



UNITED STATES  
CIVILIAN BOARD OF CONTRACT APPEALS

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DENIED: December 20, 2016

CBCA 4779

TUCCI & SONS, INC.,

Appellant,

v.

DEPARTMENT OF TRANSPORTATION,

Respondent.

J. Craig Rusk and Alix K. Town of Oles Morrison Rinker & Baker, LLP, Seattle, WA,  
counsel for Appellant.

Rayanne L. Speakman, Office of the Chief Counsel, Western Federal Lands Highway  
Division, Federal Highway Administration, Department of Transportation, Vancouver, WA,  
counsel for Respondent.

Before Board Judges **SHERIDAN**, **WALTERS**, and **LESTER**.

**SHERIDAN**, Board Judge.

Tucci & Sons, Inc. (Tucci) appeals the final decision of the Department of Transportation, Federal Highway Administration (FHWA), denying its claim for an equitable adjustment in the amount of \$81,320.45 for increased labor and equipment costs resulting from alleged differing site conditions encountered in its performance of utility trench work in Mount Rainier National Park. After a hearing on the merits, we deny the appeal because Tucci was adequately informed by the contract drawings that it was digging in “undisturbed native material” and that, because of the conditions of the site, it should have anticipated that it might encounter a variety of different sizes of boulders.

## Background

This appeal arises out a contract to reconstruct a 9.7-mile portion of the roadway in Mount Rainier National Park from the park's Nisqually Entrance to Paradise Valley and install a utility trench in a 6.06-mile length of the road. The park is located on Mount Rainier, which is a snow-capped volcano covered by several glaciers. The glaciers erode materials which travel down the mountain via gravity and rivers as glacial, alluvial, and mud deposits containing sands, gravel, cobbles, and boulders. Beneath those materials is bedrock, which sometimes breaches the surface of the deposits. The Board takes judicial notice of the fact that construction of the Nisqually Entrance to Paradise Valley portion of the roadway began in 1903 and was completed in 1915. 48 CFR 6101.25(a)(1) (2015); *see* [http://npshistory.com/publications/highways/mount\\_rainier/mount-rainier.pdf](http://npshistory.com/publications/highways/mount_rainier/mount-rainier.pdf) (an online park brochure "Highways in Harmony, Mount Rainier Roads and Bridges" that was last visited Dec. 16, 2016). The road from Nisqually Entrance to Paradise Valley was one of the first roads built in a national park.

### A. Solicitation

In 2013, the FHWA's Western Federal Lands Highway Division (WFLHD) solicited bids for the reconstruction of portions of the roadway from Nisqually Entrance to Paradise Road and construction of utility trenches within portions of that road. The utility trench work was to be performed on the left-hand side of the downhill lane of the two-lane roadway, the lane that was closer to the mountain.<sup>1</sup>

The length of the project spanned approximately 32,700 linear feet, beginning at station 25+80 and ending at station 346+00.<sup>2</sup> The project drawings detailed four types of utility trenches that the contractor potentially would be constructing for the conduit installation (Types A, B, C, and D), but the contract generally specified the use of the Type A trench. Use of the Type A trench required the contractor to excavate an area two feet wide (24") by three-and-a-half feet deep (42") and to install conduit at a depth of three feet (36"). In pertinent part, drawing K-8, "UTILITY TRENCH TYPE A," showed "undisturbed native material" outside the trenches, with the Type A trench being backfilled with approximately twenty inches of bedding material, six inches of backfill material, and four

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<sup>1</sup> The project was along the Nisqually River, which originates at the Nisqually Glacier, one of the main glacial drainages on Mount Rainier.

<sup>2</sup> The station numbers denote the trench's distance in feet from the beginning of Nisqually Road (station 0+00). Thus, the trenching began 2580 feet from the start of the road and ended a distance of 34,600 feet away from the entrance.

inches of aggregate base, and then paved with five inches of minor hot asphalt concrete. The plans for the three other types of trenches similarly showed “undisturbed native material” outside the trenches, and varying amounts of bedding, backfill, and other materials covering the cables which was then covered by four inches of aggregate base, and paved with five inches of minor hot asphalt concrete. Drawing K-8 is the only portion of the contract that addresses the roadway subsurface, and while it shows where the utility trenches were to be constructed, it also tells a contractor that there will be undisturbed native material outside the trenches.

The solicitation noted that there would be no WFLHD-arranged site visits and urged prospective bidders to inspect the location in which the work would be performed. With regard to information concerning the physical conditions of the project area, Federal Acquisition Regulation (FAR) clause 52.234-4, Physical Data, 48 CFR 52.234-4 (2012), was included in the contract and advised:

Data and information furnished or referred to below is for the Contractor’s information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by: N/A.

....

(d) Geotechnical data, subsurface investigation information, and design data, consisting of the following, may be obtained upon request. . . .

- (1) Geotechnical Memo – GM 24-13, Nisqually to Paradise Road, PH 1; Rickseeker Point Loop Road M[echanically] S[tabilized] E[arth] Wall
- (2) Storm Water Pollution Prevention Plan (SWPPP)

Tucci learned about the solicitation while its project superintendent, Mr. Daniel Nelson, was working on another WFLHD project involving road reconstruction, pavement repair, storm culvert replacements, and asphalt overlays on Stevens Canyon Road, also within Mount Rainier National Park. Tucci is a family-owned business that has provided roadway construction, asphalt paving, earth moving, and underground utilities installation services for several years. Tucci rebuilt a ten-mile stretch of road leading to Mount Rainier National Park for the Washington State Department of Transportation. Several years earlier, Tucci built a section of road for the FHWA on Skate Creek Road, although it is not clear whether the section was in or near Mount Rainier National Park. Tucci built parking lots at Crystal

Mountain Ski Resort “on the other side of the mountain,” and has built roads in the Puget Sound area and along river banks “in terrain that is very similar to this.”

In preparation of its estimate, Tucci’s president, Mr. Mike Tucci; Mr. Nelson; and Tucci’s chief estimator jointly conducted a site investigation of the project area in October 2013. Mr. Nelson described the roadway as a “two-lane kind of country road in relatively rough shape in need of some repair and overlay work.” During the visit, the group assessed the full length of the roadway and concluded that logistical issues (truck and equipment staging, as well as traffic control) had the most potential to affect the project. The group also surveyed the general physical conditions of the site and observed cobbles and boulders along the roadside. Both Mr. Nelson and Mr. Tucci testified<sup>3</sup> that the surface features they noticed along the project area, particularly the presence of boulders, were of less concern in their estimate because such conditions were not “necessarily indicative” of what lay beneath the roadway. As each explained, the presence of boulders did not raise concerns because they could have been purposefully placed by a prior contractor for aesthetic reasons (as Tucci itself had been required to do on the Stevens Canyon project) or were there as a result of natural occurrences. The Tucci officials further testified that, in their experience, they would not ordinarily expect to encounter boulders within a “roadway prism” at the depths at which the utility conduits were required to be installed.<sup>4</sup> Mr. Nelson stated that he does not rely on the observed conditions of an area as an indicator of subsurface conditions and instead relies on geotechnical reports because they “are explicit to the defined boundaries of the contract work.”

During the bid process, Tucci requested and received from the FHWA the geotechnical memorandum (GM 24-13) noted in the Physical Data clause. The information contained in GM 24-13, however, was unrelated to the utility trench work at issue and instead concerned another portion of the project, for the construction of a mechanically stabilized earth wall, located between six and seven miles away and at an elevation 2000 feet higher than the trenching area. According to Mr. Nelson, this report did not provide any useful information relative to the trench excavation and was not used in preparation of Tucci’s bid. There is no evidence in the record that Tucci requested from WFLHD any other information specific to the utility work in preparation of its bid.

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<sup>3</sup> Tucci’s chief estimator did not testify at the hearing.

<sup>4</sup> According to Mr. Nelson, a roadway prism is “everything from top surface elevation of the road down to subgrade,” including the asphalt section which he estimated to be about six inches in depth, the crushed rock section also estimated to be about six inches, and below that some sort of borrow material. He opined that a roadway prism would extend multiple feet below a roadway’s top surface.

Tucci's proposal for the entire contract totaled \$10,099,717.87, which included \$1,414,275 for the utility trench work, priced at \$43.25 per linear foot. Tucci did not include in its bid any estimate for equipment capable of breaking or excavating boulders or bedrock.

B. The Contract

On December 30, 2013, Tucci was awarded a fixed-price contract, DTFH7014C00004, for the Nisqually Entrance to Paradise Road project in the amount of \$10,099,717.87. The contract included various drawings, including the aforementioned drawing K-8. The contract contained the standard Differing Site Conditions clause, FAR 52.236-2 (Apr. 1984), which provides as follows:

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

The contract also included FAR clause 52.236-3, Site Investigation and Conditions Affecting the Work, which, in relevant part, provides:

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its costs, including but not limited to: . . . (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract.

The contract incorporated the FHWA's Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects FP-03 U.S. Customary Units (the FP-03). The FP-03 contains standard specifications issued by the FHWA for construction of roads and bridges on federal highway projects "under direct administration" of the FHWA, and "when designated in a contract the FP-03 becomes part of the contract and binding upon all parties to the contract."<sup>5</sup> Although it was incorporated into the contract, WFLHD did not represent that the road had been constructed according to the FP-03 specifications. Neither party presented compelling evidence as to whether or to what extent the FP-03, or any other construction standards, were used in constructing the road in issue here. We did not find the FP-03 specifications particularly applicable in resolving this dispute.

Following award, Tucci submitted a preliminary work plan providing a narrative of the activities for the first forty-five days following the notice to proceed. Tucci's plan indicated that it intended to perform at a rate of 800 linear feet per day from March 10 to May 30, 2014, with conduit installation to be performed by its subcontractor, Mill Plain Electric. The plan further provided:

A crew of approximately seven employees, 4 solo dump trucks, excavator, backhoe, and loader and water truck will perform trenching and backfill work. A crew of 2-3 employees of the electrical subcontractor will install conduit, set vaults and pull wire as work progresses. The duration noted in this plan is based on the work of one crew. Should project conditions and other outside Contractor workload provide an opportunity to do so, a second crew may be added, thus doubling production rate for this work.

### C. Performance

Tucci received the notice to proceed on March 3, 2014. On its first day of performance, March 13, 2014, Tucci encountered subsurface obstructions that it claims impeded excavation of the utility trench. Mr. Nelson described the obstructions as "boulders" and conveyed to WFLHD their impact on the work:

It put[ ] the work at a standstill. When we are excavating per plan, moving along, when we first encounter something like this . . . first off we have to stop, try and determine the extent to which we're going to encounter

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<sup>5</sup> It appears from the FP-03's preface that an earlier version of the FP-03 was issued in 2003. No evidence was introduced as to whether or what standard specifications were in place when the road was originally built.

something like this. Is it something . . . that can be excavated? Is it something that we can break up and excavate? So we spend some time trying to determine the limits.

If it turns out that it looks like . . . large nested boulders or a very large boulder or something that we've got a potential of . . . trying to fish out of the trench line, then we begin working on that, and we can't do anything else until we get that boulder out of the way.

If it is determined that it's . . . something like this that appears to be . . . so large that we don't have a chance of using our excavator, we have to move our excavator out of the way, go get our breaker,<sup>[6]</sup> track that over to the excavation, start breaking it apart. That takes whatever time it does until we can get down to our plan elevation for trench, track [the breaker] back out of the way, get our excavator back over to the excavation location.

And again just as a reminder, this is all happening on a narrow, two-lane road. All of my equipment is in a line in the lane that I'm working in, so every time I'm moving one of those pieces of equipment I'm waiting for traffic to go by. I'm pulling the excavator out and around, back in. Traffic goes by again. So it takes some time to get this done.

Once we get the excavator back to the hole we excavate out the rubblized rock, get that sent out, and in the meantime while this has been performed . . . our solo dump trucks have just been standing there because we're working on getting them some material broken up to haul off.

Our backfill crew typically works . . . reasonably close to our excavation crew, so while this is occurring they'll catch up to the excavation and they'll stop. Then once our excavation starts again we can finally make some progress excavating. Then we have to bring back some sand bed and get that laid in, wait for our electrical subcontractor to have them lay out the conduits and get that far enough ahead, and then we'll finally start backfilling again.

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<sup>6</sup> Mr. Nelson described a breaker as a piece of equipment, much like a large jackhammer, which attaches to the excavator and uses hydraulic pressure to turn the rock into rubble.

So our backfill ends up taking the same amount of time being down as our excavation does, and each specific boulder, obstruction, ledge rock that we run into halts everything. We've got to stop, regroup and then continue on.

Mr. Nelson testified that his use of the term "boulders" referred to any obstruction eighteen inches in diameter or larger. In contrast, he identified a "cobble" as anything between three and twelve inches in diameter. According to Mr. Nelson, cobbles did not negatively impact the excavation and were not a part of Tucci's claim.

Tucci's on-site foreman, Mr. Randy Schiemer, similarly testified that as each obstruction was encountered, the crew would determine the extent of the obstruction and attempt to remove it with the excavator. If that was not possible, a hydraulic rock breaker was then brought to the location and used to break up the boulder. Once the boulder was broken, the rock breaker was returned to the holding site and the excavator moved back to the work line to continue removing the broken rock and other materials. Mr. Schiemer stated that this process was not required when the crew encountered cobbles.

By letter dated March 13, 2014, Mr. Nelson notified WFLHD of the conditions encountered and their effect on the utility excavation:

This letter serves to inform you of a differing site condition encountered today during the utility trench excavation. During the course of the work, numerous large boulders have been encountered which drastically slow and potentially inhibit the installation of the proposed utilities on the project. The unusual size and concentration of the obstructions was unanticipated at the time of bid. Tucci & Sons, Inc. will track the additional costs and time associated with this condition.

Tucci created an additional cost code for its daily reports, code 9010,<sup>7</sup> to track the labor and equipment costs associated with each instance boulders purportedly impacted the project. All of Tucci's labor and equipment costs for March 13 were listed under the 9010 cost code.

WFLHD's on-site project engineer, Mr. Marty Flores, responded to Tucci's notice on March 14, 2014. Mr. Flores disagreed that Tucci had encountered a differing site condition and requested that Tucci provide additional information if it wished to pursue a differing site conditions claim.

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<sup>7</sup> Ordinary contract work (i.e., unobstructed trenching) was designated 7300.

As it performed, Tucci documented in its daily reports each day that it claimed it encountered boulders. Tucci did not, however, physically measure each obstruction it removed; instead, anything that “stopped [Tucci] from digging” was noted as an impact for purposes of its claim. Similarly, Tucci did not record the depth at which any particular obstruction was encountered. On March 25, Tucci added a second utility trench crew to increase production. Although it had estimated eighty days for the work, Tucci completed the work in fifty-three days, on May 6, 2014.

On June 4, 2014, Tucci submitted to Mr. Flores a letter stating that it believed the unusual size and frequency of the obstructions it encountered during performance constituted a Type II differing site condition. Included with the letter were daily reports for the twenty-three days on which boulders were encountered as well as summaries of the increased labor and equipment costs associated with their excavation. In total, Tucci sought \$78,942.68 in increased costs. In a second letter to Mr. Flores, dated October 30, 2014, Tucci provided documentation supporting an additional impact due to an obstruction encountered on July 24 and revised its incurred costs to \$81,320.45.<sup>8</sup> Mr. Flores responded to Tucci’s letter alleging a differing site condition by letter dated November 17, 2014. Mr. Flores indicated that the evidence Tucci provided did not support its claim and that, if it wished to pursue the matter further, it should seek a contracting officer’s final decision.

On February 23, 2015, Tucci requested a final decision on its differing site condition claim<sup>9</sup> and asserted, for the first time, that it had encountered a Type I differing site condition. With respect to its Type I claim, Tucci alleged that because the Type A trench required excavation to a depth of 42" (or, using the Type D trench, to a depth of 24" inches where the minimum depth could not be achieved), the contract represented that Tucci would be able to achieve, at a minimum, a depth of 24" unobstructed. Since its crews at times encountered obstructions above the minimum depth of 24" inches, Tucci concluded the boulders were a differing site condition. By final decision dated April 16, 2015, WFLHD denied Tucci’s claim.

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<sup>8</sup> Although the subject of the letter is “Trench Obstructions, Differing Site Condition REVISED,” the July 24 obstruction was encountered *after* the completion of the utility trench work.

<sup>9</sup> WFLHD states that Tucci formally requested a final decision by letter dated December 2, 2014, but failed to state a sum certain. WFLHD acknowledges that the sum certain amount was included in Tucci’s October 30, 2014, and February 23, 2015, correspondence.

D. Other Relevant Materials and Hearing Testimony

1. Draft Geotechnical Report 04-11 (GR 04-11)

Tucci timely appealed the final decision to the Board on June 4, 2015. During discovery, Tucci obtained from WFLHD the final draft of a geotechnical report, GR 04-11, dated May 2013, containing design and construction information for the “resurfacing, rehabilitation, and restoration” of the road from the Nisqually Entrance to Paradise Road. WFLHD did not include the GR 04-11 report with the contract documents.<sup>10</sup>

The report indicates that in 2009, WFLHD conducted subsurface investigations and obtained eighteen subgrade boring samples, taken from the travel lanes of the roadway approximately every half mile from locations within the utility trench project limits,<sup>11</sup> to assess, among other things, “subgrade conditions within the road prism[.]” None of the borings indicated boulders or bedrock at a depth above five feet.<sup>12</sup> However, in pertinent part, the report summarized the results of the study and noted that three of the subgrade borings encountered refusal:

Boring depths in the eighteen subgrade holes ranged from 2.0 feet in boring *NQSG09-36* to 5 feet, with the majority of the holes drilled to 5 feet. Fifteen of the subgrade borings were advanced to the full 5 foot depth and *three met refusal above 5 feet. . . .* In the holes where refusal was encountered, possible tightly nested cobbles, boulders, or bedrock may be present.

(Emphasis added.) The report stated: “Refusal was encountered in three of the subgrade holes (*NQSG09-36*, *NQSG09-38*, and *NQSG09-42*, at 2.0, 3.83, and 3.33 feet, respectively,

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<sup>10</sup> Mr. Brian Minor, WFLHD’s lead designer for the Nisqually to Paradise Road, Phase I project, who prepared the project plans and specifications, stated that the GR 04-11 report was excluded from the solicitation because the information it contained was not pertinent to the utility trench work. Mr. Minor explained that, as originally contemplated, the project envisioned a broader scope of work for repair and rehabilitation of the full twelve miles of the Nisqually Entrance to Paradise Road corridor; however, due to budgetary constraints, the work was segmented into three phases, the first of which included the subject utility trench construction. It was Mr. Minor’s decision, due to the reduced scope of work, not to include GR 04-11 with the solicitation documents.

<sup>11</sup> The samples were taken between stations 1+50 and 324+80.

<sup>12</sup> The utility trench depth was only 42”.

indicating that nested cobbles, possible boulders, or bedrock may be present.” The report later indicates that a fourth boring, *NQSG09-33*, met refusal at a depth of four feet. The report classified “boulders” as twelve inches in diameter or larger and “cobbles” as between three and twelve inches in diameter, and provided:

Due to the partial bench and sidecast construction methods that were originally used to construct many sections of the project, it would not be unusual to encounter large cobbles to small to medium boulders-sized materials and large woody debris through some road sections during excavation, especially in the rock cuts. That said, in some instances the N-values shown in the boring logs were likely influenced by the presence of coarse gravel, cobbles, or boulders, which would tend to overstate the strength of the subsurface materials.

The majority of the borings on the project did not encounter bedrock. . . . It is generally understood that the materials and conditions encountered in the borings should only be considered to be representative of the subsurface condition and materials encountered in the location of the borehole at the time of drilling. Subsurface groundwater conditions and material or depth at which a given material or groundwater is encountered can vary between, or closely beyond, borehole locations.

Mr. Nelson and Mr. Tucci each testified that the GR 04-11 report was material to bidding the utility trenching project and had they received it prior to bidding, it would have led them to believe that there might have been obstructions in the roadway that would have impeded Tucci’s ability to achieve its planned production rate. Tucci’s witnesses also maintained that, had they received the GR 04-11 report prior to bidding, they would have altered the bid to account for the possibility of encountering difficult trenching.

The record indicates that during performance Tucci did not meet refusal when excavating in the same areas from which the above-noted borings were taken, and that none of the impacts for which Tucci seeks damages occurred during the days it performed in the boring areas.

## 2. Roadway Construction

The contract did not mandate the use of any particular construction techniques. As already noted, the road was constructed using partial bench and sidecast construction methods, a fact that was not addressed in the contract. Mr. Flores described partial bench and sidecast construction methods on mountainous terrain:

[W]hatever material is on the cut side of the road is usually blasted, excavated, dug out, removed, and placed over in the fill side of the road to create a level bench. So what you excavate and see here is normally what you find over here [on the other, built-up side of the road]. So we've only removed this chunk of rock. And then, in this area, we'll have . . . to build the road up [with] fill. It's going to be rock or it's going to be dirt or whatever we have to create this level bench.

But the point is here it's a basic cut-fill section. Material from the cut side of the road is moved to the fill side of the road. We only cut to the road level and maybe six inches . . . if we need to, or [if] by spec[ification] we're supposed to go six inches below that solid rock, and put in some smaller material.

So, within a very small distance of the surface of the roadway, you can encounter bedrock or boulders. We can use boulders to build the fill. We can use four-foot boulders to build the fill all the way up to within six inches of the surface of the road by our specifications, which is a standard specification.<sup>[13]</sup>

Tucci's witnesses each testified that they did not expect to find boulders located at such a shallow depth within a road prism and offered their general understanding of how a roadway is typically constructed. In addition, Tucci offered as an expert Mr. Mike Myette. Mr. Myette's experience in roadway construction includes fourteen years with the Washington State Department of Transportation (WSDOT), from 1964 to 1978, where he was involved in the design and construction of interstate highways. His background also includes many years of private sector experience in state and municipal roadway and public utilities construction, but it appears that Mr. Myette has never worked for the FHWA or in national parks.

Mr. Myette testified that he expects a "roadway built by the government" to contain "an asphalt section, maybe some crushed earth beneath the asphalt," and "would expect it to be free from large boulders" and other material that would hinder excavation. Mr. Myette performed his own site visit of the project area and noted that, although he observed boulders and outcroppings along the roadway, he would not expect to encounter corresponding conditions underneath the roadway.

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<sup>13</sup> Mr. Flores was presumably referring to the FP-03.

Mr. Tucci testified that the road construction projects he performed that were most similar to the roadway in issue were neighborhood roads and municipal arteries. Mr. Nelson stated that he had completed only one other federal road construction job prior to the Nisqually Entrance to Paradise Road project. Mr. Schiemer's testimony revealed that his prior experience in performing work similar to the instant utility installation project was performed on concrete municipal roads that were unlike the instant road.

Mr. Flores testified on behalf of FHWA on, among other things, the issue of federal roadway construction. Mr. Flores has been an employee of the FHWA for approximately forty years, twenty-seven of which have been spent as a project engineer. In that capacity, Mr. Flores provides technical expertise and on-site, day-to-day oversight of federal road construction and rehabilitation projects in the WFLHD region, which includes Washington, Oregon, Idaho, Montana, Wyoming, and Alaska. Many of the projects he has overseen have been in Mount Rainier or in areas of substantially similar terrain where it was not uncommon to encounter boulders or bedrock during excavation.

Regarding the FP-03, Mr. Flores testified that the specifications are used in federal road-building projects and serve as the model for states in the development of their own highway construction standards. In general, a roadway constructed to the FP-03 would have approximately five inches of a top asphalt, underlain by approximately five inches of crushed rock or gravel, followed by six inches of subgrade material. The guidelines permit the use of various materials for subgrade fill, including soils, gravel, rock, and boulders. Consequently, according to Mr. Flores, a contractor performing work in a federally constructed roadway (with similar site conditions) might expect to encounter rock or boulders within sixteen inches of the road prism.

### 3. Photographs

The solicitation contained 107 photographs, and during the project over 475 additional photographs were taken and included in the record. Several of the photographs show rock outcroppings, cobbles, boulders, and bedrock in the immediate vicinity of the road. The photographs clearly establish that boulders and bedrock should be expected in undisturbed native material at Mount Rainier National Park.

### Discussion

The purpose of the Differing Site Conditions clause is to allow contractors to submit more accurate bids by eliminating the need for contractors to inflate their bids to account for contingencies that may not occur. *See Foster Construction C.A. & Williams Brothers Co. v. United States*, 435 F.2d 873, 887 (Ct. Cl. 1970). Differing site conditions can arise in two circumstances: (1) the conditions encountered differ from those indicated in the contract (Type I), or (2) the conditions encountered differ from those normally encountered (Type II). Tucci contends that it is entitled to an equitable adjustment because it encountered a Type II differing site condition during performance. In addition, appellant maintains that WFLHD withheld its superior knowledge of the differing condition in failing to disclose to Tucci a draft geotechnical report, GR 04-11, which stated that boulders could be found in the subsurface of the roadway within the limits of the construction area. Alternatively, appellant asserts entitlement under a Type I differing site condition theory, positing that the utility trench details indicated Tucci would be able to establish a twenty-four inch depth and the contract did not indicate that how to handle boulders if they were encountered.

To establish a Type II differing site condition, appellant must demonstrate by a preponderance of the evidence that it encountered an “unknown physical condition at the site which differ[ed] materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.” 48 CFR 52.236-2. A contractor’s burden in a Type II case is heavy because, unlike a Type I case, in which the contract provides the basis of comparison, “there is no clear written point of reference.” *Servidone Construction Corp. v. United States*, 19 Cl. Ct. 346, 360 (1990), *aff’d*, 931 F.2d 860 (Fed. Cir 1991); *see Charles T. Parker Construction Co. v. United States*, 433 F.2d 771,778 (Ct. Cl. 1970) (“Under ‘category two’ . . . the Government has elected not to presurvey and represent the subsurface conditions with the result that a claimant must demonstrate that he has encountered something materially different from the ‘known’ and the ‘usual.’ This is necessarily a stiffer test because of the wide variety of materials ordinarily encountered when excavating in the earth’s crust.” (internal footnotes omitted)). “[L]acking, as it does, any specific corpus of data such as the contract,” as a basis for comparison, it is therefore appellant’s burden to put forth “pertinent climatological, hydrological, and geological data *and all other relevant and probative evidence*” in order to determine whether the conditions the contractor encountered materially differed from what the contractor reasonably should have expected. *Husman Bros., Inc.*, DOT CAB 71-15, 73-1 BCA ¶ 9889, at 46,236-37 (emphasis added).

A contractor has the burden of proving a differing site condition by a preponderance of the evidence. *Stuyvesant Dredging Co. v. United States*, 834 F.2d 1576, 1581 (Fed. Cir. 1987). Tucci has failed to meet this burden because drawing K-8 showed undisturbed native

material outside the trenches and Tucci was aware or should have been aware from the surrounding site conditions that it might encounter boulders in the undisturbed native material under the pavement.

The gravamen of Tucci's Type II claim is that, in its experience, "the presence of boulders . . . high in the road prism was unusual in nature and differed materially from those situations ordinarily encountered and generally recognized as inherent in road building and repair." Appellant's Brief at 7. While each of Tucci's witnesses concluded that they would not have expected to encounter boulders at such a shallow depth within the roadway, they described only generally how, in their experience, a typical roadway might be constructed. We find that Tucci knew or should have known that the road was not constructed in the way that their witnesses testified that they believed it was constructed.

The construction of the road began in 1903 and was completed in 1915. Although there is nothing in the record as to the scope or any amount of rebuilding or repaving work that occurred between 1915 and the award of Tucci's contract, the evidence of record makes clear that the road was old and it remains a narrow, two-lane country road that hugs the mountain at various points and was cut through bedrock in several areas. The road was built using partial bench and sidecast construction methods. While that fact was not disclosed to the contractor prior to award, we are not convinced that knowing the road's construction method would have impacted how Tucci bid the contract. What is important about this contract is that it informed potential bidders in drawing K-8 that the material beneath the road outside the trenches was "undisturbed native material." This note should have been a red flag to bidders that they would be digging the trenches in undisturbed native material. That, coupled with the readily apparent site conditions, should have informed a reasonable bidder that it was likely to encounter cobbles, boulders, and/or bedrock as it was digging the utility trenches.

Tucci represented at hearing that it had experience building roads and doing utility trench work areas of Puget Sound and Mount Rainier. It conducted a site visit prior to bidding the contract and noticed cobbles and boulders along the roadway. The record is replete with photographs of the work site which show rock outcroppings and rock faces adjacent to the roadway. *See GIIS Corp.*, DOT CAB 1534, et al., 85-1 BCA ¶ 17,810, at 89,004 ("A rock outcropping must be representative of subsurface conditions at the site locations where appellant claims to have encountered changed conditions to have probative value."). In this case, "the possibility of excavating rock was far from remote; in fact, it was obvious and apparent." *Fox*, AGBCA 76-139-4, 80-2 BCA ¶ 14,788, at 72,989. In light of the observed terrain – notwithstanding, as appellant's witnesses testified, that the presence of boulders could have been the result of intentional placement by a previous contractor – a prudent contractor could reasonably assume additional rock could be found beneath the

road surface. *Aguirre Associates*, AGBCA 78-129, 80-2 BCA ¶ 14,648, at 72,264 (“[T]he site inspection made by a prudent bidder can contradict [contract] plans if patent indications are observed during inspection.”). The site conditions clearly showed boulders in the undisturbed native materials.

We are at a loss to comprehend how appellant, with its experience working in and around Mount Rainier National Park, could have reasonably believed it would not encounter boulders on this project. We find Tucci’s assumption that it would be able to dig the utility trenches without encountering any boulders or bedrock to be unreasonable.

Tucci asserts that WFLHD breached the contract by withholding its superior knowledge of the results of the GR 04-11 report. We disagree. The superior knowledge doctrine affords relief to a contractor where the Government violates its “implied duty to disclose to [the] contractor otherwise unavailable information regarding some novel matter affecting the contract that is vital to its performance.” *Scott Timber Co. v. United States*, 692 F.3d 1365, 1373 (Fed. Cir. 2012) (quoting *Giesler v. United States*, 232 F.3d 864, 876 (Fed. Cir. 2000)). The doctrine is applied where:

- (1) a contractor undertakes to perform without vital knowledge of a fact that affects performance costs or duration,
- (2) the government was aware the contractor had no knowledge of and had no reason to obtain such information,
- (3) any contract specification supplied misled the contractor or did not put it on notice to inquire, and
- (4) the government failed to provide the relevant information.

*Hercules, Inc. v. United States*, 24 F.3d 188, 196 (Fed. Cir. 1994), *aff’d*, 516 U.S. 417 (1996) (quoting *American Ship Building Co. v. United States*, 654 F.2d 75,79 (Ct. Cl. 1981)).

It is undisputed that WFLHD did not provide the GR 04-11 draft report to prospective bidders during the solicitation process. On the whole, however, the GR 04-11 report provides very limited information regarding the subsurface conditions that could be encountered while digging the utility trench. The report gave no definitive indication that there were boulders or bedrock in the subsurface materials within the depth of the utility trench. The surrounding site coupled with drawing K-8 give a much clearer picture that boulders were to be anticipated while digging the trenches. We do not believe that the GR 04-11 draft report contained any information that would have made more apparent to Tucci that it might encounter boulders or bedrock in the roadbed. That Tucci’s assumption that this particular road would have contained a twenty-four inch road prism, like every other road it purportedly has built, is simply not reasonable given the circumstances presented

here. Furthermore, Tucci also had experience working on this road on a prior project, yet its witnesses were silent as to whether that portion of the road was also built on top of undisturbed native material, an omission which we weigh against appellant. How this roadway in Mount Rainier was built and the possibility of encountering boulders or bedrock is information that is chargeable to Tucci based upon its previous experience in the park and the site visit conducted prior to bidding. See *Hardwick Bros. Co., II v. United States*, 36 Fed. Cl. 347, 389 (1996) (“Since Hardwick either knew or should have known, through its own investigation and site visit, the well known, rule-of-thumb slope of the river, plaintiff cannot charge defendant with the withholding of superior information for its failure to disclose river slope data.”); cf. *Wayne Construction*, ENG BCA 4942, 91-1 BCA ¶ 23,535, at 118,025-27 (1990) (rejecting appellant’s superior knowledge claim because the allegedly withheld information could have been obtained if contractor had performed a site visit of the project area).

Because Tucci was on notice of the conditions in Mount Rainier National Park prior to contract award, WFLHD’s knowledge cannot be said to be superior. Where the “particular information is equally available to both parties,” it is “fundamental” that the contractor’s relief under a superior knowledge claim is precluded. *Maitland Brothers Co.*, ASBCA 24032, 84-2 BCA ¶ 17,463, at 86,998, *aff’d on reconsideration*, 85-2 BCA ¶ 18,041.

Tucci also argues that it is entitled to recover for a Type I differing site condition because the contract impliedly indicated that obstructions would not be encountered within the first two feet of trenching. To recover under a Type I differing site condition theory, “the contractor must prove, by a preponderance of the evidence, that the conditions indicated in the contract differ materially from those it encounters during performance[.]” *Quality Forests, Inc. v. Department of Agriculture*, CBCA 123, 07-1 BCA ¶ 33,490, at 166,003 (quoting *H.B. Mac, Inc. v. United States*, 153 F.3d 1338, 1345 (Fed. Cir. 1998)). “A contractor is not eligible for an equitable adjustment for a Type I differing site condition unless the contract indicated what that condition would be.” *Comtrol, Inc. v. United States*, 294 F.3d 1357, 1363 (Fed. Cir. 2002) (citing *P.J. Maffei Building Wrecking Corp. v. United States*, 732 F.2d 913, 916 (Fed. Cir. 1984)); see *Husman Bros., Inc.*, 73-1 BCA at 46,237 (“Where the contract documents do not show or indicate anything about the alleged subsurface condition, the necessary postulate for a ‘category one’ [differing site] condition fails.”).

A contract may be silent as to potential subsurface conditions affecting the work, yet still implicitly indicate through its specifications that the subsurface conditions will not be encountered, thus permitting recovery for a Type I differing site condition. See *Servidone Construction Corp. v. United States*, 19 Cl. Ct. 346, 359-60 (1990), *aff’d*, 931 F.2d 860 (Fed.

Cir. 1991) (citing *Foster Construction Co. v. United States*, 193 Ct. Cl. 587, 604 (1970)); *GIIS Corp.*, 85-1 BCA at 89,003 (finding that a requirement to embed cable to depths of 24" and 36" necessarily implied impenetrable rock would not be encountered in trenching). However, among the other "indispensable elements" of a Type I claim, see *Weeks Dredging & Contracting, Inc. v. United States*, 13 Cl. Ct. 193, 218 (1987), *aff'd*, 861 F.2d 728 (Fed. Cir. 1988), is that the contractor must establish that the subsurface materials it encountered were reasonably unforeseeable. *Renda Marine, Inc. v. United States*, 66 Fed. Cl. 639, 656 (2005), *aff'd*, 509 F.3d 1372 (Fed. Cir. 2007) In essence, the underlying issue in a Type I claim is whether the contractor could reasonably have anticipated the conditions encountered from a knowledgeable interpretation of the contract documents, his inspection of the site, and his general experience (quoting *Erickson-Shaver Contracting Corp. v. United States*, 9 Cl. Ct. 302, 304 (1985)); see also *GIIS Corp.*, 85-1 BCA at 89,003 ("the question remains whether the conditions encountered could have been reasonably anticipated from an examination of the contract documents or the site").

The facts of this case do not support a finding of a Type I differing site condition. The specifications and drawings did not implicitly represent that bidders would not encounter boulders within the contractually-stated minimum depths. To the contrary, by showing that while digging the trenches the contractor would be working in undisturbed native material, drawing K-8 indicated the opposite. Furthermore, as earlier discussed, the boulders Tucci encountered were reasonably foreseeable given the site conditions. Tucci was not free to disregard these conditions and is bound by the conditions set forth in drawing K-8 and the site conditions that were readily apparent during the bidding. It appears to us that Tucci did not take the steps reasonably necessary to ascertain the nature of the work as set forth in the contract at drawing K-8, consider the site conditions, and bid the contract accordingly.

#### Decision

For the foregoing reasons, the appeal is **DENIED**.

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PATRICIA J. SHERIDAN  
Board Judge

We concur:

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RICHARD C. WALTERS  
Board Judge

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HAROLD D. LESTER, JR.  
Board Judge