

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of --)
)
Optimum Services, Inc.) ASBCA No. 58755
)
Under Contract No. W912EP-09-C-0033)

APPEARANCE FOR THE APPELLANT: Joseph W. Lawrence, II, Esq.
Vezina, Lawrence & Piscitelli, P.A.
Fort Lauderdale, FL

APPEARANCES FOR THE GOVERNMENT: Thomas H. Gourlay, Jr., Esq.
Engineer Chief Trial Attorney
Carolyn J. Fox, Esq.
Assistant District Counsel
U.S. Army Engineer District, Jacksonville

OPINION BY ADMINISTRATIVE JUDGE TING

Optimum Services, Inc. (OSI), entered into a contract with the Jacksonville District Corps of Engineers (the government or the Corps) to restore the benthic substrate and hydrologic process of Rose Bay in Volusia County, Florida, as the final phase of a multi-phase project. OSI subcontracted the dredging portion of its contract to Ryan Incorporated Southern (Ryan). OSI initially sponsored and submitted a \$1.87 million and 93-day time extension Request for Equitable Adjustment (REA) from Ryan to the contracting officer (CO). At Ryan's request, OSI converted the REA into a certified claim. The CO denied the claim and OSI/Ryan appealed.¹ We have jurisdiction under the Contract Disputes Act (CDA) of 1978, 41 U.S.C. §§ 7101-7109. We decide entitlement in favor of OSI/Ryan and remand the appeal to the parties for determination of the quantum of adjustment.

FINDINGS OF FACT

1. Rose Bay is located along the Intracoastal Waterway in east central Volusia County, Florida (ex. 204 at 1455). In the years before Florida's rapid growth, Rose Bay was a productive estuary in the Halifax River in Volusia County. Good water quality once provided vital nursery grounds and habitat for shellfish. Over time, stormwater runoff, leaking septic systems and restricted water flow caused by two causeways degraded the bay's shellfish productivity. To restore Rose Bay, the St. Johns River

¹ Unless context dictates otherwise, we use OSI/Ryan because the appeal was prosecuted by Ryan with its attorney.

Water Management District (SJRWMD) worked with the residents and local governments and formed a coalition of agencies to find solutions to the pollution problems. SJRWMD, the city of Port Orange and Volusia County coordinated efforts through the Rose Bay Task Force and developed a five-point restoration plan. The task force also established partnerships with the Florida Department of Transportation and the U.S. Army Corps of Engineers. (Ex. 101 at 4, <http://www.sjrwmd.com/rosebay/>)

2. The five-point restoration plan included: (1) controlling stormwater runoff pollution; (2) eliminating leaking septic systems; (3) replacing the existing US-1 Bridge and removing a causeway to reestablish natural water exchange in the bay; (4) removing the old causeway east of US-1; and (5) removing accumulated sediment to restore estuary habitat (*see* <http://www.sjrwmd.com/rosebay/>). This appeal relates to the last phase of the Rose Bay Restoration Project or the “Section 206, Aquatic Ecosystem Restoration, Rose Bay” Project (the Rose Bay Project) (R4, tab 5).

3. Oysters are “an indicator species” (tr. 3/149). “[I]f the oysters are doing well...then the rest of the habitat would be doing well as well” (tr. 3/149-50). Dredging the accumulated sediment would help restore oyster habitat in Rose Bay (tr. 3/149). In addition to oysters, other shellfish exist in Rose Bay (tr. 3/150).

4. On 10 March 2009, the Corps issued a solicitation for the “restoration of inter-tidal and sub-tidal benthic substrate and hydrologic processes within Rose Bay by removing up to approximately 152,000 cubic yards of *unconsolidated sediment* from the Bay” (*see* Section 01 11 00, SUMMARY OF WORK, Paragraph 1.2.1, Project Description) (R4, tab 5 at 316) (emphasis added). The contract included a base and three option items. The base work consisted of reconstructing an existing upland disposal area at Lost Creek Island (the disposal area) requiring approximately 147,000 cubic yards (CY) of new dike construction, removal of two existing weirs and construction of two new weirs and outfall pipes.² The dredging work was divided into Option Items A, B, and C of approximately 104,000 CY, 21,000 CY and 27,000 CY respectively. (R4, tab 4 at 40) The dredged material was to be placed in the disposal area which would be located about two miles from the dredging area and was not accessible by land (ex. 216 at 2068).

5. On 20 May 2009, OSI submitted a bid including the three option items for dredging for \$4,073,158.96. The Corps awarded Contract No. W912EP-09-C-0033 including all option items (the Rose Bay contract) to OSI on 19 June 2009. The contract required OSI to begin work within 30 calendar days and to complete work within 324 calendar days after receiving the notice to proceed. (R4, tab 4 at 38-39)

² The construction of the disposal area was the subject of another appeal decided in 2013. *Optimum Services, Inc.*, ASBCA No. 57575, 13 BCA ¶ 35,412, *aff'd*, *Optimum Services, Inc. v. McHugh*, 582 F. Appx. 879 (Fed. Cir. 2014).

6. The Rose Bay contract incorporated by reference the following FAR clauses, among others: FAR 52.233-1, DISPUTES (JUL 2002); FAR 52.236-2, DIFFERING SITE CONDITIONS (APR 1984); and FAR 52.243-4, CHANGES (JUN 2007) (R4, tab 5 at 64-65).

Dredging Requirements

7. Section 35 20 23 of the specifications pertained to dredging:

3.4.4 Areas to be Dredged

The areas requiring dredging are depicted on the drawings as hatched areas and the dredging limits are designated by State Plane (X-Y) Coordinates. The actual limits of dredging may be adjusted, if necessary, by the Contracting Officer, in order to maintain the minimum setback of 25 feet from any structure.

3.4.5 Acceptance Sections

For the purposes of acceptance, the work to be done will be divided into acceptance sections as shown on the drawings....

3.4.6 Special Instructions

Materials to be removed under this contract are described in Section 00 31 32 GEOTECHNICAL DATA; however, if any hardbottom is encountered above grade, the hardbottom material shall not be dredged and its location shall be reported to the Contracting Officer for verification.

(R4, tab 5 at 499)

8. As shown on contract Drawings CN 103 and CN 104, of the nine Acceptance Sections (AS), AS#8 and AS#9 were located east of the US-1 Bridge, and AS#1 through AS#7 were located west of the US-1 Bridge³ (app. supp. R4, tab 2; Drawings CN 103, CN 104).

³ Option A applied to AS#1 through AS#6; Option B applied to AS#7; and Option C applied to AS#8 and AS#9 (ex. 204 at 1296).

9. Drawing CN 105, "DREDGING PLAN - TOP OF SEDIMENT, EAST OF US-1," showed five areas of "EXPOSED OYSTER BED" (ex. 1003). Drawing CN 106, "DREDGING PLAN - TOP OF SEDIMENT, WEST OF US-1," showed three areas of "EXPOSED OYSTER BED," two in AS#6 and one in AS#5 (ex. 1004). Both drawings contained this note:

4. THE DREDGING LIMITS HAVE BEEN ESTABLISHED TO PROVIDE FOR A 25' MINIMUM SETBACK FROM ALL STRUCTURES AND OYSTER BEDS. THE CONTRACTOR SHALL ADJUST THESE LIMITS AS NECESSARY IN ORDER TO MAINTAIN THIS 25' MINIMUM SETBACK. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE OF THE NEED TO MAKE SUCH ADJUSTMENTS PRIOR TO DOING SO.

(Exs. 1003, 1004)

10. Drawing CN 104, "DREDGING DEPTHS, QUANTITIES AND ACCEPTANCE SECTIONS WEST OF US-1," showed that AS#1 through AS#6 required -3 feet NGVD⁴ as dredging depth and AS#7 required -4 feet NGVD as dredging depth. Drawing CN 103 showed AS#8 and AS#9 required -4 feet NGVD as dredging depth. (App. supp. R4, tab 2)

Materials the Specifications Represented the Contractor Would Encounter

11. The specifications of the Rose Bay Project included a Geotechnical Data Report at Section 00 31 32. Section 1.2.2 pertained to "Materials Encountered" at Rose Bay. Paragraph 1.2.2.1, referred to as the "Character of Materials" clause in this appeal, provided:

1.2.2.1 Rose Bay

Sediments within Rose Bay are represented through borings CB-RB-1 through CB-RB-10 and all borings were drilled by barge and tripod in shallow water.

The first materials encountered in the bay are unconsolidated fine sediments. This unconsolidated fine sediment is predominantly organic sandy silt with gravel to sand-sized shell particles with a very soft consistency, as

⁴ NGVD stands for National Geodetic Vertical Datum (tr. 2/80).

indicated by the absence of blow counts. Silt is occasionally interbedded with seams of very soft organic silty fine quartz sands with shell fragments, obtaining a thickness of several feet. Throughout Rose Bay, borings indicate that this unconsolidated fine sediment ranges in thickness from 9 to 27 feet and pinches out toward the shoreline. Below the unconsolidated fine sediment, a resistant, consolidated material is encountered, referred to as "hard bottom". It is comprised of soft to medium dense, fine quartz sands, and silty sands, with sand-sized shell fragments. Boring CB-RB-3 indicates that clay is also present in the base material. The initial resistance (hardness) at the top of this unit may come from cemented oyster beds covered with unconsolidated fine sediment.

(R4, tab 5 at 205) (Emphasis added)

12. Sediments are "the products of run-off from the region that come into suspension and then settle in the area." Sediment is "very different from...shell[s] that are organisms that are trying to in situ thrive." (Tr. 2/58) The term "unconsolidated" referred to "a very loose [and] soft material" and "something [with] very soft consistency" (tr. 1/54). In contrast, the term "consolidated" means "cemented" (tr. 4/207, 211). Oyster beds are "cemented together in distinct clusters" (tr. 3/9-10). The firm layers of crust at issue in this appeal were not oyster beds because they were a localized collection of "interlocked shells" that "can give an appearance of being cemented" (tr. 4/164-65). Other than oysters, there were other types of shellfish such as "clams and mollusks" (tr. 3/150). The contract defined the word "[s]hell" to mean "[m]aterial composed of predominantly (>75%) coarse-grained sand to gravel-sized whole or broken shell" (R4, tab 5 at 206).

13. Section 00 31 32, Paragraph 1.3, of the Geotechnical Data Report pertains to "DEFINITIONS." It states that "[d]efinitions not explicitly indicated in the sections below are typical industry standard definitions from their respective ASTMs." (R4, tab 5 at 205) This paragraph does not require a prospective bidder to use any specific ASTM to calculate the volumes of silt, sand or shell to be dredged as a means of verifying the material description the Corps set out in Paragraph 1.2.2.1 or the visually classified materials in Borings CB-RB-1 through CB-RB-10. Among other terms, paragraph 1.3.2 defines "Coarse Gravel-Sized" to mean "[p]articles greater than 3/4 of an inch but less than 3 inches in diameter" (*id.* at 206). Thus, a prospective contractor should expect to dredge whole or broken shells up to three inches in diameter.

14. The so-called "dredging prism" tells a contractor how far to dredge both horizontally and vertically (tr. 1/56). Drawing CN 309, "TYPICAL DREDGING

SECTIONS,” showed a typical dredging prism or area to be dredged in relation to the top of sediment and the hard bottom (ex. 1000). Paragraph 1.2.2.1 of the specifications indicated that the unconsolidated fine sediment ranged in depth from 9 to 27 feet. That meant that the hard bottom would be from 9 to 27 feet below the top of sediment. Because the dredging prism only extended to a depth of -4 feet NGVD, a contractor could reasonably assume that it would not dredge into hard bottom three or four feet below the top of sediment. (Tr. 2/69, 88) We find in cases where the Corps directed the contractor to dredge to the lines, grades, and limits of the contract, it was directing the contractor to dredge in accordance with the dredging prism specified in the contract drawings (tr. 1/137).

15. The Corps performed a hydrographic and topographic survey of Rose Bay between 16 September and 17 October 2002. Drawing CN 107 showed the results east of the US-1 Bridge (AS#8 and AS#9). Drawing CN 108 showed the results west of the US-1 Bridge (AS#1-AS#7). These drawings show hundreds of probes were made. The drawings do not, however, indicate any obstructions of the kind the contractor would later encounter in 2010 and 2011. In 2010, OSI’s dredging subcontractor encountered patches of firm crusts of shells scattered around all but AS#7 (finding 55-56) and heavy concentrations of shell at various locations (finding 69). We find these crusts and at least some of the shells were developed in Rose Bay since the 2002 survey (tr. 1/154-55).

Borings CB-RB-1 through CB-RB-10

16. As noted, Paragraph 1.2.2.1 of the Geotechnical Data Report told bidders that “[s]ediments within Rose Bay are represented through borings CB-RB-1 through CB-RB-10” (R4, tab 5 at 205; finding 11). CB-RB-1 was drilled outside the dredging area. Each Acceptance Section has one boring except AS#6 and AS#2. AS#6 had no boring and AS#2 had two. (R4, tab 5 at 212 and Drawing CN 104; ex. 101 at 22)

17. The drilling logs for all ten borings were depicted on pages 14 through 23 of the Geotechnical Data Report. As indicated on the logs, the boring samples were taken and visually classified in accordance with the Unified Soils Classification System in April 2000, nine years before the Corps issued the solicitation for the Rose Bay Project. (R4, tab 5 at 215-24)

18. Borings were accomplished with the use of a split spoon sampler which was a hollow tube with inside diameter of 1 3/8 inches attached to a drill rod. Drill rod advances were indicated by (1) “WOR” (Weight of Rods) or (2) “WOH” (Weight of Hammer) (R4, tab 5 at 215-25; tr. 1/47, 49). “WOR” means “[the] sampler penetrated into the soil 18 inches under its own weight” and “we didn’t have to drop our 140 pound hammer to drive it through.” “WOR” material means material of “very soft consistency.” (Tr. 4/149) “WOR” material is also generally referred to as “zero blow

count” material (tr. 2/23). In Paragraph 1.2.2.1 “WOR” was described as “absence of blow counts” (R4, tab 5 at 205). Because the borings were accomplished with a split spoon sampler with a 1 3/8 inch diameter, it was impossible for a shell or shell fragment larger than 1 3/8 inches in width to enter the sampler (ex. 101 at 32-33). In July 2010, after the parties’ dispute arose, OSI’s subcontractor hired Universal Engineering Sciences (Universal) to conduct auger borings within the dredging area. Universal used a 4-inch diameter casing and a 3-inch diameter hand auger. Because the 4-inch diameter casing had a cross-sectional area of 12.6 square inches as opposed to the split spoon sampler which had a cross-sectional area of 1.48 square inches, it was reported that “[n]ine of the borings contained large oyster shells.” (Ex. 101 at 34) We find the use of the split spoon sampler in 2000 could have underestimated the number of large shells in Rose Bay. Dr. Nicholas W. Hudyma, the Corps’ geotechnical engineering expert, acknowledged that a shell bed that one had to “juke through...with a PVC pole or an iron rod” would not be “WOR” material⁵ (tr. 4/213).

19. Dr. Hudyma’s expert report summarized at Table 2, the following pertinent boring information from the specifications:

Table 2. Soil description and standard penetration test (SPT) blow counts for the upper 18 inches of sediment

Boring #	Soil Description	SPT Blow Counts
CB-RB-1	SILT, some fine quartz sand, trace coarse sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-2	SILT, some fine quartz sand, trace of medium sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-3	SILT, some fine quartz sand, trace of medium sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-4	SILT, some fine quartz sand, trace of medium sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-5	SILT, some fine quartz sand, little fine to medium sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-6	SILT, little fine quartz sand, trace coarse sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-7	SILT, some fine quartz sand, trace coarse sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-8	SILT, little fine quartz sand, trace coarse sand-size shell fragments, gray (ML)	Weight of Rod/18”
CB-RB-9	SILT, some fine quartz sand, little coarse sand-size shell fragments, gray (ML)	Weight of Hammer/18”
CB-RB-10	SILT, little fine quartz sand, trace medium sand-size shell fragments, gray (ML)	Weight of Rod/18”

(Ex. 101 at 14)

20. As Dr. Hudyma’s report further explained:

As shown in Table 2, the soil is described as gray silt. The consistency of the material is very soft as indicated by the blow counts. In nine of the ten borings, the weight of the rods alone caused the sampler to move eighteen inches into the sediment. For the other boring, CB-RB-9, the weight of rods and hammer caused the sampler to move eighteen inches into the sediment. All of the descriptions note the

⁵ In dredging parlance, the word “juke” is used to describe punching through with force using a hard tube.

presence of fine sand and medium and coarse sand-sized shell fragments in the upper sediment.

(Ex. 101 at 14)

What the Borings Reasonably Revealed to Bidders

21. OSI/Ryan's dredging expert, Williams S. Humphreys, testified that the borings used the word "SILT" in capital letters, and based on the Unified Soil Classification System, "the first word...tells you what the material is. The others are just descriptors." (Tr. 1/72) Dr. Hudyma agreed that the material described was "predominantly silt sized" (tr. 4/205), and it was the material "you most want a person to see" (tr. 4/206).

22. Mr. Humphreys testified that, as an experienced dredger, he would read the contract documents to require the removal of "unconsolidated silt from the Bay for environmental reasons" (tr. 1/43), that the nine borings within the dredging area described the material to be dredged as "unconsolidated soft sediment" (tr. 1/44), with "no blow-count" consistently "throughout the Bay" (tr. 1/45). And, as typical of such jobs, it involved the dredging or removal of "about 15 inches" or "near-surface material" in water that was "two feet deep" (*id.*).

23. OSI/Ryan's geotechnical engineering expert, Dr. Luis A. Prieto-Portar, agreed that even though the dredging prism ranged from 9 to 27 feet deep, Ryan was to dredge, on average, only "one-foot, three-inches of the dredging prism" (tr. 2/20). He also explained that "sand is basically a very high friction material" and "you need very little sand to hold up that rod" (tr. 2/25). Thus, with "a weight of rod with the absence of blow counts, you can only have trace amounts of sand and shell," and that "the sum of[f] sand and shell could not have been much more than five percent in that material" (tr. 2/24).

24. For the Rose Bay Project, the Corps used the borings from 2000, nine years before it issued the solicitation in 2009. According to Dr. Prieto-Portar, if the Corps were to take 10 borings just before the solicitation was issued at the same locations as it did in 2000, the new borings would show a "totally different geotechnical profile" and would show the presence of "shells" and "packed sand," cemented "oyster beds" and "gravel-size shell[s]" (tr. 2/50-51). He explained:

This is a small bay with a lot of dynamics; run-offs, storms, causeways being built, causeways being taken out. You cannot have a single picture describe what is really a movie of 10 years of intense activity.

(Tr. 2/50) He explained that a 1 3/8-inch split spoon would pick up whole shells except for the big ones, and thus more recent borings would not have described the shell contents to include only “shell fragments” (tr. 2/52-53).

Independent Government Estimate

25. The Corps prepared an Independent Government Estimate (IGE) on the Rose Bay Project in February 2009, before issuing its solicitation (ex. 216 at 2066). The IGE computed the dredging cost for each Acceptance Section using the Cost Engineering Dredge Estimate Program. In all but AS#5, the Corps assumed 100% “MUD & SILT” as the “MATERIAL FACTOR.” For AS#5, the Corps assumed 50% “MUD & SILT” and 50% “LOOSE SAND.” (Ex. 216 at 2073, -79, -85, -91, -97, -103, -109, -115, -121) Thus, the IGE indicated that the Corps did not expect any consolidated shell bed material would be encountered. As Mr. Humphreys observed, the Corps estimator assumed “[n]o oysters...no shell, no rock...he only assumed two things, silt and mud or this little bit of sand” (tr. 1/133). A table summarizing the type of material to be dredged by Acceptance Section from the IGE showed the Corps estimated 93% of the CYs dredged (195,000 CY) would be “Mud & Silt,” 7% (15,300 CY) would be “Loose Sand,” and 0% would be “Composite Shell” (ex. 433 at 2927).

26. While Ryan’s bid was based on the use of a 10-inch suction dredge, the Corps’ IGE assumed the use of a smaller 8-inch suction dredge (tr. 2/13). According to OSI/Ryan’s expert who owned the same 8-inch dredge, “[t]hat dredge can only pump very, very loose material” (tr. 2/46). The IGE showed that using the 8-inch dredge, dredging could be “done in daylight hours in less than six months”⁶ (tr. 4/77).

Before Issuance of the Solicitation, the Corps was Told of the Presence of Shell Crusts Throughout Rose Bay

27. Paul J. Haydt has worked for SJRWMD for over 20 years (tr. 3/145). During those years, he chaired the Rose Bay Task Force (tr. 3/147). He was “closely involved” with the Corps during the development of the Rose Bay Project (tr. 3/158); he co-planned the dredging project with the Corps (tr. 3/176). Mr. Haydt probed the Rose Bay “several times through the years with several different groups” before the Corps became involved (tr. 3/183). “[S]ignificantly before” the project plans and

⁶ We agree that the IGE, in and of itself, cannot be used as proof of a differing site condition (DSC) (*see* gov’t reply br. at 12). The IGE, however, is reflective of how the Corps itself interpreted the contract requirements, and thus can be used to evaluate whether the contractor’s interpretation of the same contract requirements was reasonable. The Corps acknowledged that its “IGE preparation is based strictly on the same contract specifications and drawings provided to all offerors” (*id.* at 26).

specifications were finalized for bidding, Mr. Haydt and others probed the areas to be dredged “down to [the] hard bottom” (tr. 3/177). He testified he came across “hard surfaces” of shell above the hard bottom (tr. 3/184). He acknowledged that prior to issuance of the solicitation in March 2009 he told the Corps that there was “[c]onsolidated shell in various areas throughout Rose Bay” (tr. 3/188). He told the Corps that there were “crust” consisting of “shell throughout the bay” that he had to “juke...through” (tr. 3/182, 186-87). He described what he found at the hearing:

[S]ome shell...out there in some places there’s enough for it to be *layered and consolidated*, but it’s...a three or four foot...area you’re cutting through and it’s a...half inch layer...there is *shell throughout the bay* without a doubt and closer to oyster bars you probably have more, but yes. It’s an estuary that has shell.

(Tr. 3/188) (Emphasis added)

28. Mr. Haydt testified that although he did not come across six-inch thick crusts, “in some places you could walk on it and other places it will break through” (tr. 3/191). He testified although not cemented together as in an oyster bar, the shells of the crusts were “consolidated” or “[stuck] together” and were not “individual shells” (tr. 3/189). The crusts were said to contain dead (as opposed to live) oyster shells stuck together with mud (tr. 3/189-90). We find these crusts were formed and accumulated over time and could affect dredging operations in shallow water. We find the Corps did not mention any firm crusts throughout the bay in its solicitation or otherwise alert bidders to their presence.

Site Investigation

29. FAR 52.236-3, SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984) clause provided in part:

The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or

for proceeding to successfully perform the work without additional expense to the Government.

(R4, tab 5 at 65)

30. OSI's president, Daniel Eastman testified that, before he bid the project, he and others from his firm visited the 73-acre project site in May 2009. He testified he did not see anything at the site that was different from what was represented in the Geotechnical Data Report and shown in the boring logs, and because of the limited time within which to submit OSI's bid, he saw no need to conduct further geotechnical investigations. (Tr. 3/42) The Corps COR acknowledged that the submerged algae-covered crusts would be difficult or impossible to see under certain conditions of the day such as high tides. He testified that "[i]t would be impossible to see if the water was really dark, it gets like a tea color sometimes, it would be impossible to see if it was high tide and there were lots of these tanins [sic] in the water." (Tr. 4/97-98)

31. When the Corps awarded OSI the Rose Bay Project contract in June 2009, OSI had not awarded a subcontract for the dredging part of the contract. On 31 July 2009, OSI entered into a subcontract with Ryan Incorporated Southern (Ryan) to do the dredging work. The subcontract was in the amount of \$1,280,120.00. (Ex. 226; tr. 1/184-85)

32. Before entering the subcontract with OSI, Ryan's Donald (Sonny) Buchanan investigated the site (tr. 2/100). Mr. Buchanan testified that, from his review of the contract documents, he understood the project to involve "shallow dredging [of] silt" (tr. 2/101). He toured the site with Ryan's chief estimator in a small boat. He testified that he was concerned with "water depth" and crossing "3,000 foot of line through a coastal marsh" (*id.*). He "did a couple probes just west of the bridge" with a seven-foot steel rod (*id.*) and his probe went down three to four feet and did not find anything inconsistent with what the borings showed as WOR material (tr. 2/102).

33. OSI/Ryan's dredging expert, Mr. Humphreys, testified that a "normal site visit" in this case would involve "access to the site, how...to get the pipeline to the disposal area, whether you can float or not," and "a few probings of the silt...to see how much soft fluff is on top" (tr. 1/103). He opined that a bidder might find a crust if it "looked extensively enough" and since the crusts could be mistaken for oyster beds, and the contract specifically excluded oyster beds from dredging, he "would not have gone out of [his] way to try to identify them during the bid phase" (tr. 1/163-64). OSI/Ryan's geotechnical engineering expert, Dr. Prieto-Portar, opined that a reasonably prudent contractor would not have discovered the firm layers of shell beds below the water that permeated Rose Bay unless it "spent money and time putting in a drill rig" which none of the seven bidders did (tr. 2/86-87). He testified he would

consider it imprudent for a bidder to second guess the information assembled by the Corps in the contract documents (tr. 2/70).

34. We find even if a contractor were to wait until low tide to visit the site and come across a firm layer of interlocked shell crust, it could easily have mistaken the crust to be a hard bottom or a newly developed oyster bed required to be reported for setback purposes and need not be dredged. We find that OSI conducted a reasonable site investigation.

Ryan's Bid

35. William H. Ryan is and was Ryan's president (tr. 1/173). He testified in bidding the dredging work, he relied on the information provided by Paragraph 1.2.2.1 of the Geotechnical Data Report and the boring logs (tr. 5/7-8). He testified the borings showed "predominantly silt" with a trace, little or some "sand-sized sediments or fine sand" (tr. 1/180). He said his only concern was pumping silt over a long distance which could be done with the use of a booster pump (tr. 1/175). He concluded that the project "appeared to be simpler than most dredge projects" (*id.*), and it would be "an easy job" with a 10-inch suction dredge (tr. 1/182).

36. Mr. Ryan testified when he bid the dredging work, he understood oyster beds were located as shown in the contract drawings, and if additional oyster beds were encountered, Ryan need not dredge them (tr. 1/199). He testified he was aware that Ryan was to "stay 25 feet away from them" (tr. 1/232). When asked if he accounted for shell fragments less than three inches (coarse gravel size as defined in ¶ 1.3.2 of the specifications) in his bid, he answered "[i]n our bid, there was going to be no shell above sand-size. So, no, we did not assume any three inch shells. I mean, if you got a stray shell, fine, but we were not planning to dredge oyster beds." (Tr. 1/237-38) He testified that his bidding team was "comfortable with the six month schedule" to perform the dredging work and had planned to work single shifts (tr. 1/184). We find that Ryan did not assume there would be no shells in a shellfish habitat, but did assume from the contract documents shell recovery would not cause dredging issues. As found earlier, the Corps' IGE assumed 0% "Composite Shell" (*see finding 25*).

37. According to OSI/Ryan's geotechnical engineering expert, because what were shown in the borings were "so homogenous...describing not gravel-size shell fragments, but medium, fine and very few coarse-size shell fragments," coupled with the "absence of blow counts," most dredgers would consider the presence of large shells "anomal[ous]" (tr. 2/49). As for what percentage of sand a dredging contractor could or should have expected, OSI/Ryan's dredging expert testified:

The average dredger is a person with multiple talents; project management, equipment manager, has knowledge about some materials in the field. But to construe that that person could look at the boring log and can come up with a 35 percent content sand from that boring log is way beyond the capabilities of any, any dredger in the field. There's no way they could have arrived at that conclusion.

(Tr. 2/35)

38. In dredging, the nature of the material to be dredged and pumped determines the productivity and the cost of dredging (tr. 1/69). Sand weighs seven or eight times more than silt (tr. 1/110), and silt could be pumped two to three times as easily as sand (tr. 1/70). While the use of a screen could prevent clogging during dredging, it could also reduce production rate. According to OSI/Ryan's dredging expert, if the material described – silt – had been dredged, the use of a screen would not have been necessary. (Tr. 1/167) OSI/Ryan's dredging expert testified that given the material described, he would have bid the job using either a small 12-inch pipeline dredge or a 10-inch pipeline dredge. As mentioned earlier, the Corps' IGE was based upon using a smaller 8-inch dredge. (Tr. 1/68)

The Corps was Aware of a "Significant Amount of Firm Material" in the Bay Before Ryan Began Dredging

39. Ryan began dredging on 12 May 2010 (ex. 201, tab 3).⁷ Three months before, Julie Anderson, the Chief of the Architect Engineering and Construction Branch in the Corps' Contracting Division expressed concern to the CO in an 11 February 2010 email that a "significant amount of firm material above the required grade" might be out of scope work:

Heads up Pre dredge survey has identified significant amount of firm material above the required grade. If information is correct and cont[r]actor is instructed to cease work, they expect significant under run. They are at the CAP limit on funds. Removal of this firm material is probably out of scope too.

(Ex. 201, tab 2)

⁷ OSI/Ryan's dredging expert report – Ex. 201 – included tabs setting out a chronology of events of the parties' dispute. We use ex. 201 the way we would normally use a Rule 4 file since the one assembled by the Corps is not conducive for such use.

40. In his 3 March 2010 email to his colleagues, COR Michael A. Presley expressed his belief that the layer of oyster shells was “the hard bottom...that is higher than we anticipated” (ex. 201, tab 3). In his reply, Stephen R. Conger, Corps Project Manager of the Rose Bay Project, also believed that the “significant amount of firm material above the required grade” was tied to, and a part of, the hard bottom. He told his colleagues:

I think that the specs are clear about hardbottom being tied to a substantial consolidated layer as identified by the borings. Bottom line, we want the Contractor to achieve the prescribed grade unless it is proven that the layer he is claiming to be firm is not simply a “crust.”

(Ex. 201, tab 3) In other words, he said that the contractor would be required to dredge through a crust.

41. Despite Ms. Anderson’s warning and the input received from Mr. Haydt, the Corps did not follow up and evaluate whether the nature and composition of the above grade firm material or crust would impact dredging efforts.

Encountering Firm Layers of Crust Dredging AS#8 and AS#9

42. As planned, OSI was to complete the construction of the Disposal Area in four months or by October 2009. The Disposal Area “took a lot longer;” OSI did not finish it until April or May 2010. (Tr. 3/141)

43. AS#9, on the west side of the US-1 Bridge, was the first Acceptance Section Ryan dredged (tr. 3/133). OSI’s project manager, Matthew Conneen notified the Corps by email on 19 May 2010 that on 13 May 2010 Ryan encountered hard bottom much sooner than expected. Forwarding a sketch of the area, the email stated “Sheet CN107 identifies the hard bottom in this area to be approximately -18.0’ +/- of which we are finding a hard bottom within 1.5’ +/- below water surface.” The email went on to say “[t]he bottom in this area will support foot traffic,” and OSI was submitting a Request for Information (RFI) seeking clarification on how “hard bottom” would be defined in the field. (Ex. 201, tab 6)

44. OSI’s Quality Control Representative Matt Hart reported when the dredge encountered the material it was “rumbling, shaking, trying to get through this material which was not anywhere near what we thought it was going to be.” Stepping off the boat, he found the material encountered not to be “unconsolidated material” but “more of a consolidated sandy sandbar shelly bar nature” on which he could stand knee high. He also could not see what it was because the water was “very murky.” (Tr. 3/86) We

find OSI/Ryan, like the Corps, erroneously believed that the firm layer of crust material it encountered to be an unexpectedly high hard bottom.

45. OSI's 19 May 2010 RFI stated:

We have found some material we believe is hard bottom that support foot traffic. The location of this material is much higher than what is shown on the plans. To help preserve any hard bottoms found on site we are requesting a standard field procedure that may help our QC to determine the location of the hard bottom. Section 00 31 32 – 1.2.2.1 defines a hard bottom as a resistant consolidated material which we believe can be identified as supporting human foot traffic.

(Ex. 236)

46. There was uncertainty within the Corps on what to do next. The Corps design engineer emailed the Corps project manager on 19 May 2010 stating “We need to inform Paul Haydt and be prepared to direct the Contractor to either continue dredging to required grade or move to another location. I am leaning toward continued dredging but would like to have more information before doing so.” (Ex. 201, tab 9)

47. The Corps Quality Assurance Representative (QAR) Ronald L. Wilson's log of 20 May 2010 reported that Ryan continued to dredge AS#8 and its booster pump was down “this morning for awhile.” The QAR probed areas in AS#8 and AS#9 to check OSI's claim of higher than expected hard bottom. He reported “[i]n all cases where I probed there was only slightly firm layer/crust on top of the silt. I was able [to] push probe thru crust without much effort in most places.” He reported that, on the outer limits of the dredging area, i.e., south side of AS#9, “the firm layer/crust was harder to push thru, but I was able to push thru with juking.” The report said he “[t]old Matt Hart (CQC) to continue dredging down to the contract required grade of -4.0' elev. in all areas of AS#8 until we (C.O.E.) told them otherwise. He acknow[ledged] and agreed.” (Ex. 201, tab 8) We find the Corps' QAR confirmed the existence of firm layers of crust above the hard bottom. We find the QAR did not consider the crusts to be oyster beds requiring setbacks. COR Presley acknowledged at the hearing that wherever such crusts were encountered during the project, he told the contractor to dredge them (tr. 4/20). The crusts typically consisted of whole oyster shells, sand, shell fragments, and in some locations clusters of oysters interlocked together with mud and sand. The material was not “unconsolidated sediments” as described in the contract. (Ex. 201, tab 31)

48. On 3 June 2010, Corps personnel and SJRWMD's Mr. Haydt probed AS#8 and AS#9. According to the Corps QAR's log, "Their final conclusion was that the crust we did find around the edge of dredging limits was not hard bottom." The Corps and SJRWMD "agreed [that the] contractor should continue to dredge to lines & grades and limits shown in the contract drawings." The QAR's log noted that "Ryan appears to be dredging 11 to 12 hrs per day lately/but production rate has yet to be determined." (Ex. 201, tab 13)

49. The Corps' 3 June 2010 response to the RFI took the position that the materials Ryan encountered were not hard bottom (ex. 236). Although the Corps did not address the above grade firm material encountered, its silence was consistent with its direction that Ryan was expected to dredge through the material. Running behind, Ryan gradually increased its dredging hours in June 2010 and went to two 12-hour shifts a day beginning the first week of July 2010 (tr. 4/90-91).

50. By letter dated 22 July 2010, Ryan asked OSI to notify the CO that it had encountered a differing site condition. The letter said the material encountered "has not been the unconsolidated fine sediments that were reflected in the borings provided to us for the project." The letter went on to say that "[o]ur production has been significantly hampered by this differing site condition, including the slow production caused by pumping coarser material (including oyster shells) rather than silt and has contributed to dredging downtime as well as higher operating cost." (Ex. 201, tab 18) OSI forwarded Ryan's notice to the Administrative Contracting Officer (ACO) and the Corps' North Florida Area Office Engineer, David R. Tolle by letter dated 26 July 2010⁸ (ex. 201, tab 19). Even before their July 2010 notice of differing site condition, OSI/Ryan had weekly meetings with the Corps, and the subject of encountering a differing site condition was discussed. The Corps did not relieve Ryan from dredging the firm layers of crust (tr. 3/115, 117).

51. OSI's Quality Control Report (QCR) of 30 July 2010 noted dredging continued in AS#9 on double shifts. It stated that the "[d]redging subcontractor marked out areas of hard material and oyster beds within Section 9 and had geotech firm bore and sample these areas."⁹ (Ex. 201, tab 20)

52. The Corps QAR's log of 6 August 2010 noted that the "dredge disposal line got plugged last night." He asked "Dredge was in a position in AS#9 where they should have been pumping soft silt materials? Why the blockage?" (Ex. 201, tab 24) His log of 9 August 2010 reported that after the dredge line was blocked Friday,

⁸ During the project, OSI was told that as long as it copied its communications to the ACO and the COR, it would be their determination whether to "advance it up" to the CO (tr. 3/115, 117).

⁹ We discussed Universal's auger borings in finding 18.

Saturday and Sunday, Ryan tried to use a new booster pump but encountered “major mech problems.” After Ryan replaced a section of the dredge disposal line and a second booster pump, dredging resumed in AS#9.¹⁰ (Ex. 201, tab 25)

53. The Corps QAR’s 11 August 2010 log noted that Ryan continued to dredge AS#9. At the monthly progress meeting, Ryan complained that its work had been impacted and delayed “because of the shelly materials.” OSI and Ryan asserted that the blockage in the dredge discharge line was “caused by excessive amounts of shell.” The Corps QAR questioned whether a differing site condition could exist “[e]ven though there are numerous oyster beds clearly shown in the contract drawings and clearly visible during an extreme low tide.” (Ex. 201, tab 26) We find at this point, what qualified as an oyster bed was still unclear. OSI/Ryan had referred to the firm layer of crust it encountered as an oyster bed. The Corps, on the other hand, had not considered the crust as an oyster bed requiring a setback, and had directed OSI/Ryan to continue to dredge such crusts. No oyster bed setback would be established until dredging reached AS#5 and AS#6 in October or November of 2010.

54. As a result of receiving OSI/Ryan’s notice of differing site condition in the dredging area as well as disposal area, the Corps engaged the services of Dr. Hudyma for his views on the issues. Dr. Hudyma visited the site on 18 August 2010 and provided his findings to the COR in his letter of 24 August 2010. (Ex. 201, tab M). Dr. Hudyma reported that “[p]robe sampling at various locations did not provide evidence of large shells within the dredged area.... Hand auger samples did return large oyster shells, both broken and fragmented, from sampling locations.” (*Id.* at 5) A photograph taken at the beach near the eastern edge of the dredging area showed the presence of large oyster and clam shells in the vicinity, but not within, the dredging area (*id.* at 6).

Dredging AS#7

55. In mid-August 2010, Ryan mobilized to the west side of the US-1 Bridge where AS#7 and AS#1 were located. AS#7 was on the north side of AS#1 and was in a “deeper area” near some private residences. Unlike AS#8 and AS#9, which took from May to mid-August 2010 to dredge, AS#7 had “very little shell[s],” and Ryan had “no problems dredging AS7 and...they finished it in the time they expected to” (tr. 4/25).

¹⁰ At the entitlement hearing, the parties did not address the cause(s) of equipment failure that occurred from time to time. Not all equipment failure was the Corps’ responsibility. For example, there is evidence of mechanical failure due to Ryan operating the booster in a reverse mode (tr. 2/135-36).

56. We note Boring CB-RB-7 was drilled within AS#7 (Drawing CN 107 and R4, tab 5 at 212). Boring CB-RB-7 described the material to be encountered as WOR material consisting of “SILT, some fine quartz sand, trace coarse sand-size shell fragments, gray (ML)” (*see* finding 19). With minor shell fragment size differences (medium versus coarse), this description was similar to those of the other borings except CB-RB-9 which contained WOH material. We find the material in AS#7 representative of what OSI/Ryan should encounter absent the firm layers of crust it encountered in all of the other acceptance sections. When Ryan reached AS#2 west of AS#7, it ran into crusts again which hindered its dredging efforts (tr. 3/92-93).

Dredging AS#1, AS#2, AS#3 and AS#4

57. In response to OSI’s 26 July 2010 notice of encountering a differing site condition, ACO Tolle’s 28 August 2010 letter said that after investigating “Acceptance Sections 8 and 9 where dredging has just been completed and also in the remaining acceptance sections where dredging had not yet commenced,” the Corps “have determined that the materials encountered during the dredging do not differ from those described in the contract documents.” He gave the following explanation:

SECTION 00 31 32 “Geotechnical Data Report” of the contract specifications shows evidence of sandy material that contains shell fragments. Further, the contract makes numerous references to oyster beds that indicate that shells will be present in the dredging area. The report also stated that the initial resistance (hardness) at the top of the hard bottom in the bay may come from cemented oyster beds covered with unconsolidated fine sediment. It is my determination that the contract clearly describes the materials actually encountered in the bay and that the presence of coarse material and shell does not constitute a DSC.

(Ex. 201, tab 31) While the ACO focused on the hard resistance layer that came from cemented oyster beds “at the on top of the hard bottom,” what Ryan encountered was firm crusts of shells in the dredging prism far above the hard bottom.

58. Ryan continued to encounter crusts. OSI’s QCR of 22 September 2010 reported that the Corps and OSI “inspected the...area where the dredge was working when the pipeline became plugged.” The QCR further reported that “a shallow bar with a crust of shell was probed,” and “[t]his crust material will be further investigated as a differing site condition, as it is not shown in the project borings.” (Ex. 201, tab 34) The Corps QAR’s log of the same day noted that Ryan was dredging the center of AS#1 and encountered some shell material that plugged up the dredge line.

In probing the area where the dredge had been dredging, the Corps QAR and OSI's QCR "found a mound/high spot in the area" (ex. 201, tab 35). OSI's QCR reported to his project manager that "the dredged material on the island and what material was probed...appears to be the same 'crust' that Ryan has been dealing with east of the bridge" (ex. 201, tab 36). Mr. Ryan testified that the crusts Ryan dredged were made of shells and sand cemented together. Ryan had to use a cutter to penetrate and break up the crusts and used a screen to prevent clogging; it had to run the dredged material through a pump and a two-mile long discharge line to the Disposal Area. And even after all this, large pieces of cemented shells – some larger than gravel size – ended up in the Disposal Area. (Tr. 5/11-12) As opposed to these crusts, he testified that "stray shells" was "not a problem" (tr. 5/21).

Defining What Constituted Oyster Beds

59. Ryan continued to dredge AS#1 on 24 September 2010. On that day, the Corps QAR and OSI's QCR inspected the northern dredging limits of AS#2, AS#3 and AS#4 "to verify locations of new docks and oyster beds not shown on the contract plans." Since the docks and the oyster beds were inside the dredging limits, OSI was told to "stay 25' away from all docks and oyster beds." (Ex. 201, tab 38) Up to this point, the Corps had not designated any oyster beds not shown on the contract drawings for setback. Although OSI/Ryan thought the crusts it ran into were oyster beds, the Corps did not consider them oyster beds and had consistently required OSI/Ryan to dredge the crusts.

60. On 7 October 2010, the Corps QAR reported to his colleagues that "[t]here are new oyster beds in that area between the docks which are not shown on the contract drawings." He recommended "it would be wise on our part to revise the dredging limits to avoid all those areas." (Ex. 201, tab 41) OSI's QCR reported to his superiors by email on 8 October 2010 that the Corps probed within the limits of dredging that day and "will modify the northern boundary to eliminate dredging between docks and close to oyster bars." The email said "'Hard Bottom' along with typical shell crust was encountered along the southern side of the bay in Section 3. USACE will modify the entire southern boundary by moving it northward by 30 feet." Implementing the procedure set out in Drawings CN 105 and CN 106, Note 4, the email said that "[o]yster beds encountered throughout the dredging limits will be identified to OSI QCM and USACE QA to determine the necessity of dredging." (Ex. 201, tab 42)

61. Ryan's 9 October 2010 letter asked OSI to ask the ACO to reconsider his 28 August 2010 rejection of its differing site condition claim. Ryan maintained that "[t]his differing site condition is large oyster shells which cannot be considered an 'unconsolidated fine sediment.'" (Ex. 201, tab 45 at 4) Referring to the borings, Ryan asserted that all 10 borings indicated the material to be dredged was soft silt containing

sand-size shell fragments. Ryan maintained there was no mention of whole oyster shells in any of the 10 borings and that “[a] reasonable interpretation of the borings is that the material within the dredging prism would be easy to dredge and easy to pump to the disposal area.” (*Id.* at 2) Referring to Paragraph 1.2.2.1 of the specifications, Ryan argued that paragraph was consistent with the borings describing the materials to be encountered in the Bay as “unconsolidated fine sediments” consisting of “predominantly organic sandy silt with gravel to sand-sized shell particles with a very soft consistency, as indicated by the absence of blow counts.” (*Id.* at 2)

62. Addressing the ACO’s point that the hardness Ryan encountered might be the “hard bottom,” Ryan’s letter argued:

- a. This “hard bottom” is 9 to 27 feet below the surface of the bay. The dredging grade is elevation -3.0 feet and -4.0 feet. This “hard bottom” is well below the dredging prism.
- b. Even this “hard bottom” material is described as “soft to medium dense, fine quartz sands, and silty sands, with sand-sized shell fragments”. It is not described as consisting of large oyster shells.
- c. In the ten USACE borings furnished in the specifications the *highest* elevation at which *any* blow count was recorded was at approximately elevation -8 feet (Boring CB-RB-6, 1 blow for 0.5 ft. of penetration). The required dredging grade in this area is elevation -3.0 feet. This means the top of the “hard bottom” (if this one-blow material was the top of the hard bottom) was 5 feet below the dredging prism.

(Ex. 201, tab 45 at 3)

63. OSI’s QCR of 13 October 2010 reported dredging was continuing in AS#2 on double shifts and dredging was impacted for four hours “due to shell bed.” It reported the dredge “went down at 5:00 pm due to overheating problem” (ex. 201, tab 46). Photographs bearing the same date show a large quantity of fragmented, broken and whole shells discharged into the disposal area (ex. 201, tab 47).

64. On 13 October 2010, OSI asked the COR to provide field modifications to the dredging limits. In reply, the Corps’ Project Engineer, John H. Wilson (Project Engineer J. Wilson) said that “[b]y modifying contract we risk acquiescing to a ‘Changed’ condition.” Since the contract required the contractor to stay 25’ from structures (§ 35 20 23, ¶ 3.2.3) and the contract drawings required the contractor to provide a 25’ setback from all structures and oyster beds, Project Engineer J. Wilson

said that he “saw no need to modify the contract.” His reply went on to say “If contractor is willing to work with QA in the field, to define limits, then this can be done informally and thereby save contractor cost and effort” since “there isn’t any need for navigational dredge precision here.” (Ex. 201, tab 48)

65. On 13 October 2010, Ryan stopped dredging in the early afternoon after it dredged through “some sand & shell material” and the dredge engine went down with a cracked head. On 15 October 2010, the Corps and OSI/Ryan staked the revised dredging limits along the north side of AS#2 and AS#3. (Ex. 201, tab 50) On 18 October 2010, dredging was reported continuing in AS#2 on double shift. OSI reported that the dredge was down “due to low tide while dredging over a shell bed (high spot)” and the shell banks at two locations within the dredging prism were “impacting dredge production.” (Ex. 201, tab 51)

66. On 20 October 2010, Ryan continued to dredge AS#2. The Corps, OSI and Ryan inspected AS#3, AS#4, AS#5 and AS#6 and probed areas thought to be oyster beds. The parties agreed that Ryan’s crew must clearly mark areas thought to be oyster beds and then OSI and the Corps would verify those areas to be excluded from dredging. The Corps QAR’s log mentioned that “6” thick crust or deeper was mentioned as a deciding factor.” (Ex. 201, tab 53) OSI QCR’s 20 October 2010 email to his superior and the Corps QAR stated “[p]er further discussions with USACE, it is requested that the perimeters be staked where the crust/oyster bed is six inches thick and probing requires effort to penetrate the layer.” The Corps QAR forwarded OSI’s email to his colleagues including ACO Tolle and COR Presley with the following question and comment:

The big question is, how thick does the crust have to be to qualify as an oyster bed and be excluded from dredging?
We also probed through the middle of a live oyster bed clearly marked on the contract drawings and it was 2 foot thick in the center. Please review and comment.

(Ex. 201, tab 55)

67. Internally, however, the Corps began to realize that the crusts it had required Ryan to dredge since May 2010 could potentially be considered oyster beds. In his 21 October 2010 email to the CO (Griselle Gonzalez), COR Presley, Project Engineer J. Wilson, Project Design Engineer Stephen R. Conger and others, ACO Tolle wrote:

The Contractor has already put the Government on notice that the “crust” they continue to encounter on a frequent basis is either hard bottom or recently formed oyster

beds.... However, Ron Wilson now is expressing concerns that this crust could be potentially...oyster beds that have developed since the project scope was developed. Accordingly, I believe it is imperative that we have a marine biologist visit the site ASAP to investigate the situation. We certainly don't want to be destroying oyster beds with an Environmental Dredging project and if new beds have formed within the required dredging area, we will either need to modify this area or terminate the remaining dredging work.

The email requested that "a Marine Biologist with experience dealing with oyster beds visit the site ASAP." (Ex. 201, tab 56)

68. Paul E. Stodola, the Corps' biologist, told his colleagues in his 21 October 2010 email that if live oysters were encountered, the contract required "the work should stop in these areas where they're coming up in the dredge" and the Corps "[m]ay need to do a quick survey to delineate live oyster beds, and avoid those areas" (ex. 201, tab 59). We find the contract did not distinguish between live and dead oyster beds. The contract (Drawings CN 105 and 106, Note 4) required the contractor to notify the COR and to adjust the dredging limits to maintain a 25' setback upon encountering oyster beds.

69. The following answers, provided by the Corps' QAR R. Wilson, in his 21 October 2010 email to the questions posed by the Corps' Rose Bay Project Manager, Nelson R. Colon, provided an overview of the parties' differing site condition dispute up to that point:

1. Could oyster beds have formed since 2002?

Answer: Yes, there are many that have formed in the western portions of the project site, AS#3, AS#4, AS#5, and AS#6 that are not shown on the contract drawings. These new oyster beds range from early development 1 foot to six 6 inches below water level at [high] tide to 6-8 inches above water level at low tide. The crust thickness on top of the silt layer varies in each case.

2. Is the "crust" on the surface of the seafloor or buried?

Answer: Most of the areas in question are on the surface of the seafloor formed on top of the silt layer. The

contractor has also encountered some old shell beds buried in the silt layer.

3. Are we having dredged material with heavy shell content coming out of the discharge pipe?

Answer: Yes, at times the shell content is heavy but most of the time the average discharge has been a sandy silt material with an occasional shell. So far we have not dredged up any live oyster beds. This would be noticeable at the dredge discharge point in the disposal area.

4. Is this condition found throughout the dredging footprint or in patches?

Answer: Mainly in patches scattered around the acceptance sections. It appears to be getting worse as we progress towards the western reaches of the project and in shallow areas along the northern, southern, and western dredging limits. After inspecting and probing suspected areas in AS#4, AS#5, and AS#6 yesterday at extreme low tide we discovered many newly developed mounds of sand and shell (10-12 approx.) that are not shown on the contract drawings. They vary in size and thickness. I would estimate that 20% to 25% of the areas shown in AS#5 and AS#6 may have to be excluded from the dredging limits; otherwise, we'll be dredging up live oyster beds.

(Ex. 201, tab 57) We find this narrative, coming from the Corps QAR who was on the project site several days each week, a credible assessment of the nature and extent of the dredging issues Ryan confronted at Rose Bay up through the end of October 2010.

70. We find that the Rose Bay Task Force's restoration efforts over the years in controlling runoff pollution, eliminating leaking septic systems, removing the old causeway and replacing the US-1 Bridge had improved the benthic and hydrological conditions of Rose Bay. These improvements in the intervening years, however, had substantially changed the nature and character of the materials in the bay by the time the dredging phase of the restoration effort took place in 2010 and 2011.

71. Internally, someone within the Corps questioned whether "historic" oyster beds should be dredged. That person opined that keeping these "historic" oyster beds would be ideal for the ecosystem restoration project since "[t]he oyster shell beds are

the ideal substrate for oyster spat settlement.” (Ex. 201, tab 66) By email to SJRWMD’s Mr. Haydt on 25 October 2010, the Corps Project Manager advised that the Corps believed there was a potential environmental situation developing on the Rose Bay Project. The email said that the contractor continued to report encountering a “crust” that it believed to be either “hard bottom or recently formed oyster beds.” The email invited Mr. Haydt to a site visit as soon as possible. Mr. Haydt’s reply confirmed “There is a shell surface ‘crust’ over the sediment in Rose Bay that is encountered when surveying sediment depths” and “[t]his was consistent with conditions we found in the east part of the bay with the project team earlier in the project.” (Ex. 201, tab 73)

72. By email on 25 October 2010, the Corps Project Engineer J. Wilson reminded OSI that pursuant to Note 4 of Drawing CN 105, “the dredging limits have been established to provide for a 25' minimum setback from all structures and exposed oyster beds,” and the contractor was to “notify the contracting officer’s representative of the need to make such adjustments prior to doing so.” OSI’s reply said that a “new base line was established to define oyster beds or...shell beds.” The email said prior to 20 October 2010, “many oyster beds deeper than 6"...were determined by the COR to be dredged.” The email wanted to know “if the 6" base line...is not correct.” J. Wilson’s reply drew a distinction between oyster beds and hard bottom: “Oyster beds are to be delineated, defined, verified and avoided as you dredge horizontally along the dredge plane. Hard bottoms are those areas to avoid as you dredge vertically.” His email went on to say “Unless you are willing to work according to plans already established to address the issue of oyster beds, you will need to dredge to the lines, grades and limits of the contract.” (Ex. 201, tab 78)

73. What OSI/Ryan were complaining about up to this point was not dredging hard bottom or oyster beds; it was complaining about dredging submerged consolidated crusts of shell beds above the hard bottom that it encountered throughout Rose Bay. The Corps has not disputed that it established a new baseline on 20 October 2010 requiring Ryan to dredge these crusts if they were less than 6" thick.

74. The Corps’ Project Engineer J. Wilson, the Corps’ biologist (Stodola), SJRWMD’s Haydt and Ryan’s staff met at the site on 27 October 2010 to verify if the “areas marked by the contractor were correctly identified as oyster beds.” Mr. Haydt sampled the site with a shovel. The substrate at each of the sites marked was found to contain “dead oyster shell and sediment,” with spats (juvenile oysters) in “very small numbers,” and “an occasional adult oyster.” (Ex. 201, tab 95 at 1) Based on this revelation, it was determined that none of these areas the contractor marked were “viable oyster beds.” According to Mr. Haydt, “all viable oyster beds within the Halifax River system have been observed within intertidal habitats only,” and the sites checked “appear to be sub-tidal.” In contrast, when the parties surveyed the oyster beds marked on the contract drawing in AS#5, it was found that the oyster beds there

“comprised of numerous live oysters, both adults and spats,” and “[a]s is typical of a viable oyster bed, the adults were attached to the substrate and their valves were pointing up.” These latter oyster beds were determined to be “an intertidal habitat.” (*Id.* at 2)

75. Corps Project Engineer J. Wilson’s 28 October 2010 email to his colleagues including ACO Tolle and COR Presley, stated that he reiterated to OSI that “they should continue with the dredging per the lines, grades and...limits as currently set forth in the contract,” and to “dredge around” those areas the contractor believed should be avoided until “a formal ACO directive to do otherwise.” The email went on to say that “the supposed oyster beds OSI marked in [AS#3] were not the oyster beds envisioned by the contract for avoidance” and SJRWMD, the project sponsor, appeared willing to remove these areas from dredging but only at no costs to the government. (Ex. 201, tab 94)

76. We find that up through the end of October 2010, the Corps itself was learning the difference between live versus dead oyster beds, between viable versus non-viable oyster beds, and between inter-tidal versus sub-tidal oyster beds. And until all these differences were understood, the Corps was inconsistent in its determination with respect to which oyster beds OSI/Ryan encountered should be excluded from dredging. COR Presley acknowledged that through the end of October 2010, the Corps “never thought about excluding...submerged shell layers” from dredging. He acknowledged that the direction not to dredge crusts over six inches did not come about until October 2010. (Tr. 4/36)

77. OSI’s QC Report of 3 November 2010 noted that Ryan was “reporting heavy shell content within dredge prism,” and dredging was continuing in AS#3 on double shift (ex. 201, tab 108). Its QC Report of 4 November 2010 noted that Ryan was “reporting heavy oyster beds within the dredging prism on the south boundary of [AS#3],” and dredging was continuing in AS#3 on double shift (ex. 201, tab 110).

The Corps’ Decision to Reduce the Dredging Areas in AS#4, AS#5 and AS#6

78. Prior to issuing the solicitation in 2009, the Corps had made a commitment to the Florida Inland Navigation District (FIND) to leave 100,000 CY of capacity for future use (tr. 4/7-8). Ryan had Sea Diversified, Inc. (SDI), a surveying and mapping firm out of Delray, Florida, perform a survey of AS#5 and AS#6. By email on 9 November 2010, Ryan sent OSI a sketch combining SDI’s survey and the Corps’ pre-survey of AS#3 and AS#4. The email called attention to the shaded areas of “**very heavy concentration of shell**” and suggested that “these areas are similar to the designated area on the plan that we are not suppose to dredge.” (Ex. 201, tab 122) For AS#3 and AS#4, the sketch showed shell concentrations along the northern and southern boundaries. For AS#5, the sketch showed shell concentration along the

northern boundary extending south into the middle of the section. For AS#6, the sketch showed shell concentration on all four sides enveloping nearly half of the section. OSI forwarded Ryan's email to the ACO and the COR with the message: "The information provides a more analytical view of areas of very heavy shell that should be considered for exclusion in the revised dredging limit plan currently under review." (*Id.*).

79. To ensure available Disposal Area capacity of 100,000 CY, Corps Project Engineer J. Wilson's 15 November 2010 email to ACO Tolle recommended "allowing contractor to liberally delete work areas" (ex. 346 at 2400). On 16 November 2010, Ryan received from OSI the Corps' proposed Modification No. P00007 (ex. 201, tab 130 at 1). The modification sought to revise the southern dredging limits of AS#4, AS#5 and AS#6 in accordance with an attached Drawing VH 101. The modification offered no change in contract price or contract completion date. It contained a "Closing Statement" requiring the contractor to release the government from "any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to Change Request NM008 for adjustment," and provided that "the reduction in quantity due to the removal of this area shall be addressed in a subsequent Variation in Estimated Quantities modification as per the terms and conditions included in this contract." (Ex. 350 at 2408-15)

80. The COR testified that excluding dredging areas along the southern and western reaches of the bay was for the benefit of the Corps and the contractor because "[i]t would let them get finished with the job sooner, and it limited how much material went into the disposal area which would help us meet our commitment to the Florida Inland Navigation District" (tr. 4/57).

81. As of 19 November 2010, Ryan had finished dredging AS#3 and was dredging AS#4 (ex. 201, tab 130 at 2). Ryan notified OSI by letter dated 19 November 2010 that it "could not agree to the terms and conditions of P00007 as written" for two reasons: First, Ryan said it was not clear "what Change Request NM008 is or what it includes," and it was concerned that Ryan might release the government from "liability for the differing site condition (shell versus fine sediment) that Ryan and Optimum and the Corps of Engineers have been investigating and discussing for some time now." Second, Ryan stated that the Corps' proposed changes to the limits of dredging in Modification P00007 differed from the changes Ryan suggested in its shaded plan using -1.5 elevation as the criteria emailed on 9 November 2010. (Ex. 201, tab 130) By letter dated 24 November 2010, the ACO canceled proposed Modification No. P00007 and directed OSI that "[t]he unfinished dredging work in the remaining uncompleted Acceptance Sections shall be completed in

accordance with the terms and conditions of the contract, including the requirements of Modification P00006”¹¹ (ex. 201, tab 136).

Dredging AS#4 and AS#5 – December 2010

82. On 3 December 2010, the Corps and OSI representatives inspected the southern dredging limits of AS#4 and AS#5 at low tide. They verified that inter-tidal oyster beds were present within the original dredging limits. The COR agreed to establish a 30-foot setback as the southern limits of AS#4 and AS#5 in accordance with the contract requirement. (Ex. 201, tab 144) OSI’s QC Report of 6 December 2010 noted the dredging was completed in AS#4 (ex. 201, tab 148).

83. OSI’s QC Report of 9 December 2010 indicated that Ryan was “digging shell in AS 5 for five hours on second shift” (ex. 201, tab 152). The Corps QAR’s log of the same day indicated the Corps and OSI representatives “re-staked the perimeter of the oyster bed[s] in AS#5” as shown on the contract drawings. They also inspected the layout of AS#6 and probed for oyster beds and hard bottom along the north, west and south limits and found that the south and southwest limits might have to be revised north to avoid some of the oyster beds. The log indicated that the 30-foot setback would not work along the south and southwest corner of AS#6 because of the irregular shape of the oyster beds. (Ex. 201, ex. 151)

84. OSI’s QC Report of 11 December 2010 noted that Ryan was “digging shell in AS 5 for 6.75 hours on second shift” (ex. 201, tab 156). Its report of 13 December 2010 noted that Ryan was “digging shell in AS 5 for 2 hours on second shift” (ex. 201, tab 157). The parties field inspector verified the existing oyster bed as shown in Drawing CN 106 in AS#5 extended “beyond the limits...on the contract drawings,” and “re-staked the oyster bed perimeter to comply with minimum setbacks as required.” (Ex. 201, tab 159)

Deletion of Dredging Areas in AS#5 and AS#6 in December 2010

85. OSI’s QC Report of 14 December 2010 indicated dredging was continuing in AS#5 and Ryan was “digging shell in AS 5 for 3.5 hours on second shift” (ex. 201, tab 160). The Corps QAR’s log indicated that the parties conducted a joint inspection to exclude areas in AS#5 and AS#6 “where there were inter-tidal oyster beds which had developed after contract drawings were assembled.” The parties re-staked the dredging limits on the south and west side of AS#6 and the north side of AS#5. (Ex. 201, tab 162) On 15 December 2010, Corps and OSI representatives conducted a

¹¹ Modification No. P00006 dealt with the oyster bed and dock setbacks the parties discussed on 24 September 2010 and agreed upon (*see* finding 59; ex. 201, tab 38 at 2).

joint inspection to exclude areas in AS#5 and AS#6 “where there were inter-tidal oyster beds which had developed.” The parties “restaked the dredging limits on the north, south & west side of AS#6, and the north side of AS#5.” (Exs. 386, 387, 388, 389; tr. 3/125-26) On 17 December 2010, dredging continued in AS#5 and Ryan was “digging shell in AS 5 for 2.6 hours on second shift” (ex. 201, tab 164). Ryan continued to dig into shells in AS#5 for 1.6 hours on 20 December 2010 and for 4 hours on 21 December 2010 (ex. 201, tabs 166, 167). Mr. Ryan testified that in December 2010, Ryan continued to encounter what it believed to be “oyster bed” every day (tr. 1/198). COR Presley acknowledged that in the areas not deleted “we made them dredge it” (tr. 4/117).

86. The ACO notified OSI by letter dated 17 December 2010 that its work in AS#3 and AS#4 was accepted (ex. 201, tab 165). OSI’s QC Report for 7 February 2011 notes that “Dredging Rose Bay was completed first shift this date” (ex. 434, QCR for 7 February 2011). ACO Tolle notified OSI by letter dated 16 February 2011 that its work in AS#5 and AS#6 was accepted (ex. 201, tab 173).

87. Mr. Ryan testified that “oyster beds” were found in all Acceptance Sections with “[AS#]7 [having] less than some of the other sections, but generally, they all had them” (tr. 1/192). He testified what the Corps ultimately deleted from dredging in December 2010 was no different from what the Corps required Ryan to dredge in October and November 2010, or from what it encountered on the “east side of the bridge” (tr. 1/193).

88. COR Presley testified there were four reasons the Corps excluded areas from dredging: (1) oysters; (2) hard bottom; (3) structures; and (4) “to accommodate the contractor’s request...to make it easier to manage the dredging operations” (tr. 4/62). He explained “On the north it was structures, hard bottom and ease of dredging. On the west end, it was...for oysters and structures and...the power line. And on the south side, it was for hard bottom and oyster beds.” (*Id.*)

89. Structures and hard bottom are not in issue – there is no evidence that Ryan dredged anywhere close to structures or hard bottom. As for oysters or oyster beds, the Corps unilaterally deleted certain areas in AS#5 and AS#6 from dredging in November and December 2010. There is no evidence that the Corps directed and Ryan dredged those oyster beds shown on Contract Drawings CN 105 and CN 106 (*see* finding 9). The evidence indicates and we find that, except with respect to the oyster beds indicated on the contract drawings and those dredging areas deleted in AS#5 and AS#6, the Corps required Ryan to dredge submerged crusts of shell beds, first without exception, and then in October 2010, only those less than six inches. Because the Corps itself was uncertain what qualified as an “oyster bed,” it also required Ryan to dredge non-viable oyster beds and dead oyster beds. The Corps required Ryan to dredge all but what its biologist and SJRWMD were able to confirm

as live or viable inter-tidal oyster beds. In all cases, the Corps consistently required Ryan to dredge to the lines, grades, and limits specified in the contract from May 2010 until it finished in February 2011. If there were areas the Corps relieved Ryan from dredging in order to “accommodate” its request or to “make it easier to manage the dredging operations,” the evidence does not indicate where.

The Corps’ Defenses

90. In its defense to OSI/Ryan’s appeal, the Corps presented an expert report from Dr. Hudyma. Framing OSI/Ryan’s claim as one where it argued it had “no expectation of shells to be present in the dredging area” (ex. 101 at 32), Dr. Hudyma opined that based upon “numerous indicators,” it was “a reasonable expectation that shells and shell fragments would be present in a once productive estuary in which an aquatic ecosystem restoration project is being performed” (*id.* at 34). He pointed to the following indicators:

- The description of the regional geology indicates the potential for the presence of shells.
- The description of the material encountered states the presence of gravel to sand-sized shell particles.
- The description of the upper soft sediments in the boring logs clearly states the presence of shell fragments.
- Oyster beds are shown in the dredging area on CN 104, CN 106, and CN 108.
- Oyster beds are shown in the vicinity of the dredging area on CN 105 and CN 107.

(*Id.*)

91. This analysis missed the point of OSI/Ryan’s claim. OSI/Ryan was not complaining about encountering shell and shell fragments. Rather, it was complaining about the presence of submerged firm crusts of shell beds on top of the silt layer and above the hard bottom it encountered in patches scattered around the acceptance sections, and about the concentrations of large broken and whole shells in various areas not indicated in the Geotechnical Data Report and the contract borings.

92. Dr. Hudyma compared the actual volumes of sand and shell Ryan dredged with the volumes of sand and shell it could expect to dredge based upon the descriptions provided in the boring logs. According to Dr. Hudyma, out of a total

gross quantity of approximately 259,000 CY estimated to have been actually dredged Ryan estimated it dredged approximately 31,000 CY of sand (12%) and approximately 32,000 CY of shell (12%). (Ex. 101 at 36) He concluded that by following the ASTM D2488-00 definition of “Trace,” “Few,” “Little,” “Some” and “Mostly” (*id.* at 18), the volumes of sand and shell fragments to be dredged in the acceptance sections could be calculated (*id.* at 25). He suggested that had the contractor made such calculations when it bid the contract, and assuming the contractor only dredged the upper sediment of the acceptance sections, it should have expected to dredge between 64,747 and 103,323 CY of sand and between 5,169 and 18,611 CY of shell fragments (*id.* at 28). Thus, the conclusion to be drawn was that the contractor did not encounter a differing site condition because the sand and shell fragments actually dredged were less than the volumes that could be expected.

93. Assuming “the contractor only dredged the upper sediments and the descriptions of the upper sediments in the boring logs are representative of the upper sediment throughout each acceptance section,” Dr. Hudyma compared the contract dredged volumes with the final calculated dredged volumes and concluded the contractor over-dredged 98,557.78 CY of material (ex. 101 at 28-29). He posited that “if the contractor over dredged near the edges of the dredging area, it could be possible the contractor dredged hard bottom material,” and “[i]f hard bottom material was dredged, the contractor would have dredged significantly more sand and shell” (*id.* at 29) (emphasis added). Focusing on only one out of nine acceptance sections, Dr. Hudyma concluded “in Acceptance Section 1, the contractor over dredging has resulted in the dredging of hard bottom material. The over dredging into the hard bottom material can account for any unanticipated dredging of sand and any unanticipated dredging of shells and shell fragments.” (*Id.* at 30) At the hearing, he testified he investigated only AS#1 for over dredging because he only had a “limited amount of time...for the report” and he “cannot speak to...the other areas” (tr. 4/181).

94. At the hearing, Dr. Hudyma acknowledged that he made “a big mistake” using the wrong hard bottom elevations for his AS#1 analysis (tr. 4/188-89). Instead of relying upon the much deeper hard bottom elevations provided by Drawing CN 108 (tr. 4/187), Dr. Hudyma relied on the erroneous hard bottom elevations provided to him by the Corps (tr. 4/237).

95. Dredging is not an exact science. With no tolerance specified, a dredger would over-dredge in order to leave the required dredging depth “everywhere” and to avoid having to re-dredge if a later survey finds a “high spot” (tr. 1/64). Since over-dredging was a “non-paid” item (tr. 1/147), there was no incentive for a contractor to over-dredge more than necessary. The Corps expected the dredging contractor to over-dredge “between a half of a foot and a foot” (tr. 1/65). Ryan over-dredged by “probably less than a foot and a half” (tr. 1/55) or “1.2 feet on an average over the area...dredged” (tr. 1/211), in a dredging prism of “two feet of water

and about 15 inches [of] material” (1/55). OSI/Ryan’s dredging expert testified that based upon WOR or WOH materials shown in the boring logs, reaching “way below any depth that the dredge would ever reach,” over-dredging would not have contributed to the amount of shells Ryan ultimately dredged (tr. 1/65, 149). Other than Dr. Hudyma’s theoretical analysis – “if the contractor over dredged near the edges of the dredging area” (finding 93) – there is no evidence that OSI/Ryan dredged hard bottom (gov’t reply br. at 16).

Submission of REA, Certified Claim, and Appeal of CO Decision

96. On 30 August 2012, OSI submitted to the ACO Ryan’s Request for Equitable Adjustment (REA) (R4, tab 3 at 33). Ryan’s REA, dated 31 July 2012, sought \$1,247,932 and a time extension of 93 calendar days (ex. 200, tab D at 4). Ryan contended that it incurred extra costs as a result of a constructive change and a differing site condition because it was “required to dredge oyster beds although oyster bed dredging was specifically excluded under the terms of the contract.” It contended that it “worked an additional 93 calendar days to complete the dredging at Rose Bay.” (*Id.*) With field and home office overhead plus profit, the REA sought “\$1,877,057.79 and an additional duration of 93 calendar days”:

RIS – REA Cost	\$1,247,932.00
Field Office Overhead	\$ 279,536.77
Home Office Overhead	\$ 248,366.42
Profit @ 5.7%	<u>\$ 101,222.60</u>
TOTAL	\$1,877,057.79

(R4, tab 3 at 32, 36)

97. In her 13 December 2012 letter, the CO advised OSI and Ryan that she planned to provide a response by 31 January 2013. Ryan’s 14 December 2012 letter to OSI complained that since submission of its REA three and one-half months ago, there had been “no substantive correspondence,” “no discussions,” “no meetings,” and had received no questions or any requests for further information from the Corps. The letter said that “as a result of the apparent lack of progress,” it was in Ryan’s best interest to convert its REA to a claim. (R4, tab 3 at 33) Ryan furnished a certification signed by its president (*id.* at 35). OSI submitted a certified claim to the CO by letter dated 20 December 2012 seeking an equitable adjustment of \$1,877,057.79 including home and field overhead and an “additional duration of 93 calendar days” (*id.* at 32, 36).

98. The CO’s 3 April 2013 decision denied OSI/Ryan’s claim (R4, tab 2). On the question of constructive change, the CO took the position that the terms “oyster shell” and “oyster bed” are not “interchangeable.” According to the CO, “an oyster

bed must contain live oysters and provide a viable environment for sustaining those live oysters.” She observed that “[s]hell fragments, even if highly concentrated, do not constitute an oyster bed if no live oysters are present and the environment is not conducive for producing oysters.” Based on SJRWMD Mr. Haydt’s observation that oyster beds were only sustainable in inter-tidal habitats, she concluded that a concentration of shells in a sub-tidal area did not qualify as an oyster bed. (*Id.* at 27-28) She concluded there was no constructive change because she found no evidence that Ryan was directed to dredge oyster beds:

Throughout the performance of the contract, if the Corps verified the existence of an oyster bed, the dredging limits were adjusted. If the Corps found no viable oyster bed but only shell and shell fragments, Ryan was directed to continue dredging to the lines, grades and limits established by the contract. This was the process contemplated by the contract documents and the one consistently followed throughout this dredging project.

(R4, tab 2 at 27-28)

99. On the question of differing site condition, the CO denied the claim on three grounds. First, the CO contended that while the contract showed approximately 8,700 square feet of oyster beds, the additional 240,000 square feet of “intertidal” oyster beds the Corps ultimately excluded and deleted was completely in accordance with what was contemplated by Note 4, Drawings CN 105 and CN 106. (R4, tab 2 at 28) She attributed Ryan’s numerous equipment breakdowns to using a larger dredge than necessary and over dredging (*id.* at 29). Second, on the character of the material dredged, she contended that the contractor actually encountered less shell, sand and shell fragments – 24.4% based on the contractor’s measurement – comparing with the Corps’ after-dredge surveys of 35.8%, and the sieve analysis of C[B]-RB-1 and CB-RB-10 showing 55.3% versus 40.2% sand (*id.* at 30). Third, she contended that while it was unclear whether Ryan was claiming a differing site condition based on low tides, she found “Tides are a phenomenon related to weather and as such are not properly the subject of a differing site condition claim” (*id.*).

100. OSI for itself and its subcontractor Ryan timely appealed the CO decision by notice dated 27 June 2003. The Board docketed the appeal as ASBCA No. 58755. A five-day hearing on entitlement was held from 12-16 May 2014 in Jacksonville, Florida. By agreement, the parties treated the extent of the delay claimed – 93 calendar days – as a quantum issue.

DECISION

As a part of the Rose Bay Task Force's multi-phased project to restore Rose Bay's ecosystem, the Corps entered into a contract with OSI to reconstruct an existing disposal area and to remove unconsolidated sediments from the bay. OSI subcontracted the dredging work to Ryan. Dredging was to be performed by Acceptance Sections. There were nine Acceptance sections: AS#1 – AS#9. Upon the start of dredging in May 2010, Ryan immediately ran into what it believed to be hard bottom at a much higher elevation in AS#9. The Corps determined what Ryan encountered was not hard bottom and required Ryan to continue to dredge through the firm layers of crust encountered. The crusts typically consisted of whole oyster shells, sand, and shell fragments interlocked together with mud and sand.

Except in AS#7, Ryan continued to run into and dredge firm layers of crust in AS#1, AS#2, AS#3 and AS#4. By the end of October 2010, five months after Ryan began dredging, the Corps confirmed that crusts "on top of the silt layer" and "dredged material with heavy shell content" were found "in patches scattered around the acceptance sections" (finding 69). In December 2010, the Corps deleted certain areas in AS#5 and AS#6 from dredging. In areas not deleted, Ryan continued to run into crusts and high concentrations of shell. The Corps acknowledged in areas not deleted, "we made them dredge it." (Finding 85) Ryan completed its dredging in February 2011 (finding 86), three months longer than planned (finding 36).

OSI/Ryan's certified claim sought an equitable adjustment on the bases of constructive change and encountering a differing site condition (findings 96, 97). Its post-hearing brief tells us that both claims "were based on basically the same evidence," and its constructive change case "is essentially subsumed" in its differing site condition case (app. br. at 1 n.1). OSI/Ryan contends it encountered a Type I differing site condition.

The Elements of a Type I Differing Site Condition

The DIFFERING SITE CONDITIONS clause at FAR 52.236.2(a)(1) described a Type I differing site condition as "subsurface or latent physical conditions at the site which differ materially from those indicated in this contract." To establish entitlement to an equitable adjustment due to a Type I differing site condition claim, a contractor must prove, by a preponderance of the evidence, that: (1) the condition indicated in the contract differs materially from those actually encountered during performance; (2) the conditions actually encountered were reasonably unforeseeable based on all information available to the contractor at the time of bidding; (3) the contractor reasonably relied upon its interpretation of the contract and contract-related documents; and (4) the contractor was damaged as a result of the material variation between expected and encountered conditions. *Stuyvesant Dredging Co. v. United*

States, 834 F.2d 1576, 1581 (Fed. Cir. 1987); *Control, Inc. v. United States*, 294 F.3d 1357, 1362 (Fed. Cir. 2002).

What Materials did the Contract Documents Indicate the Contractor would Encounter?

A Type I differing site condition is dependent on what is “indicated” in the contract documents. *Foster Constr. C.A. & Williams Bros. Co. v. United States*, 435 F.2d 873, 881 (Ct. Cl. 1970). A contractor cannot be eligible for an equitable adjustment for a differing site condition unless the contract indicated what those conditions would supposedly be. *P.J. Maffei Bldg. Wrecking v. United States*, 732 F.2d 913, 916 (Fed. Cir. 1984). Where the contract is silent, a Type I differing site condition claim cannot arise. *Neal & Co. v. United States*, 36 Fed. Cl. 600, 617 (1996). Contract indications, however, need not be explicit or specific; they must be reasonably plain or positive indications that the subsurface conditions would be materially different from those actually encountered. *P.J. Maffei*, 732 F.2d at 916.

In this case, the Rose Bay environmental restoration solicitation told bidders that the project involved the removal of up to approximately 152,000 CY of “*unconsolidated sediment*” from the Bay (finding 4) (emphasis added). It is undisputed that the term “unconsolidated” referred to “a very loose [and] soft material” and “something [with] very soft consistency” (finding 12). The dredging portion of the specifications (§ 35 20 23, ¶ 3.4.6) told bidders that the materials to be removed were described in § 00 31 32 of the Geotechnical Data Report and hard bottom material was not to be dredged (finding 7).

The “Character of Materials” clause of the Geotechnical Data Report (¶ 1.2.2.1) told bidders that “[t]he first materials encountered in the bay are unconsolidated fine sediments,” consisting of “predominantly organic sandy silt with gravel to sand-sized shell particles with a *very soft consistency, as indicated by the absence of blow counts.*” This clause also told bidders that “[s]ediments within Rose Bay are represented through borings CB-RB-1 through CB-RB-10.” (Finding 11) (Emphasis added) All nine borings inside the dredging area indicated “SILT” to be the predominant material that would be encountered (finding 19). All nine borings indicated the presence of various amounts (some, little) of fine quartz sand, and various amounts (trace, little) of sand to medium size shell fragments. Eight of the nine borings indicated “WOR” material, and one boring indicated “WOH” material. (Finding 19) Because sand is a very high friction material, and very little sand is needed to hold up the split spoon drill rod, “WOR” material indicated very little or trace amounts of sand and shell fragments, not much more than five percent of the material to be dredged (finding 23).

The “Character of Materials” clause, ¶ 1.2.2.1, indicated that the unconsolidated fine sediment ranged in depth from 9 to 27 feet. That meant that the hard bottom would be from 9 to 27 feet below the top of sediment. Because the dredging prism only extended to a depth of -4 feet NGVD, bidders could reasonably assume that they would not dredge into hard bottom three or four feet below the top of sediment. (Finding 14)

Since ¶ 1.3.2 of the Geotechnical Data Report defined “Coarse Gravel-Sized” to mean particles up to 3 inches in diameter (finding 13), bidders should expect to dredge up broken or whole shells up to three inches from time to time. We do not interpret ¶ 1.2.2.1 to indicate that a bidder should expect to encounter heavy concentrations of broken and whole shells. Our reading is consistent with the context in which “gravel-sized particles” is mentioned, *i.e.*, the material to be dredged remains of a “*very soft consistency, as indicated by the absence of blow counts*” (finding 11).

What Materials Did the Contractor Actually Encounter During Performance?

What conditions were actually encountered by the contractor is a question of fact. *Arundel Corp. v. United States*, 515 F.2d 1116, 1123 (Ct. Cl. 1975). In this case, as soon as Ryan began dredging in May 2010, it encountered what its project manager described as “a consolidated sandy sandbar shelly bar nature” material sufficiently hard to carry the weight of a person. Erroneously believing what it encountered was an unexpectedly high hard bottom, OSI reported what Ryan encountered to the Corps. (Findings 44, 45) In May and June 2010, the Corps confirmed the existence of firm layers of crust “on top of the silt” and above the hard bottom probing AS#8 and AS#9 (findings 47, 48). In July 2010, Ryan through OSI formally notified the Corps that it had encountered a differing site condition because the material encountered was not “the unconsolidated fine sediments that were reflected in the borings provided” (finding 50).

In mid-August 2010, Ryan mobilized to the west side of the US-1 Bridge. It encountered very little shells and had no problems dredging AS#7; it finished AS#7 on time. (Finding 55) When Ryan reached AS#2 west of AS#7, it ran into crusts again which hampered its dredging efforts (finding 56). Ryan continued to encounter the same crusty material it had been dealing with dredging AS#1 in September 2010 (finding 58). In October 2010, Ryan’s production was impacted while dredging over a shell bed and shell banks at two locations within the dredging prism in AS#2 (finding 65).

In his 21 October 2010 email to the Corps’ project manager, the Corps’ on-site QAR confirmed the existence of crusts “on top of the silt layer” (as distinguished from the hard bottom). These crusts were said to be found “in patches scattered around the acceptance sections,” and “getting worse...towards the western reaches of the project

and in shallow areas along the northern, southern, and western dredging limits.” He estimated there were 10 to 12 newly developed mounds of sand and shells not shown on the contract drawings covering 20% to 25% of the areas shown in AS#5 and AS#6. He also reported that “at times the shell content is heavy” coming out of the discharge pipe. (Finding 69)

The Corps did not relieve Ryan from dredging crusts until October 2010 when it allowed Ryan not to dredge crusts exceeding 6 inches (finding 76). Ryan continued to dredge AS#3 and AS#4 in November and early December 2010 (findings 81, 82). It dredged into heavy concentrations of shell in AS#5 in December 2010 (finding 83, 84). Even after the Corps deleted from dredging in December 2010 certain areas in AS#5 and AS#6 where inter-tidal oyster beds had developed, Ryan continued to run into shells and what it believed to be “oyster bed[s]” every day. In areas not deleted, the Corps required Ryan to continue to dredge. (Finding 85)

We have found that except with respect to the oyster beds indicated on the contract drawings and those deleted dredging areas in AS#5 and AS#6, the Corps required Ryan to dredge submerged crusts of shell beds, first without exception, and then in October 2010, only those less than 6 inches. Because the Corps itself was uncertain what qualified as an “oyster bed,” it also required Ryan to dredge non-viable oyster beds and dead oyster beds. The Corps required Ryan to dredge all but what its biologist and SJRWMD were able to confirm as live or viable inter-tidal oyster beds. In all cases, the Corps consistently required Ryan to dredge to the lines, grades, and limits specified in the contract from May 2010 until it finished in February 2011. (Finding 89)

Did the Conditions Indicated in the Contract Differ Materially from Those Actually Encountered During Performance?

In defense, the Corps frames OSI/Ryan’s claim as one where it “did not expect to dredge any *sand or shell* within the Rose Bay, a historic shellfish habitat” (gov’t br. at 12) (emphasis added). The Corps maintains “[t]he contract specifically states that the Appellant should expect *both sand and shell* in addition to silt” (*id.* at 13) (emphasis added). The Corps’ defense does not address the differing site condition claim advanced by OSI/Ryan. OSI/Ryan has never argued encountering shell and sand in the dredging area was a differing site condition. Nor has it argued that encountering shell above sand-size shell in and of itself was a differing site condition. The Corps’ attempt to minimize or ignore the firm layers of crust and the high concentrations of shell OSI/Ryan encountered throughout Rose Bay highlights the weakness of its defense.

The Corps also maintains that “**the Contract was silent as to Quantity of Shell above Sand-size and the Concentration of the Shell**” (gov’t. br. at 12). We do

not agree. Of the ten borings in the contract documents, nine of them indicated the presence of “WOR” or zero blow-count material. According to expert testimony, this indication told bidders that “the sum o[f] sand and shell could not have been much more than five percent in that material” (finding 23). The Corps’ own expert read the borings to indicate that “[t]he consistency of the material is very soft as indicated by the blow counts. In nine of the ten borings, the weight of the rods alone caused the sampler to move eighteen inches into the sediment... All of the descriptions note the presence of fine sand and medium and coarse sand-sized shell fragments in the upper sediment.” (Finding 20)

OSI/Ryan’s geotechnical engineering expert testified that if the Corps were to take 10 borings just before the solicitation was issued in 2009 at the same locations as it did in 2000, the new borings would show a “totally different geotechnical profile” and would show the presence of “shells” and “packed sand,” cemented “oyster beds” and “gravel-size shell,” and the more recent borings would not have described the shell contents to include only “shell fragments.” (Finding 24) Thus, the “zero blow-count” or “the absence of blow counts” indication in the contract documents (§ 1.2.2.1) told bidders that they would not encounter any high concentrations of large broken and whole shells. If large quantity or large concentration of shell had been present when borings were taken in 2000, the borings would not have indicated zero blow-count material. There was no differing site condition in AS#7. AS#7 thus exemplifies what OSI/Ryan should have encountered based on the representations in the Corps’ contract documents (findings 55, 56).

We found that the Rose Bay Task Force’s restoration efforts over the years in controlling runoff pollution, eliminating leaking septic systems, removing the old causeway and replacing the US-1 Bridge had worked to improve the benthic substrate and hydrological process of Rose Bay. These improvements in the intervening years had changed the nature and character of the materials in the bay by the time dredging work took place in 2010 and 2011. (Finding 70)

We also reject the Corps’ argument that the blow-counts were specific to the exact locations of the 10 borings and were not a guarantee of the subsurface condition of the entire bay (gov’t br. at 17). The “Character of Materials” clause (§ 1.2.2.1) flatly represented to bidders that “[s]ediments *within Rose Bay are represented through borings CB-RB-1 through CB-RB-10*” (finding 11) (emphasis added). See *Weeks Dredging & Contracting, Inc. v. United States*, 13 Cl. Ct. 193, 220 (1987) (“a reasonable and prudent contractor would conclude, based on the contract boring logs, that the government was positively representing the *overall character of the type of materials to be expected...where such materials would be found within the contract area*”). We have said that contract borings are the most significant indicator of subsurface conditions. *Optimum Services, Inc.*, ASBCA No. 57575, 13 BCA ¶ 35,412

at 173,724 (citing *Nova Group, Inc.*, ASBCA No. 55408, 10-2 BCA ¶ 34,533 at 170,322).

Finally, the Corps contends that OSI/Ryan cannot demonstrate that the conditions encountered differed materially from those represented in the contract documents because it in fact dredged “predominantly sandy silt” (gov’t br. at 33). The Corps tells us that OSI/Ryan’s own calculations showed it dredged 76% silt, 12% sand, and 12% shell of all sizes (*id.* at 33-34). The Corps tells us by applying the definition in ASTM D2488-00, Dr. Hudyma had calculated the borings showed up to 40% sand and 7% sand-sized shell fragments (*id.* at 34). The Corps posits that another 5% was shell “up to gravel size that could not be captured in the borings” (*id.* at 35). The Corps argues that “if anything the material encountered was actually more favorable than described by the borings” (*id.* at 34). (Finding 92)

As the Corps recognized in its brief (gov’t br. at 16), differences, or similarities in this case, in the quantity of materials, are not the same as differences or similarities in the nature or character of the materials. Quantity differences or similarities do not prove or disprove a differing site condition. *Renda Marine, Inc. v. United States*, 66 Fed. Cl. 639, 655-56 (2005); *Spirit Leveling Contractors v. United States*, 19 Cl. Ct. 84, 94 (1989); *Weeks Dredging*, 13 Cl. Ct. at 221.

We conclude OSI/Ryan has proved, by a preponderance of the evidence, that the materials it actually encountered (firm layers of crust in patches and high concentrations of broken and whole shell at various locations) in Rose Bay differed materially from those the contract documents indicated (zero blow-count unconsolidated sediment with little to some sand, and trace to little sand-size shell fragments).

The Actual Subsurface Conditions were Reasonably Unforeseeable

The Rose Bay contract included the Site Investigation and Conditions Affecting the Work clause. This clause required the contractor to acknowledge that “it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site.” (Finding 29) A contractor is charged with knowledge of the conditions that a pre-bid site visit would have revealed. *H.B. Mac, Inc. v. United States*, 153 F.3d 1338, 1346 (Fed. Cir. 1998).

Before bidding on the contract, OSI personnel did visit the site and did not see anything different from what was represented in the Geotechnical Data Report and the boring logs to warrant further geotechnical investigation (finding 30). Before entering its subcontract with OSI, Ryan personnel also visited the site and “did a couple probes

just west of the bridge” with a steel rod and found nothing inconsistent with what the borings showed as WOR material (finding 32).

Evidence in the record indicates that the submerged algae-covered crusts would be difficult or impossible to see depending upon the time of day and the color of the water (finding 30). OSI/Ryan’s geotechnical engineering expert opined that a reasonably prudent contractor would not have discovered the firm layers of shell beds below the water that permeated the 73-acre Rose Bay unless it “spent money and time putting in a drill rig” which none of the seven bidders did (finding 33). Contractors are not expected to conduct their own expensive tests. *Foster Constr.*, 435 F.2d at 886 (charging contractor with notice of condition not apparent to bidders on visual inspection of the site but was discoverable through geological studies beyond those bidders had reason to make held erroneous as a matter of law).

We have found that even if a contractor were to visit the site at low tide and came across a firm layer of shell crust, it could easily have mistaken the crust to be a hard bottom or newly developed oyster beds required to be reported for setback purposes but need not be dredged (finding 34). The Corps itself had mistaken the firm layers of crust to be hard bottom: When the Chief of the Architect Engineering and Construction Branch in the Corps’ Contracting Division expressed concern to the CO in February 2010, three months before Ryan began dredging about a “significant amount of firm material above the required grade,” as probably “out of scope,” the COR and the Corps’ project manager believed the firm material to be hard bottom (findings 39, 40). When Ryan first encountered the firm crust in May 2010, it too, thought it ran into an unexpectedly high hard bottom (findings 44, 45).

Indeed, no one within the Corps appeared to understand the difference between the crusts OSI/Ryan had consistently encountered and an “oyster bed.” In late October 2010, five months after Ryan began dredging, the ACO told his colleagues that it was imperative to have “a marine biologist visit the site ASAP to investigate” whether the “crust” OSI/Ryan continue to encounter on a frequent basis was “either hard bottom or recently formed oyster beds” (finding 67).

The contractor bears the risk associated with not examining the information that the contract explicitly referred to and make available for inspection. *Randa/Madison Joint Venture III v. Dahlberg*, 239 F.3d 1264, 1272 (Fed. Cir. 2001); *Flippin Materials Co. v. United States*, 312 F.2d 408, 414 (Ct. Cl. 1963). SJRWMD’s Mr. Haydt testified that he told the Corps before the project plans and specifications were finalized that there were “crust” consisting of “shell throughout the bay” that he had to “joke...through” while probing (finding 27). There is no evidence the Corps alerted bidders to any crusts (finding 28). There is no evidence that OSI or Ryan had any knowledge of the existence of any crusts that that could affect its dredging (findings 32, 36).

Absent specific provisions in the contract or specific circumstances alerting a contractor to verify certain conditions, we conclude that neither OSI nor Ryan had to go out of their way to extensively probe the dredging area to verify the representations the Corps made in the contract documents. We conclude that OSI/Ryan has established, by a preponderance of the evidence, that it conducted a reasonable site investigation and the subsurface conditions encountered – the firm layers of crust and the high concentrations of large broken and whole shell that OSI/Ryan had to dredge – were reasonably unforeseeable.

OSI/Ryan Reasonably Relied on the Contract Indications of the Subsurface Conditions

To prevail on a differing site conditions claim, the contractor must show reliance on the representations in the contract. *Control*, 294 F.3d at 1363; *H.B. Mac, Inc. v. United States*, 153 F.3d 1338, 1345 (Fed. Cir. 1998) (“[T]o establish entitlement to an equitable adjustment by reason of a Type I differing site condition: ...[t]he contractor...must show that it reasonably relied upon its interpretation of the contract and contract-related documents”). 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. *International Technology Corp. v. Winter*, 523 F.3d 1341, 1352 (Fed. Cir. 2008); *H.B. Mac*, 153 F.3d at 1347.

The Corps argues that OSI/Ryan cannot demonstrate that it reasonably relied on the contract representations because (1) OSI/Ryan knew and it was well known that “Rose Bay was once a thriving shellfish habitat” so it was “unreasonable to expect no shell would be in the dredging prism of the bay”; and (2) “shell was clearly visible in the bay and along the banks during low-tide” and had OSI/Ryan gone to the bay during low tide, it “would have been familiar with what an exposed oyster bed looks like, whether additional beds had formed, and would have been able to observe loose oyster shells that had washed up on the shoreline.” (Gov’t br. at 30)

Here again, the Corps pretends that encountering shells was the problem. It was not. OSI/Ryan never said it should not encounter shells in the dredging prism. Given what was indicated in the contract documents, it acknowledged that it would encounter stray shells here and there. Nor were exposed oyster beds, newly formed oyster beds or shells that had washed up on the shoreline the problem. OSI and Ryan knew they were not supposed to dredge oyster beds or to dredge outside the dredging prism. (Finding 36)

What OSI/Ryan was complaining about was that it encountered submerged layers of crust, some of which were sufficiently firm to withstand the weight of a person at various locations throughout the bay, that it encountered 10 to 12 “newly

developed mounds of sand and shell” in AS#4, AS#5 and AS#6 (finding 69), and that it was “digging shell” in AS#5 (findings 83, 84, 85). As for these conditions, there is no evidence OSI/Ryan had any knowledge of their existence before bid. We conclude OSI/Ryan did not know that the representations the Corps made in the “Character of Materials” clause and the borings were not reflective of the actual conditions in the bay.

Nothing the Corps has argued has dissuaded us from the conclusion that OSI/Ryan reasonably interpreted the Character of Materials clause (§ 1.2.2.1) and the borings to indicate that it could expect to dredge unconsolidated, zero blow-count, very loose, very soft, predominantly silt material with insignificant amounts of sand and shell fragments, and with some large broken or whole shells up to three inches in diameter here and there. Reliance upon this interpretation is reflected in the fact that OSI/Ryan planned to complete dredging with single shifts in six months using a 10-inch dredge (findings 35, 36). That OSI/Ryan reasonably relied upon its interpretation is demonstrated by the Corps’ own IGE which estimated that 93% of the materials expected to be dredged would be “Mud & Silt,” 7% would be “Loose Sand,” and 0% would be “Composite Shell”; and that dredging could be “done in daylight hours in less than six months” using a smaller 8-inch dredge than the 10-inch dredge OSI/Ryan chose (findings 25, 26).

We conclude that OSI/Ryan has proved, by a preponderance of the evidence, that it reasonably relied on the contract indications of subsurface conditions.

OSI/Ryan was Damaged as a Result of the Material Variation Between Expected and Encountered Conditions

In dredging, the nature of the material to be dredged and pumped determines the productivity and the cost of dredging (finding 38). Based upon what OSI and Ryan expected to encounter, they bid to use a 10-inch dredge, work single shifts, and plan to complete in six months (findings 35, 36). Instead of dredging zero blow-count unconsolidated sediment with sand and shell fragments described in the contract documents, however, OSI/Ryan ran into what the Corps itself described as a “significant amount of firm material above the required grade” (finding 39) and a high concentration of large broken and whole shells at various locations. Most, if not all of these materials encountered were developed since the borings were taken nearly ten years before the dredging took place (finding 69). These materials slowed OSI/Ryan’s dredging operations, caused equipment failures (findings 47, 52, 63, 65), and clogging of the disposal line (findings 52, 53, 58). Slow productivity forced OSI/Ryan to increase its dredging to 11 and 12-hour days in June 2010, and to two 12-hour shifts a day beginning the first week of July 2010 (finding 48, 49). OSI/Ryan continued to work double shifts into October (finding 65), November (finding 77), and December 2010 (findings 82, 83, 84).

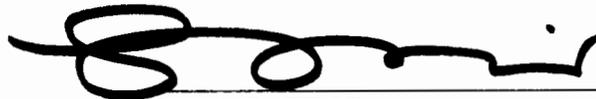
We do not wish to leave the impression that all nine acceptance sections were totally engulfed by firm layers of shell crusts or contained high concentrations of large broken or whole shell (as opposed to sand size shell fragments). As QAR R. Wilson observed, crusts were found in “patches scattered around the acceptance sections,” and “newly developed mounds of sand and shell” were found in specific locations but “most of the time the average discharge has been a sandy silt material with an occasional shell” (finding 69). There was no differing site condition in AS#7 (findings 55, 56). And, not all equipment failure was the Corps’ responsibility (finding 52 n.10).

Nonetheless, we conclude that OSI/Ryan has proved, by a preponderance of the evidence, that it was damaged as a result of the material variation between the expected and the encountered conditions.

CONCLUSION

At its core, this case is about a dredging project as the last phase of a gradually improving benthic and hydrological ecosystem in which work began nearly a decade after core boring information at the site was gathered. Relying on the Corps’ outdated contract representations, the contractor ran into subsurface conditions that had developed in the intervening years. We conclude that OSI/Ryan has proved, by a preponderance of the evidence, all of the elements of a Type I differing site condition, and is entitled to an equitable adjustment of its contract price. Having decided in favor of the contractor, this case is remanded to the parties for determination of the extent of delay experienced by OSI/Ryan as well as the quantum of adjustment.

Dated: 25 March 2015



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

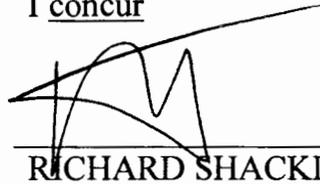
(Signatures continued)

I concur



MARK N. STEMLER
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. 58755, Appeal of Optimum Services, Inc., rendered in conformance with the Board's Charter.

Dated:

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