ARMED SERVICES BOARD OF CONTRACT APPEALS

| Appeal of | |
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| M.A. Mortenson Company | ASBCA No. 53229 |
| Under Contract No. DACA85-94-C-0031 | |
| APPEARANCE FOR THE APPELLANT: | William R. Joyce, Esq. Faegre & Benson LLP Minneapolis, MN |
| APPEARANCES FOR THE GOVERNMEN | T: Thomas H. Gourlay, Jr., Esq. Engineer Chief Trial Attorney Michael H. Gilbert, Esq. District Counsel Toni B. London, Esq. Engineer Trial Attorney U.S. Army Engineer District, Alaska |

OPINION BY ADMINISTRATIVE JUDGE TING PURSUANT TO RULE 11

M.A. Mortenson Company (Mortenson) timely appealed from a contracting officer (CO) decision denying its claim for allegedly being required to redesign, and construct in colder weather, a water feature at the Composite Medical Facility in Anchorage, Alaska. The CO decision left open the possibility that Mortenson may be due additional compensation for the liner material in connection with adding an upper pool and a cascading waterfall to the water feature. The decision also sought a credit for relieving Mortenson from having to show full depth joints for the stone panel mockup. The parties submitted their case on the record pursuant to Rule 11. Only entitlement is before us for decision.

FINDINGS OF FACT

1. In September 1994, the government entered into Contract No. DACA85-94-C-0031 with Mortenson for the construction of a 110-bed, multi-story Composite Medical Facility for the Air Force and the Department of Veterans Affairs (R4, tab 1 at 6). The medical facility was designed by Anderson DeBartolo Pan, Inc. (ADP or A/E) (R4, tab 32). The contract included as Clause I.80, FAR 52.243-0004, CHANGES (AUG 1987) (R4, tab 30).

2. The contract included a requirement for the construction of a water feature in front of the main entrance to the medical facility. The water feature was to be an aesthetic feature having granite panels resembling mountains, a water pool, boulders and landscaping.¹ (R4, tabs 31-36)

Specification Requirements

3. Technical Specification (TS) 02821 sets out the requirements for the design and construction of the water feature. Paragraph 1.2, GENERAL REQUIREMENTS, states:

This section covers the design, construction, and inspection requirements of the water feature and the connections to the storm drain system. The dimensions and connection details shown on the drawings are for design intent and bidding purpose only.

(R4, tab 31 at 1)

4. TS 02821, ¶ 1.2.1, Design Requirements, states that:

The Contractor shall design a reinforced concrete water feature with retaining walls, stone panel foundations, stone panels, and structural connection details according to the general layout and details shown on the drawings. Detailed shop drawings and engineering design calculations shall be submitted to the Contracting Officer for approval *prior to construction*. The drawings and calculations shall be stamped by a professional structural engineer registered in the State of Alaska.

(Emphasis added) (R4, tab 31 at 1)

Pursuant to the Board's request at the hearing of a companion case (ASBCA No. 53346) in Alaska in April 2004, the government forwarded by letter dated 13 August 2004, in advance of filing opening briefs, six photographs of the water feature, taken from various vantage points. A copy of each photograph was furnished to counsel for Mortenson. No objections to the photographs have been raised. Accordingly, these photographs are received in evidence as part of the record in this case (Photograph Nos. 1 through 6).

5. TS 02821, ¶ 1.2.2, Aesthetic Design Requirements, requires that:

The Contractor shall engage and the Contracting Officer approve a Specialty Contractor for the duration of the Water Feature Submittal, construction and testing period who has the necessary artistic qualifications and construction experience to successfully supervise, coordinate and/or construct a stone and water project of this size and nature.

The scope of construction to be accomplished by this Specialty Contractor may vary, however, the minimum shall be to be responsible for directing placement of all components of the Water Feature and working closely within the Government approval process to translate the intent and requirements of the design into the finished product.

(R4, tab 31 at 2)

6. TS 02821, ¶ 1.2.2.1, set forth the criteria the government would use to evaluate the qualification of the specialty contractor. Paragraph 1.2.2.2, Involvement, specifies the specialty contractor's involvement with the water feature construction:

Involvement by the above Specialty Contractor firm shall be continuous throughout the water feature construction and testing period. The firm shall be responsible for the inspection of the work, directing placement of all components of the water feature, verifying that materials, methods, products, and quality control meet the requirements of the drawings and specifications. . . .

(R4, tab 31 at 2)

We find the water feature was not entirely designed at the time the medical facility contract was awarded. TS 02821 left certain design responsibilities to Mortenson (finding 4), and Mortenson was to engage a specialty contractor, the scope of whose responsibilities was left up to Mortenson's discretion.

7. TS 02821, ¶ 1.4, pertains to SUBMITTALS. Requirements with a "GA" designation require government approval; and requirements with a "FIO" designation are for "information" only (R4, tab 31 at 3). We find the following submittals requiring government approval must all be approved before construction of the water feature could begin (R4, tab 31 at 1; TS 02821, ¶ 1.2.1).

8. TS 02821, ¶ 1.4.1, SD-1 Data, requires government approval of engineering calculations and catalog cuts:

Furnish engineering calculations, material catalog cuts, etc. for the water feature. The calculations shall be stamped and signed by a professional structural engineer registered in the State of Alaska.

(R4, tab 31 at 3)

9. TS 02821, \P 1.4.2, SD-04 Drawings, requires government approval of shop drawings:

Provide a complete set of shop drawings for construction of the water feature. Provide detail sufficient to describe material and demonstrate the structural connections. At the completion of construction, submit as-built drawings in conformance with Section 01720 AS-BUILT DRAWINGS.

(R4, tab 31 at 3)

10. TS 02821, ¶ 1.4.5, SD-14 Samples, requires government approval of (1) Granite Panels, (2) River Stone and Boulders, and (3) Pigmented Concrete:

Provide 12 inch by 12 inch samples of any granite that Contractor wishes to be considered for approval. Samples shall be both flame finished and polished and will conform to the requirements set forth in paragraph 2.7 STONE PANELS.

. . . .

Upon approval of stone to be selected, Contracting Officer shall verify, approve and inspect the actual stone based [on] site inspection at the quarry.

Provide 3 feet by 3 feet site cast mock-up of pigmented concrete.

(R4, tab 31 at 3, 4)

11. In addition, TS 02821, ¶ 1.4.5 also requires government approval of mock-up and models:

Mock-Up; GA

Contractor shall construct a *full size* mock-up of stone panels from sheets of foam or other suitable material to serve as field verification by the Contracting Officer that proper heights, sight-lines and massing have been accomplished. These mock-ups shall then be used to provide templates to the quarry for cutting and sculpting of the stone itself.

Models; GA

The Contractor shall provide a scale working model of the entire Water Feature at a minimum scale of 1/4'' = 1'-0''. Model (or Models) will be used throughout the approval and construction process as a working resource for communicating the design and guiding the construction. Model(s) should be constructed to be easily modified throughout the approval process and will include scale people for reference. (Note that an existing model of the Hospital and Water Feature is currently on view at the Elmendorf AFB Hospital and provides a representation of the designer's intent.) It is not intended that the Water Feature be redesigned by the Contractor, rather, the model(s) will serve to communicate to the Contracting Officer that the Contractor understands the design intent and to address the normal issues and problems that may arise in the process of putting the project together.

(Emphasis added) (R4, tab 31 at 4)

12. TS 02821, ¶ 1.5, DESIGN OF WATER FEATURE, imposed the following design responsibility on the contractor:

The water feature retaining wall, concrete mat, stone panel foundations and panel connections to the concrete mat shall be designed to resist their own weights and lateral loads due to wind or seismic, whichever is greater. . . . The Contractor shall design the retaining wall, concrete mat, stone panel foundations and panel connections to the concrete mat and

submit shop drawings and calculations for approval prior to start of fabrication. The water feature engineering design calculations shall be stamped and signed by a professional structural engineer registered in the State of Alaska.

(R4, tab 31 at 4)

13. TS 02821, PART 2, pertains to PRODUCTS to be supplied for the water feature. For example, it specifies that pipe materials shall be "high density polyethylene" (TS 02821, ¶ 2.1), that concrete material shall "conform to the requirements 3,000 psi concrete . . . except as noted,"(TS 02821, ¶ 2.2), that boulders shall be "sound, nonsedimentary type and of the size indicated . . . shall be angular, not rounded" (TS 02821, ¶ 2.3.1), that river stone shall "come from the same source," (TS 02821, ¶ 2.3.2). (R4, tab 31 at 5-6) Paragraph 2.7, STONE PANELS, provides, in part:

Stone panels shall be natural granite, quarried in the United States. The stone coloring shall blend with the building coloration, range in color from pinks to oranges or greens and shall be veined and variegated so as not to be homogeneous in appearance. Gray or black veining within the granite is acceptable, however an overall gray-colored stone is not. Veining and variegation shall run in a generally horizontal direction on the stone panels. Panel segments shall be sequentially cut so that any continuous vein will extend from one segment to the next within each overall panel.

The granite panels shall be cut into pieces 12 inches minimum thickness and to the width and height as shown on the drawings. Each panel segment within an overall panel will match all other segments with regards to thickness. Both faces of the stone shall be flame finished or polished as determined by the Contracting Officer at the time of Shop Submittal. The tops and side edges of the stone shall be hand-sculpted, as shown on the drawings.

Verify that the amount of orthoclase feldspar in the granite exceeds the amount of plagioclase feldspar. Test the granite for absorption and specific gravity in accordance with ASTM C 97....

(R4, tab 31 at 7)

Contract Drawings

- 14. Contract drawing C4.4, UTILITY PLAN, depicts locations of various utilities including sewers, storm drains, utilidors, hydrant connections and the water source for the water feature. Near the center of the drawing is a circle depicting the location of the water feature. A line leading to the circle says "WATER FEATURE SEE SHEET C5.11." (R4, tab 32)
- 15. Drawing C5.11, WATER FEATURE PLAN, has three details showing berm contours, landscaping and boulder and stone panel placement and piping. Detail 1 shows the location, configuration and sizing of inlet pipes, outlets and the discharge manifold. The manifold consists of one header pipe with four pipes leading from it at right angles to the header and pointing toward the center of the circle. A note pointing to the header pipe says "4" HDPE HEADER PIPE BURIED IN BERM." (R4, tab 33)
- 16. Drawing C5.12, WATER FEATURE SECTIONS AND DETAILS, shows four sectional details of the water feature. Various components of the water feature are depicted including stone panels, river rock, berms, topsoil, boulders, piping and sidewalks. Each cross section shows a 6-inch concrete mat between classified compacted material and the surface components (river rock, stone panel, etc.). Below the stone panels, details 1 and 2 show the concrete mat extending to form footings much thicker than the 6-inches shown elsewhere. There is no indication of how thick the footings should be. Detail 2, Section BB shows the locations of the piping with the inlet piping discharging water into the pool. (R4, tab 34)
- 17. Drawing C5.13, WATER FEATURE SECTIONS AND DETAILS, contains five details for construction of the water feature. The details include the positioning of the stone panels, a plan view and cross section of the outlet weir, retaining wall cross section. Detail 1 shows a rebar pin connecting the panel to a precast concrete footing and slab. While the precast mat is shown as 6-inches thick, no thickness is prescribed for the footing beneath the panel. Detail 1 contains this note:

NOTE:

CONNECTION CONFIGURATION IS SCHEMATIC ONLY AND MAYBE [SIC] MODIFIED AS REQUIRED TO MEET THE DESIGN REQUIREMENTS OF THE WATER FEATURE SPECIFICATIONS.

(R4, tab 35)

Submittals Under the Contract

18. On 29 April 1996, Mortenson submitted Fountain Technology and Design, Inc. (Fountain Technology) as its water feature specialty contractor pursuant to TS 02821, ¶ 1.4.3. In a transmittal dated 15 May 1996, the government asked Mortenson to submit its entire package at one time, including the requirements of TS 02821, ¶ 1.2.2.1a (specialty contractor's portfolio of similar past projects) and TS 02821, ¶ 1.2.2.1c (specialty contractor's plan demonstrating understanding of work) that were not submitted. (R4, tab 37) By submittal dated 11 June 1996, Mortenson proposed John Narizny (Narizny) as its water feature design consultant. The letter stated:

The Specialty Contractor will have involvement throughout the construction and testing period and will be responsible for development of shop drawings, construction of working model, inspection of work, directing placement of components, materials, methods, and products used in the Water Feature.

A full size mock-up will be constructed by the General Contractor and all testing, maintenance and protection shall be the responsibility of the General Contractor.

(R4, tab 38)

- 19. In September 1996, two years after award of the Elmendorf medical facilities contract, Mortenson entered into a subcontract with Fountain Technology. Under the subcontract, Fountain Technology's work included, but was not limited to:
 - a. Paragraph 1.4.5 Review mock-ups of stone panels for aesthetic requirements and design compliance. Mock-ups will be fabricated by others.
 - b. Construct a 1/4'' = 1'-0'' scale model as defined. Shipped F.O.B. Jobsite. Review and coordinate with Owner, Designer. Rework as necessary for final design configuration.
 - c. As required by Specification Section 02821:

 "... directing placement of all components of the Water Feature..."

"... inspection of the work...", "... verifying that materials, methods, products, and quality control meet the requirements of the drawings and specifications."

d. Analysis and research:

- i. Review Owners CADD drawings for size, configuration, and placement of water feature components.
- ii. Review aesthetic considerations of rock material and water flows.
- iii. Research documents to familiarize with nature of materials and installation methods, as required Section 02821.

Under the subcontract, Mortenson agreed to pay Fountain Technology \$2,300 for the mock-up. For design review, analysis, research, and summaries at Fountain Technology's corporate office in Portland, Oregon, Fountain Technology was to bill Mortenson \$50 an hour. For travel to the site, Fountain Technology was to bill Mortenson \$600 a day plus expenses. (R4, tab 52) For its part, Mortenson employed Trevor Krupa (Krupa) as its primary contact with Fountain Technology. According to Mortenson, Krupa "was responsible for gaining final approval of all necessary submittals related to the Water Feature." Mortenson included approximately \$4,000 in its bid to hire a water feature specialty contractor and a structural engineer for reviewing and approving structural details (*i.e.*, those requiring a stamp by a registered structural engineer in Alaska). (R4, tab 3 at ex. 15)

- 20. On 3 October 1996, Mortenson submitted its engineering calculations for the water feature pursuant to TS 02821, ¶ 1.4.1. The government disapproved the submittal because the calculations could not be reviewed before the water feature design was completed and approved, before Mortenson's granite supplier was approved, and before any necessary coordination was completed. (R4, tab 39)
- 21. On 8 October 1996, Mortenson submitted a water feature scale model pursuant to TS 02821, ¶ 1.4.5. The government disapproved the scale model for a number of reasons, among them, the granite panel color and veining were not representative; the water area was not distinguishable in terms of area and depth; the boulders and seats were not representative of what was expected in the actual water feature; and the landscape materials were not representative of the final product in terms of color. (R4, tab 40)
- 22. Mortenson has not disputed that these submittals were rejected properly. We find that up to this point over two years into the contract it had yet to develop and

implement a coordinated design and submittal review process leading to final approval by the government so that construction of the water feature could begin.

23. In a letter dated 29 October 1996 to Mortenson, administrative contracting officer C. Alex Morrison, Jr. (ACO Morrison) wrote:

I am quite concerned about your uncoordinated and unresponsive approach to the design of the water feature. . . . The contract specifications clearly require an interactive design process with your designer taking the lead. This simply is not happening. Our repeated requests to provide a schedule of your design and review process have gone unanswered. Our offer to provide your designer with a scale model to use as a starting point has apparently been ignored – the scale model you submitted does not meet the contract requirements. You are making repeated telephonic inquiries about the design, yet when we ask to have your inquiries consolidated and submitted in writing for review, there is no response. You have submitted structural calculations; how can we tell if the structural calculations have been coordinated with the water feature design when there is, to date, no water feature design or submittal on the granite panels?

. . . .

You need to get this process under control and on track. . . . A revised shop drawing submittal schedule tying the required shop drawings to the design process in a logical manner is also required. Out of sequence or incomplete shop drawing submittals will be returned without review.

(R4, tab 4)

24. In response, Mortenson's Serial Letter No. 2189, dated 4 November 1996, set forth what it believed to be its contract obligations:

The contractors are not required to "design" the water feature as your letter alludes. To the contrary, Specification Section 02821 Paragraph 1.4.5 states in part, "It is not intended that the Water Feature be redesigned by the Contractor . . .". Further, in Paragraph 1.5, Design of Water Feature, it states

that "[t]he water feature retaining wall, concrete mat, stone panel foundations and panel connections to the concrete mat shall be designed . . .". The entirety of the contractors "design responsibility" is summarized in Paragraph 1.5. There is no contractors' designer "taking the lead" required.

. . . .

The specifications, in Paragraph 1.2, clearly define the responsibilities of the contractually required "Specialty Contractor" to be provided as part of the contract agreement. These requirements do not include design, design review, or coordination of your design efforts.

It is obvious from your letter that you are expecting significantly more for this item than is provided for by the contract documents If you wish these additional responsibilities to be added to our contract scope, we will be happy to forward the appropriate pricing for a change order.

(R4, tab 5)

- 25. Despite ACO Morrison's letter, there is no indication that Mortenson followed up and prepared a schedule tying its design process to its submittals in a logical fashion with the goal of getting all of the necessary design and submittals approved in a timely fashion so that construction of the water feature could begin.
- 26. By transmittal dated 12 December 1996, Mortenson submitted granite panel samples and pigmented concrete samples pursuant to TS 02821, ¶ 1.4.5. On 17 January 1997, the government advised Mortenson that although the granite samples had the specified color, range and veining, approval was withheld pending confirmation that the granite had the proper feldspar ratio, minimum specific gravity, and maximum absorption, and a site visit to the quarry to confirm that the samples were representative of the actual material to be quarried (comment 1); review of the finish of the panels (flamed vs. polished) during site visit (comment 2); and confirmation that veining and variegation ran in a generally horizontal direction (comment 3). The government disapproved Mortenson's pigmented concrete samples with the comment "RFI-2342 did not remove the requirement for pigmented concrete. Please resubmit." (R4, tab 41)
- 27. Confirming a discussion held on 24 January 1997, ACO Morrison advised Mortenson by letter dated 28 January 1997 that comment 1 was withdrawn because "a site visit is not a specific contract requirement." The letter went on to say that the ACO

would nonetheless make a site visit "to preclude any potential misunderstandings in the selection of the granite source." Mortenson was asked to "coordinate the appropriate time and advise . . . of available dates." The letter advised that comments 2 and 3 were not changed, and the overall action code for the submittal remained "E." (R4, tab 41) As explained by the reverse side of ENG FORM 4025, action code E means "Disapproved (See attached)."

- 28. As a result of their discussion, Mortenson by letter dated 7 February 1997 to ACO Morrison set forth what it understood to be the minimum acceptable details of the mock-up. The letter said it was proceeding with the mock-up development, and if the government disagreed with the stated understanding to advise right away. (R4, tab 7) The government's 18 February 1997 reply reminded Mortenson that minor adjustment in the orientation and configuration of the panels might result from the mock-up review process. The letter stated that both the ACO and the A/E would review the final mock-up, and that "joints must be shown, but full depth is not needed at the joint." The letter stated further "I trust that you are managing your schedule for production of the granite panels in a manner that will allow for this." (R4, tab 8) Inasmuch as the mock-up for the stone panels was intended to serve as a field verification that proper heights, sight-lines and massing had been achieved (finding 11), we find that the government could insist upon joints.
- 29. Mortenson's 18 February 1997 letter forwarded to the government the most recent cut sheets from Fountain Technology. The letter also set out Mortenson's understanding from a 10 February 1997 meeting that Fountain Technology would: forward details of grades, rock placement and elevation at each of the four outlet pipes, forward nozzle details, and clarify its method of controlling erosion of soils from backwash at the nozzle outlets. The letter stated that Mortenson would proceed with construction of the mock-up and erection of the full size mock-up as clarified. Mortenson stated that the status of the water feature design development at that stage of the project was of great concern and "It is essential the design issues be resolved in order for us to move on with the other steps in this process." (R4, tab 9)
- 30. The ACO's 21 February 1997 response expressed concern that Mortenson's letter "appears to be pushing coordination and detail responsibilities to the Government." The letter asserted "Those responsibilities are yours under the contract," and went on to say:

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At the Board's request, the government forwarded the reverse side of ENG FORM 4025 (used by Mortenson for transmitting submittals to the government) by letter dated 18 October 2004

I and my staff will continue to work closely with you by providing comments and assistance in the ongoing design process that is a part of your contract. I will facilitate conferences and discussions with my design AE whenever you request. I cannot continue to provide written responses or confirmations on each minute detail that we discuss. I will respond to the formal submittals that are required by the contract and I will do so in an expedited manner to assist you in meeting your schedule requirements.

(R4, tab 10)

- 31. A series of nine faxes beginning 4 December 1996 and ending 14 February 1997 from Fountain Technology to Mortenson show a step-by-step development of designing waterfalls into the water feature. While Fountain Technology's faxes are in the record, Mortenson's responses, if they existed, are not. We are therefore unable to determine from this record to what extent Mortenson collaborated or encouraged the design of the waterfalls. (R4, tab 12) There is no evidence that the government directed such a design effort. There is also no evidence that the original design in the contract drawings was either impossible or commercially impracticable to implement without waterfalls.
- 32. The design effort on the part of Fountain Technology culminated in a formal letter dated 19 February 1997 it sent to Mortenson in which Fountain Technology indicated that it had recommended adding "a trough, or pool to create a cascading waterfall." Fountain Technology also raised several concerns in the letter with respect to the functional performance of the original design including resizing the pipe to achieve desired discharge, incorporating a dam to minimize splash, and adding a pipe boot and liner to prevent erosion due to stray flow. As reflected in Fountain Technology's letter, by then the idea of adding a waterfall as a part of the water feature had already been rejected by both the government and Mortenson as beyond the scope of the contract:

Aesthetics

Fountain Technology (FTDI) has recommended adding a trough, or pool to create a cascading waterfall. Carolyn Pitts [A/E] has agreed that adding a waterfall is the correct interpretation of the intent of the water feature. At this time that idea has been set aside by the owner and the general contractor as being beyond the design specifications, and therefore, not acceptable.

(R4, tab 11)

- 33. "Without a pool and waterfalls idea," Fountain Technology's 19 February 1997 letter to Mortenson went on to propose certain revisions to the flow rate of the discharge piping. As Fountain Technology acknowledged, the proposed revisions were in accordance with its interpretation of "the design intent to have various discharge rates at each of the four discharge locations," and "in keeping with the mass of rock outcropping." (R4, tab 11)
- 34. Mortenson notified the government by letter dated 24 February 1997 that Fountain Technology was near completion of the sketches indicating that it could interpret, understand and execute the intent of the contract documents. The letter summarized the three concerns Fountain Technology raised with respect to the functional performance of the original design. The letter went on to say "At the present time, we are proceeding with the details shown on the contract documents. If you wish to incorporate any of the above suggestions, please advise this office." (R4, tab 11)
- 35. By letter dated 27 February 1997, Mortenson forwarded to the government "the information developed to date by our water feature consultant." What Mortenson forwarded was the same sketches Fountain Technology faxed to Mortenson between 4 December 1996 and 26 February 1997 (*see* finding 31). The letter stated:

This topic has gone through an evolution starting with the request to offer proposals to modify and improve the design to the point we are at now, showing we can interpret, understand and execute the design on the contract drawings.

At this time, we have completed the design input and suggestions proposed by Mr. Narizny. We are in a position to proceed with the next phase of development of the water feature.

(R4, tab 12)

36. By letter dated 4 March 1997, Mortenson forwarded to the government sketches of an inlet design developed by Fountain Technology showing an inlet pipe feeding an upper pool with the water overflowing from the upper pool to the lower pool. The letter said that the A/E was in agreement with the design (R4, tab 13). The evidence is not clear to what extent, if at all, the inlet and discharge piping shown on the drawings was redesigned. Inasmuch as the specifications made clear that "[t]he dimensions and connection details shown on the drawings are for design intent and bidding purpose only" (finding 3), a certain degree of installation adjustments could reasonably be expected. Mortenson could have used as-built drawings (required by TS 02821, ¶ 1.4.2) to show

what was changed, but it did not do so. Absent proof of what was changed, we are unable to find that what Mortenson ultimately did to the inlet and discharge piping exceeded the contract requirements. In his reply dated 13 March 1997, the ACO confirmed his discussion with Mortenson about using a liner to form the seal for the upper pool, and for Mortenson to provide pricing for the liner. The ACO also confirmed that Mortenson should be able to proceed with producing the model required by the contract. (R4, tab 14) According to the government, the pool was created using mounts of dirt and a liner to hold the water. Rocks were then placed so that water would "cascade" from the upper pool to the lower pool. (Gov't br. at ¶ 32).

- 37. On 18 March 1997, Mortenson resubmitted its engineering calculations, catalog cuts, water feature shop drawings, pigmented concrete samples, and water feature mock-up. The government disapproved all submittals. With respect to the engineering calculations, one of the government's comments, dated 9 April 1997, was "Typically the minimum depth of a cold footing in Anchorage is 60", revise or provide analysis." With respect to the shop drawing submittals, the government found that Mortenson's drawings had not been coordinated with other requirements of the contract, and the drawings needed to detail the inlet and outlet structures, and to show the electrical and piping concerns for coordination. With respect to the mock-up, the government commented that "[t]he mockup as presented was acceptable, however the panel sizes will be changing at your request." (R4, tab 42)
- 38. By letter dated 19 March 1997, Mortenson advised the government that it was proceeding with construction of the model, and "As the timeframe to execute this work is very limited we request direction as soon as possible." (R4, tab 15)
- 39. Mortenson notified the ACO by letter dated 26 March 1997 that development of the water feature submittals had been halted pending receipt of certain specified coordinates. The letter stated that the information was needed for Mortenson to continue with "our portion of the design requirements." (R4, tab 16) The ACO's 28 March 1997 replied:

I agree that your staff and mine are working to refine the water feature design to achieve the correct pool and visuals for the feature. That process is consistent with the contract requirements and is critical to the final success of the feature. I do not understand your statements regarding your being able [sic] to continue with your portion of the design. This process is not and cannot be a singular directed action on the part of the Government.

(R4, tab 17)

- 40. Mortenson's 28 March 1997 letter confirmed that the government would provide information regarding the type of liner material to use, sketches identifying the revised concrete borders, and the coordinates for the concrete water basin. The letter stated that Fountain Technology would complete the model based on the information to be provided. (R4, tab 18) We find that by March 1997, the government had decided to adopt Fountain Technology's idea of including an upper pool with a waterfall into the lower pool. As the photographs in the record show, as finally constructed, the water feature incorporated an upper pool with a three-foot (approximate) waterfall into the lower pool (*see* Photograph Nos. 1, 2, and 4)³.
- 41. In his 31 March 1997 letter (Serial Letter No. 2856) to the ACO, Mortenson's project manager suggested that the government finalize its design and forward it along with a direction to proceed. The letter said "If this process is not completed in the immediate future, this work could extend into the next winter season which will only add to costs associated with this issue." (R4, tab 19)
- 42. In response to Mortenson's 19 March 1997 letter, the alternate ACO wrote in his 1 April 1997 letter:

I am not aware of any direction necessary. We are continuing the design process required by the contract and, with our meeting on March 26, are close to completion. If direction is necessary when we have reached final conclusions on the design features, I will provide it.

(R4, tab 20)

43. On 2 April 1997, Mortenson submitted RFI 2746 requesting permission to modify the size of some of the stone panels. The RFI attached a letter from Georgia Stone Industries, Inc., Mortenson's stone panel supplier, stating "SOME OF THE PIECE SIZES FOR THE WATER FEATURE FOR THE ELMENDORF MEDICAL BASE ARE BEYOND QUARRY AND FABRICATION CAPABILITIES." (R4, tab 51)

44. Responding to Mortenson's Serial Letter No. 2856, the ACO's 8 April 1997 letter stated that it was his understanding that Mortenson would provide Fountain Technology the government's input on the upper pool grading, liner and concrete slab, and that the model process would continue once Fountain Technology had reviewed the discussed the government's suggestions with the A/E. With respect to RFI 2746 which

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³ Photographs 1 and 2 show the waterfall. Photograph 4 indicates the approximate size of the features shown in Photographs 1 and 2.

Mortenson submitted on 31 March 1997 seeking a deviation because Mortenson's granite supplier could not provide stone panels of required sizes, the alternate ACO asked:

How is it, with your expressed concern for timely completion of the water feature, that you have proceeded this far into the design process before discovering that your granite source cannot meet the basic size requirements in the contract? Our discussions show that the granite delivery is the longest and most critical activity associated with completion of the water feature this summer.

The government decided, however, to accept the stone panel size deviations requested in RFI 2746. (R4, tab 21)

- 45. Based on the sketches produced by Fountain Technology, the government forwarded by letter dated 22 April 1997, new coordinates. The letter reminded Mortenson that there was still no approved model, and Fountain Technology's continuing design process would result in changes to the coordinates. (R4, tab 22)
- 46. By transmittal dated 18 April 1997, Mortenson made its first submittal of its granite panel sample pursuant to TS 02821, ¶ 1.4.5. The government disapproved the sample on the ground that the sample "needs to have finished faces." (R4, tab 43)
- 47. On 7 May 1997, Mortenson submitted its granite panel shop drawings pursuant to TS 02821, ¶ 1.4.2. The government gave this submittal a Code C ("Approved, except as noted on drawings. Refer to attached sheet resubmission required") pending "submittal and approval of the remainder of the water feature shop drawings, to include among other things the electrical and plumbing layout, inlet details and elevations, etc." (R4, tab 45) Also on 7 May 1997, Mortenson submitted its engineering calculations and structural shop drawings pursuant to TS 02821, ¶¶ 1.4.1 and 1.4.2. The government gave both submittals a Code C. The government required clarification of Mortenson's engineering calculations, and approved the structural shop drawings "pending submittal and approval of the remainder of the water feature shop drawings, to include among other things the electrical and plumbing layout, inlet details and elevations, etc." (R4, tab 44) According to the CO's final decision, Mortenson was given the option to provide a structural analysis to support the use of a shallower footing for the stone panels, and it did not do so (R4, tab 1 at 20). We find Mortenson chose instead to simply adopt as its design for the stone panel footings what was typical for Anchorage, Alaska, i.e., 60-inches.

- 48. On 16 May 1997, Mortenson resubmitted the water feature scale model, required by TS 02821, ¶ 1.4.5. This submittal was given a Code B ("Approved, except as noted on drawings") on 22 May 1997. (R4, tab 46)
- 49. On 3 June 1997, Mortenson submitted another granite sample with a hand-sculpted finish. The government approved the sample on 5 June 1997. Pursuant to TS 02821, ¶ 1.4.5, SD-14 Samples, the government and the A/E made a site visit during the third week in July 1997 to review the first panel. (R4, tab 1 at 17-18) Absent evidence to the contrary, we find that this site visit to the stone supplier's quarry was coordinated between the government and Mortenson. Mortenson has not alleged that the government had in any way delayed the visit.
- 50. On 18 June 1997, Mortenson submitted river and stone boulder samples (pursuant to TS 02821, ¶ 1.4.5), and resubmitted catalog cuts (pursuant to TS 02821, ¶ 1.4.1), water feature structural drawings (pursuant to TS 02821, ¶ 1.4.2), pigmented concrete sample (pursuant to TS 02821, ¶ 1.4.5), and water feature mock-up (pursuant to TS 02821, ¶ 1.4.5). The government approved as submitted the mock-up (Code A), approved except as noted on drawings (Code C) the catalog cuts, water feature structural drawings, and the pigmented concrete, and it disapproved (Code E) the boulders at the stream as being too small but accepted the river stone at the stream. (R4, tab 47)
- 51. On 14 August 1997, Mortenson resubmitted its catalog cuts, water feature shop drawings, and pigmented concrete samples. The government approved the catalog cuts (Code A) and the pigmented concrete samples (Code A) and provisionally approved the water feature shop drawings (Code B) on 9 September 1997. (R4, tab 48) On 25 September 1997, Mortenson submitted its final structural shop drawings for the water feature. The government provisionally approved them (Code B) on 3 October 1997. (R4, tab 49) According to the government, the stone panels were shipped in September and October 1997 (R4, tab 1 at 19). There is no evidence that the government was in any way responsible for the delay in approving the granite sample, in fabricating the stone panels, or in arranging for the shipment of the panels. To the extent Mortenson had to pay a premium to expedite the shipment of the stone panels to Anchorage so that it could begin construction before winter, it was to overcome the consequence of its own uncoordinated and piecemeal submittal process.
- 52. No schedule for the construction of the Elmendorf medical facility, and the water feature in particular, has been provided to the Board. We find that the design and submittal approval process for the water feature began in October 1996 (finding 21), over two years after the Elmendorf medical facility contract was awarded, and that it ended in October 1997, a year later. We find Mortenson did not have a schedule of its design and submittal review process, and that it provided its submittal in a piecemeal and

uncoordinated fashion. As the evidence indicates, Mortenson's submittals were repeatedly disapproved, and it has not contested on this record that any of the government disapproval actions were improper. On the basis of the entire record before us, we are therefore unable to assign any delay in the design/submittal review and construction processes of the water feature to the government.

Mortenson's Claim, CO's Final Decision, and Appeal

- 53. By letter dated 17 May 2000, Mortenson submitted a certified claim in the amount of \$89,788⁴ for "additional design and construction work performed by Mortenson and its specialty contractor to construct the water feature on the Project." Mortenson contends that the government required it "to virtually re-design every aspect of the water feature far beyond the original scope of the contract." (R4, tab 3 at 1) Mortenson's claim included seven elements: (1) Added Grade Beam Concrete Costs (\$9,498), (2) Added Holding Pools, Waterfalls and Piping Costs (\$11,853), (3) Added Mockup Costs (\$10,170), (4) Enclosure and Heating Costs (\$13,019), (5) Expedited Shipping Costs (\$2,164), (6) Increased Consultant Costs (\$14,598), and (7) Increased Mortenson Staff Costs (\$8,640) (R4, tab 3, *see* breakdown attached to claim).
- 54. By decision issued on 20 October 2000, the CO denied all but one minor aspect of the claim. The decision recognized the possibility that Mortenson might be entitled to an equitable adjustment for the liner material furnished. The decision made the point that since the government did not require Mortenson to provide full depth joints for the mock-up, the government would be due a credit. (R4, tab 1 at 21-23, 25) Mortenson filed a timely appeal by notice dated 4 January 2000.

DECISION

Added Grade Beam Concrete Costs

Mortenson contends that its bid for the grade beam quantities was based on contract drawings C5.11 through C5.14, and in particular Section 4 of drawing C5.13. It contends that the government "increased the structural requirements" beyond the contract requirements when it disapproved its engineering calculations with the comment that the typical "minimum depth of a cold footing in Anchorage is 60", revise or provide analysis." (*See* finding 37; R4, tab 3 at ex. 15) In asserting that the government required it to do more work than the contract required, Mortenson appears to be arguing that it had no responsibility in designing suitable footings for the stone panels.

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⁴ Without add-ons, Mortenson's claim was in the amount of \$69,942 (R4, tab 3 at 8).

Typically, design specifications "set forth in precise details the materials to be employed and the manner in which the work was to be performed, and [the contractor] was not privileged to deviate therefrom, but was required to follow them as one would a road map." In contrast, typical performance specifications "set forth an objective or standard to be achieved, and the successful bidder is expected to exercise his ingenuity in achieving that objective or standard of performance, selecting the means and assuming a corresponding responsibility for that selection." *J.L. Simmons Co. v. United States*, 412 F.2d 1360, 1362 (Ct. Cl. 1969).

TS 02821, ¶ 1.2.1, Design Requirements, required the contractor to design, among other things, stone panel foundations and structural connection details according to the general layout shown on the drawings (finding 4). TS 02821, ¶ 1.5, DESIGN OF WATER FEATURE, required the contractor to design, among other things, stone panel foundations and panel connections to the concrete mat "to resist their own weights and lateral loads. . . . and submit shop drawings and calculations for approval prior to start of fabrication" (finding 12). Moreover, the contract drawings were consistent with the specification: they did not specify the thickness of the stone panel footings but left it up to Mortenson to design the proper footing depths. In this regard, each cross section on drawing C5.12 shows a 6-inch concrete mat between classified compacted material and the surface components (river rock, stone panel, etc.). Below the stone panels, details 1 and 2 show the concrete mat extending to form footings much thicker than the 6-inches shown elsewhere. There is, however, no indication of how thick the footings should be. (Finding 16) In addition, detail 1 of drawing C5.13 shows a rebar pin connecting the panel to a precast concrete footing and slab. While the precast mat is shown as 6-inches thick, no thickness is prescribed for the footing beneath the panel. (Finding 17) We conclude that the specifications and drawings involved here were of the "performance" variety, requiring Mortenson to design suitable footings for the water feature stone panels. We have found that the government gave Mortenson the opportunity to design a shallower footing than the one suggested as typical; it did not do so but chose instead to simply adopt as its design the 60" cold footing for the stone panels typical for Anchorage, Alaska (finding 47).

Because the specifications and drawings required Mortenson to design appropriate cold footings for the stone panels, and because Mortenson chose instead to adopt as its design the 60" footing for the stone panels typical for Anchorage, Alaska, we hold that it is not entitled to an equitable adjustment for added grade beam concrete costs.

Added Holding Pools, Waterfalls and Piping Costs

A constructive change takes place when a contractor performs work beyond the contract requirements, without a formal change order under the Changes clause, due either to an informal order from, or through the fault of, the government.

Ets-Hokin Corp. v. United States, 420 F.2d 716, 720 (Ct. Cl. 1970). Where a constructive change is found to exist, the government must fairly compensate the contractor for the costs of the change. Aydin Corp. v. Widnall, 61 F.3d 1571, 1577 (Fed. Cir. 1995). To recover, however, the contractor must show that the government actually compelled the additional work. Len Co. & Associates v. United States, 385 F.2d 438, 443 (Ct. Cl. 1967); MC II Generator & Electric, ASBCA No. 53389, 04-1 BCA ¶ 32,569, 161,169 (contractor has not proved that an "order" or "directive" was given).

Mortenson alleges that the water feature "evolved from the single-pool design indicated on the Contract Drawings to a structure with two pools, waterfalls, added piping and liners." Mortenson tells us that the government acknowledged that it changed the scope of the contract when its 13 March 1997 letter asked for a price for a liner to form the seal for the upper pool. (R4, tab 3 at ex. 15; finding 36)

As ADP (A&E) originally designed it, the water feature inlet piping discharged water into the pool (findings 15, 16). As finally constructed, the water feature inlet piping fed an upper pool from which water flowed over a small waterfall into the lower (original) pool. The idea of adding an upper pool originated from Fountain Technology. (Finding 40) Initially, Fountain Technology understood that the upper pool/waterfall idea was considered by the government and Mortenson to be "beyond the design specifications, and therefore, not acceptable" (finding 32). However, sometime after 19 February 1997, the government became interested in that design, and on 13 March 1997 the ACO asked Mortenson for a price for the liner required to create the upper pool (finding 36). By March 1997 the government had decided to adopt the upper pool/waterfall design that was ultimately incorporated into the water feature as built (finding 40). On these findings, Mortenson is entitled to an equitable adjustment under the Changes clause for the upper pool/waterfall as built. It is not, however, entitled to an equitable adjustment for the various waterfall designs that preceded the as-built design. That effort was not directed by the government, and there is no proven impossibility or commercial impracticability of the original single pool design specified in the contract drawings (finding 31).

Added Mock-up Costs

Mortenson alleges that it included \$3,419 in its bid to construct the mock-up, and it actually incurred over \$15,000 to complete it. It attributed the overrun to the government's "added criteria of requiring full thickness panels and panel joints." (R4, tab 3 at ex. 15) The contracting officer claimed a credit because Mortenson failed to provide full depth panel joints in the mock-up (finding 54).

TS 02821, ¶ 1.4.5, provides that "Contractor shall construct a full size mock-up of stone panels from sheets of foam or other suitable material to serve as field verification

by the Contracting Officer that proper heights, sight-lines and massing have been accomplished" (finding 11). We have found that the government could insist that joints be shown for the mock-up (finding 28). The government, however, has not told us what gave it the right to demand full depth joints. Nor have we been told of any justifications for them.

Because TS 02821, ¶ 1.4.5, required Mortenson to provide a full-size mock-up of stone panels, we hold that Mortenson is not entitled to an equitable adjustment for complying with the specifications.

Because the government has failed to show an express requirement for full depth joints on the mock-up, and because the ACO expressly advised that full depth joints were not required, we hold that the government is not entitled to the credit it claimed (finding 28).

Enclosure and Heating Costs

Mortenson alleges that it anticipated construction of the water feature to take place in warm weather. It contends that the government's delay in releasing the water feature details forced it to place, grout, and caulk the granite in the final quarter of 1997, to erect an enclosure, and to incur heating costs in order to complete the water feature construction work. It contends that it is entitled to an equitable adjustment for the increased costs in performing work in a later and colder time period. (R4, tab 3 at ex. 15)

To recover on a claim for delay, the contractor must show the extent of the claimed delay, that the delay was proximately cause by the government, and that the delay harmed the contractor. *Wilner v. United States*, 24 F.3d 1397, 1401 (Fed. Cir. 1994). It is the contractor's responsibility to present complete submittals in a usable form, and it is not entitled to compensation for delays resulting from its failure to make proper submittals for approval. *Wiggins Plumbing & Heating Co., Inc.* VABCA No. 2937, 90-1 BCA ¶ 22,461 at 112,770, *aff'd* 923 F.2d 868 (Fed. Cir. 1990) (table).

No schedule for the construction of the Elmendorf medical facility has been furnished to the Board. We have found that, despite the ACO's urging, Mortenson did not have a schedule of its design and submittal review process, and it provided its submittals in a piecemeal and uncoordinated fashion. We have found that the design and submittal process for the water feature did not begin until October 1996, over two years after the Elmendorf medical facility contract was awarded, and that it ended in October 1997, a year later. As the evidence indicates, Mortenson's submittals were repeatedly disapproved, and it has not contested on this record any of the government disapproval actions as improper. On the basis of the entire record before us, we are unable to assign

any delay in the design/submittal review and construction processes of the water feature to the government. (Findings 19, 20, 25, 52)

Because Mortenson has failed to prove that the delay in approving its water feature submittals was caused by the government, and because the evidence shows that Mortenson submitted its submittals in a piecemeal and uncoordinated fashion, and its submittals were repeatedly disapproved, we hold that it has failed to prove that it is entitled to an equitable adjustment for performing construction work on the water feature in a later and colder time period.

Expedited Shipping Costs

The evidence shows that after resubmission, Mortenson's granite sample was finally approved on 5 June 1997. Pursuant to TS 02821, ¶ 1.4.5, SD-14 Samples, the government and the A/E made a site visit during the third week of July 1997 to review the first panel. (Finding 49) There is no evidence that the government was in any way responsible for the delay in having the granite sample approved, or in having the stone panels fabricated and shipped. We have found that, to the extent Mortenson had to pay a premium to expedite the stone panel shipments to Anchorage it did so to overcome the delays resulting from its own uncoordinated and piecemeal submissions of submittals. (Finding 51)

Because Mortenson paid a premium to expedite the shipment of the stone panels to Anchorage to overcome the delays resulting from its own uncoordinated and piecemeal submissions of submittals, we hold that it is not entitled to an equitable adjustment.

Increased Consultant Costs

Mortenson says that it included approximately \$4,000 in its bid to hire a water feature specialty contractor and a structural engineer, and it ended up spending nearly \$18,000 for both consultants. Mortenson alleges that Fountain Technology's work was "greatly enhanced by the ERO from that reflected in TS 02821." (R4, tab 3 at ex. 15)

Under the contract, Mortenson was required to engage a specialty contractor for the duration of the water feature submittal, construction and testing period. The specification said that the scope of construction to be accomplished by the specialty contractor may vary, but at a minimum it would be required to direct the placement of all water feature components and working closely within the government approval process "to translate the intent and requirements of the design into the finished product." (Finding 5)

Mortenson chose Fountain Technology as its specialty contractor. Their contract shows Mortenson wanted Fountain Technology to do far more than what TS 02821 specified as the minimum (finding 19). To the extent Fountain Technology developed numerous sketches of waterfalls between 4 December 1996 and 14 February 1997 that were not incorporated into the water feature, we have no evidence that the government directed such efforts (finding 31). We have held that Mortenson is entitled to an equitable adjustment for the upper pool/waterfall that was incorporated into the water feature as built. That adjustment will take into consideration any work performed by Fountain Technology on that specific design. Mortenson, however, has failed to prove that any other work it required Fountain Technology to do exceeded the scope of work specified in its contract with the government.

Increased Mortenson Staff Costs

Mortenson claims that Krupa was its primary contact with Fountain Technology, and Krupa's employment had to be extended a minimum of four weeks "due to the Government-caused delays in achieving a final Water Feature scope of work." Mortenson claims reimbursement for the four week extension of Krupa's employment with Mortenson. (R4, tab 3 at ex. 15)

We are unable to determine on this record that the government was in any way responsible for any delays in the completion of the water feature. The record, however, is replete with evidence that Mortenson was unable to start construction of the water feature because it submitted its submittals in an uncoordinated and piecemeal fashion, and because its submittals were repeatedly rejected.

Because it has failed to prove that the government was responsible for any delays on the completion of the water feature, we hold Mortenson is not entitled to an equitable adjustment for extending Krupa's employment contract for four weeks.

CONCLUSION

This appeal is sustained to the extent indicated, and is in all other respects denied.

Dated: 29 December 2004

PETER D. TING Administrative Judge Armed Services Board of Contract Appeals

| (Signatures continued) | |
|---|---|
| I concur | I concur |
| MARK N. STEMPLER Administrative Judge Acting Chairman Armed Services Board of Contract Appeals | MONROE E. FREEMAN, JR. Administrative Judge Acting Vice Chairman Armed Services Board of Contract Appeals |
| I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 53229, Appeal of M.A. Mortenson Company, rendered in conformance with the Board's Charter. Dated: | |
| | CATHERINE A. STANTON Recorder, Armed Services Board of Contract Appeals |