ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of -	)	
	)	
Skanska USA Civil Southeast, Inc.	)	ASBCA Nos. 61220, 61347
	)	
Under Contract No. N40085-10-C-3006	)	

APPEARANCE FOR THE APPELLANT:	Arnie B. Mason, Esq. Williams Mullen PC Tysons, VA
APPEARANCES FOR THE GOVERNMENT:	Allison McDade, Esq. Navy Chief Trial Attorney Elizabeth C. Tosh, Esq. Trial Attorney

OPINION BY ADMINISTRATIVE JUDGE ARNETT

Skanska USA Civil Southeast, Inc. (Skanska or appellant) seeks compensation for claimed additional costs arising from the removal of interior timber bearing piles during the performance of a firm fixed-price contract with the Department of the Navy (the government or Navy) for the demolition of two existing piers (Piers 4 and 5) and construction of a new pier at the Norfolk Naval Shipyard (NNSY) in Portsmouth, VA. Skanska attributes its claimed additional costs to either defective specifications or a differing site condition (DSC) (app. br. at 4). In support of its defective specification argument, Skanska cites as a defect a note in the solicitation instructing bidders to assume that the timber piles were treated with creosote[1] (*id.* at 2-3). Skanska argues that it was legally impossible to fully extract the interior bearing piles within the dredge limits in the permit because the piles were not treated with creosote (*id.* at 5, 88-90). Next, Skanska asserts that the lack of creosote treatment constitutes either a Type I or Type II DSC (*id.* at 91-101). Finally, Skanska contends that the Navy's characterization of the note as a "worst-case scenario" for bidders constitutes a constructive change (*id.* at 101-03).

For the reasons explained in detail below, we conclude that the evidence does not support finding a defective specification, a Type I or Type II DSC, or a constructive change because Skanska should have reasonably anticipated the conditions it encountered. Therefore, we deny the appeals.

[1] Creosote is a type of tar produced from coal and commonly used to preserve timber (app. supp. R4, tab 69 at 24).

FINDINGS OF FACT

The Project:

1. On May 26, 2010, the Navy solicited proposals for a firm fixed-price design-bid-build project (the Project) to demolish Piers 4 and 5 and construct a new replacement pier at the NNSY (R4, tab 1 at 1, 3[2]). In addition, the successful offeror was required to dredge the area to a specified depth in compliance with a U.S. Army Corps of Engineers (USACE) permit (R4, tab 5 at 2; app. supp. R4, tab 16 at 4). Jutting into the Elizabeth River, Piers 4 and 5 were "closed face" piers supported by thousands of approximately 70-foot-long interior bearing piles buried in soil and enclosed with tongue and groove concrete sheet piles to hold the soil in place underneath each pier (app. resp. to gov't Proposed Finding of Fact (PFOF) ¶¶ 9, 18, 87; tr. 2/76, 163).

2. Although the solicitation included a full design prepared by the designer of record, MN3M[3] (the DOR), the successful offeror was required to have a licensed engineer design the means, methods, and procedures for demolition of the existing piers (tr. 4/68-69; R4, tab 7 at 6-7). Lacking experience with pier demolition design (tr. 5/20-21), the DOR met with three prospective contractors, including Skanska, early in the design to solicit input on the Project and "how they might approach the pier demolition" (tr. 4/81-85, 5/66-68). Feedback included concern that the "demolition aspects of this project was (sic) going to be one of the more challenging aspects" (tr. 4/85). None inquired whether the existing timber piles were treated with creosote (tr. 4/83).

3. Prior to issuing the solicitation, the Navy conducted a site visit; however, attendees, including Skanska, were unable to see or inspect the interior bearing piles supporting the piers because the piles were under the piers and obscured behind concrete sheet piles (app. supp. R4, tab 15 at 3; app. resp. to gov't PFOF ¶ 11; tr. 1/134-35).

4. Each offeror was required to submit a Technical Approach with a "narrative that describes the construction means and methods" for demolition of the existing piers, including "ensuring the existing concrete sheet pile walls remain in place while the interior fill and timber piles are removed from existing piers 4 and 5" (R4, tab 17 at 8). To prevent the soil under each pier from spilling into the water at this operational nuclear shipyard, the soil had to be removed and excavated while the

[2] Documents in the Rule 4 file are numbered using letter prefixes and leading zeros. We have dropped the prefix and leading zeros in this decision for ease.

[3] MN3M was a joint venture comprised of Moffat & Nichol and MMN Design Group (tr. 4/68).

concrete sheet pile walls forming the perimeter of each pier remained in place (*id.*; tr. 2/44, 49-50).

5. There were three types of timber piles to be removed during demolition: (1) interior bearing piles buried almost completely in soil beneath each pier and driven into the riverbed; (2) batter/brace piles[4] which were interior bearing piles driven at an angle; and (3) fender piles which were in the water and driven into the riverbed around the exterior perimeter of each pier to prevent damage from ships (tr. 2/35; app. resp. to gov't PFOF ¶¶ 25-26). The interior bearing piles are the subject of this litigation.

6. On July 29, 2010, Skanska submitted its Technical Proposal (the Proposal) highlighting its prior experience with projects at NNSY, including the Crane Rail Interconnect and Oil Waste/Waste Oil Collection System (Crane Rail Project) (ex. A-1 at 4192-04). The Proposal depicted the conditions under the piers as "muck" and reflected Mean Low Water[5] (MLW) at or above the tops of the interior piles (*id.* at 4261). It stated, "The Skanska Engineer has developed a detailed sequence of construction and methodology for the demolition of Pier 4 and 5" (*id.* at 4245-48, 4268). Skanska's thirteen-step sequence included Step 8, which focused on removing the existing planks, decking, timber caps and timber piles (*id.* at 4246). It stated, "Existing interior supporting timber piles will be removed by either a crane located on top of the relieving platform, a barge or derrick crane *in the same manner as previously described* for the timber piles, cut by chain saw and/or a shear mounted on an excavator, and loaded to a barge" (*id*. at 4246-47) (emphasis added). Step 8 references a prior section of the Proposal regarding fender piles which provided for removal by "either of" the following methods "depending on the initial resistance and condition of the piles:" 1) "chocking the pile by direct line pull by the crane" or 2) using a vibratory hammer with an extractor attachment[6] (*id.* at 4242). Further, it stated,

> For piles that are not visible and/or broken off at on (sic) near the mud line will be located, inspected by divers, and again referenced to the reference drawings. Divers will assist by attaching lines to piles that are below the water line but above the mud line for removal under method one. In cases where piles can not be removed by this method, a diver will assist with guiding a 'Randall Straw' pipe . . . pile over the existing piling. The pipe pile will then be vibrated down around the pile to break the pile free. The

[4] Batter/brace piles were only installed on Pier 4 (gov't br. at 8; app. PFOF ¶ 76).

[5] MLW is the average water level at low tide (tidesandcurrents.noaa.gov/glossary).

[6] Testimony clarified that Skanska planned to use both the vibratory hammer with the crane "in combination" to extract the interior bearing piles embedded in soil (tr. 1/176-77).

> pipe pile and timber pipe are then extracted together. Once the piles are removed from the water, air will be introduced into the pipe pile which will allow the timber pile to be extracted from the pipe pile.
>
> In areas where timber piles are below the mud line or cannot be located, a clamshell bucket attached to the crane will be lowered to probe for the potential piling. If a pile is located, it will be removed by 'biting" it with the clamshell and lifting it. Probing with the clamshell will continue until the team is satisfied that no obstructions remain. Piles will be cut and disposed of as previously described.

(*id.* at 4242-43).

7. During proposal evaluation, the Navy identified as a "strength" Skanska's "several alternatives for pier, berth wharf demolition to deal with potential construction issues particularly methods for removing piles" (app. supp. R4, tab 18 at 41). The parties stipulated that "[a]ll of the other bidders for the . . . Project included the vibratory hammer as the principal method in their respective technical approaches to remove timber piles in the interior of Piers 4 and 5" (ex. A-4).

8. On September 29, 2010, the Navy awarded Contract No. N40085-10-C-3006 (the Contract) in the amount of $164,321,000 to Skanska (R4, tab 36 at 1-2). The Proposal was incorporated into the Contract upon award (*id.* at 3). The Contract contained various clauses, including Federal Acquisition Regulation (FAR) 52.236-2, DIFFERING SITE CONDITIONS (APR 1984) and FAR 52.243-4, CHANGES (JUN 2007) (*id.* at 21).

Pertinent Contract Requirements and Skanska's Demolition Plan:

9. The Contract required Skanska to "design complete demolition procedure" for Piers 4 and 5 and submit a demolition plan in accordance with Specification § 02 41 00.00 22 (R4, tab 12). Specification § 02 41 00.00 22, para. 1.10, required the following:

> Using the information from the drawings, specifications, reference drawings, geotechnical data report, waterfront inspection report and hazard materials report, prepare and submit a detailed Demolition Plan. The Plan shall be prepared and sealed by a licensed Professional Engineer

> and approved by the Contracting Officer prior to any on-site work beginning.

(R4, tab 7 at 6). The Demolition Plan was to include drawings with supporting structural and geotechnical calculations and a detailed description of the sequence of work and procedures to be followed throughout the demolition process, including methods and equipment to be used for each operation and sequencing (*id.* at 7). We find this Contract requirement to be a performance specification.

10. Skanska's Pier 4 Demolition Plan (the Demo Plan) indicated that timber piles would be removed by land-based crane, loaded onto barges, cut to approximately 45' lengths, loaded onto trucks or dumpsters, and disposed of at an approved landfill site (gov't supp. R4, tabs 58.0003 at 3116, 58.005 at 3175). It also set forth Skanska's planned sequence of demolition (*id*. at 3117-20). Step 8 stated, "Method for removal of timber piles will be as per Step 3 above" (*id.* at 3119). Step 3 stated,

> Existing timber fender piles will be removed with a vibratory hammer equipped with a timber pile clamp, pulled to loosen the friction of the pile. Once pile is free, the timber pile will be secured to the existing pier and the vibratory hammer will then move to the next pile.
>
> The areas where timber piles are below the mud line or cannot be located, a clamshell bucket attached to the crane will be lowered to probe for the potential piling. If a pile is located, it will be removed by 'biting' it with the clamshell for removal. Probing with a clamshell will continue until the team is satisfied that no obstructions remain.

(*id.*). Step 8 stated that Skanska would remove the soil below the platform to a specified elevation with the waterborne crane and clamshell bucket (*id.*).

11. The Contract required Skanska to completely extract[7] and demolish all timber piles (R4, tabs 12, 14). It also included requirements for handling, transportation, and disposal of hazardous waste (*see generally*, R4, tabs 8-9). During design, the DOR was unable to definitively determine from the historical documents whether the relieving platform, pile caps, and timber piles were treated with creosote

[7] A timber pile is fully extracted if it is completely removed in its entirety (gov't resp. to app. PFOF ¶ 138).

(tr. 4/136). As a result, Drawing SD-101, Demolition Key Plan, included the following Demolition – General Notes:

> 4. FOR HANDLING AND DISPOSAL OF DEMOLITION WASTE, SEE DIVISION 2 OF SPECIFICATIONS.
> 5. ALL BOLLARDS, CLEATS AND OTHER MOORING HARDWARE SHALL BE ASSUMED TO HAVE LEAD IN ANCHOR RECESS & PAINT.
> 6. ALL TIMBER STRUCTURE INCLUDING BUT NOT LIMITED TO PILES, BENT CAPS, RELIEVING PLATFORM SHALL BE ASSUMED TO BE CREOSOTE TREATED.

(gov't supp. R4, tab 54.0002 at 2428). Creosote-treated[8] materials must be disposed of as a hazardous waste or reused in lieu of disposal (app. resp. to gov't PFOF ¶ 203; tr. 2/178). We find the sequence of General Notes 4-6 to be provided in the context of proper disposal of potentially hazardous demolition waste but not limited to that context. Contract Drawing GI-010, General Notes, also included several notes reflecting similar assumptions regarding disposal of potentially contaminated soil, sediment, and debris as well as items that may contain lead or PCBs (*id*. at 2203). The Contract required compliance with applicable federal, state, and local environmental protection standards, laws, and regulations (*id*. at 2203).

12. The Contract also required Skanska to dredge the area to a depth of -46.05 MLW plus allowed over-dredge of up to 2 feet consistent with the USACE permit (R4, tab 42 at 3, 5). The Contract indicated that Skanska might encounter obstructions while dredging, including "debris such as . . . broken piles" and indicated that the Contractor "shall rake the dredge areas and shall remove debris encountered" prior to dredging (app. supp. R4, tab 16 at 1, 3-4).

Contract Information about the Condition of the Piers and Timber Piles:

13. Constructed between 1917 and 1924, Pier 4 was 1,000 feet long, 100 feet wide, and supported by approximately 5,000 timber piles (app resp. to gov't PFOF ¶¶ 9, 12, 31). Constructed in 1940, Pier 5 was 1,000 feet long, 150 feet wide, and supported by approximately 7,500 timber piles (*id.* at ¶¶ 9, 22, 74). At the time of contract award, the interior bearing piles at Pier 4 were about 90 years old, and the interior bearing piles at Pier 5 were about 70 years old. The original fender piles at Piers 4 and 5 were replaced in 1999 or 2000 and were only approximately 10 years old at the time of contract award (R4, tab 13 note 6; tr. 2/73-74).

[8] Creosote has distinct features such that it can be recognized by sight and smell, and it will burn the skin (tr. 2/147, 165-66).

14. For information, the solicitation provided 822 Reference Drawings, including 45 original as-built construction drawings, more than 455 drawings from the Crane Rail Project[9] as well as drawings from other upgrades (*see generally* R4, tab 3; gov't supp. R4, tab 54.0001). The original as-built drawings provided pile locations, depths, and whether piles refused to go further, as well as test pile data, which "tells you generally what you're up against when you're going to drive piles" (*id.* at 56, 68-73, 82-90; tr. 2/71). Out of 34 piles in the test pile data, 5 piles were noted to have been broken (gov't supp. R4, tab 63.0001 at 3496). Navy expert Mr. Waller estimated that 15% to 20% of the piles may have broken during installation (tr. 6/21).[10] We find that the test pile data put Skanska on notice of the likelihood that some piles were broken during installation.

The As-Built Drawings Only Labelled the Fender Piles as "Creosoted."

15. We find that the Pier 4 and Pier 5 as-built drawings depict all three pile types (interior bearing, batter/brace, and fender piles) and use a labeling convention that only called out fender piles as creosote-treated (gov't supp. R4, tab 54.0001 at 57, 59-60, 89). Pier 4 as-built drawing R-005 included a handwritten note that the interior bearing piles and batter/brace piles were not treated with creosote: "Bearing and Brace Piles (not creosoted)" (*id.* at 60; tr. 4/136-37).[11] Fender piles were consistently labeled as "Fender Piles (creosoted)" in the Pier 4 as-built drawings; however, labels for interior bearing piles and batter/brace piles lacked any designation as "creosoted" (gov't supp. R4, tab 54.0001 at 57, 59-60). Pier 5 as-built drawing R-034, Typical Cross Section Thru Pier Detail, labeled fender piles as "Treated timber piles" and interior bearing piles simply as "timber piles" without any designation that the interior bearing piles were "treated" (*id.* at 89). We conclude that the Pier 4 and Pier 5 as-built drawings used a labeling convention that used labels such as "creosoted" or "treated" to denote piles treated with creosote, and fender piles were the only pile type identified as treated. The information provided by Drawing R-005 and the labeling convention appears to have been overlooked by the parties during the design and performance of the Contract.

16. The Crane Rail Project drawings include numerous notes to "cut off existing piles" and labels for "existing 12" dia. timber piles" at Piers 4 and 5 without any mention of creosote-treatment (gov't supp. R4, tab 54.0001 at 663-664). Also, we

[9] Skanska performed the Crane Rail Project from 2000 to 2003 (R4, tab 33 at 2, 7).

[10] This percentage indicates that as many as 2,100 to 2,800 piles may have broken during installation.

[11] Dating from 1917, most notes appear to be handwritten, and some are very difficult to read (gov't supp. R4, tab 54.0001 at 57-80). The DOR testified that he identified this note during the week of trial (tr. 4/136-37).

find no evidence of any pre-bid inquiries about which materials in the existing piers were treated with creosote (tr. 4/137).

The Solicitation Indicated that the Bearing Piles Were Buried in Soil and Water.

17. The as-built information indicated that, at the time of construction, MLW was 92.46 feet, which hit the bearing piles approximately one foot from the top of the pile caps[12] (tr. 4/141; gov't supp. R4, tab 54.0001 at 59). As originally installed, the fill around the bearing piles was approximately the same height as the water at MLW (tr. 4/70-72, 142). Thus, when it was originally constructed, approximately one foot of the piles (including pile caps) extended above the soil and water level at low tide. By 2010, the solicitation indicated that MLW had risen nearly one foot to 93.43 feet, and Mean High Water (MHW)[13] was 96.18 feet (R4, tab 14). As of 2010, the tops of the piles were only briefly visible and exposed to the air at low tide and "completely underwater" the rest of the day (tr. 4/154; 2/99-100; gov't supp. R4, tab 62.0001 at 3332).

18. The solicitation included a 2001 Underwater Facilities Inspections and Assessment at NNSY (2001 Report) which documented the condition of Piers 4 and 5 in late 2000 (app. supp. R4, tab 4 at 1-11, 23-39, 53-63). Since more than nine years had elapsed since the inspection documented in the 2001 Report, the solicitation noted that the accuracy of the report could not be verified and that the contractor should "not rely solely on the content" of the report (R4, tab 12).

19. The 2001 Report indicated that the overall condition of Pier 4 was fair and noted 10 gaps as large as 18" between the tongue and groove of the concrete sheet piles, which allowed the soil to seep out (app. supp. R4, tab 4 at 28). At the larger gaps, voids as deep at 4 feet or more and timber debris were observed (*id.*). The 2001 Report stated that the overall condition of Pier 5 was fair and noted gaps as large as 4 inches between the concrete sheet piles (*id.* at 61). At the larger gaps, voids as deep as 1 foot or more were observed (*id.* at 58). For both Piers 4 and 5, the 2001 Report identified the gaps and voids as a "concern" because "the voids are likely exposing the piles and platform deck to marine borer attack, which is very aggressive around the shipyard" (*id.* at 31, 61). It stated that the extent of the borer damage was "not known" because the timber was "inaccessible behind the sheeting" (*id.* at 31-32, 39, 61-63).

20. We find that the 2001 Report put Skanska on notice that the gaps in the concrete sheet piles were allowing soil to seep out and water to flow in below the

[12] Pile caps were attached to the top or side of the timber piles (tr. 4/70).
[13] MHW is the average water level at high tide (tidesandcurrents.noaa.gov/glossary).

platform around the tops of the bearing piles, as well as the risk of damage from marine borers.

Skanska's Knowledge of Conditions at Piers 4 and 5 and Assumptions:

21. Skanska had prior experience working on Piers 4 and 5 from May 2000 to April 2003 through the Crane Rail Project, which included three pier upgrades (R4, tab 33 at 2, 7). For the first upgrade, Skanska installed a concrete beam along each pier to support a new crane rail. For approximately 200 to 300 feet along the bottom of each pier, Skanska cut the top few feet of the existing bearing piles underneath the platform to allow room for the concrete beam. (Tr. 5/151-52) The second upgrade involved excavating sections of each pier to place a 12 x 12 x 18-foot concrete waste pump station and removing the top 6 feet of the bearing piles to place each pump station (*id*. at 155-161; tr. 2/176-80). Navy Contract Administrator Matthews recalled that Skanska could not cut the piles because "they were then below water level and in a thick mucky mud system environment" (tr. 5/161-62, 166-67). Instead, Skanska used a crane with either a choker or a "vibratory clamp" to pull some piles, but "not all of them came out" (*id.* at 162-63). For the piles that it could not pull out, Skanska used a clamshell to cut them off below where the station was placed (*id.*). For the third upgrade, Skanska removed existing bearing piles to place a 30 x 30-foot concrete base for a mooring system on Pier 5 (tr. 5/146-48). Mr. Matthews testified that Skanska used "all kinds of methods," including "chokers" and "vibratory clamps" to pull the piles (*id.*). Some piles were "aged or broken" and "unable to extract," and Skanska "oftentimes used clamshell just to dig down to bust the bow off below the elevation of where the concrete foundation would be." (*id.*).

22. We find that each of the three upgrades required Skanska to handle bearing piles, giving Skanska firsthand knowledge of the condition of the piles and fill under the platforms of Piers 4 and 5 from 2000 to 2003 and the challenges associated with extracting bearing piles buried almost entirely in soil and muck. We find that Skanska Project Executive Brent Hunt served as a field engineer and Quality Control manager who performed "the actual work" on the Crane Rail Project from beginning to end and was still employed by Skanska at the time of the hearing (tr. 2/140-41, 145, 167). When asked how he could tell that piles on another project were creosote-treated, Mr. Hunt stated, "You could absolutely tell by looking at them, and you could tell even more by coming into contact with them. Anybody who's worked around creosote knows pretty quickly what it smells like. It burns you." (tr. 2/147). Given the distinctive characteristics of creosote and hazards presented by handling materials treated with creosote, we also find that Skanska was on notice from the Crane Rail Project that the bearing piles were not creosote-treated since Skanska was required to properly handle and dispose of the extracted and cut piles.

23. At the hearing, Skanska offered testimony that it intended to use the vibratory hammer on this project to extract timber piles "irrespective of where" they were driven (tr. 3/49), and it only planned to use the clamshell and divers for fender pile removal (tr. 1/185-86, 3/75). However, Skanska's estimator did not expect "things to go perfect" with the vibratory hammer and acknowledged the likelihood of encountering broken piles:

> From our experience, you are going to be able to extract most of the piles if they've not been disturbed and presuming they went in without breaking, which, you would confirm through the pile driver logs when they were initially driven, you would be able to extract the complete pile.
>
> However, there are going to be things that happen, such as – such an (sic) example of the operator not being plumb with the vibratory hammer over the pile and the pile then could break, and that will happen. So no, we did not expect things to go perfect.

(tr. 1/107-08).

24. Skanska presented evidence that it based its estimate on several prior projects in which it successfully used a vibratory hammer to remove treated timber piles (R4, tabs 44 at 3, 5, 49; tr. 3/46). The prior projects cited by Skanska involved removing treated timber piles from marine environments where the piles were surrounded by water (tr. 3/41-42, 150; R4, tabs 49, 53.0003 at 9-11).

25. We find Skanska's only prior experience removing timber piles from a closed face pier, where the piles were buried in soil, was from the Crane Rail Project at Piers 4 and 5. The fact that more than half of the 822 Reference Drawings in the Solicitation were from the Crane Rail Project with approximately 30 references to Skanska's name[14] and job number should have highlighted the relevance of this prior project (finding 14; gov't supp. R4, tab 54.0001 at 274, 277, 280-81, 284-85, 288, 290, 293-94, 297-98, 300-01, 305, 307, 310, 312, 315-16, 319-20, 420, 423, 440-41, 447-48, 452). When asked whether he had ever looked at the drawings from the Crane Rail Project, Skanska's estimator responded that he had "very little involvement in the Crane Rail job" and his understanding of it was "rudimentary, at best" (tr. 1/194). Overlooking the significance of the Crane Rail Project, Skanska's estimator failed to

[14] Skanska was founded in 1932 as Tidewater Construction (R4, tab 33 at 3).

talk with any Skanska personnel[15] from the Crane Rail Project when preparing the bid for this project (*id.*, 2/184).

26. We conclude that the interior bearing piles presented different challenges for removal than the fender piles. Because the fender piles were in water, breaking the "skin friction" was easier on a fender pile because less of it was embedded than a bearing pile (tr. 1/177). Since the interior bearing piles were buried almost entirely in soil and muck, the friction and effort to remove them was much greater than that required to pull the fender piles (tr. 2/52-53, 1/176-77). Also, the fender piles were only 10 years old, whereas the bearing piles were 70 to 90 years old (findings 13, 16).[16] We find that, prior to submitting its proposal, Skanska should have been aware that removing the bearing piles buried in soil and muck would present different challenges than removing the fender piles from their marine environment.

Removal of Timber Piles at Pier 4:

27. In early October 2011, the "cycle of removing timber decking, removing concrete piles, and removing timber piles" was "in progress" on Pier 4 (gov't supp. R4, tabs 57.0005 at 29562, 56.0003 at 64707; tr. 2/115-16). After removing the relieving platform, Skanska found "an open sea of watery muck several feet deep over the entire area of the pier" (app. supp. R4, tab 1 at 61). The bearing piles were buried in fill and muck, with the tops only visible at "very low tide" (tr. 2/132). When visible, Skanska flagged the tops (tr. 2/132). Otherwise, Skanska located the tops by "walking through the mud . . . to locate [them] with your feet" (*id.*). During high tide, workers were waist-deep in water (app. supp. R4, tab 72 at P2120099; tr. 5/121-22). This was not unexpected (tr. 3/51, 2/96-97). The sediment in the water from disturbing the soil under the surface caused visibility to be very poor, so "you couldn't see anything" (tr. 5/110).

28. The October 11, 2011 daily report stated, "Probe/timber pile and pull 4 ea." (gov't supp. R4, tab 56.0010 at 65084, 65096-97). An October 13, 2011 safety report noted, "The operation is being run efficiently and the pile pulling apparatus is working well" (gov't supp. R4, tab 56.0012 at 65233, 65249). The October 26, 2011 daily report noted, "Timber pile removal 5 EA. Broke 9 EA" (gov't supp. R4, tab 56.0025 at 65792). Skanska's Update Schedule, dated November 1, 2011, reported pile extraction issues at Berth 25 but none at Pier 4[17] (gov't supp. R4, tab 57.0006 at 30055, 30057, 30063). It stated, "The first three sections of Pier 4 range 1 were

[16] While not part of the claim, the batter piles were buried in soil like the interior piles but driven at an angle, preventing them from being pulled straight up (tr. 3/50).

[17] Pier 4 included Berths 26-30; Pier 5 included Berths 32-36 (app. supp. R4, tab 4 at 2).

completed. This includes removal of the . . . timber piles . . . and excavation below the platform." (*id.*).

29. Testimony indicated that Skanska's pile removal "[s]tarted off with a deadlift with the crane hooking a wire rope to the actual pile and just trying to pull it up with the crane" and use of a vibratory hammer with hydraulic pressure (tr. 5/105-06). These methods required clamping to the pile that was buried in mud at or below the waterline (*id*. at 105-07). After approximately one month of using the vibratory hammer on Pier 4, Skanska switched to using the clamshell to remove timber piles (app. reply br. at 41). We find no evidence that Skanska sought approval to change its extraction method at Pier 4.

30. On November 3, 2011, Skanska's daily report stated, "Using clamshell Bucket to extract Timber Piles + Fill under Relieving Platform" and set forth a plan to use the clamshell: "In Section 4 . . . the clamshell will be used to remove fill under relieving deck and Timber Piles. The Bucket will bite through the Timber Piles . . . . Final length of Timber Piles (Below 57' NNSY) will be Removed (sic) when dredging begins." (gov't supp. R4, tab 56.0033 at 66146). Skanska acknowledges that it switched to the clamshell for pile removal because the clamshell was more efficient than Skanska's use of the vibratory hammer on the Project (app. reply at 41).

31. On December 18, 2011, Skanska notified the Navy of test results confirming that the interior bearing piles were not treated with creosote and did not "meet the classification of hazardous waste" (R4, tab 39 at 1-2). Skanska stated its "intent to treat the timber piles as non-hazardous waste and dispose of accordingly" and that they were "sure there will be some savings" but had not "quantified" (*id.*).[18] Contemporaneous correspondence indicates that both parties anticipated savings arising from the absence of creosote on the interior bearing piles (*id.*)

32. Skanska's Update Schedules, from January 3, 2012 through June 7, 2012, reported completion of timber pile removal for Sections 5-30 of Pier 4 range 1 (gov't supp. R4, tabs 57.008 at 27658; 57.0009 at 30233; 57.0010 at 30585; 57.0011 at 30987-88; 57.0012 at 31346-47; 57.0013 at 31688-89). None asserted schedule impacts related to Pier 4 timber pile removal (*see generally*, gov't supp. R4, tabs 57.008, 57.0009, 57.0010, 57.0011, 57.0012, and 57.0013).

[18] No evidence has been presented regarding the estimated cost savings arising from not having to haul timber piles to a hazardous waste disposal site. Skanska did not include any disposal costs in its proposal for disposing of creosote-treated timber piles as hazardous waste because it contends that it planned to repurpose them (tr. 3/79-81).

Proposed Change Orders (PCOs)

33. On June 11, 2012, Skanska requested an equitable adjustment and time extension through Proposed Change Order (PCO) No. 78 on the basis that the interior bearing piles were not treated with creosote or within "standard straightness tolerances" (R4, tab 40 at 1-2). Skanska stated that it had been "unable to use conventional extraction methods" and its "intended method of extracting with a vibratory hammer and or dead pulling with wire rope has proven unsuccessful as the pile tops are rotten and break off with minimal force" (*id.* at 1). It asserted that this was a changed condition and that it would "need to develop alternate methods to remove timber piles" (*id.*). [19]

34. On June 19, 2012, Skanska submitted PCO No. 88, realleging its lack of success with its "intended method" and "rotten" pile tops (R4, tab 41 at 1). It stated,

> As a result, we are required to utilize alternate means to remove these piles. This method consists of clam shelling piles and fills simultaneously. Although effective, production is much slower due to the need to separate piles from excavation, increased soil resistance, and smaller size loads of actual soil being removed per bucket cycle.

(*id.*).

35. Skanska's Update Schedule, dated July 9, 2012, reported pile removal at Pier 4 and alleged "schedule impacts or . . . potential future impacts" arising from numerous PCOs including Nos. 78 and 88 (gov't supp. R4, tab 57.0014 at 31966, 31972-73).

36. On August 28, 2012, the Navy rejected Skanska PCO Nos. 78 and 88 (R4, tab 43). While acknowledging that the bearing piles "did not turn out to be creosote treated," the Navy disagreed that creosote-treated piles had "an indefinite life span" (*id.* at 2). Citing a life span of 25-50 years for treated marine piles, the Navy noted that the Pier 4 piles were 90 years old and asserted that "creosote treated piles of this age would have similar difficulties with extraction as non treated piles" (*id.* at 3).

Request For Information (RFI) 423:

37. On March 28, 2013, Skanska submitted RFI No. 423 seeking approval to deviate from the requirement to fully extract the timber piles (gov't supp R4,

[19] We note that, as of June 2012, Skanska had been using alternate methods for timber pile removal at Pier 4 for almost 8 months since November 3, 2011 (findings 29-30).

tab 59.0001). Citing the "timber pile structural condition", Skanska stated it did not intend "to remove the timber bearing piles in their entirety" and requested permission to use a clamshell to excavate down to an elevation of -47.0 feet (*id.*). We note that, at this point, Skanska had been using the clamshell at Pier 4 for timber pile removal since November 2011—almost 16 months (findings 29-30). According to Skanska's Update Schedule dated March 4, 2013, the demolition of Pier 4 was nearly complete (gov't supp. R4, tabs 57.0022 at 35581; 57.0023 at 36822).

38. On April 3, 2013, the Navy responded that piles left in place would need to account for an overdredge allowance of -47 + 2 feet and inquired how Skanska would verify that all piles had been cut off at the proposed elevation (gov't supp R4, tab 59.0001). In preparing a draft response, the DOR recommended that the Navy get concurrence from its Engineering section about "leaving piles in place, understanding that at this point there is likely no practical way to completely remove the piles for Pier 4" (app. supp. R4, tab 26 at 1).

39. On May 22, 2013, Skanska proposed to use a post-dredge survey to confirm that all piles had been removed, but the Navy expressed concern about the level of detail from such a survey (gov't supp. R4, tab 59.0002). On July 11, 2013, Skanska proposed to remove all material down to -49.0 feet rather than -47.0 feet with an overdredge limit of -51.0 feet and perform a "multi-beam type survey" (gov't supp. R4, tab 59.0003). The Navy confirmed that all timber piles did not have to be fully extracted but limited its response to Pier 4 timber piles (*id.*).

40. On August 14, 2013, Skanska reiterated its position from PCO No. 88 and stated its understanding that the Navy was working to modify the permit to allow dredging an additional 2 feet deeper than previously authorized (R4, tab 42). On September 26, 2013, the government extended the permit but stated that the permissible dredge depth would not be changed (R4, tab 59.0004 at 2).

41. On September 30, 2013, Skanska submitted a Request for Equitable Adjustment (REA) asserting that it incurred additional work, delays, and costs arising from Pier 4 timber pile removal (R4, tab 44 at 2, 5-7). It alleged that the lack of creosote treatment was a DSC or defective specification for which the Navy should be responsible (*id.* at 11-12).

42. On October 30, 2013, the Navy agreed to accept a multi-beam survey confirming the removal of material down to -47 feet and "[t]imber piles below the over dredge elevation only need to be fully extracted if they interfere with the installation of [sic] structural element of this project" (gov't supp R4, tab 59.0004 at 3225). There is no evidence of a formal change to the contract memorializing this relaxation of the requirements.

43. Navy expert Mr. Waller asserts, and we concur, that the Navy's decision to relax the requirement to fully extract the timber piles not only saved Skanska the time and cost associated with removing piles broken and buried by its use of the clamshell but also reduced the volume of timber to be disposed (gov't supp. R4, tab 63.0002 at 3512).

Pier 5 Removal of Timber Piles:

44. In August 2014, Skanska dug two test pits at Pier 5 to demonstrate its extraction methods. In one test pit, Skanska was unable to extract a timber pile because the "clamp came loose" and the vibratory hammer kept slipping off the pile. (Gov't supp. R4, tab 60.0027 at 3274; app. supp. R4, tab 54 at 1; tr. 5/137). In the second test pit, Skanska was able to fully extract two piles using a vibratory hammer (tr. 5/126-31). Skanska extracted two piles at Pier 5 for testing on August 26, 2014 (gov't supp. R4, tab 60.0027 at 3274). The two piles appeared untreated and showed no visible signs of rot or decay (*id.*, gov't supp. R4, tab 60.0025 at 3262).

45. As of October 6, 2014, Skanska was "[p]ulling timber piles in the footprint of Pier 5" (gov't supp. R4, tab 56.0755 at 103409). Skanska pulled 12 piles on October 7, 2014, before the hammer "broke down"; Skanska repaired the hammer and resumed pulling piles the next day (gov't supp. R4, tabs 56.0756 at 103448, 56.0757 at 103480). Subsequent reports note hammer issues beginning to impact the schedule (gov't supp. R4, tabs 56.0758 at 103527; 56.0759 at 103576). By October 15, 2014, Skanska was revising its "Timber Pile Pulling [Workplan]" (gov't supp. R4, tab 56.0764 at 103708, 103712). On October 16, 2014, after pulling the remaining 20 piles on the east end of Pier 5, Skanska stated, "To date, approximately one third of the timber piles have broken in response to Skanska's planned extraction method" and sought direction on "how to proceed" with pile extraction (gov't supp, R4, tabs 56.0765 at 103748, 61.001 at 64521).

46. By January 28, 2015, Skanska reported a steady decline in its success rate pulling piles on Pier 5, with only 191 pulled and 145 broken piles since November 16, 2014 (gov't supp, R4, tab 61.002 at 64526). Skanska attributed its failures to "the lack of creosote treatment of the timber piles in combination with the unanticipated subsurface conditions that make extraction so difficult" (*id.*). Skanska stated it would cease pulling piles and begin clamshell/excavation to remove the piles and soil at Pier 5 (*id.* at 64527). We find that Skanska's statement acknowledges the increased friction and challenges associated with extracting piles buried in soil and muck. We also find Skanska's assertion that such conditions were unexpected to be inconsistent with the testimony of its witnesses (finding 27).

Actual Condition of the Timber Piles:

47. The parties tested samples from the 70 to 90-year-old interior bearing piles as well as from the 10-year-old treated fender piles. Testing conducted at Skanska's request in December 2011 revealed low levels of creosote in three samples obtained from Pier 4 (gov't supp. R4, tab 60.0001 at 121378). The parties differ regarding the significance of this and whether it indicates some application of creosote more than 90 years ago (gov't resp. to app. PFOF ¶ 323). Testing conducted at Skanska's request in October 2014 included three treated samples (gov't supp. R4, tabs 60.0003 at 121471-72; 63.0003 at 3515).

48. Testing indicated unspecified decay in one treated sample *(id.*). Skanska expert Dr. McIntyre acknowledged there were "pockets" of "decay or softness" in the treated fender piles and that creosote treatment did not prevent part of the treated pile from rotting where the pile was exposed to factors that attack wood (tr. 3/181). Navy expert Dr. Debonis testified that he observed rotted fender piles during his site visit (tr. 6/64). Thus, we find that creosote treatment did not prevent the decay of the fender piles, which were only ten years old.

49. Navy testing included three samples from Pier 4 and five samples from Pier 5 (gov't supp. R4, tab 62.0005 at 3387). One of the Pier 4 samples was from a treated fender pile (*id*. at 3388). Although the treated fender pile was only approximately ten years old, its strength was similar to or less than the samples from the untreated piles at Pier 4 (gov't supp. R4, tab 63.0003 at 3517). Experts for both parties agreed that the process to prepare the piles for creosote treatment initially reduces the strength of a new pile by as much as 26% (tr. 3/194-95, 6/62-63). Of the two untreated samples from Pier 4, only one showed decay. The five untreated samples from Pier 5 showed some level of soft rot decay (gov't supp. R4, tab 63.0003 at 3516). While the testing only included a small number of samples and samples varied in age, strength testing revealed that the 10-year-old treated samples were only slightly stronger than the 70- to 90-year-old untreated samples (*id*. at 3517, 3519). Testing did not indicate any evidence of marine borer attack (tr. 6/90).

50. Experts for both parties agreed that creosote-treated piles in an identical environment as untreated piles will remain in service longer (gov't supp. R4, tab 63.0004 at 3563, tr. 3/156-57). Both parties also agreed that piles fully encased in the soil could last indefinitely regardless of whether they are treated and that "piling durability is a function of site specific conditions" (tr. 3/122, 168-69, 185; gov't supp. R4, tabs 63.0002 at 3511; 63.0004 at 3563). However, the experts differed regarding what conditions should have been anticipated.

51. Skanska's experts opined that Skanska expected to find "reasonably sound" treated interior bearing piles that could be removed with a vibratory hammer (app.

supp. R4, tabs 65 at 4, 66 at 4). Mr. Bitner[20] surmised that the tops would be "visible" and seemed surprised that Skanska found an "open sea of watery muck" in which the piles were buried (gov't supp. R4, tab 65 at 3-5). Dr. McIntyre expected the interior bearing piles to be "fully encased in soil" with the concrete sheet piles preventing "wave action" and limiting seepage of fill (app. supp. R4, tab 66 at 4, 10). We find that these expectations reflect a misunderstanding of the level and intrusion of water under the pier and are contrary to what Skanska expected—that the fill had settled, the piles were buried in muck, and the tops were underwater most of the time (finding 27).

52. Skanska's experts drew comparisons between the treated fender piles and the untreated interior bearing piles, attributing their differences to creosote treatment rather than age or conditions. Mr. Bitner noted Skanska's success pulling treated fender piles with a vibratory hammer and stated that untreated bearing piles "could not be extracted" with the hammer (app. supp. R4, tab 68 at 4). Dr. McIntyre's opinion relied heavily on a comparison between the treated and untreated piles, including both Skanska's success using a vibratory hammer to extract treated fender piles compared to its struggles with the untreated piles (app. supp. R4, tab 66 at 6) and the amount of decay found during testing (tr. 3/156). We find these comparisons to be flawed and unpersuasive since the treated fender piles were buried in water and only 10 years old, while the interior bearing piles were buried in fill/muck and were 70 to 90 years old. Dr. McIntyre even acknowledges that the fender piles were not representative of the interior bearing piles (app. supp. R4, tab 67 at 9), which further undercuts his comparison of the treated versus untreated piles.

53. Navy expert Mr. Waller opined that the "known age, condition, and location" provided sufficient information for a marine contractor to have expected that the timber pile heads[21] would have deteriorated and that creosote treatment would not have prevented such deterioration (gov't supp. R4, tab 63.0001 at 3505). He commented that, during construction, the tops of the timber piles were cut off, exposing the heartwood at the top to "attack by marine life and/or oxygen, which would degrade the piles" (gov't supp. R4, tab 63.0001 at 3496). He stated, "the probability that [the] tops of the piles were exposed to both salt water and oxygen should have alerted Skanska that many piles would at best <u>not</u> be in an as new condition, and at worst would be significantly deteriorated since they were over 70 years old" (*id.* at 3499) (emphasis in original).

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[20] Mr. Bitner initially concluded that the timber piles "were in an advanced state of decay and severely damaged structurally by marine borers" (app. supp. R4, tab 1 at 62) but revised this statement when no evidence of marine borers was found (app supp. R4, tab 65 at 3).

[21] He noted that there are common occurrences in pile extraction that require cutting the pile tops, such as if they are rotten or damaged (*id.* at 3506).

54. Navy expert Dr. DeBonis opined that the loss in strength over time between the treated and untreated piles was "negligible (approximately 6% difference)"[22] and opined that Skanska should have anticipated such a reduction in strength in either treated or untreated piles (gov't supp. R4, tab 63.0003 at 3519). He posited, and we agree, that "other factors such as skin friction may have played a role" in the breakage of piles during extraction (*id.*). Noting the information from the 2001 Report regarding gaps between the concrete sheet piles and voids in the fill replaced by brackish tidal water, he concluded that Skanska should have anticipated that the timber piles would no longer be fully encased in soil and that there was a high likelihood they were subjected to deteriorating agents such as decay and/or marine borers (gov't supp. R4, tab 63.0004 at 3564). We find this position to be more credible and reasonable than that put forward by Skanska.

55. We find that the upper portions of the interior bearing piles were exposed to muck, water from the rising tide, and likely other deteriorating agents, making them vulnerable to decay. These conditions were disclosed in the solicitation and should have been anticipated. We note that some of the treated fender piles exhibited rot after only 10 years (finding 48). We are not persuaded that creosote treatment would have prevented significant deterioration in the 70 to 90 years that the interior bearing piles were subjected to these conditions. Skanska should have anticipated significant deterioration of the interior bearing piles regardless of whether the piles were treated.

Pier 4 Claim and Appeal:

56. On June 3, 2015, Skanska filed a certified claim seeking costs associated with the removal of deteriorated interior bearing piles at Pier 4 (app supp. R4, tab 1). On August 5, 2015, the Navy posed several questions to Skanska regarding its claim, to which Skanska responded (R4, tabs 48-49).

57. On April 19, 2017, the Navy issued a final decision denying Skanska's Pier 4 claim (*see generally* R4, tab 51). Addressing the claim as a DSC, the contracting officer concluded that, although the contract instructed Skanska to assume that timber piles were creosote-treated, Skanska had not reasonably relied upon this representation in light of other contract information which provided notice of the condition of the piles and the challenges with using a vibratory hammer for piles completely buried in soil (*id.* at 3-5).

58. On June 15, 2017, Skanska filed its notice with the Board appealing the denial of its Pier 4 claim. The appeal was docketed as ASBCA No. 61220.

[22] Recognizing that the sample is small, this is particularly significant since the fender piles were only 10 years old as compared to the interior piles, which were 70-90 years old.

Pier 5 Claim and Appeal:

59. On June 1, 2017, Skanska filed a second certified claim seeking costs associated with removal of deteriorated interior bearing piles at Pier 5 (*see generally* R4, tab 52).

60. On September 27, 2017, Skanska filed its notice of appeal asserting that it had not received a decision and its Pier 5 claim was deemed denied by the government's inaction. The appeal was docketed as ASBCA No. 61347. ASBCA Nos. 61220 (Pier 4 Appeal) and 61347 (Pier 5 Appeal) have been consolidated.

DECISION

I. The Parties' Contentions:

Skanska seeks $5,146,378 under the Pier 4 Appeal and $4,310,785 under the Pier 5 Appeal for costs arising from an alleged change in the means and methods employed to remove deteriorated timber piles from beneath the relieving platform. Addressing the appeals collectively, Skanska asserts that it is entitled to recover under either the Changes clause (FAR 52.243-4) or the Differing Site Condition clause (FAR 52.236-2) (compl. ¶¶ 4, 7). First, Skanska contends that the specifications are defective because they mistakenly instruct bidders to assume that the timber piles had been treated with creosote (app. br. at 86). Because the piles were assumed to be treated, Skanska "anticipated that the timber piles being removed would be in sound condition" and as such priced its means and methods of demolition and removal accordingly (R4, tab 52 at 3-4). Skanska contends that the Navy assumed the financial risk of "being wrong" about the creosote treatment and breached an implied warranty that satisfactory performance would result from adherence to the specifications (*id.* at 85-87). Skanska argues that full extraction of the interior timber piles within the dredge limits was impossible, rendering the specifications defective (*id.* at 87-90). Next, Skanska asserts that the lack of creosote treatment constitutes a Type I DSC in that the interior piles differed materially from what the contract indicated (*id*. at 91-99). Alternatively, Skanska argues that the "unknown physical condition" of the interior piles differed materially from that ordinarily encountered, giving rise to a Type II DSC (*id.* at 99-101). Finally, Skanska alleges that the Navy's interpretation of Note 6 as a "worst-case scenario" for bidders constitutes a constructive change to the contract (*id*. at 101-03).

The Navy responds that Skanska's defective specifications claim rests on the same facts as its DSC claim and is, therefore, "collapsed into" its DSC claim (gov't br. at 70). Noting that Skanska designed the demolition procedures, the Navy argues that the specification at issue is a performance specification (*id.*). The Navy dismisses the impossibility argument as a "red herring" because Skanska requested and was granted

a variance to abandon the remaining broken piles after it had been "consistently clamshelling the piles out" for more than two years and effectively created the circumstance by assuming that it would remove the "final length" of the timber pile "when dredging begins" (*id.* at 71-72). As to Skanska's Type I DSC argument, the Navy asserts that Skanska's alleged reliance on Note 6 regarding creosote is not reasonable because Skanska "conflates treatment with the condition of the piles" and ignores data in the solicitation and its prior experience with timber piles at Piers 4 and 5 (*id.* at 66-67). As to Skanska's Type II DSC argument, the Navy argues that the condition of the interior bearing piles was not unusual or reasonably unforeseeable, particularly in light of Skanska's prior experience (*id.* at 68-69). Finally, the Navy characterizes Skanska's constructive change argument as a restatement of its other claims, noting that Skanska had actual, direct knowledge of the interior bearing piles and conditions under Piers 4 and 5 from its experience on the Crane Rail Project and that Skanska anticipated the site conditions because its proposal recognized the need for multiple methods of timber pile removal (*id.* at 73-79).

In reply, Skanska clarifies that its claimed defect "concerns the Contract requirements to fully extract and completely remove the timber piles without violating the USACE Permit dredge limit" (app. reply at 5). Skanska contends that the requirements for full extraction and complete removal combined with the specified dredge limits were defective design specifications provided by the government (*id*. at 8). Further, Skanska alleges that the Navy conceded that its specifications are defective through its response to RFI No. 423 and a comment made by the DOR (*id.* at 8-10).

II. Skanska's Defective Specification Arguments:

Here, Skanska's defective specification argument includes two alleged defects: (1) the Note 6 instruction to assume that piles were creosote-treated was a defect because the interior bearing piles were not treated; and (2) the specifications were impossible to perform because they required complete removal of the piles while complying with the dredge limits in the permit (app. br. at 86, 89). We address both alleged defects.

A. Only Skanska's First Alleged Defect is Intertwined with its DSC Claim.

The Court of Appeals for the Federal Circuit explained the effect of a defective specification argument that is intertwined with a DSC claim:

> Although [DSC] and defective specifications claims are distinct in theory, they collapse into a single claim . . . where the alleged defect in the specification is the failure to disclose the alleged [DSC]. Where the [DSC] claim and

> the defective specifications claim are so intertwined as to constitute a single claim, that claim will be governed by the specific [DSC] clause and the cases under that clause.

Comtrol, *Inc. v. United States*, 294 F.3d 1357, 1362 (Fed. Cir. 2002).

Note 6 instructs offerors to assume the timber piles were creosote-treated, which is both Skanska's first alleged defect and the basis of its DSC arguments. We determine that this defect is so intertwined with Skanska's DSC claim that it constitutes a single claim. Accordingly, we reject the first alleged defect and address the issue as a DSC herein.

Skanska's second alleged defect is that it was impossible to fully extract the interior bearing piles while remaining within the dredge limit. We determine that this alleged defect is distinct from the DSC claim and merits further evaluation.

B. Skanska's Second Defect Argument Does Not Fail Simply Because the Specification is a Performance Specification.

Defective specification cases stem from "the implied warranty that satisfactory contract performance will result from adherence to the [contract's] specifications." *Essex Electro Eng'rs, Inc. v. Danzig*, 224 F.3d 1283, 1289 (Fed. Cir. 2000). There are generally two types of specifications: design specifications, which tell the contractor in detail how the work is to be performed; and performance specifications, which tell the contractor the end result that is expected and leave it to the contractor to determine the best way to get to the result. *See Blake Constr. Co. v. United States*, 987 F.2d 743, 745 (Fed. Cir. 1993); *J.L. Simmons Co. v. United States*, 412 F.2d 1360, 1362 (Ct. Cl. 1969). "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.'" *Blake Constr. Co.*, 987 F.2d at 745 (quoting *J.L. Simmons*, 412 F.2d at 1362). Generally, only design specifications include the warranty that, if followed, the contractor will obtain a satisfactory result. *Id.* at 1363.

Here, we have found the specifications regarding the demolition of timber piles to be performance specifications (finding 9). The Contract required Skanska to exercise its ingenuity in its approach to and design of the pier demolition, including the removal of timber piles (findings 2, 4, 9). The Contract did not prescribe how Skanska should demolish the piers or extract timber piles; rather, it required Skanska to select the methods it planned to use (findings 2, 4, 9). Skanska's Proposal and Demo Plan described the removal methods it planned to use (findings 6, 10). The alternative methods presented by Skanska were noted as a strength in the Navy's

evaluation and selection of Skanska (finding 7). Since this portion of the specifications is performance-based, we conclude that it does not give rise to an implied warranty.

However, that is not the extent of the discussion. "When performance specifications are involved and the contractor is not constrained by Government-imposed design requirements, the contractor's basis for relief is impossibility or commercial impracticability." *Oak Adec, Inc. v. United States*, 24 Cl. Ct. 502, 507 (1991) (quoting Ralph C. Nash, Jr. & John Cibinic, Jr., FEDERAL PROCUREMENT LAW 1023 (3d ed. 1980)). The appropriate consideration with respect to performance specifications is whether the contractor can demonstrate that the government should bear the risk that the specifications may be impossible to achieve. *Id.*

C. Skanska's Second Defect Does Not Meet the Criteria for Impossibility.

Asserting impossibility of performance, Skanska contends that it was impossible to fully extract the interior bearing piles while complying with the dredge limits (app. br. at 2-3). "Performance is only excused under this doctrine when it is objectively impossible." *Seaboard Lumber Co. v. United States*, 308 F.3d 1283, 1294 (Fed. Cir. 2002) (citing *Jennie-O Foods, Inc. v. United States*, 580 F.2d 400, 409 (Ct. Cl. 1978)). Skanska must show that it was incapable of performing the contract and that "no similarly-situated contractor could have performed." *Id.* Skanska must demonstrate that the specification "require[d] performance beyond the state of the art." *Reflectone, Inc*., ASBCA No. 42363, 98-2 BCA ¶ 29,869 at 147,829 (citing *Foster Wheeler Corp. v. United States*, 513 F.2d 588, 598 (Ct. Cl. 1975)). The doctrine of impossibility is not limited to actual or literal impossibility but also may be satisfied through a showing of commercial impracticability. *Seaboard Lumber Co.*, 308 F.3d at 1294. "A contract is commercially impracticable when performance would cause 'extreme and unreasonably difficulty, expense, injury, or loss to one of the parties.'" *IAP Worldwide Servs., Inc*., ASBCA No. 59397 *et al.*, 17-1 BCA ¶ 36,763 at 179,160 (quoting *Raytheon Co. v. White*, 305 F.3d 1354, 1367 (Fed. Cir. 2002)). While mentioned in a footnote (app. br. at 88 FN4), Skanska does not argue commercial impracticability. Thus, we address absolute impossibility but not commercial impracticability.

In evaluating an impossibility claim, courts consider numerous factors, including (1) whether any other contractor was able to comply with the specifications; (2) whether the specifications require performance beyond the state of the art; (3) the extent of the contractor's efforts in meeting the specifications; and (4) whether the contractor assumed the risk that the specifications might be defective. *Oak Adec, Inc*., 24 Cl. Ct. at 504; *GLR Constructors, Inc. v. Togo*, 114 F.3d 1206 (Fed. Cir. 1997); *Stewart & Stevenson Servs., Inc.*, ASBCA No. 43631, 97-2 BCA ¶ 29,252 at 145,519-20; *Reflectone, Inc.*, ASBCA No. 42363, 98-2 BCA ¶ 29,869 at 147,829-31.

As to the first two factors, Skanska summarily concludes that "the evidence is clear that neither Skanska nor any other contractor could comply with the Contract requirement to both fully extract and completely remove all interior bearing piles and remain within the dredge limit required by the USACE Permit" (app. br. at 89). We disagree.

To support its position that no contractor was able to comply with the specifications, Skanska cites a stipulation that all the other offerors proposed to use a vibratory hammer as "the principal method" in their technical approaches (finding 7). The stipulation only addresses one pile removal method, and using the word "principal" implies that other offerors, like Skanska, proposed alternative methods. We have previously found that Skanska did not expect to be "perfect" with the vibratory hammer and was on notice of the probability of encountering broken piles (findings 14, 23-24). Thus, alternate methods were necessary to complete the task. To conclude that performance is beyond the state of the art, the evidence must support an objective finding that neither Skanska nor any other contractor could accomplish the specified task. *Reflectone*, 98-2 BCA ¶ 29,869 at 147,830. The record demonstrates that Skanska was able to remove some piles with a crane and vibratory hammer (findings 6, 28-29). The record does not suggest that Skanska switched to clamshelling because the original methods were impossible but rather because clamshelling was more efficient (finding 30). The record does not contain sufficient information to demonstrate that other contractors could not fully remove timber piles while remaining within the dredge limits or that the specifications required performance beyond the state of the art. We conclude that Skanska has failed to satisfy the first two factors.

As to the third factor, the evidence regarding Skanska's efforts is inconsistent and unconvincing. Testimony indicated that Skanska's success rate was estimated to be as low as 5 to 10% with direct pulling by the crane using a wire rope (tr. 5/105-08); however, there does not appear to be any data regarding the actual number or percentage of interior bearing piles successfully pulled using the crane with the vibratory hammer before Skanska switched to the clamshell method (tr. 3/118). Skanska acknowledges switching to clamshelling after only one month of using the vibratory hammer because clamshelling was more efficient (finding 30). If Skanska proposed, as it now contends, to exclusively use the vibratory hammer for pile extraction, its switch to the clamshell at Pier 4 was a deviation meriting discussion and, perhaps, approval (finding 23, 29-30). Skanska's contemporaneous Update Schedules did not report any issues at Pier 4 until nine months after it began pile removal (findings 28, 32). Skanska's June 2012 statements about the condition and straightness of the piles and the "need to develop alternate methods" are inconsistent with the fact that it had been clamshelling for seven months and was contemporaneously reporting that it had "completed" timber pile removal for Sections 5-30 of Pier 4 (findings 30, 32-33).

For Pier 5, PCO 224 and Skanska's daily reports during initial Pier 5 timber pile removal indicated that Skanska was successfully extracting two-thirds[23] of the attempted piles with a vibratory hammer, and one-third of those attempted were broken (either prior to or during extraction) (finding 45). A 66% success rate with the vibratory hammer does not demonstrate impossibility. Daily reports also reflected equipment issues with the hammer (*id.*). When Skanska reported a decline in its success rate at Pier 5, it switched to clamshelling the piles (finding 46). While it is clear that Skanska struggled with this tedious contract requirement and elected to use more efficient methods, there is insufficient evidence to conclude that it was impossible to extract the interior bearing piles while complying with the dredge limit.

Since we have concluded that Skanska failed to provide sufficient evidence to demonstrate the first three factors of its impossibility claim, we need not address the fourth factor.

D. The Navy did not Concede Impossibility.

Skanska contends that the Navy admitted impossibility in two ways: 1) through an April 2013 email from the DOR; and 2) through the Navy's response to RFI No. 423 (app. reply at 8-10). We interpret both the email and the RFI response in the context that they were generated.

1. The DOR's April 2013 Email is not an Admission.

When the DOR commented on April 3, 2013, "at this point there is likely no practical way to completely remove the piles for Pier 4," he did so in response to Skanska's request for permission to clamshell to a specific depth and leave any broken piles below that depth (findings 37-38). We interpret the DOR's email in the context that it was made. As of April 3, 2013, Skanska had already clamshelled timber piles at Pier 4 and was nearly complete with Pier 4 demolition (finding 37).

We do not view this to be an admission by the DOR that it was, and always had been, impossible to comply with the specifications. Rather, we find it to be a comment on the circumstance created by Skanska's clamshelling for approximately 17 months, from November 2011 to April 2013. When Skanska began clamshelling in November 2011, it noted its plan to remove the "final length" of the piles below 57 feet "when dredging begins" (finding 30). As of April 2013, the only piles that should have remained were the "final lengths" broken by the clamshell below the elevation where Skanska had stopped excavating. Thus, we conclude that Skanska's

[23] Given the historical data from the test piles at Pier 4 suggesting that 15% of the piles may have broken during installation, a 66% success rate with the vibratory hammer might be reasonable.

clamshelling left broken piles below 57 feet, which likely could not be extracted since the pieces were approximately 36 feet below the surface of the water at MLW.[24]

2. The Navy's Response to RFI No. 423 is not an Admission.

Skanska asserts that the Navy's acquiescence to relax the contract requirement through its response to RFI No. 423 in July 2013 is an admission that the specifications were defective and cites our decision in *Kinetic Builders, Inc.*, ASBCA No. 32627, 88-2 BCA ¶ 20,657 at 104,401 (app. reply at 9). In *Kinetic Builders*, the government acknowledged problems encountered with mucky conditions by modifying the contract to waive compaction requirements and granted a 106-day time extension in response to the contractor's request. 88-2 BCA ¶ 20,657 at 104,401. We held,

> Change orders are of course not admissions of liability, but these change orders admit the facts of the conditions encountered, and make extensive changes to meet these conditions. . . . No credible explanation of the changes is made or is possible other than that they were an acknowledgement that changed conditions had been encountered, materially different than those expected.

Id. (quoting *Foster Constr. C.A. v. United States*, 435 F.2d 873, 898 (Ct. Cl. 1970)).

Here, we conclude that the conditions encountered by Skanska—broken piles below dredge depth—from which Skanska sought relief were caused by its own actions (findings 29-30). Skanska began using the clamshell to "bite through" the piles at Pier 4 in November 2011 and stated its intent to remove the broken remaining "[f]inal length" of the piles during dredging (*id.*). When Skanska submitted RFI No. 423 in March 2013 requesting relief from the contract requirement to fully extract the piles and permission to abandon broken piles below dredge depth, it had been breaking piles during clamshelling for the past 17 months (findings 29-30, 37). Here, unlike the facts in *Kinetic Builders*, there is no evidence of a changed condition caused by the government. Rather, Skanska sought relief from a condition that it created. Accordingly, Skanska's assertions that the government's response to RFI No. 423 equates to an admission of liability or a changed condition must fail.

[24] The water was at 93.43 feet at MLW (finding 17). Broken piles below 57 feet would be approximately 36 feet underwater at low tide. Skanska was required to dredge to 46.05 feet MLW (finding 12).

III. Skanska's Type I DSC Argument:

Skanska contends that it encountered a Type I DSC in that the interior bearing piles were not creosote-treated and differed materially from what the contract indicated (app. br. at 91-99). The contracting officer determined that the contract instructed offerors to assume that timber piles were treated but concluded that Skanska did not reasonably rely upon this representation in light of other information in the Contract (finding 57). Our review is de novo. *Dep't of Transp. v. Eagle Peak Rock & Paving, Inc.*, 69 F.4th 1367, 1374-76 (Fed. Cir. 2023); 41 U.S.C. § 7103(e); ASBCA Rule 10(c), (d).

A Type I DSC exists when "subsurface or latent physical conditions at the site . . . differ materially from those indicated in [the] contract" FAR 52.236-2(a). The appellant must prove the following four elements:

1) that a reasonable contractor reading the contract documents as a whole would interpret them as making a representation as to the site condition;
2) that the actual site conditions were not reasonably foreseeable to the contractor based upon information available to the contractor outside of the contract documents;
3) that the contractor reasonably relied upon the contract documents; and
4) that the conditions differed materially from those presented in the contract documents and the contractor suffered damages as a result.

Int'l Tech. Corp. v. Winter, 523 F.3d 1341, 1349 (Fed. Cir. 2008).

A. *The Contract Made Representations About Whether Timber Piles Were Treated.*

To meet the first element, Skanska must show that the Contract made a representation regarding the condition of the timber piles. We review this issue de novo, "based on how a reasonable contractor would interpret the contract documents as a whole." *Int'l Tech. Corp.,* 523 F.3d. at 1350. Skanska contends that General Note 6 represented that all timber piles should be assumed to be creosote treated and that the Contract was unambiguous on this point (app. br. at 91-99; app. reply at 10-11). We disagree that the Contract was so clear. In fact, the Contract included multiple representations regarding which types of piles were treated with creosote (see Section B *infra*).

General Note 6 in Drawing SD-101 told bidders, that "All timber structure including but not limited to piles, bent caps, relieving platform shall be assumed to be creosote treated" (finding 11). This is one of several notes reflecting similar warnings regarding disposal of potentially hazardous contaminants encountered during

demolition (i.e. lead, creosote, PCBs) (*id.*). While Skanska interprets this note as a directive that all timber piles are creosoted (app. reply at 10-11), we decline to engage in a semantic debate regarding the meaning of the word "assume." *See South Bay Boiler Repair, Inc*., ASBCA No. 59281, 17-1 BCA ¶ 36,634 at 178,423 (Although not a DSC case, we addressed contract language that the contractor "consider marine paint/nonskid to contain heavy metals" and a reference stating, "[a]ssume paints being removed contain chromates and present a cancer risk" to serve as notice to the contractor that the paints may contain heavy metals. We refrained from addressing whether this language meant that all paint contained heavy metals. "Because the contract places the contractor on notice that the vessel's coatings may contain heavy metals, it is incumbent on the contractor to estimate the cost of performance."). Here, we have found that General Note 6 was provided in the context of disposal and put Skanska on notice that the various components of the timber structure may contain creosote, requiring special handling and disposal, in the same way that the hardware may contain lead (finding 11).

In any event, we believe that the explicit representation advising contractors to assume that all timber piles were treated with creosote meets the first element. In the context of the threshold issue of whether a representation was made as to the site conditions, we conclude that the first element of the test is satisfied.

B. *The Actual Site Conditions Should Have Been Reasonably Foreseeable in Light of the Information Available to Skanska.*

To meet the second and third elements, Skanska must show that the conditions encountered were reasonably unforeseeable in light of all the information available to it. It is settled that "a contractor who knows or should have known the facts of the conditions at the site is estopped to claim a changed condition. Where he knows or has opportunity to learn the facts, he is unable to prove . . . that he was misled by the contract." *Vann v. United States*, 420 F.2d 968, 982 (Ct. Cl. 1970). A contractor must show that it "examined the contract documents and reasonably interpreted them." *Neal & Co., Inc. v. United States*, 36 Fed. Cl. 600, 617 (1996), *aff'd*, 121 F.3d 683 (Fed. Cir. 1997) (citing JOHN CIBINIC, JR. & RALPH C. NASH, JR., ADMINISTRATION OF GOVERNMENT CONTRACTS 508 (3d ed. 1995)). Whether a contractor reasonably relied upon a representation is a question of fact. *Int'l Tech. Corp.*, 523 F.3d at 1352. Reliance is unreasonable when a contractor has reason to doubt the accuracy of a representation, such as knowledge of a flaw in the information underlying the representation. *Id.*

Here, three factors, in combination, lead us to conclude that that the conditions encountered were reasonably foreseeable. First, Skanska had prior knowledge and experience from the Crane Rail Project extracting interior bearing piles at the same location (findings 15-16, 21-22). Second, as-built Drawing R-005 and the labeling

convention indicated that the bearing piles were "not creosoted" (findings 15-16). Third, regardless of whether they were treated, Skanska should have expected that the bearing piles would be significantly degraded due to their prolonged exposure to the conditions under the piers (findings 53-55). For the reasons discussed below, we conclude that Skanska should have anticipated the conditions it encountered.

1. Skanska Had Constructive, if not Actual, Knowledge of the Pile Conditions.

From May 2000 to April 2003—7 to 10 years prior to this Contract, Skanska worked on Piers 4 and 5 performing three upgrades as part of the Crane Rail Project. As we have found, each of the upgrades required Skanska to handle the bearing piles, giving it firsthand knowledge of those piles. (Finding 21) While Skanska argues that the significance of its prior experience on the Crane Rail Project is overstated (app. reply at 23), we disagree.

The Crane Rail Project put Skanska on notice that the bearing piles were not treated. Because of the distinctive characteristics of creosote and the hazards it presents, Skanska would have learned during the Crane Rail Project that the bearing piles did not contain creosote (finding 22). Based on its work on this prior project, Skanska had compelling reasons to doubt whether the bearing piles contained creosote.

The Crane Rail Project gave Skanska direct knowledge of the conditions under Piers 4 and 5 and the challenges involved in extracting piles buried almost entirely in soil and muck (finding 22). Skanska was on notice of the deteriorated state of the piles because it was "unable to extract" some of the very same piles during performance from 2000 to 2003 (findings 21-22). The Crane Rail Project represents Skanska's only prior experience extracting timber piles in these conditions—buried in soil and muck (finding 25).

The relevance of the Crane Rail Project was highlighted in the Solicitation because drawings from the prior project comprise more than half of the Reference Drawings for this project (finding 14). Despite this, its significance was lost on Skanska's estimator whose understanding of the Crane Rail Project was "rudimentary, at best" and who may not have reviewed the Crane Rail Project in the Reference Drawings (finding 25). While Skanska Project Executive Mr. Hunt was engaged in "the actual work" throughout the duration of the Crane Rail Project and remained employed by Skanska at the time of hearing, Skanska's estimator failed to talk to him about his knowledge and experience with piles at Piers 4 and 5 (findings 22, 25). As a result, the estimator failed to gain crucial knowledge that was readily available to him (*id.*).

Skanska rejects the notion of prior knowledge and relies upon *Holloway Constr. Co.*, ENGBCA 4805, 89-2 BCA ¶ 21,713 at 109,187, and *Townsco Contracting Co.*,

ASBCA No. 39924, 94-2 BCA ¶ 26,707 at 132,844-45. We find both decisions distinguishable.

In *Holloway Constr.*, the Board[25] declined to impute actual knowledge to a contractor based upon prior projects where 20 or more years had passed, none of the bidding personnel had worked for the contractor at the time of the prior projects, and details of the prior contracts were not in the record. 89-2 BCA ¶ 21,713 at 109,188. Here, the facts are distinguishable because the Crane Rail Project concluded only seven years prior to the award of the Contract with some personnel overlap and because drawings from the Crane Rail Project comprised more than half of the Reference Drawings for this Project highlighting their relevance (findings 14, 21).

In *Townsco Contracting*, the contractor encountered V-shaped construction joints requiring more sealant than the vertical joints depicted in the contract. 94-2 BCA ¶ 26,707 at 132,844. The design specifications prohibited the use of V-shaped tools to clean the joints. *Id*. at 132,833. When the government declined to waive the prohibition and ordered saw-cutting which further widened the joints, the contractor filed a claim. *Id.* at 132,836. The government argued that the contractor knew the actual condition of the joints from its work on prior contracts and that the contractor had used V-shaped tools on prior contracts and bid to do the same for the current contract. The Board found testimony from the contractor's vice president to be credible, specifically that he based their bid on the joints depicted in the contract and did not recall preparing bids for prior contracts. The Board concluded that information regarding the prior contracts was "too sketchy to make any meaningful findings" and was unwilling to impute actual or constructive knowledge to the contractor. *Id*. at 132,844-45.

Here, the facts are distinguishable. Rather than design specifications as in *Townsco*, Skanska bid performance specifications and prepared its own design for demolition and extraction of the piles (finding 9). Here, the Solicitation included hundreds of drawings from the Crane Rail Project highlighting the relevance of the prior project performed by Skanska at the very same location (findings 14, 16). However, Skanska's estimator failed to recognize the importance of the Crane Rail Project as Skanska's only prior experience extracting piles in such conditions—buried in soil and muck (findings 14, 25). The estimator failed to talk with a Skanska Project Executive who actively worked the Crane Rail Project and remained in Skanska's employ at the time of hearing (findings 22, 25). When a Solicitation highlights a prior project performed at the very same location, it behooves a contractor to reacquaint itself with its own performance and experience if persons who actively worked the project remain in its employ.

[25] The Corps of Engineers Board of Contract Appeals merged with this Board in 2000.

Based upon the Contract, when read as a whole, giving meaning to all parts, as well as Skanska's prior work on Piers 4 and 5, we conclude that Skanska knew or should have known that the bearing piles were untreated. We question the reasonableness of Skanska's asserted reliance upon General Note 6 which we found to be provided in the context of proper disposal (finding 11) and inconsistent with Skanska's prior experience on the same project site as well as the as-built drawings (findings 15, 21-22). Because the Board concludes that Skanska has failed to prove the second and fourth elements of the test, we need not discuss the third element in greater depth.

2. The As-Built Drawings Indicated that Bearing Piles were Not Creosoted.

Skanska had a duty to review the original as-built construction drawings provided in the Reference Documents with the Solicitation. *Randa/Madison Joint Venture III v. Dahlberg*, 239 F.3d 1264, 1270 (Fed. Cir. 2001). Specification § 02 41 00.00 22, para. 1.10 required Skanska to use the Reference Drawings for design of its demolition procedure (finding 9). This put Skanska on notice of the importance of the information in the Reference Drawings, and Skanska can be presumed to have reviewed them. *Flippin Materials Co. v. United States*, 312 F.2d 408, 412 (Ct. Cl. 1963). Thorough review of the original as-built drawings would have revealed labels indicating that fender piles were treated whereas bearing and brace piles were not. At a minimum, the as-built drawings provided information inconsistent with the general assumption that every piece of the "timber structure" was treated which should have raised a question.

3. Skanska Should Have Anticipated the Degraded Piles It Encountered.

Regardless of whether the bearing piles were creosoted, Skanska should have anticipated that the bearing piles would be degraded due to their prolonged exposure (70-90 years) to the conditions under the piers. We have found that extraction of the bearing piles was complicated by several factors: locating piles completely submerged in soil, muck, and water (finding 27); the increased friction of pulling piles in those conditions (finding 26); encountering a percentage of piles broken during installation or removal (findings 14, 21); and the natural degradation of piles (treated or untreated) as a result of age and daily exposure of the pile tops to tidal water (findings 53-55). These factors were disclosed in the Contract and should have been known to Skanska.

C. The Conditions Did Not Differ Materially From Those Presented in the Contract.

As we have previously found, the conditions that Skanska encountered were 70- to 90-year-old timber piles buried as much as 70-feet deep in soil and muck and obscured by tidal water most of the time (findings 1, 17, 27). Extracting piles buried

in soil and muck involved more friction, effort, and difficulty than piles surrounded by water (finding 26). It was known that a percentage of piles were broken during installation and more would likely break during extraction (findings 6,12, 14). Regardless of treatment, the piles naturally degraded due to their prolonged exposure (70-90 years) to the conditions under the piers (findings 53-55). These conditions were known or should have been known to Skanska when it bid the job.

We conclude that the conditions Skanska encountered did not differ materially from those presented in the Contract. The lack of creosote was not a material difference.

IV. Skanska's Type II DSC Argument:

Skanska contends that it "had no reason to know the piling would not be creosote treated" and could not have anticipated such, giving rise to a Type II DSC (app. br. at 100). We disagree.

A Type II DSC involves "unknown conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered." FAR 52.236-2(a). To recover for a Type II DSC, the contractor must establish "the recognized and usual conditions at the site, the actual physical conditions encountered and that they differed from the known and usual, and that the different conditions caused an increase in the cost of contract performance." *Nova Grp., Inc.*, ASBCA No. 55408, 10-2 BCA ¶ 34,533 at 170,329. As recognized by the Board, this "is a 'relatively heavy burden of proof."' *Zafer Constr. Co.*, ASBCA No. 56769, 17-1 BCA ¶ 36,776 at 179,235 (quoting *Charles T. Parker Constr. Co. v. United States*, 433 F.2d 771, 778 (Ct. Cl. 1970)). Type II DSC are notoriously more difficult to prove than their Type I counterparts. *Randa/Madison Joint Venture III v. Dahlberg*, 239 F.3d at 1276. "The unknown physical condition must be one that could not be reasonably anticipated by the contractor from his study of the contract documents, his inspection of the site, and his general experience [,]if any, as a contractor in the area." *Id.* (quoting *Perini Corp. v. United States*, 381 F.2d 403, 410 (Ct. Cl. 1967)).

Here, we previously concluded that Skanska should have reasonably anticipated that the bearing piles would be degraded due to their prolonged exposure (70-90 years) to the conditions under the piers. We find no evidence of a Type II DSC.

V. Skanska's Constructive Change Argument:

Skanska alleges that the Navy's interpretation of Note 6 as a "worst-case scenario" for bidders constitutes a constructive change to the contract (app. br. at 101-03).

"A constructive change occurs where a contractor performs work beyond the contract requirements without a formal order, either by an informal order or due to the fault of the Government." *Int'l Data Prods. Corp. v. United States*, 492 F.3d 1317, 1325 (Fed. Cir. 2007) (citing *Miller Elevator Co. v. United States*, 30 Fed. Cl. 662, 678 (1994)). "If a contractor performs work that cannot be characterized as additional work under the contract, it does not constitute a change." *South Bay Boiler Repair, Inc.*, ASBCA No. 59281, 17-1 BCA ¶ 36,634 at 178,426 (citing *Int'l Data*, 492 F.3d at 1325); *see also Bell/Heery v. United States*, 739 F.3d 1324, 1335 (Fed. Cir. 2014) ("To demonstrate a constructive change, a plaintiff must show (1) that it performed work beyond the contract requirements, and (2) that the additional work was ordered, expressly or impliedly, by the government.").

Under this firm fixed-price contract, Skanska was required to remove the interior bearing piles as part of the demolition of Piers 4 and 5 (findings 1, 8). There is no evidence that Skanska performed work beyond the contract requirements and, as such, no grounds to demonstrate a constructive change to the contract.

CONCLUSION

For the reasons discussed herein, the appeals are denied.

Dated: April 3, 2025

LAURA J. ARNETT
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

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

I concur

MICHAEL N. O'CONNELL
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 Nos. 61220, 61347, Appeals of Skanska USA Civil Southeast, Inc., rendered in conformance with the Board's Charter.

Dated: April 3, 2025

for Jamnye D. Allott

PAULLA K. GATES-LEWIS
Recorder, Armed Services
Board of Contract Appeals