ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of --	)	
	)	
Balfour/S&P Two, A Joint Venture	)	ASBCA No. 58067
	)	
Under Contract No. W9126G-09-C-0054	)	

APPEARANCE FOR THE APPELLANT: Douglas L. Patin, Esq.
Bradley Arant Boult Cummings LLP
Washington, DC

APPEARANCES FOR THE GOVERNMENT: Thomas H. Gourlay, Jr., Esq.
Engineer Chief Trial Attorney
Jane Holt-Duecaster, Esq.
Engineer Trial Attorney
U.S. Army Engineer District, Ft. Worth

OPINION BY ADMINISTRATIVE JUDGE WILSON

This appeal arises from the denial of a claim for costs associated with performing remedial work to correct alleged deficiencies in drilled concrete foundation piers due to alleged defective specifications and the government preclusion of appellant's means and methods to complete construction. A six-day hearing was held in San Antonio, Texas, on entitlement only. The parties have submitted post-hearing and reply briefs. The Board has jurisdiction over this matter pursuant to the Contract Disputes Act of 1978 (CDA), 41 U.S.C. §§ 7101-7109. For the reasons stated below, we deny the appeal.

FINDINGS OF FACTS

1. On 17 September 2009, the United States Army Corps of Engineers, Fort Worth District (Corps or government), awarded Contract No. W9126G-09-C-0054 to Balfour/S&P Two, A Joint Venture (Balfour or appellant) in the amount of $46,437,194 (R4, vol. 1, tab 4). The parties involved in the joint venture were Balfour Beatty and Satterfield & Pontikes, JV (supp. R4, vol. 10, tab 168). The contract was for the construction of the Airmen Training Complex Dormitory 1, at Lackland Air Force Base (Lackland AFB), in San Antonio, Texas. This project, which was the first dormitory to be constructed out of eight identical dormitories, was part of a larger program at Lackland AFB called the Airman Training Complex (ATC). The contract performance period was 730 days from receipt of the Notice to Proceed (NTP). (R4, vol. 1, tab 4) The contract included a structural design for the foundation that consisted

of 136 reinforced drilled piers (also referred to as drilled caissons) installed to a depth of approximately 65 feet below grade (R4, vol. 2, tabs 13-19). The relevant contract drawings required that the upper section of each pier be installed using a sonotube, which is a round cardboard formwork (akin to a giant cardboard paper towel roll) (R4, vol. 2, tab 20; supp. R4, vol. 40, tab 797).

2. The contract also contained the following special technical provisions:

SECTION 31 63 26

DRILLED CAISSONS
08/08

PART 1 GENERAL

1.1 UNIT PRICES

1.1.1 Basis of Bids

Base the bid on the number and total length of caissons, established by top and bottom elevations and diameters.... The Contractor will not receive payment for rejected caissons or for those not conforming to specifications.

....

1.7 SEQUENCING

1.7.1 Caisson Excavation

Perform excavation of caissons or groups of caissons so that reinforcing steel and concrete placement is a continuous operation performed the same day that the excavation is completed. Do not leave excavations open overnight.

....

2.1 MATERIALS

2.1.1 Concrete Work

Perform all concrete work in accordance with requirements of Section 03 31 00.00 10 CAST-IN-PLACE STRUCTURAL CONCRETE, as modified herein:

2.1.1.1 Strength

Provide 3000 psi strength concrete at 28 days, with slump from 4 to 6 inches.

....

2.1.1.3 Reinforcing Steel

Provide reinforcing steel conforming to ASTM A 615/A 615M Grade 60, welded into cages in accordance with AWS D1 . 4/D1 . 4M and inserted securely in the caissons, in position and alignment, as shown, prior to concrete placement.

....

2.1.3 Casing Steel

...Provide casings with an outside diameters [sic] not less than indicated shaft sizes and a minimum of ¼ inch thick. Temporary casings shall extend down 40 feet below existing grade....

....

3.2 INSTALLATION

....

b. Bring concrete to a true level surface inside the shaft and a full width cross key formed, or dowels installed, if it becomes necessary to interrupt placing concrete in any caisson. Prior to placing additional concrete, clean surfaces of laitance and slush with one-

> to-one portland cement grout, having a water-cement ratio not exceeding that of the concrete.

(R4, vol. 1, tab 12 at 417, 420-22) The drilled pier foundation is created as follows:

> The process begins with drilling a hole with an aug[e]r. And the soils are displaced....
>
> ...[A] casing is placed down in the hole, as the hole is started. And then once placed inside the hole, the auger action goes inside and continues the drilling until it gets to what's called the proper bearing depth.
>
> And once it reaches a certain resistance that is acceptable to the Government's geotechnical representatives it's considered proper to begin the placement of concrete.

(Tr. 1/14-15) Before the concrete is placed, a rebar cage (approximately 60 feet in length) is inserted inside the drilled shaft. Additionally, the contractor is required to "[c]ontinuously remove all water that flows into the excavations and from the excavation bottom, to the extent possible prior to concrete placement." The applicable contract provisions further state:

> The maximum permissible depth of water is 2 inches. In the event of a severe water condition that makes it impossible or impractical to dewater the excavation, place concrete using an underwater tremie after water movement has stabilized.

(R4, vol. 1, tab 12 at 422) The record reflects that a "tremie" is a solid pipe that concrete is pumped through to fill the previously-drilled shaft. The tremie may be inserted directly in the freshly-poured concrete to continue filling the excavated area; effectively filling the shaft with concrete while flushing out water and other contaminates from below. (Tr. 1/16)

3. The contract contained the following Federal Acquisition Regulation clauses in pertinent part:

> 52.236-5, MATERIAL AND WORKMANSHIP (APR 1984)
>
> ....

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(R4, vol. 1, tab 4 at 166)

56.236-21, SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense....

(*Id.* at 171)

52.246-12, INSPECTION OF CONSTRUCTION (AUG 1996)

....

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirement....

....

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government

consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(R4, vol. 1, tab 5 at 207)

52.246-21, WARRANTY OF CONSTRUCTION (MAR 1994)

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

....

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect....

....

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause....

....

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, The Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(*Id.* at 208-09)

4. The contract also contained numerous drawings, including No. A-S502 "CONCRETE DETAILS" which illustrated the "SONOTUBE FORMING AND CLAY CAP DETAILS" (R4, vol. 2, tab 20)

5. The NTP was issued by the Corps on 23 September 2009, and was acknowledged as having been received by appellant on 6 October 2009 (R4, vol. 2, tab 26). Thus, 6 October 2011 was the original contract completion date.

6. By transmittal dated 1 December 2009, appellant submitted its shop drawings for the piers, which included the "TYPICAL PIER REINFORCING SUPPORT DETAIL" and proposed the usage of "3" CONCRETE MACON PIER BOLSTER (3 – PCS. PER CAGE)" and "PIER SLEDS" to secure the rebar cage inside the concrete piers in the alignment and position shown on the drawings in order to meet the contract requirement that the rebar cage have at least 3 inches of concrete coverage around the cage (R4, vol. 2, tab 27 at 442, 463, 479, 495). It is undisputed that these sleds and bolsters proposed by appellant were made of concrete (tr. 3/71). It is further undisputed that appellant ultimately used plastic wheel spacers (tr. 3/71, 161).

7. On 24 December 2009, appellant submitted Request for Information (RFI) No. 0035, which stated:

> After further coordination with the subcontractors that will be drilling and placing the concrete piers, we have determined that there are some options that will alleviate constructability issues regarding the placement of the pier extensions that extend above grade.
>
> Based on geotechnical information, we are assuming that all piers will require casing. The casing will prevent formwork and reinforcing ties for the portion of the pier above grade from being installed prior to placement of the concrete and removal of the casing. This would require that concrete be placed up to 5'0" below grade elevation, casing completely removed, reinforcing steel pier ties above grade installed, sonotubes cut to correct length, sonotubes set, formed, plumbed, and elevations marked, then a continuation of concrete placement. This work would have to be performed in an amount of time to not create an unintentional cold joint in the pier.
>
> Logistically this will be difficult to achieve and will significantly decrease the production of pier placement. We propose that a construction joint in the piers be designed and located at or near the grade elevation and the

> extension of the piers above grade be formed and placed the following day.
>
> Please advise if this will be acceptable.

The Corps responded on 30 December 2009 stating: "Place the construction joint at 5 feet below grade. Form the top tiers with sonotube per Detail 6/B-S502." This response was sent by Yijie Qiang, Senior Design Engineer. (R4, vol. 2, tab 29)

8. Subsequently, on 4 January 2010 the Corps offered an additional response to RFI No. 0035. This response, sent by Mr. Joshua Alley, the Corps' Quality Assurance Representative (QAR), provided the following: "It is acceptable to place a cold joint 3' above grade on the piers. The government considers this to be a clarification of the contract requirements, it does not constitute a change to the contract and does not require a change to the cost or time." The response also noted that several email attachments were included in the response authored by Messrs. Ken McCleskey and Steve McCall. (R4, vol. 2, tab 30) Mr. McCleskey was the lead geotechnical engineer for the Dormitory 1 ATC project (tr. 2/172). Mr. McCall was the lead QAR for the Corps (tr. 3/54).

9. On 11 January 2010, Mr. McCall sent an email to Mr. McCleskey requesting that he review RFI No. 0035 and the Corps' response (via Senior Design Engineer Qiang). Mr. McCall added:

> The contractor is voicing concern about the potential of water and mud being at the top of the concrete 5' below grade making it very difficult to clean off. If the concrete was brought to grade then the water and mud would not be an issue. Pat Finley said that this was a Corp detail and he did not want to very [sic] from it without your input.

Mr. McCleskey replied, by email dated 14 January 2010 (9:21 am) as follows:

> I'm not sure I understand what the contractor's issue is.
>
> Typically, they should drill the pier, using casing to seal off any groundwater or sloughing materials from the walls of the excavation. They would then underream and cleanout the pier with their belling tool, and, once approved by us (USACE COR), install their rebar cage into the pier hole. Next they would place their concrete to near the surface. Lastly, they would seat the sonotube

> within the uppermost part of the pier, per our detail (i.e., with sonotube placed within the upper 5 feet of pier to ensure the formed concrete at the top of the pier is cylindrical in shape....
>
> If they use the sonotube, per the contract drawings, I see no reason why they can't place the pier concrete to the elevation indicated on the structural drawings (i.e., there should be no reason why they would have to stop pier placement below grade).
>
> Therefore, their requested deviation should be refused.

(R4, vol. 2, tab 31)

10. Mr. McCall replied via email at 1:30 pm on the same day, which read as follows:

> The question is how hard is it to place the sonotube once the casing is removed and maintain a continuous column of concrete in the pier without having a cold joint at the bottom of the sonotube, especially since the top of the son[o]tube in some cases is 8' above the dirt grade? Pat Finley's [the designer of record] response would leave us to believe that a cold joint is permissible at this point, do you concur with his response? If you do concur then what is the recommended method for cleaning the top of the concrete to avoid having compressible materials at the cold joint?

Mr. McCleskey responded by email also on the same date, stating in pertinent part:

> There shouldn't be an issue removing the casing and placing the sonotube and remaining concrete. The entire operation of placing the concrete to near the top of the casing, removing the casing...placing the sonotube, and completing concrete placement should take less than 30 minutes on a typical pier. Properly done, this should be a *continuous* operation....
>
> ....

> So, to reiterate, I advise that we refuse the contractor's proposed deviation. The piers should not be constructed with a cold joint, and, following the typical/common practice drilled pier construction procedure outlined above, a cold joint shouldn't even come into play.

(R4, vol. 2, tab 32)

11. On 16 January 2010, the site was flooded due to a water main break, thereby delaying the project (supp. R4, vol. 10, tab 178). The record also contains numerous references to water at the site as an issue in the pier construction process and a significant number of piers that had to be drilled at least twice prior to completion (supp. R4, vol. 26, tabs 349-83). By email dated 18 January 2010, Mr. McCall communicated to Messrs. Finley and McCleskey to relay the following information:

> This e-mail is to document and confirm a conversation between Pat Finley and me on Friday 15 January 2010. The subject of the conversation was to discuss means and methods of installation of the son[o]tube extinctions [sic] for the piers. Pat reported that he would accept a joint in the columns that extend the piers to the 1st floor slab. If the contractor installs the son[o]tube to 2 or 3 feet above the dirt grade in the crawl space and places the concrete in a simultaneous pour once the pier casing is removed, this would avoid a cold joint below grade in the pier. This removes the contractor[']s constructability issues with having mud and water in the piers....
>
> Please respond to this to voice any concerns you might have.

(R4, vol. 2, tab 33) The record reflects that Mr. McCleskey had no concerns regarding the methods proposed in the above-mentioned email (tr. 2/214). We find that the Corps decision to allow the use of a cold joint at 3' above grade was reasonable.

12. On 15 February 2010, the first piers were drilled by subcontractor Batten Drilling. The record reflects that Mr. McCleskey made a site visit to Lackland AFB to inspect the start of pier drilling operations. In his detailed memorandum for the record, he observed the excavation of 3 piers, designated as C-3, C-4, and D-5. Several issues arose including: 1) concrete slump was initially 3 inches, later corrected by adding water to achieve the requisite 6 inch slump (C-3); ground water seepage and material sloughing into the previously drilled cavity and casing placement

(C-4); and suspending the rebar cage by a crane during concrete placement due to over drilling the pier cavity (C-3 and D-5). Mr. McCleskey concluded:

> Batten Drilling appeared to be having difficulties, as noted herein, drilling and underreaming the piers on the date of the inspection. It is the opinion of the undersigned that these issues are primarily attributable to the "first day" lack of familiarity with the site-specific subsurface conditions. Drilling efficiency and pier construction processes are anticipated to improve as more experience is gained at the site. However, the issues regarding casing placement and withdrawal from Pier C-4 cause greater concern for the understanding of basic drilling principles in areas of known water-bearing sloughing materials.... It should be noted that the subsurface conditions encountered on the date of the inspection were very similar to those described in the logs of borings included in the USACE Foundation and Pavement Design Analysis and presented in the contract drawings.

(R4, vol. 2, tab 65)

13. On 18 March 2010, Mr. Joshua Alley, the Corps' QAR sent appellant the following email:

> From approximately 1630 on, the only representative of [appellant] in the area that the work was being performed was Mike Dugger, the SSHO [Site Safety and Health Officer].
>
> Mike Dugger was performing the work of the SSHO, the Superintendent, and the QC. As per the terms of the contract, the SSHO is only to have the duties of the SSHO.
>
> Further, during the placement of one of the piers, I had to stop work before the concrete could be placed in the sonotube because it was visibly obvious that the sonotube was out of plumb. Upon checking the sonotube, I found that the sonotube was several inches out of plumb. I asked to have the pier corrected and it was brought to within the tolerances described in the specifications....

> If you intend to continue working the hours that you worked yesterday, then you also need to provide adequate Quality Control and Superintendence to ensure that the work being done meets the contract requirements, and to allow the SSHO to perform his work without interruption or distraction.

(R4, vol. 3, tab 130)

14. Appellant responded via email on 19 March 2010 indicating that several representatives were on site and that "[t]he piers in question will be checked and dealt with accordingly" (R4, vol. 3, tab 133).

15. On 20 March 2010, QAR Alley forwarded via email a spreadsheet to appellant detailing several piers that were not plumb and were marked "Fail." He stated further: "Please examine the data and let me know when you are ready to meet to discuss what the next step should be." (R4, vol. 3, tab 135)

16. By letter dated 12 May 2010, the Corps identified several deficiencies in the pier construction including:

> 1. Piers not within tolerances for plumb or out of tolerance for alignment.
> 2. Reinforcement inside piers does not have the required clearance to the surface of the concrete.
> 3. Concrete in piers does not meet contract requirements.
> 4. [H]ook bars in perimeter beam and slab were tied to the inside of the reinforcement cages and not outside as per the details[.]
> 5. The required number of dowels between the Pier Cap in Area A and the surrounding slab has not been provided.

Additionally, appellant was directed to submit proposals for the methods of evaluation to the Corps for review. After acceptance of the proposed testing methods, appellant was required to test and document the condition of all of the piers. For those piers found to be deficient, appellant was to submit a repair plan to the Corps for approval. Upon approval, appellant was further directed to treat the repair work as "a new feature of work, and will require a full preparatory meeting, initial inspection, and follow-up inspections." Finally, in addition to indicating that appellant's quality

control had been lacking, the Corps concluded that appellant's performance had been unsatisfactory. (R4, vol. 3, tab 149)

17. By letter dated 19 May 2010, appellant replied to the Corps' 12 May 2010 letter indicating that it had taken immediate action on the issues. First, appellant fired its structural quality control inspector "due to a systemic failure of enforcing the appropriate quality control measure required for this project." Appellant reported that it was bringing on a new QC inspector with significant experience as well as using the general superintendent to "take an active and increased role to monitor and control the quality control department." With regard to the other issues, pier plumbness and location, underground pier plumbness, poor concrete, pier rebar cover and length, open piers, and other problems, appellant proposed a "MOVE FORWARD PLAN" as follows:

1. Refine method to identify and fix deficient issues.
    a. Utilizing the pachometer we will
        1) Locate rebar depth, top and bottom at above grade pier extension
        2) Locate top of pier cage reinforcing
    b. Core and perform penetration test (Windsor Probe) on a sampling of pier extensions as identified by our third party engineer to verify concrete strength
    c. Excavate 5' below grade at piers J11, F12 and K10 identified by our third party engineer to inspect and test below grade concrete.
2. Submit identification and fix process to USACE for approval.
3. Proceed with identification and fix.

(R4, vol. 3, tab 150) Based upon the foregoing, we find that appellant did not employ the appropriate quality control measures at the site.

18. On 25 May 2010, the Corps informed appellant that it's proposed QC representative's personnel qualifications had not been received and that until a new structural QC qualified per Specification § 01 45 01 had been submitted and approved, no further work on "structural functions" of the project may proceed. The Corps further noted that the requirement for maintaining documentation was also not being met. (R4, vol. 3, tab 151)

19. By letter dated 14 July 2010 appellant advised that it had retained Mr. Edward Ulrich, P.E., to assist with the resolution of the foundation construction

issues. Appellant conveyed Mr. Ulrich's findings that "most of the conditions observed in the piers are inherent in the USACE's design and instructions and its denial of Balfour/S&P's request to modify the design in RFI 0035, and as such, could not reasonably have been avoided under the circumstances." Thus, appellant put the Corps on notice that it was reserving its rights with regard to all costs and schedule delays associated with the foundation repairs. (R4, vol. 4, tab 152, attach. 11)

20. The record reflects that the defective piers were identified and repairs were commenced (supp. R4, vol. 26, tab 383 at 10176). The parties attempted to resolve the issues, which culminated in a handwritten settlement agreement dated 6 May 2011. This agreement, which was signed by appellant and the Corps, was "Subject to Availability of Funds." (Supp. R4, vol. 40, tab 776) However, it was later determined that funding was not available for the entire amount (tr. 5/51). The parties reentered into negotiations and, on 17 June 2011, settled other issues via Modification No. P00032, while reserving the pier claim (supp. R4, vol. 38, tab 6).

21. On 19 September 2011, appellant filed a claim with the contracting officer (CO) in the amount of $4,769,979 which appellant believed it was due because of "the Government's defective pier design and ensuing constructive changes to Balfour Beatty/S&P's contractual obligations with respect to the piers both during the original pier construction and the repair of conditions that the Government considered defective" (R4, vol. 4, tab 152).

22. By letter dated 6 December 2011, the CO informed appellant that she had received the claim and expected to issue a decision on or before 28 February 2012 (notice of appeal, ex. 1).

23. By letter dated 4 April 2012 appellant filed a notice of appeal with the Board on a deemed denial basis, due to the CO's failure to issue a final decision on the aforementioned claim by 28 February 2012. The appeal was docketed as ASBCA No. 58067.

24. At the hearing, appellant offered the expert testimony of Mr. Edward Ulrich, P.E. He was qualified without objection as an expert in soil mechanics and foundation engineering with a special expertise in drilled piers (tr. 1/60). He opined that the pier sonotube detail shown in the project drawings was not buildable in one continuous pour without a cold joint below the ground surface under the conditions of water and mud behind the temporary casings. Also, he concluded that the Corps improperly rejected the use of a crane to position the rebar during the process of pouring the concrete piers. This refusal, he concluded, created many of the issues uncovered. (Supp. R4, vol. 40, tab 775)

25. The government offered expert testimony* of Robert Brehm, Ph.D., P.E., Chief Executive Officer of Construction Analysts, LLC (CA), a construction management and consulting firm (supp. R4, vol. 39, tab 711). Dr. Brehm has over 40 years of experience in construction engineering including private industry and academia (tr. 6/22). Appellant objected to his qualifications as an expert, contending "[s]imply being a civil engineer or having years of construction management experience does not give him the necessary expertise or qualifications to give opinions on the drilled pier issues that are involved in this case" (tr. 6/21). The Corps countered that Dr. Brehm has extensive experience in the construction industry and has taught the concepts that are being applied by people working in the industry who apply those same means and methods he teaches in the classroom. The Board, upon consideration of the depth and breadth of construction experience, allowed Dr. Brehm to offer expert testimony in the instant appeal (tr. 6/23).

26. Dr. Brehm offered the following summary of opinions and conclusions in pertinent part:

> 1. CA opines that the design requirements established by the USACE in the contract documents are consistent with standard industry practice and buildable in the geotechnical conditions at Lackland Air Force Base, San Antonio, Texas.

Further, he concludes that appellant "failed to perform the work on the drilled concrete caisson piers in reasonable conformance with the contract documents and demonstrated a lack of quality control to ensure compliance as required by the contract documents and standard industry practice. (Supp. R4, vol. 39, tab 711) With regard to the issue of the allowance of a cold joint, he testified that a monolithic pour would have flushed out the contaminants from the concrete due to the fact that the concrete used was denser than the water. As the concrete was pumped into the pier cavity, the heavier concrete would essentially cause the water to rise to the top and ultimately flushed out at the top (*see* tr. 6/30-33). Moreover, with regard to using a crane to stabilize the rebar cage he testified that it is not industry practice to hold the rebar cage to ensure vertical alignment while concrete is being placed. He further added that the lack of concrete coverage around the rebar cage was more than likely due to the failure to maintain the plumbness of the cage resulting from improperly installed spacers. (Tr. 6/43) We find this testimony persuasive.

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* The government also offered Mr. William Manginelli as an expert in delay analysis (tr. 4/129). As this decision denies the appeal in its entirety, the Board need not consider his testimony in relation to the instant appeal.

27. Based on the facts in the record, as presented at the hearing and Mr. Ulrich's lack of analysis contained in his report, we find that Mr. Ulrich's testimony was not as persuasive as that of Dr. Brehm.

DECISION

Both parties acknowledge that several of the piers were defective and not compliant with the contract specifications. However, the parties disagree as to which bears responsibility for these defects and ultimately should bear the cost burden of the subsequent repairs. Under the applicable contract clause (finding 3), the contractor is liable for defects in workmanship, unless the deficiencies were caused by defects in government-furnished materials or design.

Appellant contends that the government restricted its means and methods of completing the work according to the specifications contained in the contract. Specifically, appellant avers: (1) despite the contract allowing cold joints in the pier installation (Section 31 63 26, Drilled Caissons, Part 3.2(b)), the government arbitrarily did not permit cold joints; (2) the government's decision to bar appellant from stabilizing the rebar cages with cranes during the concrete pour operations caused misalignment of the rebar cages and poor concrete coverage on the completed piers; and (3) the government's prohibition on relief hole excavations to expunge contaminates from the piers prior to placing the sonotubes contributed to the poor concrete in the pier extensions. Additionally, appellant argues that the government did not prove that appellant's faulty workmanship or lack of quality control caused the pier defects. (App. br. at 30-37)

The government contends, *inter alia*, that appellant failed to comply with many of the contract requirements, including: (1) failure to control water at the site; (2) pre-drilling several of the piers in violation of the express provisions to the contrary; (3) installing rebar cages that did not extend the full depth of the drilled pier; (4) the usage of plastic wheels as spacers on the rebar cages rather than concrete sleds they proposed and the Corps accepted, and these plastic spacers broke off or bent during the placement of the rebar cages inside the piers thus failing to keep the cages plumb and the requisite 3 inches away from the side of the pier; (4) failure to flush contaminants (soil and/or water) out of the pier concrete properly; (5) misplaced dowels outside of the rebar cage rather than within the cages in accordance with the contract requirements; and (6) failure to ensure proper quality control over the pier excavations and concrete placement. (Gov't br. *passim*)

It is well settled that when government plans or specifications specify, in design detail, the precise manner or method of performance, the government impliedly warrants a satisfactory performance result if the plans and specifications are followed. *United States v. Spearin*, 248 U.S. 132 (1918). This implied warranty, however, only

runs to contractors that comply with the plans and specifications. *Al Johnson Construction Co. v. United States*, 854 F.2d 467, 469 (Fed. Cir. 1988). As the claimant, the burden is on the contractor to prove that it complied with the plans and specifications and that despite compliance, defective work resulted. *Maecon, Inc.*, ASBCA No. 31081, 89-2 BCA ¶ 21,855 at 109,945.

Here the record shows numerous instances of QC failures and we found that appellant failed to maintain an adequate quality control system (finding 17). Moreover, appellant did not comply with the plans and specifications, particularly with regard to the rebar cage, thus creating piers out of plumb and the rebar not properly aligned within the concrete (finding 6). With regard to the contract interpretation issue regarding the use of a cold joint, we found that the government's engineering concerns and ultimately allowing a cold joint above grade were reasonable (finding 11). Moreover, the government's expert gave a more plausible reason for the pier defaults that we found persuasive (finding 27). Thus appellant failed to meet its burden to prove that the defects were due to the government's plans and specifications and/or actions.

In light of our decision we need not consider appellant's claim for a time extension due to government-caused delay.

CONCLUSION

Accordingly, the appeal is denied.

Dated: 1 September 2015

OWEN C. WILSON
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

MARK N. STEMPLER
Administrative Judge
Acting Chairman
Armed Services Board
of Contract Appeals

I concur

RICHARD SHACKLEFORD
Administrative Judge
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. 58067, Appeal of Balfour/S&P Two, A Joint Venture, rendered in conformance with the Board's Charter.

Dated:

JEFFREY D. GARDIN
Recorder, Armed Services
Board of Contract Appeals