or omitted item, failing to do so will not relieve him from the responsibility to execute these ambiguous items as per the Engineer instructions during contract.

(Condition of Contract, Clause 12)

3. Valuation of Variations

The first and most relevant methodology for Valuation is BOQ rate, since these are the contracted rates; we only refer to other methodologies, if rates are not applicable. It is to be noted that applicable does not mean identical, it also means if extrapolation is possible we should adopt BOQ rates and extrapolate therefrom.

(Condition of Contract, Clause 52 (1))

Main Variations Summary

Sr.	Vo.	Description	Claimed	Certified	Difference	
					AED	%
1	1	Civil Variation	4,986,416	3,229,803	1,756,613	35
2	4	Stiffener Column	90,549	Nil	90,549	100
3	10	Staircases	250,727	68,688	182,039	73
4	20	Chiller Foundations	184,716	Nil	184,716	100
5	21	Office Block	170,788	38,715	132,073	77
6	35	Steel grill	163,616	Nil	163,616	100
7	37	LTG openings	61,705	Nil	61,705	100
8	45	Switch Gear room	1,326,982	562,271	764,711	58
TOTAL			7,235,499	3,899,477	3,336,022	46

Variations Entitlement Analysis

1. VO.1 Civil Variation

This is the major variation; it is due to differences between the Tender drawings and the Construction drawings.

The Engineer agreed on principal but disagreed on valuation.

We are entitled.

2. VO.4 Stiffener Column

Drawings showed column sections to be 40x40, which turned out to be not safe and changed to 1000x200.

The Engineer is claiming it is part of our scope.

We are entitled since design is not made by Amana, and any change thereof will entail a variation.

3. VO.10 Steel Stair Case

Stair cases inside the A/C Plant were shown in the tender drawings. We are under the impression that any metal works related to A/C Plant is out of our scope of works, this impression is only based about a statement from Sales department with no backup and the fact that this item is not shown in the BOQ.

The Engineer agreed on principal but disagreed on valuation.

We are not entitled for any item shown in the drawing. Hence the Engineer agreement on principal is to our benefit.

4. **V0.20 Chiller Foundations**

Chillers are shown in the drawings with no foundation details.

The Engineer is claiming it is part of our scope.

Same as No.3 above, if it is shown in drawings (even with no details) it will be part of our scope, the right action would have been to query it during tender, or exclude it in the Contract.

5. **V0.21 Revised Office Block**

Office block was completely revised and entailed various variations.

The Engineer is claiming that most of it is in our scope and referring to what appears to be a non-contractual drawing.

We are entitled for this variation.

6. **V0.35 Steel Grill for Ground Tunnel**

Drawings showing a cover for the trench with no details thereof.

The Engineer is claiming it is part of our scope.

We are not entitled, same as No. 3 above.

7. **V0.37 LTG Openings**

Some openings related to the scope of LTG were not shown in the drawings.

The Engineer is claiming it is part of our scope.

We are entitled only for the non shown openings.

8. **V0.45 Switch Gear Room**

A new requirement for a Switch Gear Room arose after we completely finished our scope.

The Engineer agreed on principal but disagreed on valuation.

We are entitled.

9. **MEP Variations**

Engineer is dealing directly with the nominated subcontractor Bauer.

Valuation Methodology Analysis

1. VO.1 Civil Variation

a. Initial Claim	:	AED 4,986,416
b. Items removed because claimed elsewhere		
i. External Paving (claimed in VO.11)	:	AED 436,811
ii. Boundary Wall (claimed in VO.22)	:	AED 67,735
iii. Soil Improvement (claimed in VO.11)	:	AED 46,322
iv. Landscaping (claimed in VO.15)	:	AED 69,000
Total Deduction	:	AED 619,868
c. Deductions during negotiations	:	
i. Main Building	:	AED 136,036
ii. Office Building	:	AED 58,964
iii. Security	:	AED 21,340
Total Deduction	:	AED 216,340
d. Conclusion:-		
i. Entitlement	:	4,986,416 - 619,868 - 216,340= AED 4,150,208
ii. Engineer Valuation	:	AED 3,229,803
iii. Difference	:	AED 920,405

2. VO.4 Stiffener Column

CCE site engineer approved 81,000 as opposed to our valuation of 90,549 which reflects that our price was well estimated. However, this was rejected by Subhi and alleged to be a part of our scope.

3. VO.10 Steel Stair Case

CCE calculation is based on BOQ rates while ours is based on new rates.

Since BOQ rates can be extrapolated, new rates should be based thereon.

On the other hand, in our calculation we re-calculated the existing steel cases outside the A/C plant with new rates, which has no grounds at all.

Moreover, we deducted from our calculation the quantity included in the BOQ, which is not applicable unless we already billed this quantity (which I strongly doubt), thus we are deducting an unbilled amount. As a quick estimation by applying BOQ rates and allowing for the difference of height in A/C stairs, we can adopt an increase factor of 1.5 to be applied to the total price based on BOQ rates (74,818). Hence, AED 100,000 can be acceptable.

4. VO.20 Chiller Foundations

Our calculation is very logic and very close to BOQ rate, so it is acceptable. However, the Engineer completely rejects this item.

5. VO.21 Revised Office Block

Our calculation was revised to be AED 126,896 instead of AED 170,788 to eliminate some items like finishing and cladding, and it is mostly based on BOQ rates, hence acceptable. However, the engineer valuation was AED 38,715, with no break down provided or justification.

6. VO.35 Steel Grill for Ground Tunnel

No existing rates in BOQ, so our price was based on actual cost via a quotation plus overheads and profit, so calculation is acceptable. However, the Engineer completely rejects this item.

7. VO.37 LTG Openings

No existing rate in BOQ, hence new rates are acceptable. However, the Engineer completely rejects this item.

8. VO.45 Switch Gear Room

The main dispute here, is which rates are applicable. If it is established as additional works and not as a variation; new rates should be mutually agreed.

Conclusion

Sr.	Vo.	Description	Claimed	Certified	Fair Settlement	Remarks
1	1	Civil Variation	4,986,416	3,229,803	4,150,208	
2	4	Stiffener Column	90,549	Nil	81,000	Taken CCE Civil eng. valuation
3	10	Staircases	250,727	68,688	100,000	Rough estimation based on BOQ rates
4	20	Chiller Foundations	184,716	Nil	Nil	We are not entitled
5	21	Office Block	170,788	38,715	126,896	Finishing deducted
6	35	Steel grill	163,616	Nil	Nil	We are not entitled
7	37	LTG openings	61,705	Nil	61,705	
8	45	Switch Gear room	1,326,982	562,271	945,000	Taken the average between Amana and CCE
TOTAL			7,235,499	3,899,477	5,464,809	75% of our claimed amount 1,57 m above CCE valuation