

Corrected Version

DOCUMENT FOR PUBLIC RELEASE
The decision issued in this appeal contained protected material. This redacted version has been approved for public release.

Appeal of --)
)
The Clark Construction Group, Inc.)
)
Under Contract No. AOC-9800017)

CAB No. 2003-2

Appearances for the Appellant:

Michael Evan Jaffe, Esq.
Mary Margaret Utterback, Esq.
James R. Newland, Jr., Esq.
Thelen, Reid & Priest, LLP

W. Breck Weigel, Esq.
Vorys, Sater, Seymour and Pease, LLP

Marc S. Zweben, Esq.
Marc S. Zweben, PC

Appearances for the Government:

James R. Watson, Esq.
Archibald Wallace, III, Esq.
WallacePledger, PLLC

DECISION

The Clark Construction Group, Inc. (Clark or Appellant) seeks additional monies arising out of the delative credit taken by the Architect of the Capitol (AOC, Government, or Respondent) for a change order canceling the installation of a shade cloth system, a portion of the parties' contract for the renovation of the United States Botanic Garden Conservatory. Appellant claims that the unilateral deductive credit taken here by AOC was excessive and improperly calculated. Our jurisdiction of this appeal is pursuant to the contract's Disputes Clause and the appointment of the Board by the Joint Committee on the Library by letter dated December 13, 2002. Only quantum is at issue here.¹

We sustain the appeal in the amount of \$772,745, plus interest.

¹ References to the evidence shall be as follows: Rule 4 file: "R4"; Clark's supplemental Rule 4 file: "C4 Supp."; AOC's supplemental Rule 4 file: "A4 Supp."; Clark's hearing exhibits: "App. Exh."; AOC's hearing exhibits: "Resp. Exh."; hearing transcripts: "H.Tr., (witness's name);" deposition transcripts: "D.Tr., (deponent's name)."

BACKGROUND

On October 1, 1998, AOC awarded Appellant a fixed-price contract in the amount of \$27,920,520 for the renovation of the U.S. Botanic Garden Conservatory (Botanic Garden), located in Washington, D.C.² R4, K1551. The contract as originally awarded to Clark included that portion of the project commonly referred to as the retractable shade cloth system, which would permit for the motorized extension and retraction of a fabric shade product throughout the various glass-enclosed areas of the Botanic Garden. R4, K0908-10. It is the deletion of the shade cloth system, particularly the proper pricing of the deleted work, which is at issue here.

Relevant to this appeal the contract incorporated by reference Federal Acquisition Regulation (FAR) § 52.243-4, Changes (Aug. 1987).³ R4, K0051. The contract also contained the “Official Procedure for Making Changes in Contracts” clause, stating in pertinent part:

4. Allowances for Overhead and Profit

4.1 Except as provided in paragraph 4.3 below, the following percentages will be allowed for overhead and profit:

4.1.1 The contractor shall receive, as a percentage of the cost of all work performed by his own organization, an amount not to exceed 10% overhead and not to exceed 10% profit; and if subcontractor(s) are involved in the change, an amount of not to exceed 10%, encompassing both overhead and profit, as a percentage of the total price of the subcontractor portion of the change.

4.1.2 Subcontractor(s) to the prime contractor (first tier subcontractor(s)) shall receive, as a percentage of the cost of all work performed by or for it, a total amount of not to exceed 10% overhead and not to exceed 10% profit.

4.1.3 The percentages for overhead and profit permitted by the above shall be allowed only for the contractor and its first tier subcontractors. Percentages for overhead and profit in any amount will be not be [sic] allowed for subcontractors of any other tier.

* * * *

5. Changes Involving Decreases in Price

5.1 For changes involving only a decrease in price, the contractor and subcontractors shall return as credit for overhead and profit those same percentages which are allowed for like changes involving increases in price. On changes involving both an increase and decrease in price, overhead and profit will be allowed only on the net increase.

² The nature and performance of this contract are discussed in detail in our decision in CAB No. 2003-1, also issued this date.

³ The text of this contract provision is appended to our decision in CAB No. 2003-1.

R4, K0188-89.

On or about November 20, 1998, Clark entered into a fixed price subcontract with Rough Brothers, Inc., in the amount of \$6,721,375 for specified portions of the conservatory glazing system. C4 Supp. 13 0406-37, 0414. The subcontract agreement between Clark and Rough Brothers made applicable and incorporated the terms and conditions of the renovation contract between AOC and Clark. *Id.* at 0407. On January 22, 1999, Clark and Rough Brothers agreed to a modification of their subcontract agreement. Specifically, Clark increased the scope of Rough Brothers' subcontract to include performance of the shade cloth system work for the additional amount of \$1,012,000. Stipulation Regarding Shade Cloth Credit Claim (*hereinafter*, Stipulation of Fact) at ¶ 3, exh. A.

Sun Control Systems, Inc., an independent shade and drapery specialty company, had both before and after award of the renovation contract negotiated directly with Clark for the shade cloth system aspect of the project. H.Tr., D. Buckingham, 1:121-23.⁴ After Clark subcontracted performance of the shade cloth system work to Rough Brothers, Sun Control provided price quotes to Rough Brothers for the same work. *Id.* at 1:125. On or about February 25, 1999, Rough Brothers agreed to subcontract the shade cloth system work to Sun Control for the amount of \$894,500. *Id.* at 1:124-25; A4 Supp. T40038. Rough Brothers and Sun Control subsequently signed a subcontract agreement for a total price of \$911,200, of which \$894,500 represented the price for Sun Control's design, fabrication, and installation of the shade cloth system.⁵ Stipulation of Fact, exh. B; A4 Supp. T40038; H.Tr., D. Buckingham, 1:125. The subcontract agreement between Rough Brothers and Sun Control also made applicable, and incorporated the terms and conditions of the renovation contract between AOC and Clark. Stipulation of Fact, exh. B.

It is important to note that Sun Control's final price to Rough Brothers for the shade cloth system work was the end result of various refinements to both its technical proposal and its estimated costs of performance. Specifically, in July 1998, Sun Control estimated that its material (*i.e.*, product fabrication) and installation costs totaled \$[DELETED] as part of a total price of \$[DELETED]. A4 Supp. T40203. On August 13, 1998, Sun Control's revised estimate for its material and installation costs was \$[DELETED]. *Id.* On January 25, 1999, Sun Control estimated that its costs for material and installation were \$[DELETED] as part of a total price quote to Rough Brothers for the shade cloth system of \$1,000,198. A4 Supp. T40021, T40029. It was on February 18, 1999 that Sun Control provided Rough Brothers with a final revised price quote of \$894,500 for the shade cloth system that became the basis of the parties' subsequent subcontract agreement. A4 Supp. T40038.

In bidding jobs, Sun Control's practice was to calculate its various direct costs (*e.g.*, material, installation) and then apply a "gross markup" as a percentage of its direct costs to determine its final price. H.Tr., D. Buckingham, 1:191-94. The gross markup percentage that Sun Control applied to its estimated direct costs was not a fixed rate, but varied with the complexity and other variables of each project. *Id.* Moreover, the types of costs encompassed by Sun Control's gross markup also

⁴ Citations to D. Buckingham refer to J. Daniel Buckingham, Jr., Sun Control Senior Vice President. Citations to J. Buckingham refer to John D. Buckingham, President of Sun Control.

⁵ The remaining balance, in the amount of \$16,700, was for East and West Display Hall louvers that were separately deleted and are not relevant to the dispute here. H.Tr., D. Buckingham, 1:126.

varied between project bid estimates; on some occasions Sun Control would calculate its project design and engineering costs “above the line” (*i.e.*, as direct costs), and then apply a smaller gross markup rate to its estimated direct costs. H.Tr., J. Buckingham, 1:240-41; *compare* A4 Supp. T40195 *with* Resp. Exh. 1. Here, while Sun Control knew when preparing its bid that the shade cloth system project would require \$200,000-\$300,000 in design and engineering efforts, these costs were not reflected “above the line,” but instead were within the gross markup amount that the subcontractor applied to its estimated direct costs. H.Tr., J. Buckingham, 1:307-11, 2:339. Sun Control President, John D. Buckingham, testified that the company’s decision not to treat the design and engineering costs here as a direct expense was an inadvertent one, and that never before for this type of specification had Sun Control included its estimated design and engineering costs within its gross markup amount. *Id.* at 2:344-45, 377-79. In addition to design and engineering efforts, Sun Control’s gross markup also included such cost elements as project management expenses, overhead, and profit. H.Tr., D. Buckingham, 1:225, 229-30.

Shortly after reaching agreement with Rough Brothers, Sun Control prepared an internal product cost sheet for the shade cloth system project, indicating estimated material costs of \$[DELETED], installation costs of \$[DELETED], and other related direct costs of \$[DELETED] for a direct cost total of \$[DELETED]. Resp. Exh. 1. Sun Control’s project cost sheet here also reflected the subcontractor’s use of a [DELETED]-percent gross markup rate (totaling \$[DELETED]) for a total “price” of \$[DELETED], in comparison to its \$894,500 subcontract amount with Rough Brothers.⁶ *Id.*

On April 2, 1999, Sun Control issued a purchase order to MechoShade Systems Inc., a specialty shading manufacturing company, for the complete fabrication and assembly of the shade cloth system. A4 Supp. T40160; H.Tr., D. Buckingham, 1:178-79. The purchase order, which MechoShade considered fixed-price in nature, contained a subtotal amount of \$251,648 for shade cloth fabrication and assembly, plus an additional \$5,000 for a product mock up, for a total amount of \$256,648.⁷ A4 Supp. T40160; H.Tr., Berman, 2:468-69. MechoShade’s purchase order price to Sun Control also included the vendor’s indirect costs, overhead, and profit, as MechoShade was not performing its work for Sun Control “at cost.” H.Tr., Berman, 2:469-70, 473. The Sun Control purchase order to MechoShade did not make applicable or incorporate the terms and conditions of the renovation contract between AOC and Clark. A4 Supp. T40160.

On March 25, 1999, Sun Control provided Rough Brothers with a “schedule of values,” setting forth the priced values (including overhead and profit) for each sub-element of the shade cloth system work (*i.e.*, design, fabrication, assembly, installation) based upon its subcontract price with Rough Brothers. R4, 6711-13. The schedule of values was used to govern the interim progress

⁶ The Sun Control gross markup rate here is not [DELETED]% of total direct costs, but [DELETED]% of its total price [DELETED]. Resp. Exh. 1. Sun Control’s gross markup amount is approximately [DELETED]% of its total estimated direct costs [DELETED]. *Id.*

⁷ While MechoShade incurred design and drafting expenses both before and after receipt of the Sun Control purchase order, H.Tr., Berman, 2:440-42, 471, 477, most of such costs were outside of and in addition to MechoShade’s purchase order price for fabrication, assembly, and product mock up. *Id.* at 2:444, 450, 477-78. Sun Control in fact agreed to separately pay for the drafting and design development expenses that MechoShade had incurred prior to issuance of the purchase order, which were estimated by MechoShade at a minimum of \$15,000. *Id.* at 2:440-42, 471; A4 Supp. T40160.

payments that Sun Control would receive from Rough Brothers as work was completed. H.Tr., D. Buckingham, 1:189. Similarly, Rough Brothers provided Clark with a schedule of values for its total subcontract effort (including \$1,012,000 for the shade cloth system work), and Clark in turn provided AOC with a schedule of values for the entire Botanic Garden renovation project. Clark's schedule of values contained various line items for the shade cloth system having a total amount, including the contractor's overhead and profit, of \$1,050,000. Stipulation of Fact at ¶ 4.

From February 1999 until April 2000, Sun Control and MechoShade performed extensive design and engineering work on the shade cloth system. H.Tr., D. Buckingham, 1:181; Berman, 2:409; A4 Supp. T40166-81. From Sun Control's perspective the contract specifications for the shade cloth system "were inadequate and were at best conceptual descriptions or renderings of the project." R4, 6695. As of April 2000 Sun Control had completed schematic sketches for the Palm House, submitted shop drawings for the low houses, and provided various material samples for AOC's approval.⁸ H.Tr., D. Buckingham, 1:181-84, D.Tr., Witt, 37-38. By contrast, as of April 2000, Sun Control had not yet begun production of the shade cloth fabric, or assembly and installation of the shade cloth system. H.Tr., D. Buckingham, 1:184; D.Tr., Witt, 38; A4 Supp. T40166-67.

On April 14, 2000, AOC notified Clark of its intent to delete the shade cloth system. R4, 6735. AOC's decision to delete the shade cloth system resulted from its uncertainty whether a retractable shade cloth system could be designed to meet the contract specifications. H.Tr., Krapp, 2:646. Clark immediately provided notice of the government's intention to Rough Brothers, which in turn notified Sun Control. R4, 6715; D.Tr., Witt, 46. Shortly thereafter, AOC issued Change Order No. 88, officially deleting the shade cloth system and requesting that Clark provide a proposal showing the credit due the government for the deleted work. R4, 6724. AOC later requested that Clark also provide it with a proposal for a replacement greenhouse shade system (which subsequently became Change Order No. 115). R4, 6733, COF 0235-37. In contrast to the retractable shade cloth system that Rough Brothers subcontracted to Sun Control, Rough Brothers elected to perform the replacement greenhouse shade system itself. R4, COF 0038-46.

On April 24, 2000, aware that the shade cloth system work had been deleted, Sun Control provided Rough Brothers with a revised schedule of values that substantially increased the value of the project's design work, and requested payment of \$523,517 for work allegedly performed to date.⁹ R4, 6716-21. As part of its payment request, Sun Control represented that the project's design work was now 100-percent complete and that material fabrication was 30-percent complete. *Id.* Rough Brothers denied Sun Control's payment request in its entirety because, among other things, the subcontractor had altered the agreed-upon schedule of values and because it was attempting to bill for 30 percent of project materials when, to date, there had been no approval for the procurement of materials. R4, 6702-03.

⁸ Dan Buckingham estimated that "somewhere in the neighborhood of around 20%" of the design work had not been completed as of April 2000. H.Tr., D. Buckingham, 1:182.

⁹ Sun Control submitted its April 2000 pay requisition knowing that it would not be paid, but to make a point regarding both the efforts it had expended to date and how it believed had been treated here. H.Tr., J. Buckingham, 1:296-97.

Sun Control subsequently wrote to AOC, arguing that inaccurate and misleading statements had resulted in the improper deletion of the shade cloth system and requesting that AOC's decision here be reassessed.¹⁰ A4 Supp. T40151. Sun Control's letter also set forth its work on the shade cloth system to date: 15 months of shade development work that encompassed shade design development, fabric submittal and testing, a shade mock-up, electrical motor system development, shade hardware development, value engineering development, schedule development, job coordination and multiple site meetings. *Id.* By contrast, completely absent from Sun Control's letter regarding its efforts was any mention of material fabrication, assembly, or installation work. *Id.*

On May 12, 2000, MechoShade submitted an invoice to Sun Control for costs incurred to date totaling \$151,808, including lost profits on work not performed. R4, 6699-6700. Other than mock up work, none of the costs incurred by MechoShade prior to the deletion of the shade cloth system were for material fabrication or assembly. *Id.*; H.Tr., D. Buckingham, 1:187-88.

On May 22, 2000, Sun Control submitted its termination cost claim to Rough Brothers requesting payment of \$615,541 as a result of deletion of the shade cloth system. R4, 6694-6701. Sun Control's claim here was calculated as follows:

Sun Control Direct Labor	\$222,575
Other Direct Costs	\$12,231
MechoShade Costs	\$151,808
Total Direct Costs	\$386,614
Overhead (20.49%)	\$79,217
Profit (10%)	\$46,583
Total Costs	\$512,414
Overhead & Profit on Uncompleted Work	\$130,324
Amounts Paid to Date	<\$77,126>
Termination Costs	\$49,930
Total	\$615,541

R4, 6697-98.

As part of its claim Sun Control represented that the efforts expended by Dan Buckingham for project management and design totaled 1,374 hours at a cost of \$178,356.¹¹ R4, 6697. Also as part of its termination claim Sun Control estimated the cost of the uncompleted work to be \$398,786. *Id.*

¹⁰ The parties have made various arguments as to whose fault it was that the shade cloth system was deleted, whether Sun Control (and Rough Brothers) failed to bring design errors to AOC's attention, and whether Sun Control sought excess progress payments under the contract. We consider these arguments irrelevant in determining the proper amount of the credit for the deleted work here.

¹¹ Sun Control's termination claim indicates that the rate it applied to Dan Buckingham's work was \$129.81/hour ($\$178,355.77 \div 1,374 \text{ hours} = \$129.81/\text{hour}$).

On June 19, 2000, Clark submitted a letter to AOC proposing a total credit of \$334,905 for the deletion of the shade cloth system requirement. R4, 6830. Clark calculated this credit as follows:

Rough Brothers' Subcontract Price	\$1,012,000
Sun Control Costs Incurred	<\$615,541>
Rough Brothers Profit (10%)	<\$61,554>
Credit to AOC	\$334,905

R4, 6831.

Clark also provided AOC with a Rough Brothers' estimate for the replacement greenhouse shade system in the amount of \$487,394. R4, COF 0031-32. On July 13, 2000, AOC directed Clark to furnish and install the replacement greenhouse shade system (*i.e.*, Change Order No. 115). R4, COF 0033-35. AOC also tentatively accepted the estimates provided by Clark for both the deductive credit and the replacement work--\$334,905 and \$487,394, respectively--and adjusted the contract price accordingly. *Id.*

On August 2, 2001, AOC issued Amendment No. 2 to Change Order No. 88, unilaterally definitizing the credit due the government for deletion of the shade cloth system in the amount of \$1,506,961.¹² Stipulation of Fact at ¶ 7, exh. D. AOC, in calculating the credit it imposed, took the total amount of the Rough Brothers' subcontract change order price with Clark (in the amount of \$1,012,000) and then added to this figure (i) \$237,762 for Rough Brothers' overhead and profit, and (ii) \$43,823 for shade controls. Stipulation of Fact at ¶ 9. AOC also added 10 percent for Clark's overhead and profit in the amount of \$136,996 to the subcontractor subtotal. *Id.* AOC's complete calculation was as follows:

Rough Brothers' Subcontract Price	\$1,012,000
Credit for Completed Design Work	<\$35,000>
Deleted Electrical Work	\$111,379
Deleted Shade Controls	\$43,823
Subcontractor Subtotal	\$1,132,202
Subcontractor Overhead and Profit (21%)	\$237,762
Clark Overhead and Profit (10%)	\$136,996
Total	\$1,506,961

Stipulation of Fact at ¶ 8, exh. D.

On November 6, 2001, Clark informed AOC of various perceived errors in the computation of the government's deductive credit for the shade cloth system work. R4, tab 10, exh. F. Specifically, Clark asserted that AOC's inclusion of separate amounts for Rough Brothers' overhead and profit and the shade controls were improper because such amounts were already part of Rough Brother's

¹² Also on August 2, 2001, AOC separately issued Amendment No. 3 to Change Order No. 115, definitizing the change in contract price as a result of the replacement greenhouse system in the amount of \$470,743. R4, COF 0046. As part of this change order AOC accepted overhead and profit markups for Rough Brothers and Clark of 21 percent and 10 percent, respectively. R4, COF 0038-40.

\$1,012,000 subcontract price with Clark for the shade cloth system. Stipulation of Fact at ¶ 10. Clark asserted that AOC’s deductive credit should be no more than \$1,108,380, given the \$398,580 in miscalculation mistakes and associated markups here, irrespective of additional amounts believed due by Sun Control for its work. R4, tab 10, exh. F.

On March 22, 2002, Sun Control provided Rough Brothers with a claim stating that the credit properly due AOC for deletion of the shade cloth system was \$219,971, based on its costs to perform the deleted work. R4, tab 3. In light of its subcontract contract price and the payments previously received, Sun Control claimed that the additional amount it was due totaled \$571,895. *Id.* On July 29, 2002, Clark submitted the Sun Control claim to the contracting officer and requested the issuance of a final decision. R4, tab 1, 5. The contracting officer denied Sun Control’s claim in its entirety on October 7, 2002. R4, tab 1. Clark filed a timely appeal of the final decision here with this Board on October 31, 2002.

On October 28, 2002, Rough Brothers submitted to Clark its “miscalculation” claim in the amount of \$362,345, computed as follows:

Double-counted Overhead & Profit	\$237,762
Shade Controls	\$43,823 ¹³
Additional Design Work Credit	\$80,000 ¹⁴
Total	\$362,345

R4, tab 10.

Clark submitted the Rough Brothers miscalculation claim to the contracting officer for final decision on April 30, 2003. R4, tab 16. AOC issued its final decision denying the Rough Brothers miscalculation claim in its entirety on June 9, 2003. R4, tab 2. Clark then appealed the final decision with this Board in a timely manner on June 26, 2003. The two appeals arising out of the same deductive change order and credit were consolidated here.

As part of a joint Stipulation of Fact submitted by the parties during this appeal, AOC has belatedly acknowledged that in computing the amount of the deductive credit for the deletion of the shade cloth system, it incorrectly included additional amounts for Rough Brothers’ overhead and profit and the cost of shade controls, inasmuch as these items were already included in Rough Brothers’ subcontract price with Clark.¹⁵ Stipulation of Fact at ¶ 15. The excessive or “over” credit on

¹³ Rough Brothers argued that the credit taken by AOC for the shade controls was improper because this item was part of Rough Brothers’ original subcontract agreement with Clark, it was not deleted with the deletion of the shade cloth system, and because it was in fact provided and installed. R4, tab 10.

¹⁴ Rough Brothers argued that as it had already been paid a total of \$115,000 for design and engineering work performed on the shade cloth system, AOC’s credit of \$35,000 for completed design work was understated by \$80,000 ($\$115,000 - \$35,000 = \$80,000$). R4, tab 10. The record also reflects that Rough Brothers in turn paid Sun Control a total of \$102,134 (or 88.8%) of the \$115,000 it received for the completed shade cloth system design work. R4, COF 0094. The \$102,134 amount was taken into account by Sun Control in its claim of March 22, 2002, as to the amount due the subcontractor. *Id.*

¹⁵ AOC’s prolonged failure to acknowledge the excessive credit taken for the deleted aspects of the shade cloth system is inexplicable. The record plainly establishes that as of November 6, 2001, AOC possessed

Rough Brothers' subcontract attributable solely to AOC adding separate additional credits for those two items amounts to \$258,196, which consists of \$214,373 for overhead and profit¹⁶ and \$43,823 for shade controls. *Id.* Accordingly, the parties agree that separate and apart from the final determination by the Board of the other issues raised and presented in this appeal, AOC's taking a credit for the \$258,196 was "excessive, incorrect, and erroneous." *Id.*

Separate and apart from the acknowledged \$258,196 "over" credit as to Rough Brothers, the parties remain in dispute as to what credit AOC was properly entitled to take from Clark and any of its subcontractors and suppliers arising from AOC's issuance of Change Order 88. *Id.*

The sequence of events as set forth above demonstrates that both parties have modified their respective positions over time with regard to the amount of the credit to which AOC is properly entitled as a result of the deletion of the shade cloth system. As the sole issue here is one of quantum, we consider it beneficial to set forth the parties' respective positions as to the proper amount of the deductive credit, in comparison to AOC's original determination, to demonstrate the areas and amounts now in dispute.

	Respondent (8/2/01)	Appellant (current)	Respondent (current)
Material & Assembly		\$115,679	\$251,648
Design/Engineering/Drawings		\$4,823	\$15,000
Installation		\$80,089	\$94,800
Installation Equipment		\$14,575	\$45,000
Other Expenses/Project Management		\$36,602	\$21,000
Senior Executive Time		\$0	\$83,000
Shade Cloth Subtotal	\$1,012,000	\$251,768	\$510,448
Completed Design Work Credit	<\$35,000>	\$0	\$0
Shade Controls	\$43,823	\$0	\$0
Sun Control Markups (30% v. 0%)	\$0	\$0	\$136,784
Shade Cloth System Subtotal	\$1,020,823	\$251,768	\$647,232
Electrical Work Credit	\$111,379	\$111,379	\$111,379
Subcontractor Markups (21% v. 11%)	\$237,763	\$39,946	\$135,918
Clark Markup (10% v. 4%)	\$136,996	\$16,124	\$13,591 ¹⁷
Total	\$1,506,961	\$419,217¹⁸	\$908,120

clear evidence demonstrating that the deleted credit it had taken had doubled-counted various Rough Brothers' cost elements. R4, tab 10, exh. F. Nonetheless, it was not until April 16, 2004--some 2 ½ years later--that AOC finally admitted its calculation error. Stipulation of Fact at ¶ 15.

¹⁶ The \$214,373 amount for overhead and profit was computed by applying a 21% rate to the sum total of the Rough Brothers' subcontract, shade controls, and design work credit amounts (\$1,012,000 + \$43,823 - \$35,000 = \$1,020,823. \$1,020,823 x .21 = \$214,373). Stipulation of Fact, exh. A.

¹⁷ We note that while Respondent employed a 10 percent-overhead and profit rate here for Clark, it was applied to only the Rough Brothers' overhead and profit amount of \$135,918.

¹⁸ This amount was derived by using the amounts and rates set forth in Appellant's complaint, as adjusted by the increase in Sun Control's direct costs (*i.e.*, \$251,768 instead of \$219,971). App. Complaint (Sept. 9, 2003) at 9-10; App. Exh. 2.

Stipulation of Fact at ¶ 8, exh. D; App. Complaint (Sept. 9, 2003) at 9-10; App. Exh. 2; A4 Supp. T40158-59; Resp. Brief at 38. Thus, in comparison to the \$1,506,961 original credit taken by AOC, Respondent now asserts that the proper credit due the government for the deletion of the shade cloth system totals \$908,120. Resp. Brief at 38. By contrast, Appellant argues that the proper credit is \$419,217.

ANALYSIS

Our analysis begins with a determination of which party bears the burden of proof here. The burden of proof for price adjustments to a fixed-price contract generally rests with the party seeking the benefit of the contract price adjustment. *Wilner v. United States*, 24 F.3d 1397, 1401 (Fed. Cir. 1994); *Lisbon Contractors, Inc. v. United States*, 828 F.2d 759, 767 (Fed. Cir. 1987). This general rule is equally applicable to downward price adjustments as a result of deleted contract requirements. Specifically,

. . . [T]he Government has the burden of proving how much of a downward equitable adjustment in price should be made on account of the deletion Just as a contractor has that task when an upward adjustment is sought under the Changes clause, so the [Government] has the laboring oar, and bears the risk of failure of proof, when a decrease is at issue.

Nager Elec. Co. v. United States, 194 Ct. Cl. 835, 853, 442 F.2d 936 (1971); see *Jimenez, Inc.*, VABCA Nos. 6351 *et al.*, September 24, 2002, 02-2 BCA ¶ 32,019 at 158,254-55; *Blount, Inc.*, VABCA No. 3236, August 5, 1992, 93-1 BCA ¶ 25,474 at 126,893. Thus, for the downward price adjustment taken by the government here as a result of the deletion of the shade cloth system, we find Respondent bears the burden of proving by a preponderance of the evidence that the amount taken is both reasonable and proper.

In determining the measure of the downward equitable adjustment due the government for a deductive change order, courts and boards have long agreed upon the proper methodology: “it is settled that an equitable adjustment for work deleted by a unilateral change order is measured by what the cost of the deleted work would have been to the contractor.” *Glover Constr. Co., Inc.*, ASBCA Nos. 29194, 29924, April 29, 1985, 85-2 BCA ¶ 18,093 at 90,810, *citing Nager Elec. Co. v. United States*, *supra*, at 853; *Globe Constr. Co.*, ASBCA No. 21069, September 27, 1978, 78-2 BCA ¶ 13,337 at 65,220; see also *Blount, Inc.*, *supra*, at 126,894 (“in making the determination of the downward adjustment, our Board is guided by what the record indicates that the deleted work would have reasonably cost the contractor”).

The procedure for ascertaining the reasonable cost for the deleted work is also well established:

The Government is entitled to a price reduction based on the amount that the contractor would have spent to perform the deleted work. That amount is best determined, in the absence of evidence of actual costs, by competent estimates and generally without reference to the amount included in the contractor’s bid. *Nielson Co. v. United States*, 141 Ct. Cl. 793 (1958); see *Bruce Anderson Co.*

ASBCA No. 29412, [April 6, 1989], 89-2 BCA ¶ 21,872. By logical extension, the amount of the price reduction should be calculated without reference to the amount of the contract price yet unpaid which, at least in part, is based upon the bid.

Cottman Mech. Contractors, Inc., ASBCA No. 48,882, February 16, 2000, 00-1 BCA ¶ 30,777 at 151,999.

Our determination of what the deleted work would have reasonably cost the contractor here to complete implicitly rests upon the amount of the shade cloth system work that was still to be performed at the time the deductive change order was issued. We find that at the time AOC deleted the shade cloth system on April 14, 2000, Sun Control and MechoShade had yet to complete the design and engineering work, and other than a product mock up, no material fabrication, assembly, or installation had occurred. Sun Control's Senior Vice President estimated that 20 percent of the design and engineering work had yet to be completed, H.Tr., D. Buckingham, 1:182, and Respondent's expert, Glenn Lovette, testified that approximately 25 percent of the design and drawing work remained to be completed.¹⁹ H.Tr., Lovette, 2:536; A4 Supp. T40158-59. Further, the termination claims and other contemporaneous documentation prepared by both Sun Control and MechoShade regarding the work completed prior to April 14, 2000 clearly demonstrate that material fabrication, assembly, and installation, and related project management were also left to be performed. R4, 6697-6700; A4 Supp. T40151; *see also* H.Tr., D. Buckingham, 1:184; D.Tr., Witt, at 38. It is the reasonable costs to the contractor to complete these aspects of the shade cloth system that is the proper basis for the credit computation here.

Sun Control's Direct Costs

As set forth above, Sun Control asserts that its reasonable direct costs to complete the deleted work total \$251,768. App. Exh. 2. By contrast, Respondent argues that Sun Control's direct costs to complete the deleted work are \$510,448. Resp. Brief at 38. Each of the competing estimates offered by Appellant and Respondent represents the sum total of various component elements (*e.g.*, material, installation, equipment, etc.). Based on the record, we find that Sun Control's reasonable direct costs to complete the deleted aspects of the shade cloth system are \$440,248.

A. Material (Fabrication & Assembly)

The largest area of difference between the Appellant and Respondent estimates involves material costs. Sun Control asserts that its costs for product fabrication and assembly total \$115,679. App. Exh. 2. Sun Control's material cost estimate was determined by computing the reasonable direct costs that its vendor, MechoShade, would incur to fabricate and assemble the shade cloth system as ordered by Sun Control. H.Tr., Berman, 2:412-24. Respondent, by contrast, asserts that Sun Control's material costs here are \$251,648. A4 Supp. T40159. Respondent's expert determined this amount by relying upon MechoShade's contemporaneous purchase order price to

¹⁹ Glenn Lovette was qualified as an expert in the pricing of commercial shade systems, including shade system components, services, and products. H.Tr., Lovette, 2:521.

Sun Control for product fabrication and assembly, other than mockup (*i.e.*, \$251,648). A4 Supp. T40160.

As set forth above, the amount that the contractor would have spent to perform the deleted work is best determined, in the absence of evidence of actual costs, by competent estimates and generally without reference to the amount included in the contractor's bid. *Cottman Mech. Contractors, Inc., supra*, at 159,999. Cost estimates, however, may be "outweighed by evidence of quotations actually received after award from the material supplier and from the subcontractor who was expected to perform the deleted work." *Glover Constr. Co., Inc., supra*, at 90,810. Such is the case here.

Shortly after receiving the subcontract from Rough Brothers for the shade cloth system, Sun Control issued a fixed-price purchase order to MechoShade for all material aspects of the project. Sun Control's purchase order to MechoShade contained a specific subtotal amount of \$251,648, representing Sun Control's cost for product fabrication and assembly. A4 Supp. T40160. Moreover, the record demonstrates that no fabrication and assembly (other than product mock up) occurred prior to issuance of the notice and change order deleting the shade cloth system. R4, 6699-6700; A4 Supp. T40151. Accordingly, we find that MechoShade's purchase order price of \$251,648 for fabrication and assembly of the shade cloth system accurately represents Sun Control's material costs of the deleted work.

Sun Control does not dispute that the purchase order subtotal of \$251,648 represents MechoShade's price for shade cloth fabrication and assembly, or that none of this work was performed prior to the deletion of the shade cloth system. Instead, Sun Control argues that the purchase order reflects MechoShade's price, and not MechoShade's costs. Sun Control contends that the detailed estimate prepared by MechoShade of its direct costs for shade cloth fabrication and assembly should instead be relied upon here. We disagree.

While MechoShade prepared a detailed estimate of its direct costs for material fabrication and assembly, App. Exh. 2, Sun Control has presented no evidence that MechoShade would in fact perform the fabrication and assembly work for Sun Control at cost. In fact, the record evidences the contrary. H.Tr., Berman, 2:468-73. MechoShade's original price for fabrication and assembly in the amount of \$251,648 reflected not only the vendor's direct costs but also the company's indirect expenses, overhead and profit. *Id.* MechoShade's President recognized that the vendor's price for fabrication and assembly of the shade cloth system in the amount of \$251,648 became Sun Control's cost for these aspects of the project. *Id.* As Sun Control has presented no evidence that MechoShade was ever willing to perform the fabrication and assembly work for it at a lesser amount, we find that MechoShade's price of \$251,648 represents Sun Control's reasonable costs for material of the deleted work.

B. Design/Engineering/Drawings

Appellant and Respondent also differ as to the reasonable costs the contractor would incur to perform the deleted design and drawing work. Sun Control contends that its cost to complete the remaining design and drawing work is \$4,823, a figure based on MechoShade's estimated direct costs here. App. Exh. 2. By contrast, AOC argues that the cost to complete the engineering (*i.e.*,

drawings) is \$15,000, a figure based upon an estimate by Mr. Lovette as to the level of effort that remained to be performed. A4 Supp. T40158-59. Both the Sun Control and Respondent cost figures here also provide the parties' underlying estimates for the amount of design and drawing effort that remained: Sun Control estimates that 120 hours of design and drawing work remained to be performed, while Respondent estimates that 150 hours was required to complete the engineering. *Id.*; App. Exh. 2.

We find the \$15,000 estimate advanced by Respondent more accurately represents the reasonable costs that the contractor would incur to perform the deleted design and drawing work. The complexity of the shade cloth system and the difficulties encountered by Sun Control and MechoShade during the 15-month period prior to its deletion support our determination that the level of effort required to complete the design and drawings would be at least 150 hours of time. Also, Sun Control's estimate for design and drawings is again based on MechoShade's direct costs for performing this item of work, and Sun Control has failed to demonstrate that its vendor was any more willing to perform the drawing work at cost for Sun Control than it was the material fabrication and assembly. Given that Sun Control (and MechoShade) had already incurred significant design costs prior to deletion of the shade cloth system, *see* R4, 6697-99, and that Sun Control believed that approximately 20 percent of the design and engineering work remained, H.Tr., D. Buckingham, 1:182, we find that \$15,000 represents the reasonable costs to the contractor to perform the deleted design and drawing work here.

C. Installation

Sun Control contends that its costs for installation of the shade cloth system are \$80,089, while Respondent alleges that the reasonable costs for installation are \$94,800. App. Exh. 2; A4 Supp. T40158.

Sun Control's installation estimate was based upon a detailed examination of the types and amounts of labor required to perform the installation (*e.g.*, 2,392 hours for installers, 192 hours for installation coordinator). App. Exh. 2; H.Tr., D. Buckingham, 1:94-103. Additionally, Sun Control made a careful assessment of the different hourly rates that it would actually pay for the various labor categories. *Id.* Mr. Lovette's estimate, by contrast, had but a lump sum amount of the number of hours required for installation (*i.e.*, 2,370 hours).²⁰ App. Exh. 2. AOC estimate also used an average rate of \$40 per hour for all installation, without knowing the labor rates actually paid by Sun Control. H.Tr., Lovette, 2:584-91.

We find Sun Control's estimate here to be a more reliable starting point for determining the reasonable installation costs. We find, however, that it does not reflect all the contractor's costs for installation. In its various bid estimates, Sun Control determined that a contingency amount of not less than \$8,000 was a valid cost of its installation. A4 Supp. T40203; Resp. Exh. 1. Additionally, while Sun Control now estimates its electrical coordination costs at \$9,139, the company's bid worksheets demonstrate the contractor's belief that the reasonable costs for electrical coordination work were not less than \$12,000. Resp. Exh. 1; A4 Supp. T40203. We see no reason why both the contingency and higher electrical coordination costs, developed

²⁰ Respondent's expert agreed that the number of hours estimated by Sun Control was in fact reasonable, and differed only as to the hourly rate to be applied to the estimated labor. H.Tr., Lovette, 2:583-84.

outside the heat of litigation, should not also be included in Sun Control's cost to complete here. Accordingly, we compute Sun Control's reasonable installation costs as follows:

Sun Control Labor Estimate	\$80,089
Contingency Costs	\$8,000
Additional Electrical Coordination Costs	\$2,861
Total	\$90,950

D. Installation Equipment

Sun Control contends that its costs for the equipment used to install the shade cloth system are \$14,575, while Respondent argues that the reasonable costs for installation equipment total \$45,000. App. Exh. 2; A4 Supp. T40158.

Sun Control's installation equipment estimate was based upon a detailed examination of the types of equipment required (*i.e.*, 30-foot lift, scaffolding), the time periods required for each type of equipment, and the applicable rental rates. App. Exh. 2; H.Tr., D. Buckingham, 1:103-09. Sun Control also supported its estimated equipment costs with rental invoices demonstrating the rates that it would actually incur. App. Exh. 2. Mr. Lovette's installation equipment estimate was based upon a combined daily rate of \$500 per day for a period of 90 days (\$500 x 90 = \$45,000). H.Tr., Lovette, 2:581, 592.

We find Sun Control's estimate of \$14,575 to be a reasonable measure of the contractor's installation equipment costs. As Respondent's expert recognized, the major difference between the equipment estimates here is Sun Control's use of long-term rental rates in contrast to the daily rates employed by Mr. Lovette in his estimate. H.Tr., Lovette, 2:592. The invoices supplied by Sun Control as part of its equipment estimate demonstrate that the validity of its long-term lease rates. App. Exh. 2. As the parties do not significantly differ as to the types of equipment and the time periods required, we accept Sun Control's estimate here.

E. Other Direct Expenses

Sun Control's estimate of the reasonable costs the contractor would incur to perform the deleted work includes additional direct expenses (*e.g.*, safety equipment, freight, storage and transport) of \$23,485. App. Exh. 2. Respondent did not separately account for such other direct expenses, but instead included these items within other parts of its estimate (*e.g.*, safety equipment as part of installation equipment, freight as part of material). A4 Supp. T40159; H.Tr., Lovette, 2:590, 593, 624-25.

We find that the additional direct cost items within Sun Control's estimate to be expenses that the contractor would necessarily incur to complete the deleted work. Further, while Respondent accounted for these expense items in other aspect of its estimate, we find that Sun Control's figure for installation equipment (which we accepted) did not include related safety equipment, A4 Supp., T40203; H.Tr., D. Buckingham, 1:110, and that the MechoShade purchase order price for material (which we accepted) did not include the cost of freight. Resp. Exh. 1; A4 Supp. T40195, T40203; H.Tr., D. Buckingham, 1:110-11. Accordingly, we find that Sun Control's

estimate for other direct costs in the amount of \$23,485 to be reasonable and an appropriate part of the contractor's cost to perform the deleted work.

F. Project Management

The issue of the project management expenses that the contractor would incur to perform the deleted shade cloth system work and to which AOC is entitled to a credit is a complex one, in part because of the conflicting manner in which this item of cost has been treated by the parties. As project management expenses are a valid part of the amount that the contractor would have spent to perform the deleted work, our resolution of this cost item requires some degree of explanation.

Sun Control contends that its project management costs for the deleted work total \$13,177. App. Exh. 2. Sun Control derived this amount by determining that the remaining aspects of the project would require 144 hours of Senior Vice President Dan Buckingham's time, at a rate of \$91.09 per hour.²¹ H.Tr., J. Buckingham, 1:253-61. Sun Control's estimate of the required project management time was in turn based on its belief that it would take approximately 40 hours to complete the required drawing work and approximately an additional 100 hours to manage the project during the installation phase to ensure compliance with the shop drawing requirements. H.Tr., J. Buckingham, 1:253-57.

As detailed above, Sun Control did not include its project management expenses as a direct cost of its bid estimate, but made this item part of the gross markup amount that it applied to its direct costs for material and installation. H.Tr., D. Buckingham, 1:225, 229-30. Sun Control's treatment of project management expenses here as part of its cost to complete estimate demonstrates the company's view that while Dan Buckingham's time here was made part of its gross markup for bid purposes, his efforts were not part of the company's overhead expenses. App. Exh. 2; H.Tr., J. Buckingham, 2:350-51; R4, 6697. Therefore, we find it appropriate to consider Sun Control's project management expenses as a direct cost of the deleted shade cloth system work.

Respondent's estimate of the contractor's cost to perform the deleted work does not, by contrast, include project management costs *per se*. Instead, Mr. Lovette's estimate includes an item of cost characterized as "Sun Control 'value added' services" in the amount of \$16,250.²² A4 Supp. T40159. Additionally, in its post-hearing brief, Respondent argues that, in addition to its own expert's estimate, Sun Control's direct costs to perform the deleted work include "Senior

²¹ As part of its cost-to-complete estimate here, Sun Control prorated Dan Buckingham's time on the basis of a 57.5-hour workweek and derived a rate of \$91.09 per hour. H.Tr., J. Buckingham, 1:253-61. By contrast, as part of its termination claim Sun Control prorated Dan Buckingham's time on the basis of a 40-hour workweek and derived a rate of \$129.81 per hour. *Id.*; R4, 6697. While Sun Control's President characterized the hourly rate used by the company in its termination claim as a "calculation error," H.Tr., J. Buckingham, 1:260, we note that Sun Control's choice of rates in each instance maximized its potential recovery.

²² While Mr. Lovette's report quantified the Sun Control "value added" services at \$21,000, A4 Supp. T40159, at the hearing Mr. Lovette testified that this amount was in error and that the correct amount was \$16,250. H.Tr., Lovette, 2:625-26.

Executive Time,” estimated at \$83,000. Resp. Brief at 12-15. We explain both of these cost items below.

Mr. Lovette testified that his estimate of the contractor’s cost to perform the deleted shade cloth system work included Sun Control value-added services related to the finalization of the project design. H.Tr., Lovette, 2:622-23, 626. Mr. Lovette described his concept of value-added services as the direction that Sun Control provides to MechoShade for the development of the product.²³ *Id.* Mr. Lovette calculated the amount of Sun Control value-added services for the deleted work by applying a flat rate of \$500 per motorized unit times the project’s 130 motorized shade units times the 25 percent of the work which had yet to be performed ($\$500 \times 130 \times .25 = \$16,250$). *Id.*; A4 Supp. T40158-59.

Respondent, in its post-hearing brief, essentially argues that its own expert’s estimate of the contractor’s direct costs to perform the deleted shade cloth system work was not all inclusive and that Sun Control’s costs here should also include Senior Executive Time. Resp. Brief at 10-11. Respondent’s concept of Senior Executive Time refers specifically to the efforts that Sun Control Vice President Dan Buckingham would expend to complete the deleted work. *Id.* at 12-13. In determining the amount of Senior Executive Time to be included within the estimate of the contractor’s cost to perform the deleted work, Respondent employs a “jury verdict” approach: since Sun Control estimated its total design and engineering costs to be \$200,000-\$300,000, Respondent applies the \$250,000 midpoint to the remaining one-third of the design effort to reach the “rounded” amount of \$83,000 ($\$250,000 \times 33\% = \$82,500$). *Id.* at 13-14.

We find that neither Mr. Lovette’s value added services estimate nor Respondent’s Senior Executive Time estimate are helpful in ascertaining the contractor’s project management costs for the deleted shade cloth system work. Based on the description provided at the hearing, we conclude that Mr. Lovette’s concept of Sun Control value added services does not represent the contractor’s project management costs or its design and engineering expenses, but something in between. Further, Respondent’s attempt to supplement, or supplant, its own expert’s estimate with Senior Executive Time expenses is rejected, as Respondent has failed to provide any evidence demonstrating that this cost item was not already accounted for in its expert’s estimate.

Nevertheless, we find the estimate advanced by Sun Control here also does not adequately reflect the contractor’s reasonable project management costs for the deleted work. We note that Sun Control itself determined that Dan Buckingham had spent 1,374 hours, valued at \$178,356, prior to deletion of the shade cloth system when approximately 80 percent of the design and engineering effort was completed. R4, 6697; H.Tr., D. Buckingham, 1:182. We find it improbable that Dan Buckingham’s efforts for the remaining 20 percent of the design and engineering, the fabrication, and assembly, and the installation aspects of the shade cloth system would be no more than 144 hours, valued at \$13,117. Again, the complexity of the shade cloth system and the difficulties encountered prior to its deletion support our determination that the level of project management required of Sun Control to complete all remaining work would be considerably more than the 144 hours estimated. Accordingly, we determine that a reasonable estimate of the project management efforts required for the deleted work to be a total of

²³ Mr. Lovette also believed that the value-added services here to be different than project management costs, which he considered to be an overhead item. H.Tr., Lovette, 2:626-27.

343.5 hours.²⁴ We also will apply the \$129.81 hourly rate that Sun Control initially applied to Dan Buckingham’s time, instead of the \$91.09 hourly rate now advanced, given that this was the rate the contractor used when it was to its advantage. Thus, we determine that a reasonable estimate of the project management costs that Sun Control would incur for the deleted work to be \$44,590.²⁵

G. Total Direct Costs

We find that Sun Control’s direct costs to perform the deleted shade cloth system work total \$440,248 as follows:

Material (Fabrication & Assembly)	\$251,648
Design & Drawings	\$15,000
Installation	\$90,950
Installation Equipment	\$14,575
Other Expenses	\$23,485
Project Management	\$44,590
Total	\$440,248 ²⁶

Sun Control Markups

Respondent argues that the contractor’s reasonable cost to perform the deleted shade cloth system work must necessarily include Sun Control’s overhead and profit markups of 20 percent and 10 percent, respectively. Resp. Brief at 19-25; see R4, 6697-98. Sun Control argues, by contrast, that AOC is not entitled to Sun Control overhead and profit markups to the direct costs of performing the deleted shade cloth system work here because of the terms of the contract.

We are mindful of the general rule that an equitable adjustment should make a contractor “whole,” *Bruce Constr. Corp. v. United States*, 163 Ct. Cl. 97, 100, 324 F.2d 516 (1963), and should not increase or decrease a contractor’s loss at the expense of the Government, *Nager Elec. Co., Inc. v. United States*, 194 Ct. Cl. at 853. Thus, the government is generally entitled to a credit for a contractor’s overhead and profit amounts on deleted work. See *Gladwynne Constr. Co.*, VABCA Nos. 6594 *et al.*, April 19, 2002, 02-1 BCA ¶ 31,848 at 157,388 (allowing, pursuant to the contract’s Changes provision, a deductive credit which included overhead and profit rates where work was incomplete); *P.J. Dick, Inc.*, GSBCA No. 12215, March 8, 1995, 95-1 BCA ¶ 27,574 at 137,418 (entitling the government to a credit for overhead and profit markups on deleted work); *Conner Brothers Constr. Co., Inc.*, VABCA No. 2519, December 30,

²⁴ This figure is an extrapolation based upon the 1,374 hours expended by Dan Buckingham for the first 80 percent of the design and engineering effort and extended to the remaining design and engineering and other aspects of the project (1,374 hours ÷ 80% x 20% = 343.5 hours).

²⁵ 343.5 hours x \$129.81 per hour = \$44,590.

²⁶ We note that our determination of the contractor’s reasonable costs to perform the deleted work here grossly approximates with the estimate that Sun Control itself prepared prior to litigation. Specifically, shortly after reaching agreement with Rough Brothers and after some 9 months of cost refinement, Sun Control estimated that its direct costs for material and installation (and not including project management and design and engineering costs) totaled \$[DELETED]. Resp. Exh. 1.

1994, 95-1 BCA ¶ 27,409 at 136,644 (adding, pursuant to a contract provision, to the credit due to the government a “reasonable allowance” for overhead and profit on deleted work); *Santa Fe Engineers, Inc.*, ASBCA No. 31762, October 30, 1990, 91-1 BCA ¶ 23,571 at 118,187 (adding overhead and profit markups to government credit for work that government did not permit contractor to complete).

However, the determination of whether AOC is entitled to a credit here for Sun Control’s overhead and profit markups cannot be made without regard to applicable contract provisions. *See Lionsgate Corp.*, ENGBCA Nos. 5425 *et al.*, February 28, 1990, 90-2 BCA ¶ 22,730, at 114,909; *Olson Constr. Co.*, VACAB No. 291, January 30, 1962, 1962 VABCA LEXIS 122. In this regard, boards of contract appeals have recognized that applying overhead and profit markups on work deleted by the Government in accordance with the stated contract provisions is appropriate. *See Condor Reliability Servs., Inc.*, ASBCA No. 40538, August 23, 1990, 90-3 BCA ¶ 23,254, at 116,675-76; *J.F. Shea Co., Inc. v. United States*, 10 Cl. Ct. 620, 627 (1986). Similarly, where the contract prohibits the recovery of overhead and profit markups on work deleted by the Government, effect should be given to the contract provisions. *See generally Lionsgate Corp., supra*, at 114,909; *Olson Constr. Co., supra*, at *3-6.

Here, as set forth above the renovation contract included the Official Procedure for Making Changes in Contracts clause, R4, K0188-89, two provisions of which are pertinent to our determination here. Specifically, Paragraph 4, “Allowances for Overhead and Profit,” provides that overhead and profit markups are allowable (in specified percentages) only for the prime contractor and its first tier subcontractors, and are expressly unallowable in any amount for subcontractors of any other tier.²⁷ *Id.* Additionally, Paragraph 5, “Changes Involving Decrease in Price,” states in pertinent part that “[f]or changes involving only a decrease in price, the contractor and subcontractors shall return as credit for overhead and profit those same percentages which are allowed for like changes involving increases in price.”²⁸ *Id.* The express language of the two contract provisions clearly provides that additive and deductive changes to the contract were to work identically for purposes of overhead and profit markups, but in opposite directions. Accordingly, we determine that for contract changes involving a decrease in price, the government is entitled to a credit for the overhead and profit markups for the prime contractor and first tier subcontractors, but not to a credit for the overhead and profit markups for subcontractors of any other tier.

It is clear that the subcontract agreement between Clark and Rough Brothers, and the subcontract agreement between Rough Brothers and Sun Control, each incorporated and made applicable all terms and conditions of the government’s renovation contract with Clark. C4 Supp. 13 0407; Stipulation of Fact, exh. B, at 2. Accordingly, we find that the contract’s Official Procedure for Making Changes in Contracts clause governs the overhead and profit markups to be applied to

²⁷ The sole exception, involving the allowability of overhead and profit for subcontractors at any tier for the off-site fabrication of custom items unique to the project, R4, K0188-89, is one that neither party has deemed applicable to our determination here. We find this provision is irrelevant to this dispute, insofar as the off-site fabrication of custom items unique to the project may pertain to the work being performed by MechoShade, but not to the work being performed by Sun Control.

²⁸ The clause continues by stating, “[o]n changes involving both an increase and decrease in price, overhead and profit will be allowed only on the net increase.” R4, K0188-89.

the contractor's direct costs of performing the deductive change here. Specifically, while AOC is entitled to a credit for the overhead and profit markups of prime contractor, Clark, and first tier subcontractor, Rough Brothers, it is not entitled to a credit for the overhead and profit markups for second tier subcontractor, Sun Control.

Respondent contends that the government is nonetheless entitled to a credit for the overhead and profit markups of second tier subcontractor Sun Control for the deletion of the shade cloth system because the deletion of the shade cloth system (*i.e.*, Change Order No. 88) and the addition of the replacement greenhouse shade system (*i.e.*, Change Order No. 115) were in fact a single, combined change that involved both a decrease and increase in price. Resp. Brief at 27. Respondent also argues that because the contract provision cited above applies to "changes involving only a decrease in price," R4, K0188-89, and the "change" here involved both a price increase and decrease, it is inapplicable to the determination here.²⁹ Resp. Brief at 27. As no specific contract provision addresses changes involving both an increase and a decrease in price with the effect being a new decrease, Respondent alleges that a different result is justified than for changes involving a net increase or only a decrease in price, and that a credit for the Sun Control overhead and profit markups is appropriate here. *Id.* at 27-32. We disagree.

AOC's argument here is premised on the assumption that the deletion of the shade cloth system and the addition of the replacement greenhouse shade system were a single, combined change. We find that the record does not support this assumption. Change Order No. 88, which deleted the shade cloth system, was issued on April 19, 2000. R4, 6724. Change Order No. 115, which formally added the replacement greenhouse shade system, was issued almost 3 months later on July 13, 2000. R4, COF 0033-35. That AOC waited 3 months to issue Change Order No. 115 and that it assigned different change order numbers to these contract actions demonstrates that AOC considered the changes separate and apart from each other. Moreover, on August 2, 2001, AOC calculated the adjustment in contract price under Change Order No. 115 separately from the credit due the government under Change Order No. 88. Stipulation of Fact at ¶ 7, exh. D; R4, COF 0046. The contracting officer's final decisions and this appeal have also centered solely and completely on what credit AOC is due for the deleted aspects of the shade cloth system under Change Order No. 88. Stipulation of Fact at ¶ 15.

In short, for 4 years AOC treated and priced Change Order Nos. 88 and 115 independently of each other. The attempt now by Respondent to view the deletion of the shade cloth system and the addition of the replacement greenhouse system as a common change order is simply "revisionist history," unsupported by the facts in the record. As Change Order No. 88 involved but the deletion of the shade cloth system, it falls squarely within the contract provision establishing that the credit to which the government is entitled includes the overhead and profit markups for the prime contractor and its first tier subcontractors, but not for subcontractors of

²⁹ Respondent also argues that the second sentence within the "Changes Involving Decrease in Price" provision--"On changes involving both an increase and decrease in price, overhead and profit will be allowed only on the net increase," R4, K0188-89--is also inapplicable here because Change Order Nos. 88 and 115 together resulted in a net decrease. Resp. Brief at 27.

any other tier.³⁰ For this reason, we find that the credit due to AOC for the deleted aspects of the shade cloth system here should not include Sun Control overhead and profit markups.

Electrical Work

As part of its deductive credit taken here AOC determined that the deletion of the shade cloth system encompassed the deletion of certain related electrical work, the cost of which was estimated at \$111,379. Stipulation of Fact at ¶ 7, exh. D. AOC's deleted electrical work computation was not part of the claims filed here by Sun Control and Rough Brothers, nor part of the contracting officer's final decisions. R4, tabs 1, 2. Accordingly, we merely carry over the \$111,379 figure used by AOC to our calculations here.

Rough Brothers and Clark Markups

Clark and Rough Brothers do not dispute that the credit due AOC for deletion of the shade cloth system work should, in accordance with the contract's Official Procedure for Making Changes in Contracts clause, include overhead and profit markups for both the prime contractor and first tier subcontractor. Appellant asserts, however, at least in its Complaint, that the markup rates employed by AOC here were improper. App. Complaint at 9. Specifically, Clark argues that instead of a 10-percent overhead and profit rate, the government should have applied the prime contractor's original 4-percent markup rate.³¹ *Id.* Similarly, Rough Brothers asserts that instead of using an overhead and profit rate totaling 21 percent, AOC should have applied Rough Brothers' original 11-percent markup rate here.³² *Id.* Both Rough Brothers and Clark argue that using higher markup rates than those originally employed violates the general rule of putting the contractor in the same position but for the change order. *Id.* We disagree.

³⁰ Even if Change Order Nos. 88 and 115 were to be considered a combined, single change, we determine that a reasonable interpretation of the second clause of the "Changes Involving Decreases in Price" provision nonetheless excludes Sun Control's overhead and profit markups from AOC's credit. As set forth above the provision holds that, "[o]n changes involving both an increase and decrease in price, overhead and profit markups will be allowed only on the net increase." First, we find the provision here to be applicable to all changes involving both an increase and decrease in price, and not, as Respondent contends, only to those resulting in a net increase. Second, in interpreting this provision we apply the rule of contract construction that the expression of one thing is the exclusion of another. *See Nicholson v. United States*, 29 Fed. Cl. 180, 196 (1993) (stating that where "certain things are specified in a contract, other things of the same general character relating to the same matter are generally held to be excluded by implication" (citing *Grismore on Contracts* § 105, at 164)); *Favell v. U.S.*, 16 Cl. Ct. 700, 726 (1989) (expressing the maxim *expressio unius est exclusio alterius*, which means that "the expression of one thing [in the contract] is the exclusion of another" (citing E. Farnsworth, *Contracts* § 7.11 (1982))). Because the clause states that only in one instance (*i.e.*, net increases) will overhead and profit be allowable, it follows that in other instances (*i.e.*, net decreases) overhead and profit are not allowable, at least to the same degree as changes involving only a price decrease.

³¹ As evidence thereof Clark points to its \$1,050,000 schedule of values for the shade cloth system work in comparison to its subcontract price with Rough Brothers for \$1,012,000 ($\$1,012,000 \times 1.04 = \$1,052,480$). App. Complaint at 3.

³² Rough Brothers supports its contention of an original 11% overhead and profit rate by comparing the difference between its \$1,102,000 subcontract price with Clark and \$911,200 subcontract price with Sun Control ($\$911,200 \times 1.11 = \$1,012,000$). App. Complaint at 3-4.

As indicated above, the general rule is that an equitable adjustment should make a contractor “whole,” and should not increase or decrease a contractor’s loss at the expense of the Government. *Bruce Constr. Corp. v. United States*, 163 Ct. Cl. at 100; *Nager Elec. Co. v. United States*, 194 Cl. Ct. at 853. Applying overhead and profit markups on work deleted by the Government in accordance with the stated contract provisions does no violence to this rule. Overhead and profit markups are applied to the deleted work only; they do not serve to reprice the entire contract or the unchanged work, and do not alter the original terms of the parties’ bargain. *Condor Reliability Servs., Inc.*, supra, at 116,675-76. The parties remain in the same relative profit or loss position on the unchanged work as before. See *J.F. Shea Co., Inc. v. United States*, 10 Cl. Ct. at 627.

As discussed above, the Official Procedure for Making Changes in Contracts clause allows the prime contractor and its first tier subcontractors to recover overhead and profit markups of up to 10 percent and 21 percent, respectively, for additive change orders, and that for changes as the one here involving a decrease in price the contractor and its first tier subcontractors “shall return as credit for overhead and profit those same percentages which are allowed for like changes involving increases in price.” R4, K0188-89. Quite simply, the contract provisions here together clearly establish that the applicable overhead and profit markups were to work similarly for purposes of additive and deductive changes to the contract. Moreover, as AOC customarily allowed the recovery of overhead and profit markups in the maximum allowable amount for additive change orders (e.g., Rough Brothers and Clark received markups amounts of 21 percent and 10 percent, respectively, with regard to Change Order No. 115 for the replacement greenhouse shade system, R4, COF 0038-46), we find AOC’s use of the same maximum overhead and profit markup rates for the pricing of deductive work here to be reasonable.

In sum, we find that overhead and profit markups of 21 percent and 10 percent should be applied here for Rough Brothers and Clark, respectively, to the government’s credit for the deleted aspects of the shade cloth system. Additionally, while the deleted electrical work was not to be performed by Rough Brothers but by a different first tier subcontractor, we conclude that first tier subcontractor markups (again totaling 21 percent) should be applied to this portion of the credit as well.

CONCLUSION

Accordingly, we compute that the proper credit due AOC for deletion of the shade cloth system as follows:

Shade Cloth Credit	\$440,248
Electrical Work Credit	\$111,379
Subcontractor Markup (21%)	\$115,842
Clark Markup (10%)	\$66,747
Total	\$734,216

As AOC had previously taken a credit for the deleted shade cloth system in the amount of \$1,506,961, we determine that the additional monies now due Appellant total \$772,745 (\$1,506,961 – \$734,216).

Additionally, at Appellant’s behest we have determined the monies each due to Sun Control, Rough Brothers, and Clark by comparing the amounts within AOC’s original deductive credit in relation to the amounts computed above as follows:

	Original AOC Credit	Proper Credit	Difference
Sun Control	\$863,420 ³³	\$440,248	\$423,172
Rough Brothers	\$157,403 ³⁴	\$0	\$157,403
Sun Control/Rough Brothers Subtotal	\$1,020,823	\$440,248	\$580,575
Rough Brothers Markup (21%)	\$214,373	\$92,452	\$121,921
Electrical Work Credit	\$111,379	\$111,379	\$0
Electrical Work Markup (21%)	\$23,390	\$23,390	\$0
Clark Markup (10%)	\$136,996	\$66,747	\$70,249
Total	\$1,506,961	\$734,216	\$772,745

While we are unable to determine how AOC’s original deductive credit of \$1,506,961 and the interim progress payments were apportioned amongst Clark and its subcontractors, we calculate that the monies now due Appellant here are allocable to Sun Control in the amount of \$423,172, Rough Brothers in the amount of \$279,324, and Clark in the amount of \$70,249.³⁵

Lastly, the contract contained a provision that required interest be recoverable in the event that an appeal is filed from a contracting officer’s decision.³⁶ We find that Appellant is entitled to

³³ This amount was derived by taking Sun Control’s subcontract price with Rough Brothers of \$894,500 and subtracting a prorated portion of the \$35,000 design work credit that AOC provided to Rough Brothers (and Sun Control) as part of its deleted credit computation ($\$35,000 \times 88.8\% = \$31,080$). $\$894,500 - \$31,080 = \$863,420$.

³⁴ This amount was computed by determining the difference between the Rough Brothers and Sun Control subcontract prices for the shade cloth system, plus the amount taken by AOC for the shade controls, and subtracting a prorated portion of the \$35,000 design credit that AOC provided to Rough Brothers (and Sun Control) as part of its original determination ($\$1,012,000 - \$894,500 = \$117,500$. $\$35,000 \times 11.2\% = \$3,920$. $\$117,500 + \$43,823 - \$3,920 = \$157,403$).

³⁵ With this guidance, Clark and its subcontractors can determine how the \$772,745 awarded here will be divided.

³⁶ The contract provided, in pertinent part:

If an appeal is filed by the Contractor from a final decision of the Contracting Officer under the Disputes paragraph of this contract, denying a claim arising under the contract, simple interest on the amount of the claim finally determined owed by the Government shall be payable to the Contractor. Such interest shall be at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97, from the date the Contractor furnishes to the Contracting Officer his written appeal under the Disputes paragraph of this contract, to the date of (1) a final judgment by a court of competent

recover interest on the additional monies due as a result of the Sun Control claim and final decision (\$514,549) from the appeal date of October 31, 2002, and interest on the additional monies due as a result of the Rough Brothers' claim and final decision (\$258,196) from the appeal date of June 26, 2003.

The appeal here is sustained in that amount.

Dated: November 23, 2004



James A. Spangenberg
Chairman
Contract Appeals Board of
the Joint Committee of
Congress on the Library



Guy R. Petrovito
Contract Appeals Board of
the Joint Committee of
Congress on the Library



Louis A. Chiarella
Contract Appeals Board of
the Joint Committee of
Congress on the Library

jurisdiction, or (2) mailing to the Contractor of a change order, or a supplemental agreement for execution either confirming completed negotiations between the parties or carrying out a decision of a contract appeals board.

R4, K0049.