

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of -- )  
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Munck Asphalt A/S ) ASBCA No. 61497  
 )  
Under Contract No. W912DS-14-C-0019 )

APPEARANCE FOR THE APPELLANT: Mr. Hans Christian Munck  
Chief Operations Officer

APPEARANCES FOR THE GOVERNMENT: Michael P. Goodman, Esq.  
Engineer Chief Trial Attorney  
Lorraine C. Lee, Esq.  
Engineer Trial Attorney  
U.S. Army Engineer District, New York

OPINION BY ADMINISTRATIVE JUDGE CATES-HARMAN

This appeal arises from a contract awarded to Munck Asphalt A/S (Munck or appellant) by the U.S. Army Corps of Engineers (USACE) to perform work on a runway at Thule Air Base in Greenland. Munck appeals the USACE's final decision denying its claim for extra work to encase in concrete airfield runway edge light cables. Munck asserts that requiring concrete encasement for the installation of conduit on a portion of the runway renovation is a constructive change, since the drawings for this work do not state concrete encasement is required. The USACE maintains that encasing these electrical cables in concrete was always part of the basic contract. The issue before us then is whether the contract requires both duct and conduit to be concrete-encased where specified in the contract. The parties elected to submit the appeal on the record pursuant to Board Rule 11. We decide entitlement only. Appellant did not submit a brief. For the reasons discussed below, we find that the contract uses the terms duct and conduit interchangeably and therefore we deny this appeal.

FINDINGS OF FACTS

1. The USACE awarded Contract No. W912DS-14-C-0019 to Munck on August 21, 2014, in the amount of 130,042,220 Danish kroner (\$22,782,050.07). Consistent with 10 U.S.C. 2304(c)(4) (International Agreement), the award was limited to Danish and Greenlandic firms only. This was a Design-Bid-Build contract. The contract provided for runway removal and replacement, including runway edge

lights & thresholds, and other associated electrical upgrades. All work was to be performed in accordance with the plans and specifications as set forth in the special contract requirements entitled “Commencements, Prosecution and Completion of Work” at paragraph d. The project was to occur in two phases over a performance period of 905 calendar days. (R4, tabs 3a at 1-6, 32-33; 3b; 4) <sup>1</sup>

2. A Notice to Proceed was issued on September 10, 2014. Munck acknowledged receipt of the Notice to Proceed the following day. (R4, tab 4)

### The Dispute

3. A preconstruction conference was held on January 13, 2015. Among the topics discussed during the meeting, was Munck’s request for the government to provide “details of the trench for the runway lighting power cables.” The government responded that the “Cross section of new runway edge lighting trench is detailed on sheet ED103 Concrete Encased Duct – 1 Conduit.” (R4, tab 6 at 1-2) Further written response was provided by the government on January 20, 2015, “[t]he 5kV cables shall be installed in concrete as per the details shown on Sheet ED103. Furthermore, Section 26 56 20, [paragraph] 3.6 and Section 33 70 02, paragraph 2.5 both state that the conduits shall be concrete encased.” (R4, tab 6 at 1-2)

4. On January 20, 2015, Munck responded with a Request for Information “RFI” No. 013. In it, Munck states “[r]egarding the conduit trench we understand that you want the conduits concrete encased, similar to the ducts indicated on drawing ED103. We therefor[e] need a drawing for the conduit trench . . . giving indications on location related to the runway edge line etc.? Please note: The drawings ED101 and ED 102 also need revision to provide the information on concrete encased ducts.” In responding to the government’s previous answer appellant states, “We do not acknowledge your references. The references are referring to ducts yes[,] however the drawings ES 101-107 + ED101 do not specify duct for the work in question.” (R4, tab 7).

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<sup>1</sup> The government provided a paper Rule 4 file with excerpts from the contract and a CD containing the full contractual documents at tab 3. This CD is not organized in tabs, so we refer here to the relevant file’s name. Drawings ES101-08 apply to Phase 1, while ES108-13 apply to Phase 2. Drawing ES114 appears in different versions in each phase, but the differences are irrelevant for our purposes. Drawings ED101-103 are the same in both phases. For simplicity, we will cite to and the parties primarily refer to drawings in Phase 1, though the claim at issue spans work during both phases. Likewise, our decision applies to the disputed work in both phases.

5. USACE responded to RFI No. 013 on January 22, 2015, directing that the “cables shall be installed in concrete as per the details shown on Sheet ED103. . . . [T]he location of the conduit trench is indicated on Notes 1 and 2 of Sheets ES101 thru ES107.” The USACE explained that “[s]heet ED101 is an Elevated Light Detail not a duct/conduit burial detail” with new duct bank details “shown on large scale details on sheet ED103 . . . .” Further reference is provided to specification sections 26 56 20, paragraph 3.6 and Section 33 70 02, paragraph 2.5 requiring that “conduits shall be concrete encased.” (R4, tab 8)

6. Appellant performed the work as directed by the government and thereafter submitted a Request for Equitable Adjustment (REA) on September 21, 2015, seeking recovery of 3,028,559 Danish kroner asserting entitlement on the theory that encasing the cables in concrete represented a change to the contract. Appellant rejected the government’s reliance on Section 26 56 20, paragraph 3.6 and Section 33 70 02, paragraph 2.5 as requiring both duct lines and conduit be concrete encased in locations as indicated. Appellant declared that there is a difference between conduits and duct lines, relying on the distinction made in Section 31 00 00 paragraph 3.7.1. Appellant argued further that the contract language is unclear, and it should be construed against the drafter. (R4, tab 9 at 1)

7. By letter dated May 18, 2016, the government denied the REA (R4, tab 10).

8. On June 3, 2016, Munck certified its claim and requested a final decision from the contracting officer (R4, tab 11). A COFD was issued on December 11, 2017, denying the claim in the amount of \$530,572.17 (R4, tab 2 at 10). Appellant timely appealed. The Board has jurisdiction over this appeal.

### The Specification

9. The contract incorporated by reference and FAR 52.233-1, DISPUTES (JUL 2002), and FAR 52.236-21, SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997) – Alternate I (APR 1984) (R4, tab 3a at 12), which provides in part: “Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of a difference between drawings and specifications, the specifications shall govern.” FAR 52.236-21(a)

10. The contract also incorporated by full text DFARS 252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000) which provides:

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the

technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall—

- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

“Upon completing the work under this contract, the Contractor shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the equipment is completed and accepted.” See FAR 52.236-21 Alt. 1 (APR 1984)

(R4, tab 3a at 27-28).

11. The project included work on the runway edge lights as described in Specification Section 26.56. 20.00 10, AIRFIELD AND HELIPORT LIGHTING AND VISUAL NAVIGATION AIDS, Part 2, specifically, 2.5 RUNWAY LIGHTING SYSTEM “Runway lights include runway edge lights, runway threshold lights, mounting structures, controls, and the associated equipment and interconnecting wiring to provide complete systems as indicated and specified herein. In-pavement light fixtures shall be able to withstand a minimum static single wheel load of 50,000 pounds.” (R4, tab 3 at 174)

12. Specification Section 26.56. 20.00 10, AIRFIELD AND HELIPORT LIGHTING AND VISUAL NAVIGATION AIDS, Part 2, Section 2.3 ADDITIONAL REQUIREMENTS included requirements for duct and conduit:

#### 2.3.2 Conduit, Conduit Fittings, and Boxes

##### 2.3.2.1 Rigid Steel or Intermediate Metal Conduit (IMC) and Fittings.

The metal conduit and fittings shall be UL 6 and UL 1242, respectively, coated with a polyvinylchloride (PVC) sheath bonded to the galvanized exterior surface, nominal 40 mils thick, conforming to NEMA RN 1.

##### 2.3.2.2 Flexible Metal Conduit

Flexible metal conduit shall be UL 1, zinc-coated steel. UL 360 liquid-tight flexible metal conduit shall be used in wet locations.

##### 2.3.2.3 Outlet Boxes for Use with Steel Conduit, Rigid or Flexible

These outlet boxes shall be UL 514A, cast metal with gasket closures.

##### 2.3.2.4 Plastic Duct for Concrete Encased Burial

These ducts shall be provided as specified in Section 33 70 02.00 10, ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND.

### 2.3.2.5 Plastic Conduit for Direct Burial

This plastic conduit shall be provided as specified in Section 33 70 02.00 10, ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND

(R4, tab 3c at 1, 8-9)

13. Execution of the work as provided for in Specification Section 26 56 20.00 10 provides:

#### 3.2 GENERAL INSTALLATION REQUIREMENTS

Circuits installed underground shall conform to the requirements of Section 33 70 02.00 10 ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND, except as required herein. Steel conduits installed underground shall be installed and protected from corrosion. Except as covered herein, excavation, trenching, and backfilling shall conform to the requirements of Section 31 00 00 EARTHWORK. Concrete work shall conform to the requirements of Section 03 30 04 CONCRETE FOR MINOR [STRUCTURES].

(R4, tab 3c at 13)

14. Specification Section 26 56 20.00 10 identifies the general requirements for the installation of cables as follows:

#### 3.3 CABLES, GENERAL REQUIREMENTS

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##### 3.3.1 Duct Line Installation

Install medium-voltage cables in duct lines where indicated. Cable splices in low-voltage cables shall be made in manholes and handholes only, except as otherwise noted. Cable joints in medium-voltage cables shall be made in manholes only. Neutral and ground conductors shall be installed in the same duct with their associated phase conductors. Electrical metallic tubing shall not be installed underground or enclosed in concrete.

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### 3.3.2.3 Other Requirements

Where direct-burial cables cross under roads or other paving exceeding 5 feet in width, such cables shall be installed in concrete-encased ducts. Where direct-burial cables cross under railroad tracks, such cables shall be installed in reinforced concrete encased ducts. Ducts shall extend at least 1 foot beyond each edge of any paving and at least 5 feet beyond each side of any railroad tracks. Cables may be pulled into conduit from a fixed reel where suitable rollers are provided in the trench. Direct-burial cables shall be centered in duct entrances. A suitable waterproof nonhardening mastic compound shall be used to facilitate such centering. If paving or railroad tracks are in place where cables are to be installed, coated rigid steel conduits driven under the paving or railroad tracks may be used in lieu of concrete-encased ducts.

(Rule 4, tab 3c at 13-14)

15. Specification Section 26 56 20.00 10 at 3.6 provides:

### 3.6 DUCT LINES

Duct lines shall be concrete-encased, thin-wall type for duct lines between manholes and for other medium-voltage lines. Low-voltage lines run elsewhere may be non-encased direct-burial, thick-wall type.

....

### 3.6.3 Concrete Encasement

Each single duct shall be completely encased in concrete with a minimum of 3 inches of concrete around each duct, except that only 2 inches of concrete are required between adjacent electric power or adjacent communication ducts, and 4 inches of concrete shall be provided between adjacent electric power and communication ducts. Duct line encasements shall be monolithic construction. Where a connection is made to a previously poured encasement,

the new encasement shall be well bonded or doweled to the existing encasement. At any point, except railroad crossings, tops of concrete encasements shall be not less than 18 inches below finished grade or paving. At railroad crossings, duct lines shall be encased with concrete, reinforced as indicated. Tops of concrete encasements shall be not less than 5 feet below tops of rails, unless otherwise indicated. Separators or spacing blocks shall be made of steel, concrete, plastic, or a combination of these materials placed not further apart than 4 feet on centers. Ducts shall be securely anchored to prevent movement during the placement of concrete and joints shall be staggered at least 6 inches vertically.

(Rule 4, tab 3c at 16-17)

16. Specification Section 31 00 00 EARTHWORK, Part 3, section 3.7.1, as part of SPECIAL REQUIREMENTS (section 3.7), provides that the Electrical Distribution System “[p]rovide a minimum cover of 24 inches from the finished grade to direct burial cable and conduit or duct line, unless otherwise indicated.” (Rule 4, tab 3d at 1, 6)

17. Specification Section 33 70 02.00 10, ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND includes a section identified as 2.5 CONDUIT AND DUCTS and required “[d]uct lines shall be concrete-encased, thin-wall type.” This section continues with section 2.5.1 and sets forth the requirements for Metallic Conduit identifying intermediate metal conduit, rigid galvanized steel conduit and metallic conduit fittings and outlets, and the standards they must meet. Then, section 2.5.2 addresses Conduit Sealing Compound, and provides “Compounds for sealing ducts and conduit shall have a putty-like consistency workable with the hands at a temperature as low as 35 degrees F....Compounds shall adhere to clean surfaces of fiber or plastic ducts; metallic conduits or conduit coatings; concrete . . . .” (R4, tab 3e at 1, 9-10)

18. Specification Section 33 70 02.00 10, ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND, Part 3 provides the following with respect to the installation of ducts and cables:

- Section 3.3.1.2 states that “[d]uct shall be cleaned with an assembly that consists of a flexible mandrel (manufacturers standard product in lengths recommended for the specific size and type of duct) that is ¼ inch less than inside diameter of duct . . . . The

cleaning assembly shall be pulled through conduit a minimum of 2 times or until less than a volume of 8 cubic inches of debris is expelled from the duct.

- Section 3.3.2, titled “Duct Line,” requires cables to be installed in duct lines where indicated.
- Section 3.3.3, titled “Direct-Burial,” requires that medium voltage cables be buried directly into the earth.
- Section 3.3.3.2, titled “Cable Burial,” provides in part that “[c]ables shall be unreeled along the sides of or in trenches and carefully placed on sand or earth bottoms. Pulling cables into direct-burial trenches from a fixed reel position will not be permitted, except as required to pull cables through conduits under paving or railroad tracks. Where cables cross, a separation of at least 3 inches shall be provided, unless each cable circuit is protected by a nonmetallic conduit sleeve at the crossing.
- Section 3.3.3.3, titled “Other Requirements,” provides for cable installation and requires that “[w]here direct-burial cables cross under roads or other paving exceeding 5 feet in width, such cables shall be installed in concrete-encased ducts. Where direct-burial cables cross under railroad tracks, such cables shall be installed in reinforced concrete-encased ducts. Ducts shall extend at least 1 foot beyond each edge of any paving and at least 5 feet beyond each side of any railroad tracks. Cables may be pulled into duct from a fixed reel where suitable rollers are provided in the trench. Where direct burial cable transitions to duct-enclosed cable, direct-burial cables shall be centered in duct entrances, and a waterproof nonhardening mastic compound shall be used to facilitate such centering. If paving or railroad tracks are in place where cables are to be installed, coated rigid steel conduits driven under the paving or railroad tracks may be used in lieu of concrete-encased ducts. Damage to conduit coatings shall be prevented by providing ferrous pipe jackets or by predrilling. Where cuts are made in any paving, the paving and subbase shall be restored to their original condition.”

(Rule 4, tab 3e at 11-14)

19. Specification Section 33 70 02.00 10, 3.6 DUCT LINES, provides at Section 3.6.3, Concrete Encasement:

Ducts requiring concrete encasements shall comply with NFPA 70, except that electrical duct bank configurations for ducts 6 inches in diameter shall be determined by calculation and as shown on the drawings. The separation between adjacent electric power and communication ducts shall conform to IEEE C2. Duct line encasements shall be monolithic construction. Where a connection is made to a previously poured encasement, the new encasement shall be well bonded or doweled to the existing encasement. Submit proposed bonding method for approval in accordance with the detail drawing portion of paragraph SUBMITTALS. At any point, except railroad and airfield crossings, tops of concrete encasements shall be not less than the cover requirements listed in NFPA 70. At railroad and airfield crossings, duct lines shall be encased with concrete and reinforced as indicated to withstand specified surface loadings. Tops of concrete encasements shall be not less than 5 feet below tops of rails or airfield paving unless otherwise indicated. Where ducts are jacked under existing pavement, rigid steel conduit will be installed because of its strength. To protect the corrosion-resistant conduit coating, predrilling or installing conduit inside a larger iron pipe sleeve (jack-and-sleeve) is required. For crossings of existing railroads and airfield pavements greater than 50 feet in length, the predrilling method or the jack-and-sleeve method will be used. Separators or spacing blocks shall be made of steel, concrete, plastic, or a combination of these materials placed not farther apart than 4 feet on centers. Ducts shall be securely anchored to prevent movement during the placement of concrete and joints shall be staggered at least 6 inches vertically.

*(Id. at 16)*

### Drawings

20. The drawings detailed new work including the installation of elevated and semi-flush lights along the edges of the runway, linked together by underground electrical wiring. Drawings numbered ES101-113 are small-scale drawings providing an overview of the runway work in Phases 1 and 2 of the construction, with ES114 covering wiring between manholes north of the runway leading to the Airfield Lighting Vault. Drawings ED101-103, appearing in both phases, are large-scale drawings detailing the work to be done for individual elevated lights, semi-flush lights,

and the installation of concrete-encased ducts containing one, two, or four conduits. ED901-910, are the as-built drawings providing for the electrical detail existing at the site. (R4, tab 3 (Plans Phase 2 – Replace Runway Pavement) at 96-103, 111-120, 3f at 3-13)

21. There are 18 drawings that comprise the electrical detail for the runway lighting installation, ED101-ED108 and ED901-ED910. In both phases, ED101-103 contains notations “Sheet 1 of 3,” “Sheet 2 of 3,” and “Sheet 3 of 3.” Both phases also contain drawings ED104-107, which do not carry such a notation. However, other drawings contained in the electrical section also contain the designation of being part of a set. The electrical detail provided in ED101-103 shall be read as one continuous drawing. (R4, tabs 3 (both Plans Phase 1 and Plans Phase 2) at 96-103, 111-120; 3f at 2, 11-13)

22. Drawings ED101 and 102 state that the electrical wiring connecting all the lights should be “cable #6 5 kV” housed in a “galvanized rigid steel conduit.” The detail provides that the cables shall be housed in “galvanized rigid steel conduit” with a “conduit coupling” on both sides of the “Liquid Tight Non-Metallic Flexible Conduit” that reaches to the fixture with the cables again housed in the galvanized rigid steel conduit wired directly to the fixture. This detail appears on both sides of the “Elevated Light Detail” (ED101, sheet 1 of 3) and “Semi-flush Runway Edge Light” (ED102, sheet 2 of 3). Outside the construction for each light, the cables have “conduit couplings” along their length in both directions, but otherwise extend to unlabeled white space. The detail required for installation is contained on ED103 (sheet 3 of 3) and explicitly provides the electrical detail for Concrete Encased Duct – 1 Conduit, Concrete Encased Duct – 2 Conduit, and Concrete Encased Duct – 4 Conduit. The drawing does not differentiate between duct and conduit and notes 1 and 2, and note 6 for the concrete encased duct with 2 or 4 conduit, identify them as interchangeable terms. (R4, tabs 3 (Plans Phase 2) at 104-110; R4, tab 3f at 11-13).

23. ES105 (Electrical Site Plan for Area E) provides for the installation of the “new concrete encased 4” Four Way Ductbank between handhold HH E-2 and HH E-1 with a notation to run temporary PAPI circuit into HH E-2, using the handhold and conduit system to route to existing lighting vault. The contractor is referred to Sheet ES114 for connection information. Notes 4, 5, and 6 also direct the contractor to the detail identified in the drawings at ED101, ED102 & ED103. Appellant argues that because drawing ES105 identified certain conduit to be concrete-encased, drawings ED101 and ED102 should have also identified conduit as concrete-encased if it was to be required by the contract (R4, tab 9 at 1). Appellant ignores the identification of concrete-encased conduit on ED103 (sheet 3 of 3). (R4, tabs 3 (Plans Phase 2) at 106; Rule 4, tab 3f at 7, 10-13)

24. Drawing ES105 identifies a conduit path that leads to the Airfield Lighting Vault. Because this conduit path does not travel under a road or asphalt, specification section 26 56 20 paragraph 3.3.2.3, “Other Requirements” (“where direct-burial cables cross under roads or other paving exceeding 5 feet in width, such cables shall be installed in concrete-encased ducts”) does not apply to the work identified on ES105. To ensure that the requirements of section 3.3.2.3 apply to the work identified on ES105, the requirement to provide concrete-encased conduit was added. (R4, tabs 3c at 14; 3f at 3-9)

## DECISION

### *The Parties’ Contentions*

Appellant contends that its interpretation of the plans and specifications required only that duct, not conduit, were required to be concrete-encased. Appellant also contends that the contracting officer’s direction to encase both duct and conduit in concrete was a constructive change to the contract and requires compensation. Appellant submitted a three-page complaint presenting its argument, and did not file a brief. The complaint sets forth 15 numbered paragraphs in total, with six paragraphs establishing the facts and two paragraphs dedicated to rebutting the contracting officer’s final decision. Appellant advances two main arguments. First, in paragraph 10, appellant states that since ED103 is specifically referenced on drawings ES105 and ES114, both of which contain the four inch four-way duct bank (which involves lighting leading north to the Airfield Lighting Vault), then ED103 must only refer to installation of the four-way duct bank. Further, drawings ES101-104 and 106-113, which contain new work for only the edge light trench, only refer to drawings ED101 and 102, which do not discuss concrete encasement of ducts. (Compl. ¶ 10) Appellant concludes that the government’s direction to require concrete encasement of these ducts is a change in the contract. (Compl. ¶ 15) Second, appellant disputes that Section 33 70 02.00 paragraphs 2.5 and 2.5.1 require concrete-encasement for conduits, as 2.5 only references ducts, not conduit, and these “are considered as different entities” (*id.* ¶ 14). Included in its REA, Munck argues that if the contract language is susceptible to more than one meaning or is ambiguous, it should be construed against the drafter (finding 6).

In its brief, the government points to several sections of the specifications that require encasing cable in concrete. They include Section 26 56 20.00 10, subparagraph 3.3.2.3, which requires concrete-encasing when “direct-burial cables cross under roads or other paving exceeding five feet in width” (gov’t br. at 2-5). The government also points to several places in the contract where it alleges the contract uses conduit and duct interchangeably, urging us to read references to concrete-encasing ducts as references to concrete-encasing conduits (*id.* at 13-19). The government challenges Munck’s assertions that the conduits do not require that they be

concrete encased because Drawings ED101 and ED102 do not indicate concrete encasement. The government also says Munck’s use of Drawing ES105 as proof that conduit must specify that it be encased in concrete is flawed and we should look to the specifics of that drawing. Furthermore, the government maintains that Munck’s premise that the drawings dictate over the requirements of the specification is erroneous. (*id.* at 14) As provided in contract clause 52.236-21, where there is a “difference between the drawings and specifications, the specifications shall govern” and “. . . anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both” (finding 9).

### Contract Interpretation

We review the contracting officer’s final decision *de novo*. 41 U.S.C. § 7104(b)(4). The parties present us with a question of contract interpretation. Contract interpretation is a matter of law. *See, e.g., ThinkQ, Inc.*, ASBCA No. 57732, 13 BCA ¶ 35,221 at 172,825. The rules of contract interpretation require that we first look to the plain language of the contract. *Langkamp v. United States*, 943 F.3d 1346, 1349 (Fed. Cir. 2019); *Banknote Corp. of America, Inc. v. United States*, 365 F.3d 1345, 1353 (Fed. Cir. 2004); *Hercules, Inc. v. United States*, 292 F.3d 1378, 1380 (Fed. Cir. 2002). We “appl[y] the principle of contract interpretation that possibly conflicting contract provisions should be read harmoniously.” *Hometown Fin., Inc. v. United States*, 409 F.3d 1360, 1369 (Fed. Cir. 2005) (citing *Guar. Fin. Servs., Inc. v. Ryan*, 928 F.2d 994, 999 (11th Cir. 1991).

[P]rovisions of a contract must be so construed as to effectuate its spirit and purpose . . . an interpretation which gives a reasonable meaning to all of its parts will be preferred to one which leaves a portion of it useless, inexplicable, inoperative, void, insignificant, meaningless, superfluous, or achieves a weird and whimsical result.

*Gould, Inc. v. United States*, 935 F.2d 1271, 1274 (Fed. Cir. 1991) (quoting *Ariz. v. United States*, 575 F.2d 855, 863 (Ct. Cl. 1978).

The contract required appellant to provide “airfield and heliport lighting and visual navigation aids consisting of runway lights, visual glide slope indicator, and the lighting power supply and control” (finding 1). The work that forms the basis of this claim relates to the installation of new cable to the runway edge lights, and more specifically, whether the installation of those new cables, when buried under roadways or other paving in excess of five feet in width, are required to be encased in concrete when placed in conduit versus duct. While other provisions of the specification may come into play when determining certain aspects of the work, the controlling

provisions for that work are set out in Specification Section 26 56 20.00 20 (AIRFIELD AND HELIPORT LIGHTING AND VISUAL NAVIGATION AIDS) and Section 33 70 02.00 10 (ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND). Section 26 56 20.00 10 contains the requirements for the direct-burial of cables. Paragraph 3.3.2.3 requires that “where direct-burial cables cross under roads or other paving exceeding five feet in width, such cables shall be installed in concrete-encased ducts.” Paragraph 3.3.2.3 also dictates that “where direct-burial cables cross under railroad tracks, such cables shall be installed in reinforced concrete encased ducts.” (Finding 14) The specification plainly provides that concrete encasement is required when cable is to be buried under roads, paving or railroad tracks. The appellant maintains that because the contract says that “such cables shall be installed in concrete-encased ducts” and it doesn’t reference cables to be installed in concrete-encased conduit, that the work directed by the contracting officer was inconsistent with the requirements of the contract. The core of appellant’s argument is that ducts and conduit “are considered as different entities” and therefore the references in the specification to duct do not apply to conduit. (Compl. ¶ 14)

The question that requires resolution is whether the plain language of the contract “supports only one reading or supports more than one reading and is ambiguous.” *NVT Tech., Inc. v. United States*, 370 F.3d 1153, 1159 (Fed. Cir. 2004). Where a contract is susceptible of more than one reasonable interpretation, it is ambiguous. *Hills Materials Co. v. Rice*, 982 F.2d 514, 516 (Fed. Cir. 1992). “To show an ambiguity it is not enough that the parties differ in their respective interpretations of a contract term. Rather, both interpretations must fall within a ‘zone of reasonableness.’” *NVT Tech.*, 370 F.3d at 1159 (citing *Metric Constructors, Inc. v. NASA*, 169 F.3d 747, 751 (Fed. Cir. 1999)); *See also TEG-Paradigm Env’tl., Inc. v. United States.*, 465 F.3d 1329, 1338 (Fed. Cir. 2006) (“When interpreting a contract, the language of [the] contract must be given that meaning that would be derived from the contract by a reasonably intelligent person acquainted with the contemporaneous circumstances.” (citation omitted)). When analyzing the words in the contract, the context in which the words are used and the intentions of the parties are critical. We will not twist the words out of context. *Andersen Consulting v. United States*, 959 F.2d 929, 934-35 (Fed. Cir. 1992).

The specification is full of references for the installation of cable, placed in conduit or duct, and under what instances the cables shall be concrete encased. Section 26.56. 20.00 10 at 2.3.2 entitled “Conduit, Conduit Fittings & Boxes”, includes requirements relating to the installation of both conduit and duct. For each reference, whether duct or conduit, the installation must be in compliance with Section 33 70 02.00 10 ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND. (Findings 12-13) In Specification Section 33 70 02.00 10, the interplay between ducts and conduit becomes more clear. Section 3.3 provides for the general requirements for the installation of cables, including the requirements under Section 3.3.2.3 to provide

for direct burial cables that are installed under “roads or other paving exceeding 5 feet in width, shall be installed in concrete-encased ducts. Similarly, where the direct-burial cable is installed under railroad tracks, such cables shall be installed in reinforced concrete encased ducts. That section provides further that “cables may be pulled into conduit from a fixed reel where suitable rollers are provided in the trench.” (Finding 14) General requirements for duct lines provides in Section 3.6 that “duct lines shall be concrete-encased” and provides in more detail at 3.6.3 that “each single duct shall be completely encased in concrete with a minimum of 3 inches of concrete around each duct. (Finding 15) We find numerous references within Specification 26 56 20.00 10 and 33 70 02. 00.10 that discuss the types of cable, installation of cable, and when concrete-encasement is required (under roads, paving or railroad tracks), all recognizing the interplay between the terms duct and conduit. (Findings 11, 13-14, 16-18, 22) It is obvious that in performing this work, a contractor must first determine if the cable will be installed in a location that requires concrete-encasement; if it does then the requirements for concrete encasement (under roads, pavement or railroads) will apply (findings 13-15).

Appellant’s reliance on conduits and ducts being “different entities” leads to the misplaced conclusion that the mandate set forth in Section 33 70 02.00 10 paragraph 2.5 to encase duct lines in concrete is exclusive of conduits. Appellant’s reading renders significant portions of the specification meaningless. The purpose of 3.3.2.3 of Section 26 56 20.00 10 and 3.3.3.3 of Section 33.70 02.00 10 are to ensure that the buried cables are protected from damage caused by the weight placed upon roadways, railroads, and pavement. (Findings 11, 14-15, 19) If we were to accept appellant’s interpretation, we would need to conclude that where cable conduit is buried underground it would not need to be protected by concrete even where those cables are being installed under “roads or other paving exceeding 5 feet” or “under railroad tracks.” Such a reading would render superfluous those sections of the specification intending to provide additional protection where the cables are most at risk. (Findings 14, 18)

It is not unusual for courts to consult dictionaries to assist in the common meaning of a term. *Rocknel Fastener, Inc. v. United States*, 267 F.3d 1354 (Fed Cir. 2001) The New Oxford American Dictionary defines *Conduit* as “. . . 2. a tube or trough for protecting electric wiring . . . .” It defines *Duct* as “[a] channel or tube for conveying something, in particular . . . a tube or passageway for air, liquid, cables, etc. . . .” See NEW OXFORD AMERICAN DICTIONARY (3d ed. 2010). The definitions in Webster’s New World Dictionary are nearly identical. Webster’s defines *Conduit* as “. . . 2. A tube, pipe or protected trough for electric wires” and *Duct* as “. . . 4. A pipe or conduit through which wires or cables are run.” See WEBSTER’S NEW WORLD DICTIONARY (3d college ed. 1988). We note that the fourth definition of *Duct*, which is most applicable in these circumstances, includes the word “conduit.” Similarly, the American Heritage Dictionary of the English Language defines *Duct* as “3. A tube

or pipe for enclosing electrical cables or wires.” AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (5th Ed. 2020), <https://www.ahdictionary.com/word/search.html?q=duct>. It defines *Conduit* in a similar manner, only this definition of conduit includes duct as part of its definition of conduit “2. A tube or duct for enclosing electric wires or cable.” AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (5th Ed. 2020), <https://www.ahdictionary.com/word/search.html?q=conduit>.

The plain and unambiguous meaning of the written agreement will control. *Hercules Inc.*, 292 F.3d at 1380-81. We must give reasonable meaning to all of its parts. *NVT Tech., Inc.*, 370 F.3d at 1159. We find that appellant puts too much weight on silence. Paragraph 2.5.1 does not specify what shall be done with conduits, only that “[r]igid galvanized steel conduit shall comply with” two published standards related to cable composition (finding 17). To the extent that appellant argues these paragraphs are entirely independent of each other, we are unpersuaded. Paragraph 2.5.1 is a subset of paragraph 2.5 CONDUIT AND DUCTS, and are related. More importantly, paragraph 2.5 does not contradict 2.5.1 in any way, nor does it state that it is an exhaustive list of work that should be concrete-encased. Its failure to mention concrete encasement for conduits does not mean the cable conduits to the runway edge lights at issue should not be concrete-encased when traveling under roadways. Here, the contract provides in no uncertain terms that “Duct Lines” must be concrete-encased, except where specifically provided for in the contract documents. (Findings 14-15) Guided by the definitions of duct and conduit, a reasonable interpretation of the specifications requires that cables that are to be placed under a road or other paving, whether pulled through duct or conduit, are required to be concrete-encased. Several Board decisions have deduced that there is no functional difference between duct and conduit. *See e.g., Amelco, Inc.*, ASBCA No. 50826, 99-2 BCA ¶ 30,549 at 150,853 (the Board found that the encasement of the secondary cable conduit – not shown on the drawings – was nevertheless required when the cables were placed under pavement and roads.); *Nagy Enterprises*, ASBCA No. 48815 *et. al.*, 98-1 BCA ¶ 29,695 at 147,198 (“the contract did not provide [appellant] with the option to encase or not to encase the electrical conduit buried under the road . . . . [T]he contract drawings indicate a “Duct Section B” construction. . . [i]t merely indicates two kinds of duct lines for underground electrical distribution . . . .”); *Chamac, Inc.* ASBCA No. 44905, 94-1 BCA ¶ 26,482 at 131,816 (Board denied a constructive change claim for extra work installing concrete-encased electrical cables under road crossings, finding that the “reason for requiring concrete-encased cable crossings under the tank trails and other roads subject to tank traffic was to protect the electrical cables . . . .”) While specifications are not always written with exact clarity, we have been unable to find a passage in the specifications that cannot be read harmoniously with the interpretation that conduits and ducts are the same entity. We conclude that the terms conduit and duct are used interchangeably for contract purposes.

The reasonableness of the government's interpretation that the specification required concrete encasement where cables were placed under roads, is further supported by the drawings (findings 20- 22). We are reminded that the Specifications and Drawings for Construction clause, states in relevant part, "[a]nything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of a difference between the drawings and specifications, the specifications shall govern." (Finding 9 (quoting 48 C.F.R. 52.236-21(a)). The Contract Drawings and Specifications clause, also provides that, "[l]arge-scale drawings shall govern small-scale drawings" (finding 10 (quoting 48 C.F.R. 252.236-7001(c)(1)). In this hierarchy, the drawings relied upon by appellant identified as ES101-114 are the least authoritative as to work to be done when a conflict with other provisions arise. ED101-103 are large-scale drawings and take precedence over small-scale, and of course the directions in the specifications take precedence over all the drawings (finding 20).

Appellant claims that its interpretation of the specifications and drawings do not require concrete encasement around conduit unless specifically identified, as in drawing ES105. Munck's use of ES105 as reflective of the need to identify concrete encasement around conduit is misplaced. Drawing ES105 specifically identifies conduit to be encased in concrete, but that is because drawing ES105 is a drawing of conduit that leads to the Airfield Lighting Vault which does not travel under roads or other pavement. (Findings 23-24) If it did travel under roads or other pavement then Section 26 56 20 paragraph 3.3.2.3 would control, as would paragraph 3.3.3.3 of Section 33 70 02.00 10 which provides for the cable distribution underground. Accordingly, the only way the government could require that the conduit be concrete encased at that location, was by including the additional requirement on drawing ES105. (Findings 14, 16-17, 19)

Appellant also relies upon Drawings ED101 and ED102 and argues that these drawings do not call for concrete encasement in connection with conduit. ED101, ED102 and ED103 address the fixtures and electrical details for the runway edge lights and contain a reference to "sheet 1 of 3", "sheet 2 of 3" and "sheet 3 of 3." In the evaluation of the work to be performed under this contract, it appears appellant simply ignored drawing ED103. While ED101 and ED102 is limited to the fixtures themselves, it also contains conduit couplings attached to the cable between edge lights. ED103 provides the electrical detail for the installation of the fixtures and provide for "Concrete Encased Duct with 1 Conduit, 2 Conduits and 4 Conduits." It provides a cross-section of construction for singular ducts with variations depending on the number of conduits contained within, whether one, two, or four. ED103 provides unequivocal support for the conclusion that the conduits and ducts are to be considered as one, and ED103 instructs that either should be concrete encased where designated in the specification. (Findings 20-22) This set of drawings cannot be read

independent of each other, and contradicts appellant's interpretation that duct and conduit should be considered as different entities.

We fail to see how the language in this contract supports more than one reading. The words in the specification, required that where cables are to be installed under roads, railroad tracks, or pavement exceeding five feet in width, they are to be protected by concrete whether that cable is placed in duct or conduit. (Findings 14, 18-19) Accordingly, we find appellant's interpretation to be unreasonable. However, even if we found the contract to be susceptible to more than one reasonable interpretation, the context in the specification when considered along with the drawings, specifically ED101-103 raised a significant enough question that appellant should have discovered it and had a duty to inquire. *See Interstate Gen. Gov't Contractors, Inc. v. United States*, 980 F.2d 1433, 1435(Fed. Cir. 1992); *Newsom v. United States*, 676 F.2d 647, 650 (Ct. Cl. 1982) (an ambiguity is patent if it is "so glaring as to raise a duty to inquire"). We conclude that in this instance, any inconsistency was so glaring as to impose a duty upon the contractor to inquire prior to submitting their bid. Had appellant made an inquiry, as it ultimately did on January 13, 2015, any misunderstanding would have been corrected, as it was in the communications leading up to the January 13, 2015 meeting, and in the communications that followed. (Finding 3)

The provisions set forth in the specification and the drawings provide enough indications that the runway edge light cables buried under roadways or asphalt whether placed in duct or conduit should have been encased in concrete as shown on drawing ED103. The government's interpretation gave the proper meaning to the contract requirements. Accordingly, the work directed by the Contracting Officer was in accordance with the contract requirements. Any ambiguity, if in fact one existed was patent, imposing a duty upon appellant to inquire. We conclude Munck was only required to perform work that the contract required it to do and cannot recover.

CONCLUSION

For the reasons stated above, this appeal is denied.

Dated: September 21, 2021



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STEPHANIE CATES-HARMAN  
Administrative Judge  
Armed Services Board  
of Contract Appeals

I concur



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RICHARD SHACKLEFORD  
Administrative Judge  
Acting Chairman  
Armed Services Board  
of Contract Appeals

I concur



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OWEN C. WILSON  
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. 61497, Appeal of Munck Asphalt A/S, rendered in conformance with the Board's Charter.

Dated: September 22, 2021



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