All American Concrete, Inc., (All American) was the primary contractor to upgrade a storm water system on a project known as the Jungle Lake Outfall Storm Drainage Improvements Project (project) in St. Petersburg Florida. On February 11, 2011, the Occupational Safety and Health Administration (OSHA) received a complaint concerning an unprotected trench, and an employee being injured by an excavator bucket on the jobsite where All American was working. As a result of the complaint, Occupational Safety and Health Compliance Officers (CSHO or CSHOs) Zechariah Vincent and Richard Andree initiated an inspection of All American’s jobsite, on February 11, 2011. Based on the inspection findings, OSHA issued one serious citation and one willful citation on May 24, 2011, alleging All American committed violations of two excavation standards of the Occupational Safety and Health Act of 1970 (Act).

Item 1 of Citation 1 alleges All American committed a serious violation of 29 C.F.R. § 1926.651(j)(2) for not protecting employees from the hazard of materials or equipment falling into the excavation. Item 1 of Citation 2 alleges a willful violation of 29 C.F.R. § 1926.652(b), for failing to provide slopes and benching systems in accordance with the requirements of the
standard. The Secretary proposed total penalties of $53,900.00 for these alleged violations. All American timely contested the citations.

The Secretary moved to amend the citations by modifying them to correct and add additional dates for the alleged violations. By Order dated November 2, 2011, the undersigned granted the Secretary’s Motion, and the citations were amended as follows:

Citation 1, Item 1: At the All American Concrete excavation project at 27th Ave. and Park St., St. Petersburg, Fl., employees were exposed to materials and equipment that could pose a hazard by falling or rolling into the excavation, including excavator buckets, one of which rolled into the excavation on 2/08/2011 injuring two employees, and excavated and other materials on 2/8/2011 and 2/11/2011 that were within two feet of an edge where they would fall into the excavation.

Citation 2, Item 1: At the All American Concrete excavation project at 27th Ave. and Park St., St. Petersburg, FL., employees were working at various times between 2/08/2011 and 2/11/2011 and 2/24/2011 and 2/25/2011 in an excavation without properly sloped walls or other protective system exposing employees to a cave-in hazard.¹

The undersigned held a hearing in this matter on November 29 and 30, 2011, in Tampa, Florida. The parties filed post-hearing briefs on April 4, 2012. For the reasons discussed below, Item 1 of Citation 1 is vacated. Item 1 of Citation 2 is affirmed as serious and a $ 7,000.00 penalty is assessed.

**Jurisdiction**

At the hearing, the parties stipulated that jurisdiction of this action is conferred upon the Commission pursuant to Section 10(c) of the Act. The parties also stipulated that at all times relevant to this action, All American was an employer engaged in a business affecting interstate commerce within the meaning of section 3(5) of the Act, 29 U.S.C. § 652(5) (Tr. 7).

**Background**

All American was under contract with the city of St. Petersburg to upgrade the storm water system on a project identified as the Jungle Lake Outfall Storm Drainage Improvements Project (project) (Tr. 23, 102; Exh. R-1). The purpose of the project was to minimize flooding within the neighborhood (Tr. 23). All American began work on the project in January 2011 (Tr. 23). The

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¹ The amended citation sets forth the language proposed by the Secretary in her Motion to Amend and Granted by the undersigned. Although this language is unclear as to the specific dates cited, the Secretary’s argument in her Motion describes the intended dates as February 8 through 11, 2011, and the additional dates of February 24 and 25, 2011.
The project involved upgrading the storm system from 48 and 36 inch pipes to 5 by 8 foot culvert boxes,\(^2\) from the lake to the inter-coastal (Tr. 23). All American was the primary contractor on the project (Tr. 23). It employed 35 to 40 employees (Tr. 102).

All American was responsible for installing approximately one mile of culvert boxes on the project (Tr. 24-25). The project started out by opening up 27\(^{th}\) Avenue and laying the culvert boxes from Boca Ciega Bay (bay or inter-coastal) to 27\(^{th}\) Avenue and then to Park Street (Tr. 29). Park Street was to the east and the bay was to the west (Tr. 52, 57). The culvert boxes were being laid under 27\(^{th}\) and 28\(^{th}\) Avenues (Tr. 27). The depth of the excavation from 27\(^{th}\) Street running towards Park Street was from 5 feet to approximately 9 feet at Park Street (Tr. 110). Pursuant to the contract, All American was required to close up each section of the excavation as it finished installing the culvert boxes before it moved to the next section (Tr. 28-29, 90-91).

Protective systems on the jobsite included sheet piling, coffer dams, trench boxes and dewatering systems (Tr. 110, 141-142). Trench boxes were used once the depth reached 10 feet (Tr. 110). At the point where the OSHA inspection occurred, there was no sloping or trench boxes being utilized (Tr. 164). According to Jeff Nasse, President of All American, they relied upon designs by Pat Knapp, licensed and registered professional engineer. Knapp’s plans did not require a trench box at the area inspected by OSHA. Pursuant to the design plans for the project, no trench box was used at the beginning of the job for a section of 27\(^{th}\) Avenue, or at the 90 degree angle at Park Street (Tr. 142-144; R-1).

All American used an excavator to excavate material and to set culvert boxes (Tr. 316, 383). Mark Hoyt was the Heavy Equipment Operator with All American (Tr. 311-312). The contract required All American to place a material called Cadalock around the joints of the culvert boxes to help seal them. The contract also required the use of a product called Ramneck to seal the joints when the culvert boxes were pressed together. The Cadalock is placed around the entire culvert box, including the bottom before the culvert box is put into the excavation. After the culvert boxes were pressed together, the Cadalock seals the joints when water hits them. An additional fabric called Mirfi was added by All American to prevent dirt intrusion, while allowing water to go through (Tr. 42, 43, 44; Exhs. C-1(4)(5)(6)(8); C-7). Once the culvert boxes were in

\(^2\) The Final Plans provided by the engineer for the Jungle Lake Outfall Storm Drainage Project refers to the culverts as “box culverts.” At the hearing, the witnesses referred to the culverts as “culvert boxes.” For consistency purposes, the terminology used at the hearing will be used in this decision.
the trench and positioned, employees placed Cadalock and Mirfi around the joint. In order to place the Mirfi and the Cadalock, employees entered the trench to wrap them around the culvert box (Tr. 50, 51, 59; Exhs. C-1(4)(5)(6)(8); C-7). This process was repeated for each culvert box that was positioned adjacent to a culvert box already in the trench (Tr. 59; Exhs. C-1(4)(5)(6)(8); C-7). The Mirfi was placed approximately one foot from the bottom, around the top and back, to approximately one foot from the bottom on the opposite side (Tr. 43). In order to apply the Mirfi, employees positioned themselves between the culvert box and the side wall of the excavation (Tr. 51). The distance between the side of the culvert box and the side of the excavation wall where the employees worked was approximately 2 feet (Tr. 51).

While conducting work activities on the jobsite on February 8, 2011, at 27th Avenue and Park Street, the bucket from the excavator rolled into the excavation and injured an employee (Tr. 195). Prior to the accident, heavy equipment operator Hoyt had been using the excavator with the bucket unattached to unload culvert boxes from trucks that had arrived that morning (Tr. 337-338). Afterwards, he reattached the bucket and proceeded to excavate. At some point, the bucket was disengaged from the excavator.

On February 11, 2011, OSHA received a complaint alleging that a bucket had fallen into the excavation and had crushed the leg of an employee, that hard hats were not being worn, and that there was no excavation cave-in protection on the jobsite where All American was working (Tr. 173). In response to the complaint, OSHA sent compliance officers Vincent and Andree to the site (Tr. 173-175, 239-241). The compliance officers arrived at the site near the end of the work day on February 11, 2011, when All American was in the process of backfilling the excavation (Tr. 406). When Vincent and Andree arrived onsite there were no employees in the trench, however they noticed a foot print in the culvert box and a cup in the bottom of the trench (Tr. 176).

The compliance officers conducted the inspection by observing jobsite conditions, taking photographs, interviewing employees, taking measurements, and obtaining soil samples. The compliance officers obtained a soil sample from the west end of the excavation (Tr. 178). By using a trench rod, they measured the depth of the trench to be 8 feet 7 inches; the distance from the edge to the toe horizontally was 3 ½ feet; and the distance from the edge to the culvert box was 5 feet (Tr. 176, 177, 219). From the toe of the trench to the top of the trench, the wall of the
excavation sloped back 3 ½ feet (Tr. 177). The width at the top was 22.4 feet, and 14 feet at the bottom (Tr. 177). Using these measurements the compliance officers determined the slope was 68.5 degrees on one side, and 74.2 degrees on the other (Tr. 177-178).

After the inspection, CSHO Vincent reviewed photographs of the jobsite taken by Construction Inspector Dirk Gribnitz. In addition to the condition of the excavation, the photographs revealed employees working in the excavation, pieces of wood, logs, a shovel and bucket in the dirt, and a pile of gravel along the edge of the trench (Tr. 198-199; Exhs. C-2, C-3, C-4, C-5, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16). As a result of Vincent's and Andree’s inspection, the Secretary issued the two citations that gave rise to the instant case.

Discussion

The Secretary alleges that All American violated OSHA’s excavation standards. The Secretary has the burden of establishing the employer violated the cited standards.

To prove a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that (1) the cited standard applies; (2) the employer failed to comply with the terms of the cited standard; (3) employees had access to the violative condition; and (4) the cited employer either knew or could have known with the exercise of reasonable diligence of the violative condition.

JPC Group Inc., 22 BNA OSHC 1859, 1861 (No. 05-1907, 2009).

Applicability

The cited standards are found in Subpart P of the construction standards, which covers excavations. All American was installing culvert boxes underground at 27th and 28th Avenues in the Jungle Lake area in St. Petersburg, Florida (Tr. 25-29). In order to install the culvert boxes, All American dug an excavation approximately 8 feet 7 inches deep, 22.4 feet wide at the top and 14 feet wide at the bottom (Tr. 176-178, 243). While working at the excavation, All American used equipment and materials which were placed at ground level above the excavation (Exhs. C-2(1)(4)(8), C-3, C-5, C-6, C-8). The excavation standards apply to the activities performed by All American at the jobsite. Applicability of the standards is established.

Access to the Violative Conditions

As an element of the Secretary’s burden of proof, the record must show that employees were exposed or had access to the violative condition. Walker Towing Corp., 14 BNA OSHC 2072 (No. 87-1359, 1991). Employees of All American worked in the excavation in order to
position the culvert boxes and to wrap Mirfi and Cadalock around the culvert boxes on February 8 through 11, 24 and 25, 2011 (Tr. 42, 43, 44, 51, 59). Also, photographs depict employees, including the foreman and one of the owners performing other work activities in the excavation during the cited time periods, with the exception of February 10, 2011 (Exhs. C-2(1)(2)(3)(4)(5)(6)(8)(9), C-4, C-5, C-6, C-7, C-8, C-10, C-11, C-12, C-13, C-14, C-15, C-16). It is not disputed that an employee, while inside the excavation, was injured by the excavator bucket on February 8, 2011, sustaining a broken ankle when the bucket rolled into the excavation (Tr. 195). The Secretary has met her burden by showing All American’s employees had access to the violative conditions.

Knowledge

The Secretary must establish actual or constructive knowledge of the violative conditions by All American. In order to show employer knowledge of a violation the Secretary must show the employer knew, or with the exercise of reasonable diligence could have known of a hazardous condition. Dun Par Engineered Form Co., 12 BNA OSHC 1962, 1965-66 (No. 82-928, 1986). Karl Musgrave, a foreman for All American, supervised employees who worked in the excavation and was present when employees worked in the excavation (Tr. 66, 175, 185; Exh. C-5). Roger “Bo” Nickell, is the general superintendent for All American, and was aware employees worked in the excavation (Tr. 185). Moreover, the conditions of the excavation were in plain view. Since Musgrove and Nickell were supervisors, their knowledge is imputed to All American.

An employer is chargeable with knowledge of conditions which are plainly visible to its supervisory personnel. A.L. Baumgartner Construction Inc., 16 BNA OSHC 1995, 1998 (No. 92-1022, 1994). “Because corporate employers can only obtain knowledge through their agents, the actions and knowledge of supervisory personnel are generally imputed to their employers, and the Secretary can make a prima facie showing of knowledge by proving that a supervisory employee knew of or was responsible for the violation.” Todd Shipyards Corp., 11 BNA OSHC 2177, 2179 (No. 77-1598, 1984). See also Dun Par Engineered Form Co., 12 BNA OSHC 1962 (No. 82-928, 1986)(the actual or constructive knowledge of an employer’s foreman can be imputed to the employer). Knowledge is established.

The only element of the alleged violations at issue is whether All American failed to comply with the terms of the cited standards.
Citation 1

Item 1: Alleged Serious Violation of 29 C. F. R. § 1926.651(j)(2)

The Secretary issued a serious citation to All American for an alleged violation of § 1926.651(j)(2). The citation as amended alleges:

At the All American Concrete excavation project at 27th Ave. and Park St., St. Petersburg, Fl., employees were exposed to materials and equipment that could pose a hazard by falling or rolling into the excavation, including excavator buckets, one of which rolled into the excavation on 2/08/2011 injuring two employees, and excavated and other materials on 2/8/2011 and 2/11/2011 that were within two feet of an edge where they would fall into the excavation. ³

Section 1926.651(j)(2) provides:

Protection of employees from loose rock or soil... (2) Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least 2 feet (.61 m) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

Compliance with the Terms of the Standard

The Secretary amended her complaint to set forth two dates and circumstances upon which All American allegedly violated the requirements of this standard. The Secretary contends a violation occurred on February 8, 2011, when the excavator bucket rolled into the excavation. The Secretary also contends that excavated and other materials posed a hazard to employees working in the excavation on February 8 and 11, 2011 (Nov. 2, 2011 Order Amending Complaint).

Section 1926.651(j)(2) explicitly addresses “materials or equipment that could pose a hazard by falling or rolling into excavations.” Generally, a standard presumes a hazard, and the Secretary need only show the employer violated the terms of the standard; she “bears no burden of proving that failure to comply with such a specific standard creates a hazard.” Kaspar Electroplating Corp., 16 BNA OSHC 1517, 1523 (No. 90-2866, 1993). A hazard is not presumed, however, when the standard incorporates the hazard as a violative element. Bunge Corp. v. Secretary of Labor, 638 F. 2d 831 (5th Cir. 1981).

Although the Review Commission has not addressed whether the Secretary must prove the hazard in establishing a violation of § 1926.651(j)(2), it is the undersigned's determination that §

³ The evidence adduced at the hearing reflects an injury to only one employee (Tr. 195).
1926.651(j)(2) incorporates the hazard as a violative element the Secretary must prove. The first sentence of the standard states (emphasis added): “Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations.” The inclusion of this sentence in the standard requires the Secretary to (1) establish that material or equipment could pose a hazard of falling or rolling into the excavation, and (2) establish the materials or equipment were closer than 2 feet to the excavation. “[W]e must interpret statutes as a whole, giving effect to each word and making every effort not to interpret a provision in a manner that renders other provisions of the same statute inconsistent, meaningless, or superfluous.” Lake Cumberland Trust, Inc., v. E. P. A., 954 F.2d 1218, 1222 (6th Cir. 1992) (quoting Boise Cascade Corp. v. U. S., E. P. A., 942 F.2d 1427, 1431-1432 (9th Cir. 1991)). The first sentence imposes an additional element of proof on the Secretary; otherwise, the inclusion of the sentence would serve no purpose. The Secretary must prove the existence of a hazard to the employees working in the excavation.

**Excavated and Other Materials**

The Secretary contends that on February 8 and 11, 2011, excavated and other materials were located within two feet of the edge of the excavation, where they could fall into the excavation in violation of § 1926.651(j)(2). After reviewing Construction Inspector Gribnitz’s photographs, Vincent determined that pieces of wood, logs, a shovel and bucket in the dirt, and a pile of gravel located along the edge of the excavation on February 8, 2011, could pose a hazard to employees working in the excavation (Tr. 198, 199, Exh. C-2(2)).

The small pile of gravel identified in Exhibit C-2(2) is located directly at the edge of the excavation, within two feet of the edge. There is no evidence however, that this gravel was unstable or that it placed additional weight affecting the stability of the excavation, or that some of it had fallen into the excavation. Vincent’s testimony that “if it fell on top of you, that wouldn’t feel too good” does not substantiate there was a hazard of the gravel falling (Tr. 198). Rather, his testimony addresses the seriousness of the alleged violation and the resulting harm “if” the gravel were to fall into the excavation. The Secretary has failed to prove that the gravel located at the
edge of the excavation presented a hazard.\footnote{Even if a hazard were proven, there was no exposure. A review of Exhibit C-2(2) does not depict any employees in the vicinity of the gravel if it had fallen into the excavation. No testimony was adduced that employees had access to the alleged violative condition. Accordingly, exposure has not been proven.} The undersigned finds the gravel located at the edge of the excavation does not support a violation of the standard.

The Secretary relies on other items as well to support her position. As depicted in the photographs dated February 8, 2011, a shovel, bucket and log were placed on top of culvert boxes in the excavation (Exh. C-2(1), (2), (4), (6) (8)). Vincent testified that these items could have fallen into the excavation (Tr. 198-199).\footnote{The Secretary elicited no testimony at all, regarding items placed at the edge of the culvert box on February 11, 2011, instead relying on the photographs admitted as Exhibits C-5, C-6, C-7 and C-8.} The undersigned is at a loss as to how this could happen. The crux of the Secretary’s argument is that the culvert box in the excavation is a part of the excavation, with the culvert box side forming one side of the excavation, and the adjacent top portion of it forming an edge. The Secretary offers no authority in support of her position.

Subpart P defines an excavation as “any man-made cut, cavity, trench, or depression in the earth surfaces, formed by earth removal.” § 1926.650(b). Further, side is defined as “the vertical or inclined earth surfaces formed as a result of excavation work.” § 1926.650(b). The critical term in these definitions is “earth surfaces.” The culvert box is not an earth surface. The cited standard requires that materials be kept “at least 2 feet (.61 m) from the edge of the excavations...” § 1926.652(j)(2) [emphasis added]. The undersigned is unwilling to extend the requirements of the standard in the manner put forth by the Secretary. The undersigned finds that the Secretary has failed to establish that All American failed to comply with the terms of § 1926.651(j)(2) on February 8 and 11 regarding the items placed on the edge of the culvert boxes.\footnote{In light of this finding, it is not necessary for the undersigned to determine whether the Secretary has proven a hazard regarding the items placed at the edge of the culvert box. However, the undersigned finds the Secretary has not. Regarding February 8, 2011, Vincent testified that the shovel, bucket and logs posed a hazard to employees because if they were to fall on an employee, the employee could suffer a broken bone, a laceration or even death (Tr. 198, 201, 202). This testimony relates to the type of injury or the seriousness of the alleged violation and not to whether there was a hazard. Nothing was adduced at the hearing to show that the culvert box upon which these items were placed was unstable or that there was some other activity occurring in the vicinity of the culvert box which could cause the items to fall into the excavation. No testimony was adduced at all regarding the items on the culvert boxes on February 11, 2011.}

**Excavator Bucket**

It is not disputed that on February 8, 2011, an employee, while working in the excavation at the jobsite, was injured by the bucket of the Kobelco excavator. The evidence adduced reveals
the employee sustained a broken ankle when struck by the bucket (Tr. 195). How the bucket got into the excavation, however, is disputed. CSHO Vincent testified that Hoyt, the excavator operator, during his interview in February 2011, stated “the bucket had been left on the side of the trench and it had fallen in, rolled in” (Tr. 197). Vincent further testified that because he was concerned about the possibility of a quick disconnect issue, he asked Hoyt did the bucket fall off the excavator (Tr. 554-555). Hoyt denied it, saying “No, I disconnected the arm from the bucket and don’t know what happened” (Tr. 197-198). During the inspection, Vincent also questioned foreman Musgrave about what had happened. Musgrave confirmed Hoyt’s account, but stated he was not an eyewitness to the accident (Tr. 197).

Hoyt recounted a different story of the accident at the hearing. Hoyt testified at the hearing that the bucket disengaged from the arm of the excavator while he was using it, and rolled into the excavation (Tr. 337-339, 346). No witnesses testified at the hearing corroborating Hoyt’s account of the accident as elicited at the hearing. Musgrave testified only that Hoyt did not usually leave the bucket on the edge of the excavation (Tr. 404). Musgrave’s testimony on this point was inconsistent with what he told Vincent during the inspection. When asked by Vincent whether it was a practice to leave buckets on the edge of the excavation, Musgrave stated “Yes, we have done that in the past” (Tr. 197).

The undersigned observed all three witnesses during the hearing. Vincent testified confidently and without hesitation as to what Hoyt and Musgrave told him during the inspection. Further, Vincent took contemporaneous notes of what Hoyt and Musgrave told him and each were given an opportunity to read and correct the notes (Tr. 375, 414, 553). Neither Hoyt nor Musgrave advised Vincent that what he had written was wrong, although Hoyt refused to sign the notes (Tr. 375). On the other hand, Hoyt’s version of the events seemed contrived. He appeared nervous, upset and angry during his testimony. His testimony appeared cautious, as if he were consciously trying to say nothing which would be harmful to All American. The undersigned finds Vincent’s account of what Hoyt told him during the inspection, as to how the bucket fell into the excavation, to be more reliable, and therefore credits his testimony over Hoyt’s and Musgrave’s testimony regarding this accident.

In assessing whether the standard was violated, the undersigned must determine whether the bucket was placed within two feet of the edge of the excavation or whether retaining devices
were utilized. During the inspection, Vincent asked Hoyt to place a cone to demonstrate the proximity of the bucket to the edge (Tr. 344, 346, 366; Exh. R-8). Hoyt testified that where he placed the cone was representative of where the bucket entered the hole -- down the front slope into the bottom (Tr. 346, 366; Exh. R-8). Hoyt read Vincent’s notes from his interview into the record:

The bucket slid down the slope of the excavation. It was two to three feet from the excavation edge approximately in parenthesis as it indicated by the cone--oh, as indicated by the cone in the picture. He couldn’t remember exactly, but it was close enough to slide into the excavation.

(Tr. 369). Hoyt testified at the hearing that he disagreed with what Vincent had written, stating that where he placed the cone was four or five feet from the hole, and that he did not say that the bucket was close enough to slide into the excavation (Tr. 371).

As set forth above, the undersigned finds Hoyt’s testimony not trustworthy. Nonetheless, it is the Secretary’s burden to prove the standard was violated. The cited standard provides that “[p]rotection shall be provided by placing and keeping such materials or equipment at least 2 feet (.61 m) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.” § 1926.651(j)(2). Vincent’s contemporaneous notes from the inspection provide that the bucket was two to three feet from the excavation edge (Tr. 369). The Secretary argues in her brief “the fact that it fell in makes it more likely than not that it was right at the edge (i.e. less than 2 feet)” (Secretary’s Brief, p. 16). The undersigned disagrees. The credible evidence shows that at a minimum, the bucket was placed two feet from the excavation edge, as required by the standard. The Secretary adduced no evidence to show that a retaining device or a combination of the two feet distance and a retaining device was necessary. The lone fact that the bucket rolled into the excavation is insufficient to establish a violation of the standard. The undersigned finds the Secretary has failed to establish a violation of § 1926.651(j)(2) on February 8, 2011, as to the excavator bucket.

The Secretary has not met her burden regarding § 1926.651(j)(2) as alleged. Citation 1, Item 1 is vacated.
Citation 2

Item 1: Alleged Willful Violation of 29 C. F. R. § 1926.652(b)

Willful citation 2, item 1, as amended, alleges:

At the All American Concrete excavation project at 27th Ave. and Park St., St. Petersburg, Fl., employees were working at various times between 2/08/2011 and 2/11/2011 and 2/24/2011 and 2/25/2011 in an excavation without properly sloped walls or other protective system exposing employees to a cave-in hazard.

Section 1926.652(b) provides:

*Design of sloping and benching systems.* The slopes and configurations of sloping an benching systems shall be selected and constructed by the employer or his designee and shall be in accordance with the requirements of paragraph (b)(1); or, in the alternative paragraph (b)(2); or, in the alternative, paragraph (b)(3), or, in the alternative, paragraph (b)(4) as follows:

1. **Option (1) - Allowable configurations and slopes.** (i) Excavations shall be sloped at an angle not steeper than one and one-half horizontal to one vertical (34 degrees measured from the horizontal), unless the employer uses one of the other options listed below.
   (ii) Slopes specified in paragraph (b)(1)(i) of this section, shall be excavated to form configurations that are in accordance with the slopes shown for Type C soil in Appendix B to this subpart.

2. **Option (2) - Determination of slopes and configurations using Appendices A and B.** Maximum allowable slopes, and allowable configurations for sloping and benching systems, shall be determined in accordance with the conditions and requirements set forth in appendices A and B to this subpart.

3. **Option (3) - Designs using other tabulated data.** (i) Designs of sloping or benching systems shall be selected from and be in accordance with tabulated data, such as tables and charts.
   (ii) The tabulated data shall be in written form and shall include all of the following:
   (A) Identification of the parameters that affect the selection of a sloping or benching system drawn from such data;
   (B) Identification of the limits of use of the data, to include the magnitude and configuration of slopes determined to be safe;
   (C) Explanatory information as may be necessary to aid the user in making a correct selection of a protective system from the data.
   (iii) At least one copy of the tabulated data which identifies the registered professional engineer who approved the data, shall be maintained at the jobsite during construction of the protective system. After that time the data may be stored off the jobsite, but a copy of the data shall be made available to the Secretary upon request.
(4) **Option (4) - Design by a registered professional engineer.**  (i) sloping and
benching systems not utilizing Option (1) or Option (2) or Option (3) under
paragraph (b) of this section shall be approved by a registered professional
engineer.
(ii) Designs shall be in written form and shall include at least the following:
(A) The magnitude of the slopes that were determined to be safe for the
particular project;
(B) The configurations that were determined to be safe for the particular
project; and
(C) The identity of the registered professional engineer approving the design.
(iii) At least one copy of the design shall be maintained at the jobsite while the
slope is being constructed.  After that time the design need not be at the
jobsite, but a copy shall be made available to the Secretary upon request.

**Compliance with the Terms of the Standard**

The Secretary contends that during the periods February 8 through 11, 2011, and February
24 and 25, 2011, All American failed to provide cave-in protection for its employees working in an
excavation on the jobsite as required by § 1926.652(b).  The Secretary’s allegations are focused
on the excavation located at 27th Avenue and Park Street.  Pursuant to the terms of the contract,
All American was not permitted to have more than one excavation open at a time, or to move
forward on its installation of the culvert boxes until it had closed the section it was working on (Tr.
90-91).  The excavation was constantly changing.  By the time All American reached 27th
Avenue and Park Street, the inspection site, it had concluded the portions of the installation
requiring poured in place installations.  At the inspection site, All American was engaged in the
installation of culvert boxes (Tr. 27, 48).  Although the Secretary alleges violations to have
occurred on six separate days, the compliance officers only took measurements on one day,
February 11, 2011.  The Secretary relies on photographs taken by Construction Inspector Gribnitz
to support its allegation that cave-in protection violations occurred on the other five days alleged.

*February 8 through 10, 24, and 25, 2011*

CSHO’s Vincent and Andree began their inspection on February 11, 2011, and measured
the excavation as it existed at the time of their inspection.  The measurements were taken at
approximately 5:00 p.m. that evening (Tr. 249).  They secured no measurements of the
excavation as it existed on February 8, 9, and 10, and did not measure the excavation as it existed
on February 24 and 25.  Although the CSHOs took measurements of the excavation when they
were onsite on February 11, 2011, there was no evidence adduced at the hearing that those
measurements were representative of the measurements of the excavation as it existed on February 8, 9, 10, 24 and 25. In fact, unrebuthed testimony adduced at the hearing reveals the excavation for which a violation is alleged to have occurred on February 8, 2011, was different from the excavation observed and measured by Vincent and Andree when they initiated their inspection. In addition, testimony from professional engineer Knapp, regarding photographs of the excavation as it existed on February 24, 2011, indicates that the excavation was wider (Tr. 528; Exh. C-13). He also testified that the photograph depicting the excavation on February 25, 2011, reveals that it had a greater width at the top, was flatter, it was sloped more, but there was an almost vertical slope in one area (Tr. 526, 529, 546; Exh. C-16). The only testimony adduced at the hearing regarding the excavation as it existed on February 9 also was from Knapp who testified only that hard pan soil and disturbed soil were present in the excavation (Tr. 532-533). There were no photographs offered into evidence, nor was there any testimony regarding the excavation as it existed on February 10, 2011.

The Secretary contends All American failed to slope the excavation, yet with the exception of one date, failed to establish what the dimensions of the excavation were on the dates cited. In the absence of such evidence, the undersigned cannot conclude that All American violated the cited standard on those dates, regardless of which option was utilized under §1926.652(b). Photographic evidence alone is insufficient to carry the Secretary’s burden. The undersigned finds that the Secretary has failed to prove the standard was violated on February 8, 9, 10, 24 and 25, 2011 as alleged.

February 11, 2011

It is not disputed that when Vincent and Andree arrived at the jobsite, it was near the end of the workday on February 11, 2011 (Tr. 173, 174, 473). It was almost dark when they took measurements (Tr. 177). Their measurements revealed the excavation was 8 feet 7 inches deep, 22.4 feet wide at the top, and 14 feet wide at the bottom. One side of the trench was sloped at 74.2 degrees, and the other side was sloped at 68.5 degrees (Tr. 176, 177, 219). The length of the excavation was not measured because it was continually changing (Tr. 222, 224). All American contends that the compliance officers’ measurements are inaccurate because it was in the process of backfilling the excavation and securing it for the weekend when the measurements were taken (Tr. 474). Even if they were backfilling, CSHO Andree testified that the measurements were
representative (Tr. 248). Regardless of whether All American was in the process of backfilling, the measurements revealed that the excavation was greater than 5 feet in depth. This is not disputed.

Because the excavation was greater than 5 feet in depth, a protective system was required for employees working in the excavation, unless the entire excavation consisted of stable rock. All American was in the process of installing culvert boxes at the jobsite to replace the storm drainage system that had previously been installed (Tr. 27, 48). Accordingly, the soil was previously disturbed soil. Previously disturbed soil at most is classified as Type B soil and is not stable rock (Appendix A to Subpart P).

Protective systems may consist of trench shields, sloping and benching. All American argues in its brief that it was not relying on sloping or benching as required by § 1926.652(b) to protect its employees the cited location. Instead, All American contends it opted to use support systems, shield systems and protective systems as provided for in § 1926.652(c)(4) (All American Brief, p. 15). The evidence does not substantiate All American’s contention. As reflected in photographs taken of the jobsite on February 11, 2011, by Gribnitz, no trench shields, support systems or other protective systems were in place on the jobsite. (Exhs. C-5, C-6, C-7, C-8). Therefore, the excavation because of its depth was required to be benched or sloped. No evidence was adduced at the hearing to support benching. Therefore, in order to comply with the standard, All American was required to properly slope the excavation.

In order to calculate the proper slope for the excavation, the soil type must be determined. During the inspection, Superintendent Nickell told CSHO Andree the soil was Type C (Tr. 240, 244). The soil analysis of the soil sample collected by Vincent confirmed the soil was Type C (Tr. 183). The credible evidence supports the soil was Type C. Appendix B to the standard requires for Type C soil, an excavation must be sloped at a ratio of 1½ to 1 (or a slope of 34 degrees), Pt. 1926, Supt. P, App. B. This is 1½ foot horizontal distance for each 1 foot of vertical distance. Therefore, for an excavation measuring 14 feet wide at the bottom, with walls measuring 8.7 feet deep, the top width of the excavation would need to be at least 40.10 feet in order for it to have the proper slope. Here, the top width of the excavation was measured to be 22.4 feet, nearly half the required width to be in compliance with the standard (Tr. 177).

All American disputes the Secretary’s measurements arguing that they are inaccurate and
that the excavation was stable. Two licensed and registered professional engineers testified on its behalf. Reuben Clarson testified that a trench 22 feet at the top, 14 feet at the bottom, and 8 feet 8 inches in depth would be stable at a slope of 59-60 degrees as long as the excavation was being de-watered (Tr. 266-268, 273). Patrick Knapp also testified that the excavation looked stable at the angle it was cut, which he determined was 55 to 60 degrees; however, he admitted there could be some cave-ins (Tr. 502, 503, 515, 521, 537, 540-541). Clarson was consulted after the citation was issued and Knapp was consulted after the inspection but before the citations were issued (Tr. 118). Neither expert provided a written design of sloping or benching systems approved for the cited area. Based on the foregoing, the undersigned accords little weight to the testimony of these engineers, and finds the testimony of the compliance officers regarding dimensions of the excavation and the soil type to be more credible. The excavation was not properly sloped.

The record evidence shows that the condition of the excavation as measured by the compliance officers late in the day on February 11, 2011, was the same as when employees worked in it. Superintendent Nickell testified:

Q: Okay. Do you recall any of the questions the compliance officer asked you?
A: Yeah, about the hole, was that the way the hole was during the day time. And I said yes.

(Tr. 475). Further, CSHO Andree testified:

Q: Do you recall any employees or managers from the company telling OSHA that the trench as it existed during your inspection was similar to the trench when employees were actually working in it?
A: That’s what I recall. I don’t recall the exact words, but from what Bo was talking about, that was the condition basically while there were employees working in there taking the dirt out.

(Tr. 250). The condition of the excavation when employees worked in the excavation is reflected in photographs from earlier that day taken by Gribnitz (Tr. 225; Exhs. C-5, C-6, C-7, C-8). The evidence adduced at the hearing fails to substantiate that any of the options set forth in § 1926.652(b) were complied with. The sloping was insufficient, there were no designs using tabulated data, and there was no design in writing by a registered professional engineer. The Secretary has met her burden of establishing a violation § 1926.652(b) on February 11, 2011.

Affirmative Defense

All American asserts that it was infeasible and/or impossible for it to comply with the cited
standard because of the narrow tree-lined street in the residential area where it was working. (All American’s Brief, pp. 16-17). In order to prove that compliance was infeasible or impossible, the employer must show that it was not possible to comply and that it used alternative means of protection or that alternative means were not available. Brock v. Dun-Par Engineered Form Co., 843 F.2d. 1135, 1136 (8th Cir. 1988).

All American contends that because it could not comply, it implemented protective measures pursuant to § 1926.652(c)(4) instead. It asserts that it consulted and utilized designs by its registered professional engineers to protect its employees (All American’s Brief, pp. 16-17). The standard found at § 1926.652(c) addresses support systems, shield systems and other protective systems. As set forth above, All American did not use a shield system at the jobsite inspected on February 11, 2011. Nor does the record evidence reflect that any other support system as intended by § 1926.652(c) was used by All American. Section 1926.652(c)(4) provides in relevant part that the designs of support systems, shield systems and other protective systems shall be approved by a registered professional engineer, be in writing and include a plan indicating the sizes, types and configurations of the materials to be used in the protective system. All American had no such plan.

Two licensed and registered professional engineers testified at the hearing on All American’s behalf, yet neither of them identified any protective system contemplated by § 1926.652(c)(4), that was utilized at the inspection site. Reuben Clarson designed the temporary and permanent sheet piling and repairs at the Boca Ciega Bay end of the project, and the coffer cells at the Boca Ciega Bay and Jungle Lake ends of the project (Tr. 257, 261-264). He prepared reports on his designs and provided them to All American. However, these reports admitted as Exhibits R-2 and R-3, do not relate to the any of the areas where culverts were being used (Tr. 262). Further, Clarson was not consulted regarding the cited area until after the citations had been issued (Tr. 264-265). Patrick Knapp was consulted once by All American to look at the trench to give an opinion as to its stability (Tr. 502, 503). He opined that it looked stable at the angle it was cut, which he determined was 55 to 60 degrees, but he did not reduce his opinion to writing (Tr. 515, 521, 537, 540-541). Knapp was consulted after the inspection but before the citations were issued (Tr. 118). Further, the record fails to show what portion of the excavation was observed by Knapp. Nor did he provide a design plan with the sizes, types and configurations of the materials
to be used in the protective system. He merely addressed the stability of the excavation as it was configured when he observed it. This falls far short of what is required in the standard All American asserts it implemented. All American’s argument that it protected its employees pursuant to the requirements set forth in § 1926.652(c)(4) fails, and it has not met its burden of proving infeasibility or impossibility.7

Willfulness

The Secretary alleges that All American’s violation § 1926.652(b) was a willful violation of the standard, asserting that it acted with plain indifference to the requirements of the law and that it acted with intentional disregard of the law. The Secretary’s position is based on All American’s heightened awareness of the requirements of standard, and it having allowed employees to work in an excavation that it knew was unsafe (Secretary’s Brief, pp. 22-26).


All American made an effort to comply with the requirements of the standard by sloping the excavation, albeit insufficiently. Further, it relied upon the plans for the project which did not indicate that a trench shield was necessary in the area they were working (Tr. 411; Exh. R-1). All American also believed that because of the width of the excavation, it was safe. A willful charge is not justified if an employer has made a good faith effort to comply with a standard or to eliminate a hazard even though the employer's efforts are not entirely effective or complete. A good faith, reasonable belief by an employer that its conduct conformed to the law negates a

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7 The undersigned has considered all of All American’s arguments and find they are not supported by a preponderance of the evidence.
finding of willfulness. *Keco Indus.*, 13 BNA OSHC 1161 (No. 81-263, 1987). The undersigned finds that All American made a good faith effort to comply. Accordingly, the violation of the standard was not willful.
**Penalty Determination**

The Commission is the final arbiter of penalties in all contested cases. *Secretary v. OSHRC and Interstate Glass Co.*, 487 F.2d 438 (8th Cir. 1973). The Commission must determine a reasonable and appropriate penalty in light of § 17(j) of the Act and may arrive at a different formulation than the Secretary in assessing the statutory factors. Section 17(j) of the Act requires the Commission to give “due consideration” to four criteria when assessing penalties: (1) the size of the employer's business; (2) the gravity of the violation; (3) the good faith of the employer; and (4) the employer's prior history of violations. *29 U.S.C. § 666(j)*. Gravity is the primary consideration and is determined by the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood of an actual injury. *J. A. Jones Construction Co.*, 15 BNA OSHC 2201 (No. 87-2059, 1993).

In arriving at the proposed penalties Vincent determined for item 1 of Citation 2 the violation was high in severity because any injury could result in death. He determined the probability of injury was greater probability because employees had been working in the excavation with unsafe conditions for a substantial amount of time (Tr. 204-205). A 30% penalty adjustment for the size of All American was applied, since it had 40 employees at the time of the inspection (Tr. 205). However, no adjustment for good faith was applied because All American did not comply with what OSHA told them on February 11, 2011, and it had a deficient safety plan (Tr. 205).

Regarding the failure to protect employees from a trench collapse or cave-in, the undersigned finds a high gravity is appropriate because the excavation was 8 feet 7 inches deep and did not have an adequate protective system, exposing several employees to potential cave-in and serious injury or death. All American is a small employer with approximately 40 employees. It also had a workplace safety program in place and conducted tool box safety talks addressing excavation issues in English and Spanish (Exhs. Tr. 308-309; R-4, R-5 and R-6). These factors weigh in favor of a small penalty. However, All American failed to correct the conditions immediately, weighing in favor of a higher penalty. Considering these facts and the statutory elements, a proposed penalty of $ 7,000.00 is appropriate.
FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Rule 52(a) of the Federal Rules of Civil Procedure.

ORDER

Based upon the foregoing decision, it is ORDERED that:

1. Citation 1, item 1, alleging a violation of § 1926.651(j)(2), is vacated.

2. Citation 2, item 1, alleging a violation of § 1926.652(b), is affirmed as serious and a penalty of $7,000.00 is assessed.

/s/
Sharon D. Calhoun
Administrative Law Judge