ARMED SERVICES BOARD OF CONTRACT APPEALS

| Appears of |) |
|-------------------------------------|--|
| M.A. Mortenson Company |) ASBCA Nos. 53062, 53063, 53064,) 53065, 53122 |
| Under Contract No. DACA85-94-C-0031 |) |
| APPEARANCE FOR THE APPELLANT: | William R. Joyce, Esq. Faegre & Benson, LLP Minneapolis MN |
| APPEARANCES FOR THE GOVERNMENT: | Frank Carr, Esq. Engineer Chief Trial Attorney Abigail F. Dunning-Newbury, Esq. District Counsel Scott R. Marchand, Esq. Toni B. London, Esq. Engineer Trial Attorneys U.S. Army Engineer District, Alaska |

OPINION BY ADMINISTRATIVE JUDGE PAGE

These consolidated appeals arise from a contract between M.A. Mortenson Company (Mortenson, contractor or appellant) and the U.S. Army Corps of Engineers for work at the Composite Medical Facility, Phase II at Elmendorf Air Force Base in Anchorage, Alaska. They involve claims for equitable adjustment for problems encountered with drainage to trees at the South Circle (ASBCA No. 53062); steam still specifications (ASBCA No. 53063); as-built drawings (ASBCA No. 53064); thermal breaks at roof level pods (ASBCA No. 53065); and closure of metal ceilings at barrel vault (ASBCA No. 53122). Following the contracting officer's denial of Mortenson's claims, timely appeals were made. A hearing addressing each of the appeals was held, and briefs were filed; entitlement only is before the Board.

GENERAL FINDINGS OF FACT

On 16 September 1994, Mortenson and the Government entered into Contract No. DACA85-94-C-0031 in the original amount of \$120,579,000 for work on Phase II of the 3rd Medical Center, Composite Medical Facility at Elmendorf Air Force Base in Anchorage, Alaska (joint trial exs. (JTE) 1, tab h). Notice to proceed was issued 6 October 1994 (JTE 1, tab f).

The fixed-price contract contained these relevant provisions, derived from the Federal Acquisition Regulation (FAR): FAR 52.233-0001 DISPUTES (DEC 1991); FAR 52.236-0021 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (APR 1984); and FAR 52.243-0004 CHANGES (AUG 1987). (JTE 1, tab h)

ASBCA No. 53062 Drainage for Trees at the South Circle

Mortenson claimed it was entitled to compensation for additional costs to perform remedial work with respect to seven deciduous trees at the South Circle of the project. Appellant asserted that although it properly planted the trees, the trees later showed signs of distress. The contractor blamed the problems upon poor drainage resulting from the soil beneath the plant pits having been heavily compacted in accordance with contract requirements. The Government maintained that the contractor was required to plant the trees in pits with uncompacted bottoms and provide adequate drainage to support healthy tree growth, and that Mortenson was required to replace unhealthy plants during the establishment period. The Government also alleged the contractor was on notice of the drainage problem, and should have corrected it.

FINDINGS OF FACT

In addition to the general contract provisions previously recited, the following technical specifications (TS) are relevant:

SECTION 02950
TREES, SHRUBS, GROUND COVERS, AND ALPINE ROCK
GARDENS AND SITE FURNISHINGS

. . . .

1.2 GENERAL

This section covers all materials, plants, labor, and equipment to prepare pits and plant trees and shrubs where shown on the drawings. Contractor shall water, maintain and protect plants until they are established.

. . . .

1.7 WARRANTY

Furnished plants shall be guaranteed to be in a vigorous growing condition for a period of 12 months regardless of the contract

time period. A plant shall be replaced one time under this guarantee. A written calendar time period for the guarantee of plant growth shall be furnished to the Contracting Officer.

. . . .

3.3 EXCAVATION

3.3.1 OBSTRUCTIONS BELOW GROUND OR POOR DRAINAGE

When obstructions below ground or poor drainage affect the contract operation, proposed adjustments to plant location, type of plant and planting method or drainage correction shall be submitted to and approved by the Contracting Officer.

3.3.3 PLANT PITS

Plant pits shall be dug to produce vertical sides and flat, uncompacted bottoms. . . . The size of plant pits shall be as shown on the drawings.

. . . .

3.7 MAINTENANCE DURING PLANTING OPERATIONS

Installed plants shall be maintained in a healthy growing condition. Maintenance operations shall begin immediately after each plant is installed and shall continue until the plant establishment period commences. . . .

. . . .

3.10 PLANT ESTABLISHMENT PERIOD

3.10.1 COMMENCEMENT

The plant establishment period for maintaining installed plants in a healthy growing condition shall commence and shall be in effect for 12 months after beneficial occupancy. . .

3.10.2 Maintenance During Establishment Period

3.10.2.1 GENERAL

Maintenance of plants shall include straightening plants, tightening stakes and guying material, repairing tree wrapping, protecting plant areas from erosion, maintaining erosion control material, supplementing mulch, accomplishing wound dressing, removing dead or broken tip growth by pruning, maintaining edging of beds, checking for girdling of plants and maintaining plant labels, watering, weeding, removing and replacing unhealthy plants.

. . . .

3.10.2.4 UNHEALTHY PLANTS

A plant shall be considered unhealthy or dead when the main leader has died back, or 25 percent of the crown is dead. Determine the cause for an unhealthy plant. Unhealthy or dead plants shall be removed immediately and shall be replaced as soon as seasonal conditions permit.

(R4, tab 14)

Of the 20 similar trees planted in the South Circle, only the 7 which eventually showed distress were planted in an area adjacent to construction. The underlying soil of that area, between 2' to over 20' deep, had been compacted to a 95% Proctor density to meet other contract requirements including drawing No. C3.11, SITE GRADING PLAN. (Tr. 32-35; R4, tab 17)

In determining how to plant these trees, Mortenson reasonably interpreted the contract's instruction in § 02950, ¶ 3.3.3 directing the size of plant pits to be "as shown on the drawings" to refer to detail 3 on drawing No. C5.10, LANDSCAPE DETAILS, the only drawing detail describing deciduous tree planting methods and dimensions regarding the size of the required plant pits. (Tr. 22-26, 64; R4, tab 14 at 12; tab 21) Detail 3 "Deciduous Tree Planting (Seeded Areas)" depicted a plant pit with an eight-foot diameter, and a dimension of three feet from grade to below the tree root ball. A note beneath the three-foot dimension indicated that the soils more than three feet below grade were "undisturbed native soil or compacted subgrade." (R4, tab 21)

Mortenson planted the trees in accordance with the drawing, with plant pits excavated eight feet wide and three feet deep. Since the root balls were approximately twenty inches thick, digging three-foot plant pits left one to one and a half feet of uncompacted soil beneath each tree's root ball. (Tr. 22-23) During planting in August 1997, the Government inspected Mortenson's work and expressed no objections to the contractor's planting methods. (Tr. 28) The Government did not issue any non-

conformance reports, nor did the Government contemporaneously advise Mortenson that the trees were improperly planted (tr. 28-29, 70).

Mortenson advised the Government by letter dated 7 July 1998 that "trees located within the stamped concrete at the South Circle were being drowned by standing water caused by inadequate drainage as a result of the designed compaction of the earthwork at this location." The contractor agreed to commence remedial work to save the trees and prevent further damage by removing them and "digging two feet beneath the root ball and filling this space with river rock." The letter noted Mortenson's agreement that it was required by the contract to provide a plan for correcting the drainage problem, but also its disagreement that the contractor was responsible for costs associated with performing the remedial work. Mortenson requested a change order to perform the work. (R4, tab 4)

The contractor acknowledged in its 13 August 1998 letter that the cause of the inadequate drainage was the soil underlying the plant pit, but stated it properly had excavated the pit to the required dimensions. Mortenson contended that the subgrade material, which had been heavily compacted to a depth of over 20 feet as required by contract drawing No. C3.11, prevented water from percolating and caused the problem. Mortenson submitted a remediation plan calling for removal of the trees, over-excavating an additional two feet of soil, placing river rock in the bottom two feet of the pits, replacing the topsoil, and grading the area. (R4, tab 5; tr. 49-50)

On 27 August 1998, the Government agreed poor drainage caused the distress to the trees and accepted the proposed remediation plan, but rejected the contractor's change order request. The administrative contracting officer (ACO) stated that § 02950, ¶ 3.3.1 made it Mortenson's responsibility to make any adjustments to planting method or drainage correction. The ACO advised Mortenson that the drainage problem "was clearly visible prior to planting when the pits filled with rainwater and the water did not perk [sic] into the soil," and advised that the contractor could pursue the matter under the contract's DISPUTES clause. (R4, tab 6)

The contractor responded on 11 September 1998, and disagreed with the ACO that Mortenson knew of drainage problems. It acknowledged that pit bottoms had to be cleared of concrete spillage before the trees were planted, but stated it had not afterward been made aware of pits filled with rainwater, and requested any information supporting the ACO's allegation. Mortenson contended that the pits were originally over-excavated to account for problems inherent in the Government's faulty design, which it alleged caused the difficulty. Appellant also advised that while ¶ 3.3.1 obligated the contractor to propose a solution, the contract did not require Mortenson to make any adjustments or corrections. (R4, tab 7) The Government replied on 29 September 1998, and declined to change its position. (R4, tab 8) Despite Government allegations to the contrary, there was no evidence Mortenson knew of drainage problems after the debris was removed or during planting (tr. 66-72).

Mortenson's claim of 17 May 2000 in the amount of \$6,097 again advised the Government that detail 2 of drawing No. C3.11 required at least 20 feet of soil to be compacted to provide support for the adjacent concrete sidewalks, curbs, asphalt driveways, etc. The contractor contended that the landscape architect failed adequately to review the adverse effect the compacted soils near the concrete sidewalks would have on the trees to be planted in that area. Mortenson asserted that the Government was responsible for additional work resulting from the design defect. (JTE 1, tab a)

Appellant's claim was denied by final decision dated 19 July 2000. The contracting officer (CO) found that the contractor was required to plant trees in pits with uncompacted bottoms and provide adequate drainage to support healthy trees, but that Mortenson failed to do so. The CO asserted the contractor was obliged to correct any drainage problems which would interfere with the health of the trees; maintain the trees; and replace unhealthy trees at no additional cost to the Government. (R4, tab 1) Mortenson's timely appeal was filed with the Board on 27 September 2000.

DECISION

Mortenson as appellant bears the burden of proving an affirmative, monetary claim against the Government by a preponderance of the evidence. *Environmental Safety Consultants, Inc.*, ASBCA No. 47498, 00-1 BCA ¶ 30,826 at 152,143 and cases cited therein. It must show liability, causation, and resultant injury. *Wilner v. United States*, 24 F.3d 1397, 1401 (Fed. Cir. 1994) (*en banc*).

Contract requirements pertaining to the subject trees combine aspects of performance specifications, which generally set forth an objective or standard to be achieved, leaving the contractor to determine the method or means of achieving the required result, and design specifications, in which the Government details the material and manner or method in which the contract is to be performed. *T&G Aviation, Inc.*, ASBCA No. 40428, 00-2 BCA ¶ 31,147 at 153,845. The requirements that the soil beneath the plant pits be compacted to a 95% Proctor density (drawing No. C3.11) and that plant pits be excavated to have an eight-foot diameter and a depth of three feet from grade to below the tree root ball (§ 02950, ¶ 3.3.3 and drawing No. C5.10, detail 3) are design specifications. The risk that the compacted substrate would not permit adequate drainage below the pit rested upon the Government as the designer. *See United States v. Spearin*, 248 U.S. 132 (1918).

The general rules for proof of defective specifications are well settled. Where the Government has specified the manner in which work is to be done, it warrants the outcome. Once the contractor has established it substantially complied with Government plans and specifications, but that unsatisfactory performance resulted, the burden shifts to the Government to prove that the contractor performed improperly, or that there were other causes absolving the Government of liability. *SPS Mechanical Co., Inc.*, ASBCA No.

48643, 01-1 BCA ¶ 31,318 at 154,692 citing *C.L. Fairley Constr. Co. Inc.*, ASBCA No. 32581, 90-2 BCA ¶ 22,665, *aff'd on recon.*, 90-3 BCA ¶ 23,005 and *R.C. Hedreen Co.*, ASBCA No. 20599, 77-1 BCA ¶ 12,328. Here, Mortenson has proven that it planted the trees in accordance with drawing No. C5.10. There was no credible evidence the contractor performed improperly, and the Government failed to prove any otherwise exculpatory action occurred. When the contractor has performed in accordance with a design specification, the Government is responsible for the poor results.

The Government's reliance upon § 02950, ¶ 3.3.1 which required Mortenson to develop a corrective plan for problems resulting from "obstructions below ground or poor drainage" as a means of denying liability is misplaced. While the contractor must develop such a plan if necessary, there is no requirement that it assume costs for its implementation. Further, the requirement that Mortenson maintain the plants in a healthy condition for a year did not shift the risk of distress resulting from the underlying, heavily compacted soils from the Government to Mortenson. If the contractor failed properly to maintain the trees, the Government could have invoked the requirement that any plants failing to flourish during the establishment period be replaced; however, there was no evidence here of neglect or improper care.

We sustain the appeal, and remand the matter to the parties for negotiation of quantum.

ASBCA No. 53063 Steam Still Specifications

Mortenson claimed the Government wrongfully rejected a steam still that met contract requirements; that it was forced to provide a more costly model than was specified; and requested an equitable adjustment for additional costs. The Government denied the claim, maintaining that the still failed to comply with the contract because it did not fit within the space shown in the drawings.

FINDINGS OF FACT

In addition to the general provisions of the contract previously recited, the following contract specifications and drawings are relevant: TS SECTION 11702, MEDICAL EQUIPMENT, MISCELLANEOUS, ¶ 2.1.45 ITEM S8510 STILL, STEAM which provided "Unit shall be a steam powered still with a 40 gallon storage tank, 10 gallon per hour flow rate, ultraviolet light and automatic operation"; drawing No. A2.302, SECOND LEVEL AREA "2A2" FLOOR PLAN; drawing No. Q2.302, SECOND LEVEL AREA "A2" FLOOR PLAN - EQUIPMENT PLAN, which showed a solid line box with a notation "S8510" inside, indicating the steam still, and additional items of equipment along the same wall, including cabinets, a refrigerator and whiteboard; and drawing No. M3.302, SECOND LEVEL AREA "2A2" POWER PLAN. (R4, tabs 14-20; JTE 1, tab j)

On 8 December 1995, Mortenson submitted shop drawing transmittal No. 11702-984 for approval of a Consolidated Still and Sterilizers (CSS) brand steam still. The Government disapproved the submittal on 12 December 1995 alleging three bases for rejection: the still was "one of a kind" and the contract required materials and equipment with a two-year history of commercial use; the unit measured 64" long and 21" wide and was too large for the 2' x 3' space shown on contract drawing No. Q2.302; and the contractor had not adequately addressed the requirement for automatic operation. (R4, tab 3, tab D)

The contractor responded on 11 January 1996 with additional information from the manufacturer regarding the still's history and properties, and contended the specifications did not mention still dimensions. (R4, tab 4) The Government's letter of 20 February 1996 again rejected the still, citing solely that the unit was too large for the 2' x 3' space shown on drawing Nos. A2.302 (floor plan) and Q2.302 (equipment plan), and asserted the proposed unit would conflict with the equipment scheduled for the room. The ACO refused to grant a deviation to permit the proffered still, and noted that "equipment meeting the contract requirements is available." (R4, tab 5)

The contractor replied on 6 March 1996, and asked for the names of three still manufacturers able to meet the 2' x 3' space requirement. (R4, tab 6) The Government responded by letter of 13 March 1996, and advised the catalog cut in the initial submittal contained a unit on the same page as the proposed still that met the requirement. (R4, tab 7) Mortenson agreed to provide the smaller unit, but sought an additional \$8,157 for the "change." Appellant asserted that its initial submittal met all requirements of TS 11702, ¶ 2.1.45; that the specifications did not contain dimensional constraints; and that the equipment was not shown in "elevation views, which would have helped confirm any physical limitations." The letter also charged that the Government had insisted upon an upgraded, self-contained product manufactured by only one source in that footprint size. (R4, tab 8)

The Government rejected the contractor's request (R4, tab 9), and Mortenson submitted a claim seeking an equitable adjustment in the amount of \$8,157 for provision of a "superior model steam still than was specified." Mortenson contended the original steam still met contract requirements, which it alleged were vague and ambiguous regarding the type of still the Government really wanted. (JTE 1, tab h) The CO denied the claim by final decision dated 19 July 2000 (R4, tab 3) and Mortenson timely appealed (R4, tab 2).

Mortenson contended at the hearing that, contrary to the Government's assertion, the proposed still did not conflict with the equipment scheduled for the room. It established that the supply room's south wall measured 23'8"; with the cabinets, refrigerator, whiteboard and proposed still aligned on that wall, the equipment occupied one foot less than the inside wall dimensions. It asserted the only change to the proposed layout of the

room would be a slight movement of the whiteboard, with no loss of functionality. (Tr. 101-06, 119-20, 127, 136) It also proved that in some instances, the Government approved equipment that did not comport with the scaled size of the non-dimensioned drawings. (Tr. 116-18; R4, tab 17)

The Government established that the proposed arrangement would have necessitated moving the whiteboard behind the door, which would have interfered with functionality. (Tr. 160-61) Further, the contract's equipment log gave dimensions for all equipment in the room except the steam still, and it was possible to scale each of drawings No. A2.302, No. Q2.302 and No. M3.302 and determine the space allocated for the still was 2' x 3' (R4, tabs 14, 17-19; tr. 124-25, 156-57, 169-70).

DECISION

Mortenson alleged that the steam still it proffered fully met all the requirements of the specifications, which it contended imposed no size requirements. The Government's position was that although dimensions for the still were not provided in the specifications, the contractor should have determined the size of the still by making calculations from relevant contract drawings.

A contract interpretation which gives a reasonable meaning to all parts of the instrument will be preferred to one which leaves a portion of it useless, inexplicable, or inoperative. *Hol-Gar Mfg. Corp. v. United States*, 351 F. 2d 972, 979 (Ct. Cl. 1965). The Government's interpretation is the only one which gives weight to requirements imposed by the drawings as well as the specifications. The contract provided information regarding the attributes of the steam still in several places, including § 11702, ¶ 2.1.45 and drawing No. Q2.302. Although neither of these state size requirements for the still, the unit's dimensions of 2' x 3'could be calculated using the scale notation and key plan on the drawings. Mortenson has shown no ambiguity in the size restrictions indicated by the drawings.

It is well settled that the Government has the right to obtain precisely what it has specified, including strict compliance with dimensional requirements and technical characteristics of the items called for. *Astro Dynamics, Inc.*, ASBCA No. 28381, 88-3 BCA ¶ 20,832 at 105,361-62. It was not impossible for appellant to perform in accordance with the contract or commercially impracticable, only more expensive than it anticipated when it failed to take into account all salient characteristics of the steam still. The decision to grant or deny a deviation is within the sound discretion of the CO, and there was no proof that discretion was abused. *See Kurz-Kasch, Inc.*, ASBCA No. 32486, 88-3 BCA ¶ 21,053. The appeal is denied.

ASBCA No. 53064 As-Built Drawings

Appellant requested an equitable adjustment of \$28,137 for costs incurred in correcting errors and omissions in the Government-furnished electronic files containing computer assisted design (CAD) contract drawings used to produce as-built drawings. The Government contended the contractor reasonably should have anticipated the difficulties encountered and included those costs in its contract price.

FINDINGS OF FACT

Additional relevant contract provisions include: TS SECTION 01720 As-BUILT DRAWINGS, which provides in part:

1. GENERAL: The As-Built drawings shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the contract set of drawings and a record of all deviations, modifications or changes from those drawings, however minor, which were incorporated into the work, all additional work not appearing on the contract drawings and all changes which are made after final inspection of the contract work.

. . . .

- 3. DRAFTING STANDARDS: Copies of the original contract drawings on electronic data media (disks, tapes, or optical disks) in AUTOCAD version 11 format will be furnished to the Contractor at the beginning of the contract.
- ... In case of any discrepancies between the electronic data copies of the contract drawings and the printed copies of the contract drawings issued with the invitation, the printed copies shall govern. The Government assumes no responsibility for either the accuracy or applicability of any extraneous information which may be contained on the electronic data copies. . . .

. . . .

6. ALL COSTS incurred by the Contractor in the preparation and furnishing of As-Built drawings shall be included in the contract price and no separate payment will be made for this work.

(R4, tab 28)

Project designers used AutoCAD to prepare electronic files to prepare each contact drawing sheet (tr. 250, 314-15). When the contract was issued for bid, the electronic files were copied on paper by transmitting the content to a plotter (tr. 250-51). The contract required the Government to provide the electronic files to Mortenson to use as the baseline for creation of final as-built drawings (R4, tab 28).

The Government knew there were problems with the electronic files. On 7 June 1995, the Government sent a letter to its architect-engineer (AE), Anderson, DeBartolo, Pan, Inc. (ADP) advising of multiple discrepancies in electronic files prepared by ADP, as well as missing drawings. The Government expressed concern that the contractor would again raise this issue at the time to prepare the as-built drawings for the project. ADP was told to make corrections to the problems noted; "incorporate the necessary revisions to the drawings on the electronic files to ensure that those files are an accurate representation of the drawings that were delivered to the contractor"; and perform quality review to ensure "all necessary revisions are made to make the files complete, clean, and logical." (R4, tab 29)

The Government on 5 July 1996 provided Mortenson with three compact disks containing updated electronic files containing contract drawings, and recommended these be used "to fill in any missing or errant files within the original set of disks and in your asbuilt drawing files." (R4, tab 5) Mortenson found errors in these files, including problems noted in the Government's 7 June 1995 letter to ADP. (Tr. 259-80; exs. A-3, A-4)

On 4 June 1997, Mortenson requested electronic files for all ASD (Architectural Supplemental Directive) drawings resulting from contract modifications. (R4, tab 6) The Government responded on 27 August 1997 with a disk of all available electronic files of sketches previously issued with contract modifications, but noted that not all drawings were available. (R4, tab 7) The contractor again advised the Government on 13 October 1997 of problems with the files, and that this could result in additional costs. (R4, tab 8) The Government provided another disk with additional information (R4, tab 9).

The contractor continued to have difficulties with the electronic files furnished by the Government. (R4, tabs 10, 12, 13, 15, 17, 19, 21, 24) As stated in its letter of 24 October 1997, Mortenson categorized the problems as follows: (1) electronic files provided did not reflect the contract drawings issued to Mortenson and contained many errors and omissions; (2) 25% of the ASD sketches, created by the Government as attachments to contract modifications, requests for information and serial letters to Mortenson, were not issued electronically, causing Mortenson additional work; (3) ADP did not use consistent convention in developing the electronic files, resulting in files

varying greatly in terms of drawing scales, plotscale, fonts, linetypes, cross-references, and layering; and (4) many drawing files were omitted from the electronic information provided, causing the contractor to search for files and consult with the Government regarding the proper course of action and impeding the preparation of as-built drawings. (R4, tab 10; *see also* tr. 265-66, 278-85, 292-95) Mortenson has proved that while certain deficiencies did not require extensive effort to correct, it spent considerable time reviewing the disorganized files, found many errors, and was prevented from preparing the as-built drawings until the electronic files were corrected. (Tr. 255-57, 270-77; ex. A-4) Appellant provided a spreadsheet detailing the number and type of problems encountered on specific drawings, and noted the amount of time spent making the categorized revisions. (R4, tab 3) While we do not have quantum before us, this evidence was generally persuasive for purposes of liability.

The contractor's claim for \$28,137 was received by the CO on 19 May 2000; the claim was denied in its entirety by final decision dated 19 July 2000. (R4, tabs 1, 2) Timely appeal was filed with the Board on 27 September 2000.

DECISION

Mortenson argued that the Government was obligated to provide electronic files that would duplicate the original contract drawings, for the purpose of preparing the as-built drawings; that there were many instances when the Government failed to provide all or accurate files; and that Mortenson incurred "additional expense in reconciling the original contract paper drawings with the electronic drawings they received." Appellant contended it "reasonably expected complete and organized drawings that used consistent conventions and format." (App. br. at 5-6)

The Government admitted that, at some point, an electronic file existed that was used to prepare the paper copy of each contract drawing, and that a contractor should expect to receive that file for use in preparing the as-built drawings. It acknowledged there were document control problems in ADP's production of the electronic files. (Tr. 349-53) However, the Government contended these flaws were not unusual or particularly numerous for a project of this size and complexity, and that corrective efforts were neither difficult nor time-consuming. The Government argued there was nothing in the contract to lead the contractor to believe supplemental drawings would be issued in an electronic format, or that all electronic drawings would be provided in consistent convention. It asserted TS § 01720 ¶ 6 in support of denying Mortenson's request, as that clause provided that "ALL COSTS incurred by the Contractor in the preparation and furnishing of As-Built drawings shall be included in the contract price." (Gov't br. at 3-4) The Government contended that Mortenson had no right to expect a "mirror image" of the paper drawings; that the contract warned the electronic files might differ from the paper drawings; and that the Government had no responsibility for any extraneous information in the files. (Gov't br. at 7-13)

This appeal turns on what the Government owed the contractor in the way of electronic files which Mortenson was to use to prepare the as-built drawings. It is a cardinal rule of contract interpretation that an interpretation which gives meaning to all parts is preferred to one which renders a portion meaningless or void. *Hol-Gar Mfg. Corp. v. United States*, 351 F.2d 972 (Ct. Cl. 1965); *Gould, Inc. v. United States*, 935 F.2d 1271 (Fed. Cir. 1991); *C.S. McCrossan Constr. Inc.*, ASBCA No. 49647, 00-1 BCA ¶ 30,661.

Section 01720, ¶ 3 DRAFTING STANDARDS obligated the Government to provide Mortenson with "[C]opies of the original contract drawings on electronic data media (disks, tapes, or optical disks) in AUTOCAD version 11 format." Absent contractual definition, we give "copy" its ordinary meaning. *See Alive & Well Intl., Inc.*, ASBCA No. 51850, 00-1 BCA ¶ 30,778 at 152,001 citing *George Hyman Constr. Co. v. United States*, 832 F.2d 574, 579 (Fed. Cir. 1987). The plain and ordinary meaning of "copy" is a "reproduction or imitation of an original" or a "duplicate." (Webster's II New Riverside University Dictionary 310 (2nd ed. 1994)) We hold the contractor was entitled to the electronic files used to prepare the "original contract drawings."

Mortenson adequately was advised there may be "extraneous" information in the file; "extraneous" is defined as "coming from outside." *Id.* at 457 That was not Mortenson's complaint. This appeal is sustained to the extent additional or corrective work was necessary because the electronic files did not enable it to reproduce original contract drawings before it could prepare the as-built drawings, or where the electronic files were missing. *See Steele & Sons, Inc.*, ASBCA No. 49077, 00-1 BCA ¶ 30,837 at 152,199. The contract's requirement that the paper drawings controlled in instances where the electronic files differed did not diminish the Government's obligation to provide the appropriate electronic files; it only established an order of precedence for information used in the final, as-built drawings.

The Government argued that the contract did not require it to provide Mortenson with electronic files for ASD drawings which resulted from contract modifications. We agree. The contract only obligated the Government to provide electronic files for "original contract drawings" (\S 01720, \P 3), although the contractor was required to include in the asbuilt drawings a "record of all deviations, modifications or changes" (\S 01720, \P 1).

The appeal is sustained in part, as provided above, and denied in all other respects. That portion which is sustained is remanded to the parties for negotiation of quantum.

ASBCA No. 53065 Thermal Breaks at Roof Level Pods

Mortenson sought an equitable adjustment for providing six thermally-broken door frames at the roof level pod doors, and argued this exceeded contract requirements because the doors did not occur at "exterior conditions." "Pods" are plenums or spaces designed to

accept outside air which supplies the HVAC system. These door frames are designed to reduce the amount of thermal conductivity transmitted from the exterior to the interior by creating gaps and/or using non-metallic components within the frames. The Government contended the contract required these frames for the subject door openings, and they were not an additional cost.

FINDINGS OF FACT

Specific requirements for various doors are found in TS SECTION 08000. The "remarks" section states the notation "HM" means "HOLLOW METAL" and "INS" means "INSULATED." The remarks column of the chart depicting the "DOOR AND FRAME SCHEDULE" indicates opening PC101A, which separates the building from the outside, to require an insulated door; no such requirement is imposed for the six door openings in question at Pods A-E: PAR01A, PBR01A, PCR01A, PDR01A, PER01A, and PFR01A. That schedule indicates the material for these door frames is to be "HM" or hollow metal, and references drawing No. A8.501 for additional frame information. (R4, tab 22 at 3, 56, 103-08)

TS SECTION 08110, STEEL DOORS AND FRAMES, provides:

PART 2 PRODUCTS

. . . .

2.1.2 GROUTED FRAMES

All steel door frames shall be grouted solid. Provide plaster guards on door frames at hinges and strikes.

2.1.3 THERMAL BREAK FRAMES

Exterior frames which occur at exterior conditions shall be of the thermal break type. Frames shall have a 3/8 inch vinyl positive thermal break separating inner and outer frame components. Provide complete with thermal barrier anchors and continuous stiffener channels as required.

. . . .

2.3 THERMAL INSULATED DOORS

Interior of thermal insulated doors shall be completely filled with rigid foamed-in-place polyurethane or precured

polystyrene foamed board, permanently bonded to each face panel. The U-value through the door shall not exceed 0.067. Doors with cellular plastic cores shall have a flame spread rating of not more than 75 and a smoke development factor of not more than 150 when tested in accordance with ASTM E 84.

PART 3 EXECUTION

. . . .

3.1.1 GROUTING

Fill inside backs of door frames with solid grout, specified in section 04200 MASONRY. Coat interior of frames with heavy coat of bituminous paint prior to grouting.

(R4, tab 17)

Drawing No. A8.501 DOOR AND WINDOW DETAILS, detail 10 H.M. EXTERIOR JAMB stated: EXTERIOR HOLLOW METAL FRAMES TO BE SUPPLIED WITH THERMAL BREAK (19 July 2001 supp. R4, tab 1).

On 31 May 1996, the Government issued a non-conformance report directing Mortenson to furnish and install thermally-broken door frames for the openings in Pods A-E, relying upon the requirements of TS § 08110, ¶¶2.1.3 and 3.1.1. (R4, tab 4)

Mortenson argued these door frames were inappropriate for the openings in question, and contended the thermally-broken frames were necessary only at "exterior conditions" for doors separating the outside from an interior space with a different ambient air temperature. (R4, tab 8; tr. 185) We find the subject openings had the same environmental conditions: all were at roof level, and provided access from the exterior roof surface into a mechanical plenum room with 13-foot diameter louvers used to fold outside air into the HVAC system. Further, the exterior temperature and the plenum room temperatures were nearly identical. (R4, tabs 18-21; tr.176-78) Mortenson contrasted this environment with doorways connecting the outside to the building's heated interior space, for which thermal breaks are required to insulate the interior from ambient outside temperatures, and cited doorway PC101A, shown in drawing No. A2.235, as an example. Mortenson noted that the contract's door schedule further distinguished exterior/interior doorways from exterior/plenum doorways, because the latter have different types of doors and door hardware. (R4, tab 22; tr. 182-84, 197-98) Appellant concluded the requirement of thermally-broken door frames at the roof pod level was inconsistent with uninsulated doors, the type of hardware specified for the six doors, and the lack of thresholds and dustproof strikes. (R4, tab 3)

After an exchange of letters evidencing the parties' continuing disagreement (R4, tabs 5-10), Mortenson filed a claim dated 17 May 2000 in the amount of \$13,131. (JTE 1, tab a) The CO denied the claim on 19 July 2000 (R4, tab 1), and timely appeal was made (R4, tab 2).

DECISION

In matters of contract interpretation we are guided by the rules set forth in *Hol-Gar Mfg. Corp. v. United States*, 351 F.2d 972 (Ct. Cl. 1965), which establish that an interpretation which gives a reasonable meaning to all parts of an instrument will be preferred to one which leaves a portion of it useless, inexplicable, or inoperative. *Id.* at 979. As a general rule, the Government is entitled to strict compliance with its specifications. *Granite Constr. Co. v. United States*, 962 F.2d 998, 1006-07 (Fed. Cir. 1992), *cert. denied*, 506 U.S. 1048 (1993); *Conrad Brothers, Inc.*, ASBCA Nos. 42675 *et al.*, 97-1 BCA ¶ 28,659, *aff'd*, 135 F.3d 778 (1998) (table). A contractor must also comply with "technical specifications and drawings regardless of their technical soundness, and is not entitled to substitute its own views." *Astro Dynamics, Inc.*, ASBCA No. 28381, 88-3 BCA ¶ 20,832 at 105,364.

The crux of appellant's argument is that providing thermal breaks at the roof pod levels would produce the "absurd result of installing thermal break frames in locations where they serve no design purpose." (App. br. at 3) While the reason for the Government's design is not immediately evident, Mortenson was obliged to comply with the drawings. The six exterior hollow metal door frames in question were explicitly required "to be supplied with [a] thermal break" by the note on detail 10, drawing No. A8.501, and the contractor may not decide simply to ignore this requirement.

The appeal is denied.

ASBCA No. 53122 Closure of Metal Ceilings at Barrel Vault

Mortenson contended applicable contract drawings did not show the exposed tube steel roof trusses at gridlines 9 and 13; that it was forced to custom cut the acoustical metal ceiling in the small areas around those trusses; and that the Government unreasonably rejected the contractor's proposal to paint that part of the ceiling. The Government maintained the contract read as a whole clearly showed both the steel structure and acoustical ceiling finish required, and that no additional costs are justified.

FINDINGS OF FACT

Architectural drawing No. A3.412, relating to the acoustical ceiling, showed lines indicating and a note stating "perforated ceiling system typ" for gridlines 9 to 11. (R4, tab 13) Contract drawing No. A3.413 contained the same requirement for gridlines 11 to 13. (R4, tab 14) Neither drawing indicated a requirement for structural trusses at gridlines 9 and 13 (R4, tabs 13, 14). Architectural drawing No. A5.02, BUILDING SECTIONS, and structural drawings No. S2.61, UPPER ROOF LEVEL FRAMING PLANS, and No. S5.06, FRAMING DETAILS, showed trusses in the barrel vault roof framing plan at gridlines 9 and 13. (R4, tabs 17-19)

Mortenson's request for information (RFI) No. 3005 dated 11 November 1997 sought clarification of the ceiling finish in two small (approximately 6" wide) spaces, one north of gridline 9 and the other south of gridline 13. The RFI noted that contract drawing Nos. A3.412 and A3.413, which called for a perforated metal ceiling, did not indicate structural tube steel trusses in the barrel vault roof at gridlines 9 and 13. The contractor stated that it would be physically impossible to install the metal ceiling within the very small spaces without custom cutting, and suggested painting the exposed surfaces within. Evidently appellant's acoustical ceiling subcontractor, working from drawing Nos. A3.412 and A3.413, had been unaware of the truss locations. The Government's response dated 20 November 1997 acknowledged the difficulty, but rejected Mortenson's proposal. (R4, tab 4)

Mortenson's claim of 17 May 2000 in the amount of \$4,080 restated its position that the omission of structural steel trusses at gridlines 9 and 13 from architectural drawing Nos. A3.412 and A3.413 misled bidders into believing the metal ceiling extended without interruption to both gridlines 9 and 13. Because other drawings show these trusses approximately 6" from these column lines, there was discontinuity in the metal ceiling creating a difficult and expensive installation of finishes in that area. (R4, tab 3) The contractor criticized the Government's rejection of its suggestion to paint the very small subject areas, noting that the two 6" slivers of ceiling were located 50 feet vertically from the main level and 30 feet vertically from the second floor. It alleged the view of those ceiling finishes was blocked by the steel trusses, adjacent sheetrock walls, and mechanical piping systems unless viewed directly from below. (R4, tab 3; tr. 422-23)

The contracting officer denied the claim by final decision dated 17 August 2000. While admitting that drawing Nos. A3.412 and A3.413 did not show trusses at gridlines 9 and 13, the CO noted these trusses clearly were required on structural drawing Nos. S2.61 and S5.06, as well as architectural drawing No. A5.02. The CO reminded the contractor of its duty to review, compare and coordinate all contract drawings, and found the work clearly was required. (R4, tab 1)

DECISION

Mortenson admitted the requirement for structural trusses at gridlines 9 and 13 was shown in structural drawings and one architectural drawing, but contended the omission of that requirement from other architectural drawings constituted a latent ambiguity for which the Government was responsible. It emphasized that the omission was not detected by either the Government or its AE, and that it was a minor detail in a large project. The Government argued that the contract read as a whole put appellant on notice the trusses were required, and that it was unreasonable for the contractor to rely only upon select architectural drawings where a structural element was involved. The Government contended it was entitled to compliance with contract terms.

Appellant bears the burden of proving its claim against the Government by a preponderance of evidence. *TPI Intl. Airways, Inc.*, ASBCA No. 46462, 96-2 BCA ¶ 28,602, *aff'd*, 135 F.3d 776 (Fed. Cir. 1998) (table), *cert. denied*, 525 U.S. 874 (1998). It is a cardinal rule of contract interpretation that an interpretation which gives meaning to all parts is preferred to one which renders a portion meaningless or void. *Hol-Gar Mfg. Corp. v. United States*, 351 F.2d 972, 979 (Ct. Cl. 1965); *Gould, Inc. v. United States*, 935 F.2d 1271, 1274 (Fed. Cir. 1991); *C.S. McCrossan Constr., Inc.*, ASBCA No. 49647, 00-1 BCA ¶ 30,661 at 151,379. It is well settled that a contract is ambiguous only when its terms are susceptible to two different, reasonable interpretations. *M.A. Mortenson Company*, ASBCA No. 50383, 00-2 BCA ¶ 30,936 at 152,705 and cases cited therein.

It was insufficient for a single trade, such as the installer of the metal ceiling, to view only those drawings and specifications pertaining to its work, where interface with other construction aspects is essential. Although a prime contractor may divide the work among several subcontractors according to their skills, the prime remains responsible for all work shown on the contract, regardless of where it is laid out in contract drawings. It is the duty of the prime contractor to reconcile any problems for various trade subcontractors, where the work is clearly required by the contract, but may not fully be shown within a single series of drawings. *Dawson Constr. Company, Inc.*, ASBCA No. 29447, 85-1 BCA ¶ 17,862 at 89,415; *M.A. Mortenson Company*, ASBCA No. 28936, 84-2 BCA ¶ 17,337 at 186,397-98. The prime contractor had a duty to coordinate among the trades, and ensure all the work was properly done. *Gibbs Constr. Co., Inc.*, ASBCA No. 37880, 90-3 BCA ¶ 23,171.

While the trusses admittedly were not shown on all architectural drawings, there was adequate information to alert the contractor of the requirement, and appellant's interpretation cannot stand. While the contractor's suggestion that a painted finish was adequate for a tiny sliver of ceiling not readily visible may have been a reasonable solution, there was no showing that performance was impossible. *Ordinance Research Inc. v. United States*, 609 F.2d 462, 479 (Ct. Cl. 1979).

The appeal is denied.

CONCLUSION

ASBCA No. 53062 is sustained and ASBCA No. 53064 is sustained in part and otherwise denied. These appeals are remanded to the contracting officer for determination of quantum. ASBCA Nos. 53063, 53065 and 53122 are denied.

| Dated: 17 August 2001 | | |
|--|---------------------------------------|--|
| | | |
| | | |
| | REBA PAGE | |
| | Administrative Judge | |
| | Armed Services Board | |
| | of Contract Appeals | |
| | | |
| | | |
| | | |
| (Signatures continued) | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| I concur | I <u>concur</u> | |
| | | |
| | | |
| | | |
| MARK N. STEMPLER | EUNICE W. THOMAS | |
| Administrative Judge | Administrative Judge | |
| Acting Chairman | Vice Chairman | |
| Armed Services Board | Armed Services Board | |
| of Contract Appeals | of Contract Appeals | |
| | | |
| | | |
| I certify that the foregoing is a true copy of | the Oninion and Decision of the Armed | |
| Services Board of Contract Appeals in ASBCA Nos. 53062, 53063, 53064, 53065, 53122, | | |
| Appeals of M.A. Mortenson Company, rendered in conformance with the Board's Charter. | | |
| | | |

Dated:

EDWARD S. ADAMKEWICZ Recorder, Armed Services Board of Contract Appeals