In the United States Court of Federal Claims

No. 08-541C

(Filed: December 9, 2010)

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DELHUR INDUSTRIES, INC.,	*	Federal Highway Administration Road Construction Contract; Claims Under Contract Disputes Act; Constructive Changes; Delays; Differing Site Conditions; Errors in Plans and Specifications; Contractor's Burden of Proof to Obtain Equitable Adjustment; Liquidated Damages.
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Plaintiff,	*	
	*	
v.	*	
	*	
THE UNITED STATES,	*	
	*	
Defendant.	*	
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William G. Fig, Sussman Shank LLP, Portland, Oregon, for Plaintiff.

Lauren A. Weeman, with whom were *David Hibey*, Trial Attorney, *Tony West*, Assistant Attorney General, *Jeanne E. Davidson*, Director, and *Donald E. Kinner*, Assistant Director, Commercial Litigation Branch, Civil Division, United States Department of Justice, Washington, D.C., for Defendant.

OPINION AND ORDER

WHEELER, Judge.

This case involves performance disputes stemming from a road construction contract between Plaintiff Delhur Industries, Inc. ("Delhur") and the United States Department of Transportation, Federal Highway Administration ("FHWA"). Delhur is an experienced construction contractor based in the state of Washington. The project at issue is located in the Lincoln National Forest near Alamogordo, New Mexico. Although the stretch of road to be constructed was only 12.359 km long (7.68 miles), the road was in mountainous terrain and required extensive rock excavation. The contract called for Delhur to build fill areas, construct stabilizing walls, install drainage systems, and place aggregate base and asphalt pavement for a two-lane highway. The contract price at award on December 2, 2003 was $10,158,250. Delhur performed the project during 2004 and 2005. Delhur had planned to

complete the project in one construction season, approximately one year earlier than required, but it did not achieve this plan.

Delhur alleges that it incurred significant additional costs in performing the contract due to errors in the FHWA's plans and specifications. Specifically, Delhur claims to have excavated and disposed of far more material than indicated in the contract bid documents. Delhur further asserts that it performed other extra work caused by the FHWA for excess surveying costs, hand-scaling slope embankments, topsoil hauling, and installing a temporary guardrail. Delhur has included amounts for field and home office overhead in its claim due to alleged government delay. Delhur also states that the FHWA improperly assessed liquidated damages.

On December 4, 2006, Delhur submitted a certified claim under the Contract Disputes Act ("CDA") to the contracting officer, requesting an equitable adjustment of $2,115,524 for fourteen claim items, and return of liquidated damages. On July 31, 2007, the contracting officer issued a final decision awarding Delhur $38,285, but denying the remainder of the claim. Delhur timely filed a complaint in this Court on July 25, 2008 seeking de novo review of the contracting officer's final decision. The Court has jurisdiction under the CDA, 41 U.S.C. § 609(a) (2006), and the Tucker Act, 28 U.S.C. § 1491(a) (2006).

Defendant opposes Delhur's claims based essentially on a failure of proof. Defendant contends that Delhur neglected to review contract documents describing subsurface conditions and the expected excavation prior to bidding, and failed to provide notice of alleged differing site conditions. Defendant argues that Delhur excavated much more rock than required on the project, and thus should look to itself as the principal cause of any excess excavation. Defendant also asserts that Delhur did not develop a reasonable construction schedule for performing its work, did not plan its work efficiently, and failed to begin critical activities on time. Defendant points to an absence of documents or testimony supporting any of Delhur's claims, and states that Delhur cannot show government causation or the reasonable certainty of any damages.

The Court conducted a five-day trial in Portland, Oregon during May 17-21, 2010 and heard all issues of liability and damages. The parties submitted extensive stipulations of fact in advance of trial, which the Court found quite useful. At trial, Delhur reduced its claim to $1,875,758, adjusting or abandoning certain items previously submitted to the contracting officer. The parties filed post-trial briefs on August 20, 2010, and reply briefs on September 16, 2010. The Court heard closing arguments in Washington, D.C. on October 4, 2010.

In brief summary, the Court concludes that Delhur is not entitled to any recovery on its claims. At trial and in its briefs, Delhur presented high-level conclusory allegations unsupported by any concrete facts. For the excess excavation claim, Delhur did not demonstrate that it reasonably relied on all the contract documents when formulating its bid.

The only evidence of Delhur's bid preparation work consists of fifteen pages of cryptic handwritten notes that were not adequately explained at trial. Further, Delhur did not provide the Court with sufficient evidence to show that its damages were caused by errors in the plans or government direction, and not by Delhur's own mistakes. For claims unrelated to excess excavation, Delhur did not furnish sufficient evidence of causation or damages. While alleging breach of good faith and government directed constructive changes, Delhur's case is short on facts supporting its position. Delhur did not present any evidence of its actual costs to perform changed work, and the estimates it provided do not pass muster. The Court cannot say with any certainty that the FHWA caused any of Delhur's increased costs.

Similarly, Delhur is not entitled to recover any field or home office overhead costs because the evidence does not show that the FHWA was solely responsible for any project delay. Delhur did not even present a project schedule analysis to assess which party may have caused delay. Mainly, the evidence shows that Delhur adopted an ambitious and largely unrealistic construction schedule, and it quickly fell behind for reasons of its own making. While the FHWA did not perform perfectly in managing the project, the Court finds that Delhur failed to satisfy its burden of proof as to either liability or damages.

Finally, the Court concludes that Delhur is not entitled to reimbursement of $45,000 in liquidated damages. Delhur has not provided evidence to show that any of its project delays were excusable.

Factual Background[1]

A. Contract Bidding and Award

On September 2, 2003, the FHWA issued Invitation for Bids No. NM PFH 45-1(5) (the "Solicitation") requesting bids for the construction of a 12.359 kilometer road in Lincoln National Forest, New Mexico. (Stip. ¶ 14.)[2] The road construction project involved a realignment of New Mexico Forest Highway Route 45 (also known as the "Sacramento River Road") beginning near Timberon, New Mexico and continuing northwest toward Sunspot, New Mexico. Id. The Sacramento River Road is a two-lane highway in a mountainous region. Id.

The FHWA provided prospective bidders with a set of plans, drawings, and specifications for use on the project. (Stip. ¶ 15.) The FHWA also notified bidders that all

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[1] This statement of facts constitutes the Court's principal findings of fact under Rule 52(a) of the Court. Other findings of fact and rulings on mixed questions of fact and law are set forth later in the analysis.

[2] In this opinion, the Court will refer to the parties' stipulations of fact, filed on April 30, 2010, as "Stip. ¶ __." The trial transcript will be referred to by witness and page as "Name, Tr. __," and trial exhibits will be referenced as ""JX__" for joint exhibits, "PX __" for Plaintiff's exhibits, and "DX __" for Defendant's exhibits.

work must be performed in accordance with the Federal Acquisition Regulation ("FAR"), the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects ("Standard Specifications" or "FP 96"), Special Contract Requirements ("SCR"), the bid schedule, and the provided plans. Id. The Standard Specifications stated that the FAR superseded all other contract documents and that the SCRs modified and governed the Standard Specifications. (JX 1 at 37.) During bidding, Delhur reviewed the Standard Specifications and was aware of the specified coordination of contract documents. (S. Hurworth, Tr. 358-60.)

The contract called for the Sacramento River Road to be built between station 0+158 in the south and station 12+520 in the north, using metric measurements. (Stip. ¶ 17.) The contractor was required to perform excavation, build fills, construct mechanically stabilized earth ("MSE") walls,[3] perform grading, install drainage systems, and place aggregate base and asphalt pavement for the new road partly on the alignment of the existing Sacramento River Road and partly on a new alignment on the mountainside above the existing alignment. (Stip. ¶ 16.) The work included approximately 275,000 cubic meters of roadway excavation and embankment, 12,360 meters of asphalt concrete pavement, 2,200 meters of reinforced concrete and metal pipe culverts, ten MSE walls, two soil nail walls,[4] and the destruction of the existing road. Id. The FHWA estimated that the project would take two years to complete. See JX 8 at 14.

Prior to issuing the Solicitation, the FHWA's Geotechnical Group performed a slope stability analysis of the north end of the project and recommended the use of soil nail walls to enhance stability. (DeMarco, Tr. 825, 1086-87.) The FHWA also had three geotechnical reports prepared in connection with the project: (1) a January 23, 2001 Phase II Geotechnical Study Report by Kumar and Associates, Inc. (the "2001 Kumar Report"); (2) a February 27, 2000 Phase II Geotechnical Study Report by Kumar and Associates, Inc. (the "2000 Kumar Report"); and (3) an August 1997 New Mexico PFH 45-I, Sunspot Road, Preliminary Investigation and Report (the "Folkman Report"). (Stip. ¶ 19.) The FHWA identified all three geotechnical reports on page A-3 of the Solicitation, Offer and Award packet as data available for review by bidders. (Stip. ¶ 19; JX 8 at 13.) The FHWA also included this notice on sheet D-6 of the project's plans. (Stip. ¶ 19; JX 5 at 78.) Delhur's Chief Executive Officer, Sam Hurworth, who was involved in approving Delhur's bid before it was submitted, did not review these geotechnical reports during the bidding process. (S. Hurworth, Tr. 362.) Delhur's Executive Vice President and Project Manager, Rick Hurworth, also stated that he did not review any of the geotechnical reports while

[3] An MSE wall is a reinforced wire-faced earth structure that retains cuts and earth-fill embankments. [It] utilize[s] accurately spaced horizontal layers of metal straps or grids buried in the wall fill to reinforce the granular wall fill." (Stip. ¶ 9.)

[4] A soil nail wall is "a reinforced earth retaining wall system comprised of regularly spaced steel reinforcing bars grouted into pre-drilled holes. A spray-on concrete or cast-in-place rigid facing is constructed at the surface for further stabilization." (Stip. ¶ 10.)

preparing Delhur's bid. (R. Hurworth, Tr. 548.) The record does not indicate whether any Delhur representative reviewed these reports.

The FHWA's bid opening date was October 15, 2003. (Stip. ¶ 21.) The FHWA requested bids for a unit price variable quantity type contract, with estimated quantities provided in the Solicitation for each of 110 contract pay items where applicable. (Stip. ¶ 21; JX 8 at 16-24.) The FHWA received six qualifying bids for the project with Delhur deemed the lowest bidder. (Stip. ¶ 21.) Delhur's bid of $9,560,706 was approximately 22 percent below the Government's estimate of $12,319,344. The next lowest bid was $11,562,113, id., 17 percent more than Delhur's bid. The other bids went as high as $16,132,328. Id.

In preparing its bid for the Sacramento River Road project, Delhur had representatives from its offices in Port Angeles, Washington and Hermiston, Oregon separately estimate the costs of contract performance. (S. Hurworth, Tr. 55, 214.) Sam Hurworth, along with Rick Hurworth and Tim Holth, President of Delhur, compared and reconciled the separate estimates in arriving at Delhur's final bid price. (S. Hurworth, Tr. 55-56.) Before submitting its bid, Delhur reviewed the costs on another FHWA project known as "Flowery Trail" that it was performing in the state of Washington. Id.

In its bid estimate, Delhur based the excavation and wall costs, in part, on a visual inspection of the project. (Stip. ¶ 25.) For excavation, Delhur also relied upon its production rates from the Flowery Trail project. Id. Delhur acknowledges that there were differences between the Sacramento River Road project and the Flowery Trail project. (R. Hurworth, Tr. 545-46.) The Flowery Trail excavation work consisted largely of granite, whereas the Sacramento River Road excavation was largely limestone. (R. Hurworth, Tr. 545.) The Flowery Trail project did not require any soil nail work or construction of MSE walls, while the Sacramento River Road project required two soil nail walls and ten MSE walls. (S. Hurworth, Tr. 218; R. Hurworth, Tr. 550.) Yet, Delhur regarded the rock excavation work on both of these projects as similar. (S. Hurworth, Tr. 218.) At the time Delhur prepared its bid for the Sacramento River Road project, it had not completed the Flowery Trail project. (S. Hurworth, Tr. 212; R. Hurworth, Tr. 549.) Delhur completed that project in 2004. (Stip. ¶ 25.) For MSE wall construction, Delhur reviewed its production rates on a Washington State Department of Transportation project called "Lake Crescent," which it completed in 2000. Id. Delhur had constructed its first MSE wall on the Lake Crescent project. (S. Hurworth, Tr. 46-47.)

Delhur bid the Sacramento River Road project based on having a nearby quarry to use as a source of borrow material. (R. Hurworth, Tr. 550.) Delhur intended to obtain select granular backfill[5] from the quarry at the Circle Cross Ranch, believing that the contract required it to import borrow material. (S. Hurworth, Tr. 85.) Delhur was aware,

[5] Select granular backfill is "material of a specific gradation that is used in a structural system such as a[n] [MSE wall]. Select granular backfill must meet specific gradation requirements to ensure stability of the system." (Stip. ¶ 8.)

however, that the use of a borrow material source could become unnecessary. (S. Hurworth, Tr. 466.)

After reviewing Delhur's bid, the FHWA informed Delhur that four of its bid items were much lower than the Government's estimate, and asked Delhur to verify its bid. (Stip. ¶¶ 23, 24.) Specifically, the FHWA notified Delhur in an October 23, 2003 letter that Delhur had "significantly" underbid the FHWA's estimate in the following schedule items: (1) contractor testing ($50,000 lower); (2) Class 2-Class 6 riprap ($150,000 lower); (3) MSE wall construction ($390,000 lower); and (4) pipe culverts ($124,000 lower). (JX 10.) The next day, Delhur verified the prices in its bid but requested a bid correction of $597,544 to include a New Mexico gross receipts tax, which it had inadvertently omitted. (Stip. ¶ 24; JX 11.)

On December 2, 2003, the FHWA awarded Contract No. DTF68-04-00001 to Delhur in the amount of $10,158,250, an adjusted price including the requested increase for the New Mexico gross receipts tax. (Stip. ¶ 27; JX 15.) Even at this adjusted price, Delhur's price still was well below the Government estimate and the second lowest bid. Richard Gillette was the FHWA's lead engineer on the Sacramento River Road project and the Contracting Officer's Technical Representative ("COTR"). (Stip. ¶ 21.) Pursuant to Standard Specification 104.01, Mr. Gillette had "authority to decide on acceptability of work, progress of work, suspension of work, interpretation of the contract, and acceptable fulfillment of the contract." (JX 1 at 36.) Nate Thompson was one of the FHWA's on-site inspectors. (Stip. ¶ 21.)

B. Delhur's Contract Performance

Delhur submitted a Preliminary Schedule to the FHWA on December 12, 2003, confirming that Delhur intended to complete the Sacramento River Road project by September 11, 2004. (JX 14.) During a preconstruction meeting on December 16, 2003, Delhur announced that John Doyle would be its Project Manager but would be on the project on a limited basis, Bill Hamilton would be the Project Superintendent, and Mike Willard would be the Project Engineer. (JX 17 at 2.) At this meeting, the FHWA issued a notice to proceed, establishing a contract completion date of August 30, 2005, which was nearly one year later than the planned contract completion date shown in Delhur's Preliminary Schedule. (Stip. ¶ 28.) The FHWA estimated that the project would require two construction seasons to complete because of the difficulty of the work and the winter weather at the altitude of the work site. (Gillette, Tr. 1181-82.) Following the preconstruction meeting, Mr. Gillette met with Delhur's Rick Hurworth to discuss the FHWA's concerns with Delhur's Preliminary Schedule. In the FHWA's view, Delhur's proposed schedule was virtually unachievable. Mr. Gillette explained that the proposed schedule lacked a critical path, spaced activities too close together in an overlapping manner, and anticipated unrealistic production rates. (Gillette, Tr. 1183.)

In addition, Delhur had to perform the project work in a prescribed sequence. For example, a certain amount of roadway excavation had to be completed before soil nail walls could be constructed. Only after both of these tasks had largely been completed could Delhur begin construction of the MSE walls. (Gillette, Tr. 1179; DX 123.) The limited stockpile and staging areas on the site also made scheduling the work more difficult. (Gillette, Tr. 1179-80.) Despite potential scheduling issues, on January 21, 2004, Delhur submitted a Revised Preliminary Schedule, projecting an earlier completion date of August 21, 2004. (Stip. ¶ 30; JX 24.) This schedule became known as Delhur's As-Planned Schedule. (Stip. ¶ 30.)

The As-Planned Schedule projected roadway excavation beginning on March 8, 2004. (Stip. ¶ 30; JX 24.) The schedule allowed 51 work days,[6] from February 16 to April 14, 2004, for the production of all aggregate base and select granular backfill. (R. Hurworth, Tr. 565; JX 24.) Delhur planned to begin processing aggregate base on February 16, 2004 and allowed 40 work days, until April 1, 2004, to finish this activity. (JX 24.) Delhur planned to start processing select granular backfill on March 29, 2004 and allowed fourteen days, until April 14, 2004, to finish processing all the backfill. Id. Delhur scheduled 28 days, between January 2 and February 3, 2004, for submittal and approval of the plans for all ten MSE walls. Id. The As-Planned Schedule indicated that Delhur would begin the first soil nail wall on March 15, 2004, and the second soil nail wall on March 22, 2004. Id.

In a prophetic letter dated March 16, 2004, the FHWA notified Delhur that "we have serious reservations about your proposed construction progress schedule. We feel that your progress schedule is based on overly optimistic assumptions and we feel that the timelines shown in the schedule will be difficult if not impossible to achieve." (JX 29.) Specifically, the FHWA was concerned that, considering the steep terrain and narrow construction corridor, Delhur's production rates were highly aggressive for key activities such as culverts, roadway excavation, and MSE walls; that the schedule did not predict the actual critical path for the project but that key activities were stacked as tightly as possible; that the schedule did not show the amount of float for key activities; that there were errors in scheduling logic with regard to the installation of culvert pipes; that the production rate for culverts would be difficult to achieve because of traffic in the area; that the production rate of 565 square feet per day for MSE wall construction was highly optimistic; and that the schedule did not contain enough detail to determine if there were conflicts between proposed grading operations, MSE wall construction, culvert installation, and other activities. Id.

Delhur did not perform the contract as described in the As-Planned Schedule. Delhur did not start processing aggregate base until May 17, 2004, more than three months after the planned start date of February 16, 2004. (JX 57.) Delhur spent 85 days processing

[6] Although the record does not indicate how the number of "days" for each activity in Delhur's As-Planned Schedule is calculated, the Court presumes that the schedule is based upon a six-day work week, excluding Sundays.

aggregate base, which was double the amount of time planned for this activity. Id. Delhur did not begin processing wall backfill until April 19, 2004, five days after its schedule indicated that it planned to finish this activity. Id. Delhur's design firm did not complete the first set of MSE wall drawings until February 9, 2004, six days after the As-Planned Schedule indicated that all the drawings would be approved by the FHWA. (DX 21 at 2.) Delhur commenced the first soil nail wall on April 19, 2004, and the second soil nail wall on April 26, 2004, over one month later than planned. (JX 57.)

The COTR, Mr. Gillette, suspended the soil nail work on April 26, 2004. (DX 24.) The FHWA noticed deficiencies in the soil nail wall operations, including a failure to provide adequate centralizers, failure to verify that the holes were clean prior to installing grout, failure to repair damaged encapsulation on the soil nails, failure to provide a method to verify the thickness of shotcrete layers, failure to cure the shotcrete, and failure to provide proper equipment for performing verification testing. Id. The suspension of the soil nail work delayed the beginning of MSE wall construction because Delhur only had materials for MSE walls four and five onsite and those walls were directly adjacent to the soil nail walls. (Gillette, Tr. 1201.) Delhur began these two MSE walls prior to the completion of the soil nail work, which further delayed the completion of the soil nail walls. (Gillette, Tr. 1202.)

During the course of the project, Delhur changed at least two of its key personnel. Mr. Doyle, Delhur's Project Manager, left the project after one month, and Rick Hurworth replaced him. (R. Hurworth, Tr. 561-62.) Mr. Hamilton, the first project superintendent, was replaced by Don Schneider. (R. Hurworth, Tr. 562-63.)

Delhur also had problems with the finishing activities of the project, and in particular, placing the aggregate base. Delhur did not correctly monitor the quantity of the base it was placing. (Gillette, Tr. 1251.) Delhur dumped the base material at a fixed rate, meaning that it was laying base material as if the road was a constant width. (Gillette, Tr. 1251; JX 17 at 15.) However, the road was not a constant width, but was wider at the road curves to give vehicles more room to negotiate the curves. (Gillette, Tr. 1251.) Mr. Gillette offered Mr. Hamilton an aggregate base spreadsheet so that Delhur could monitor the placement of aggregate base much more accurately. (Gillette, Tr. 1251; JX 17 at 15.) Mr. Hamilton declined the spreadsheet. Id. Because Delhur did not monitor the placing of aggregate base correctly, the base was not distributed evenly on the road. (Gillette, Tr. 1251-52.) There were high areas and low areas. (Gillette, Tr. 1252.) Delhur cut down the high areas, hauled the base to the low areas, and tried to place thin lifts of aggregate base onto the grade. Id. These thin lifts of base would delaminate quickly. (JX 17 at 20.)

Ultimately, the project did not take one construction season as stated in Delhur's As-Planned Schedule. See JX 24. In fact, the project took longer than the deadline of August 30, 2005, established in FHWA's notice to proceed. See Stip. ¶ 28. The FHWA accepted the project as complete on October 5, 2005. (Stip. ¶ 32.) The total contract amount paid to Delhur, including modifications, was $10,386,031. Id.

C. Delhur's Certified Claim

By letter dated December 4, 2006, Delhur submitted a certified CDA claim to the contracting officer, requesting an equitable adjustment of $2,115,524. (Stip. ¶ 36; JX 88.) In particular, as set forth in the chart below, Delhur asserted that it incurred additional costs in fourteen discrete areas, and was entitled to the return of liquidated damages:

1. Extra cost of excavation (36% swell from BCM to CCM)	$867,417
2. Cost of Waste Site – Private Owner Royalty	$48,868
3. Additional Cost of Wall Excavation (Plain Error – Swell)	$76,099
4. Additional Cost of Wall Excavation Volume (Plain Error – Drawings)	$74,934
5. Effect of Limited Access on Wall Construction	$102,555
6. Rejection of 11,200 m3 of Granular Backfill	$193,458
7. No Stockpile area – Cost of Handling Topsoil	$17,413
8. Inappropriate Inspection – Cost to Finish Base Course	$133,856
9. Topsoil – Measurement in the Hauling Vehicle	$142,508
10. Rock Scaling in Excess of Specifications	$86,429
11. Request for Maintenance Relief	$15,957
12. West Road Rehandle (Plain Error – No Waste Site)	$20,095
13. Temporary Guardrail – Responsibility to the Public	$23,419
14. Home Office and Job Overhead – the Result of Delay	$267,516
Return of Liquidated damages	$45,000
TOTAL	**$2,115,524**

Id. On July 31, 2007, the contracting officer issued a final decision granting Delhur $38,285 in compensation. (Stip. ¶ 38; JX 91.) The awarded amount consisted of $34,473.60 for Additional Wall Excavation Volume (Plain Error – Drawings); $2,011.40 for Home Office and Job Overhead; and $1,800 in Liquidated Damages. The contracting officer denied the remainder of Delhur's claim items in all respects. Id.

On July 25, 2008, Delhur timely filed suit in this Court seeking $1,981,669 in damages for its fourteen claim items and return of liquidated damages. (Stip. ¶ 39.) By letter dated March 30, 2010, Plaintiff's counsel confirmed that Delhur would no longer pursue the following three claims: (1) "Rejection of 11,200 m3 of Granular Backfill"; (2) "Request for Maintenance Relief"; and, (3) "Effect of Limited Access on Wall

Construction." (Stip. ¶ 40.) As a result, when the parties filed their joint stipulation of facts on April 30, 2010, Delhur sought damages of $1,875,758. (Stip. ¶ 41.) Following trial, Delhur again reduced its damages claim, and now seeks $1,813,723. See Pl.'s Post-Trial Br. 5-8, 22, 28, 30, 32-35.

Discussion[7]

A. Standards for Decision

To prove entitlement to an equitable adjustment, Delhur must show "'liability, causation, and injury, and it must prove that the government somehow delayed, accelerated, augmented, or complicated the work, and thereby caused [it] *to incur specific additional costs*, and that those costs were reasonable, allowable, and allocable to the contract.'" SAB Constr., Inc. v. United States, 66 Fed. Cl. 77, 84-85 (2005) (emphasis in original) (quoting 64 Am. Jur. 2d Public Works and Contracts § 199 (2004)), *aff'd*, 206 F. App'x 992 (Fed. Cir. 2006). Delhur must make a showing as to each element, liability, causation, and injury, by a preponderance of the evidence. Bath Iron Works Corp. v. United States, 34 Fed. Cl. 218, 231 (1995) (citing Delco Elecs. Corp. v. United States, 17 Cl. Ct. 302, 319 (1989)), *aff'd*, 98 F.3d 1357 (Fed. Cir. 1996).

"Once the contractor has proved the government's liability for the costs of added or changed contract work, the actual costs incurred by the contractor will provide the measure of the equitable adjustment to the contract price, if those incurred costs are reasonable." George Sollitt Constr. Co. v. United States, 64 Fed. Cl. 229, 245 (2005). However, courts have realized that in complex cases "the ascertainment of damages, or of an equitable adjustment, is not an exact science, and where responsibility for damage *is* clear, it is not essential that the amount thereof be ascertainable with absolute exactness or mathematical precision." CEMS, Inc. v. United States, 59 Fed. Cl. 168, 227 (2003) (emphasis in original) (quoting Elec. & Missile Facilities, Inc. v. United States, 416 F.2d 1345, 1358 (Ct. Cl. 1969)). A plaintiff will meet its burden of proving damages if it "furnishes the court with a reasonable basis for computation, even though the result is only approximate." Id. (quoting Wunderlich Contracting Co. v. United States, 351 F.2d 956, 968 (Ct. Cl. 1965)).

The contracting officer's determination that Delhur was entitled to an award of $38,285 does not affect this Court's analysis. The findings of fact in the contracting officer's final decision are not binding on this Court and are not entitled to any deference. Wilner v. United States, 24 F.3d 1397, 1401 (Fed. Cir. 1994). The Court reviews decisions by the contracting officer on a de novo basis. Id. at 1402; 41 U.S.C. § 609(a)(3). Thus, the contractor must prove the three necessary elements, liability, causation and resultant injury,

[7] In the course of these proceedings, Delhur has advanced a host of legal theories to support its claims. However, the claims mainly involve garden variety construction issues, such as constructive changes, differing site conditions, defective specifications, over-inspection, and schedule delays. In addressing Delhur's claims below, the Court will consider them under the most appropriate legal theory applicable to the claim. The Court deems it unnecessary to discuss every theory that Delhur has offered.

de novo. Wilner, 24 F.3d at 1401. The Court will address Delhur's proof of the necessary elements for each of the claims below.

B. Excess Excavation

Delhur began excavation on the Sacramento River Road project on or about January 29, 2004. (Stip. ¶ 29.) On February 5, 2004, Delhur set up a screening plant at station 12+100 of the project to screen the blasted or excavated material into specific sizes. (Stip. ¶ 46.)

Many contract provisions applied to Delhur's excavation work, including SCR 204.06(a) which required, in part, that the contractor "conserve suitable material for manufacturing (including crushing) select granular backfill and special rock backfill material from the roadway excavation." (JX 9 at 53.) Delhur believed that SCR 204.06(a) was not applicable to its work because the contract required it to furnish all backfill from a borrow source such as the Circle Cross Ranch quarry. (S. Hurworth, Tr. 85, 397; R. Hurworth, Tr. 550-51.) Therefore, Delhur bid the project based upon importing select granular backfill, not conserving roadway excavation in order to produce the necessary backfill. (S. Hurworth, Tr. 397-98; R. Hurworth, Tr. 550-51.) Delhur used the Circle Cross Ranch quarry to obtain and crush rock for materials on the project. (Stip. ¶ 47.) The parties disagree on the exact volume of backfill imported. Delhur claims it imported 32,970 cubic meters, while the FHWA asserts that Delhur imported 46,679 cubic meters of backfill material. (Stip. ¶ 58.) Project records apparently are inconclusive.

The contract plans and specifications required that select granular backfill be used to fill the MSE walls. (Stip. ¶ 49.) The Grading Summary in the plans failed to include approximately 9,700 cubic meters of select granular, or wall, backfill located below the original surface. (Gillette, Tr. 1129; JX 5 at 15.) Plan sheet B5, however, which provides a summary of quantities for the project, includes the 9,700 cubic meters of backfill not shown on the Grading Summary. (Gillette, Tr. 1129; JX 5 at 8.) Plan sheet B5 also lists the location of the ten MSE walls to be built, and the quantity of select granular backfill required for each wall. (JX 5 at 8.) SCR 255.08 provides that payment for construction of the MSE walls would be made by square meter of wall face, and other components of the wall were to be subsidiary to that number. (S. Hurworth, Tr. 91-92; Gillette, Tr. 1129; JX 9 at 69.)

The parties agree that "excess excavation," defined as excavation quantities beyond those shown on the plans, was generated on the project. (Stip. ¶¶ 34, 35.) By April 2004, Delhur believed that there would likely be excess excavation material on the north end of the project. (Stip. ¶ 48.)

On April 24, 2004, after its discovery that there may be excess excavation on the project, Delhur moved its Caterpiller 385 mass excavator to the south end of the project. (Stip. ¶ 51.) In early May 2004, Delhur began using some of the screened materials from

the screening plant at station 12+100 in the MSE walls. (Stip. ¶ 49.) Delhur used approximately 7,129 compacted cubic meters of materials from the screening plant in the MSE walls. Id. On May 10, 2004, Delhur moved the screening plant to the quarry, located at approximately station 3+600. (Stip. ¶ 50.) Delhur began crushing materials from the quarry for use as aggregate base and other backfill materials, including select granular backfill for MSE walls. Id. In June 2004, Delhur temporarily stockpiled excavated material at West Road. (Stip. ¶ 84.) Delhur later moved some of this stockpiled material to other locations on the project. Id. As part of the project, under Standard Specification 204.05, Delhur was required to conserve topsoil from the roadway foundation and embankment areas. (JX 1 at 123.) The Standard Specifications at 204.02(d) define conserved topsoil as excavated material that is suitable for grass growth, cover crops, or other native applications. Id. Available locations to stockpile topsoil on the project were limited. (Stip. ¶ 69.) Because of the excess excavation on the project, there was no room on the project to stockpile the topsoil. Delhur had to move the topsoil twice. (S. Hurworth, Tr. 156-57.) Delhur's claim includes the cost of handling this material twice. Id.

On June 29, 2004, Delhur notified the FHWA in writing that there would be excess excavation on the project. (Stip. ¶ 52.) This was Delhur's first written notice to the FHWA that there would be waste material on the project. Id. No Delhur employee or subcontractor measured or recorded the volume of excess material that Delhur alleges existed as of June 29, 2004. (Stip. ¶ 53.)

The FHWA did not provide a waste site for excess material. (Stip. ¶ 63.) On July 19, 2004, Delhur reached an agreement with the Circle Cross Ranch to place excess material on its property and Delhur began hauling material to that location. (Stip. ¶ 55.) Delhur hauled approximately 2,011 loads of excavation material to the Circle Cross Ranch. (Stip. ¶ 56.) Delhur paid $36,041 to the Circle Cross Ranch to dispose of excavation material at the ranch, $10,500 to a seeding subcontractor, and applied overhead of five percent for a total of $48,868. (Stip. ¶ 64.) The FHWA did not compensate Delhur for any of the costs of securing a waste site. Id. Delhur wasted or disposed of between 33,463 and 42,228 cubic meters of excavated material off site, primarily at the Circle Cross Ranch. (Stip. ¶ 59.)

The FHWA paid Delhur at the contract unit price of $5.95 per cubic meter for excavating 276,451 cubic meters of material. (Stip. ¶ 57.) The cost of handling the excavation from MSE walls is included in Delhur's claim for the extra cost of excavation. (Stip. ¶ 61.)

Delhur seeks $1,048,910 in additional costs related to excess excavation, comprised of $886,238 for handling and hauling the excess excavation, $25,858 for additional blasting work to construct the MSE walls, and $136,814 in profit and overhead for these activities. See Pl.'s Post-Trial Br. 22. Delhur seeks $48,868 for costs incurred to obtain an excess excavation waste site, and $47,700 for work it allegedly lost under the contract because no borrow or imported material was required for the project. Id. Delhur also claims additional

costs for rehandling materials as a result of the excess excavation: $17,413 for rehandling the topsoil and $20,095 for rehandling material at West Road. See Pl.'s Post-Trial Br. 28.

Essentially, Delhur's excess excavation claim is based upon five alleged errors in the contract plans. (Pl.'s Post-Trial Br. 8-21.) These five errors are: (1) Page B-12 of the plans represented that the expected swell on the north end of the project would be 4.2 percent; (2) the plans indicated that the MSE walls would only require 9,717 compacted cubic meters of excavation; (3) Page B-12 indicated that the project would require an import of approximately 11,467 cubic meters of borrow material; (4) excavation on the north end could be embanked within 1,000 meters of where it was excavated; and (5) there were inaccuracies regarding the amount of slope excavation. Id. The Court will review the Government's potential liability for each of the five alleged errors below.

1. The Expected Swell Factor

The Grading Summary for the project estimated an overall swell of approximately 4.2 percent on the north end, from station 9+600 to the end of the project. (Stip. ¶ 44; see also Gillette, Tr. 1131; JX 5 at 15.) A "swell" occurs when materials are excavated and transformed from bank cubic meter ("BCM")[8] to uncompacted loose cubic meter ("LCM").[9] (Stip. ¶ 43.) Likewise, when materials are transformed from an LCM status to a compacted cubic meter ("CCM"),[10] the material shrinks or compacts. Id. Matthew DeMarco, the FHWA's lead geotechnical engineer, testified at trial that the shrink-swell estimate in the plans represented "a material property" and was "an estimate of how the material [onsite] would behave." (DeMarco, Tr. 1120.)

The 2001 Kumar Report found that it was "reasonable" to apply "a swell factor of 36%" to the limestone rock material on the project site. (JX 3 at 30.) Not all of the rock mass on the project, however, was comprised of intact hard limestone. (DeMarco, Tr. 849.) A portion of the materials on the project consisted of decomposed limestone and clay-like, silty materials, both of which are shrinkable materials. Id. However, the material between 10+100 and the end of the project was primarily limestone rock and limestone-related materials, which had to be blasted with explosives in order to be excavated. (Stip. ¶ 45.) At trial, Mr. Gillette acknowledged that the FHWA erred in assuming a 4.2 percent swell. (Gillette, Tr. 1131.) But Mr. DeMarco testified that, reviewing the geological reports, five percent "doesn't look bad to me as an estimate early in the project." (DeMarco, Tr. 1118.)

[8] The parties define BCM as "a volumetric measure of a cubic meter of soil or rock in its undisturbed, natural state." (Stip. ¶ 1.)

[9] The parties define LCM as "a volumetric measure of a cubic meter of soil or rock that has been excavated, but that has not been compacted." (Stip. ¶ 1.)

[10] The parties define CCM as "a volumetric measure of a cubic meter of soil or rock that has been placed or embanked or physically compacted in place." (Stip. ¶ 1.)

Delhur alleges that, because of the swell misrepresentation, the plans understated the volume of excavated material that Delhur would encounter on the project. Delhur estimates that the swell was 36 percent, which caused it to handle and haul an additional 36,000 cubic meters of excavated material. (Pl.'s Post-Trial Br. 9-10.)

Although Delhur provides three different legal theories for its excess excavation claim, under case law from the Federal Circuit, the swell claim should be analyzed as a differing site conditions claim[11] or as a misrepresentation claim. In Comtrol, Inc. v. United States, the Federal Circuit held that when a differing site conditions claim and a defective specifications claim "are so intertwined as to constitute a single claim, that claim will be governed by the specific differing site conditions clause and the cases under that clause." 294 F.3d 1357, 1362 (Fed. Cir. 2002). The court explained that "[a]lthough differing site conditions and defective specifications claims are distinct in theory, they collapse into a single claim [], where the alleged defect in the specification is the failure to disclose the alleged differing site condition." Id. This case presents precisely such a situation. Here, the incorrect swell listed in plan sheet B-12 is the defective specification. (JX 5 at 15.) In International Technology Corp. v. Winter, the Federal Circuit noted that "the same requirements apply whether the contractor asserts [] a common law breach claim[12] or a Type 1 claim[13] under the Differing Site Conditions clause." 523 F.3d 1341, 1348 (Fed. Cir. 2008). It then set out the necessary elements for both the differing site conditions claim and the common law breach of contract claim. Id. The Court will analyze Delhur's swell claim under the requirements established in International Technology Corp.

Four elements must be shown for both differing site conditions and misrepresentation claims. Id. First, the contractor must prove that a reasonable contractor reading the contract documents as a whole would interpret them as making a representation as to the site conditions. Id. at 1349. Second, the contractor must prove that with all the information available, the actual site conditions were not reasonably foreseeable to the contractor. Id.

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[11] Delhur's differing site conditions claim is based upon the clause appearing in the FAR, 48 C.F.R § 52.236-2.

[12] By common law breach of contract claim, the Federal Circuit in International Technology Corp. is referring to a misrepresentation claim. The Federal Circuit cites two common law breach of contract cases in its explanation that the same requirements apply whether the contractor asserts a common law breach claim or a Type 1 claim: T. Brown Constructors, Inc. v. Pena, 132 F.3d 724, 728-29 (Fed. Cir. 1997) as listing the elements for a common law breach of contract claim and P.J. Maffei Building Wrecking Corp. v. United States, 732 F.2d 913, 919 (Fed. Cir. 1984) as applying the same analysis to the common law breach of contract claim and the differing site condition claim. Int'l Tech. Corp., 523 F.3d at 1348. Both of these cases are addressing claims of misrepresentation. T. Brown Constructors, Inc., 132 F.3d at 728-29; P.J. Maffei Bldg. Wrecking Corp., 732 F.2d at 919.

[13] The Differing Sites Conditions Clause differentiates between two types of claims, Type 1 claims for subsurface of latent physical conditions at the site which differ materially from those indicated in the contract, and Type 2 claims for unknown physical conditions at the site which differ from those ordinarily encountered. Int'l Tech. Corp., 523 F.3d at 1348 n4. Plaintiff only alleges a Type 1 differing site condition claim.

Third, the contractor must prove that it in fact relied on the Government's representations. Id. Fourth, the contractor must prove that the conditions differed materially from those represented in the contract documents and that the contractor suffered damages as a result. Id.

In assessing the first element, whether a contractor reviewing the contract would read the plans as making an affirmative representation on the swell, the analysis is not limited to any specific provision but rather is based upon how a reasonable contractor would interpret the contract as whole. Id. at 1350. "[A] proper technique of contract interpretation is for the court to place itself into the shoes of a reasonable and prudent contractor and decide how such a contractor would act in interpreting the contract documents." Id. (quoting H.B. Mac, Inc. v. United States, 153 F.3d 1338, 1345 (Fed. Cir. 1998)). In this case, although sheet B-12 of the plans indicated a swell factor, the contract as a whole, which included the geotechnical reports, presented a far more comprehensive measure of swell. A reasonable contractor would not have limited its review of swell to page B-12, but would have carefully read the geotechnical reports.

A contractor has a duty to review information referred to and made available for inspection in the contract documents. Randa/Madison Joint Venture III v. Dahlberg, 239 F.3d 1264, 1270-72 (Fed. Cir. 2001). See also Neal & Co. v United States, 36 Fed. Cl. 600, 617 (1996) (finding that in determining if a contractor's claim is reasonable, the court "must assess all of the information that was available to the bidders at the time of bidding"), *aff'd*, 121 F.3d 683 (Fed. Cir. 1997). Thus, to reasonably rely on the indication of the swell, Delhur had to review all of the swell-related information in the contract documents. Moreover, even without the duty to review all information made available by the contract documents, a reasonable contractor in Delhur's position would have reviewed the geotechnical reports. Mr. Hurworth testified that he knew the contract was a variable quantity type, and that the final excavation quantity would vary from the excavation quantity set forth in the plans. (S. Hurworth, Tr. 466.) As an experienced construction contractor, Delhur understood the importance of knowing the materials to be excavated on the project, and how the expected swell factor of the materials would potentially affect the cost of excavation. With three geotechnical reports available for review in bidding the project, a prudent contractor would have carefully reviewed those reports, and posed questions to the FHWA if any of the swell information was unclear or inconsistent. Delhur presumably understood the properties of limestone, and knew how it would likely behave when excavated. Delhur could have inquired of the FHWA if it questioned any of the data provided. Here, there is no evidence that Delhur reviewed any of the geotechnical reports in preparing its bid. There is no persuasive indication that Delhur actually relied upon the data provided on sheet B-12 in preparing its bid, as it now claims. Although Sam Hurworth made general assertions to this effect at trial, (S. Hurworth, Tr. 63-64), Delhur's bid preparation notes cannot be deciphered and do not support Delhur's position. (JX 7.) Delhur, thus, also fails to prove the third element of a differing site conditions claim, that the contractor relied on the Government's representation.

The second element Delhur must prove is that the actual site conditions were not reasonably foreseeable to the contractor. Int'l Tech. Corp., 523 F.3d at 1349. The irony of this case is that, even if Delhur had read all three geotechnical reports, it may still not have had a correct estimate of the swell. While Delhur would have learned about the nature of the materials on the project, specifically that there was at least some intact limestone on the north end that could swell up to 36 percent, (DeMarco, Tr. 847-48; JX 3 at 30), it may not have been able to predict the swell any more accurately than as listed in the plans. As noted earlier, the FHWA's Mr. DeMarco explained that "five percent doesn't look bad to me as an early estimate in the project." (DeMarco, Tr. 1118.) Thus, this case presents a situation in which there was a condition that was indeed not foreseeable. Nevertheless, the geotechnical reports were part of the contract documents and Delhur had a responsibility to review these documents. Even though neither party could have predicted the swell with complete accuracy, the geotechnical reports would have provided Delhur with a much better idea of what to expect. Having failed to demonstrate that it reviewed the reports or relied on sheet B-12, Delhur cannot now recover for a differing site condition. See Youngdale & Sons Constr. Co. v. United States, 27 Fed. Cl. 516, 532-35 (1993) (finding that a contractor could not satisfy the requirements of a reasonable interpretation of the contract or of a reasonable reliance on the contract's representations for the differing site conditions claim if it failed to read all the contract documents).

In its post-trial response brief, Delhur argues that it did not receive the geotechnical reports until after it was awarded the contract, and therefore could not have read the reports prior to bidding on the project. (Pl.'s Post-Trial Resp. Br. 5.) The testimony cited in the post-trial response brief does not actually support this assertion. In this testimony, Mr. Hurworth stated that he did not ask for all three geotechnical reports until January 6, 2004. (S. Hurworth, Tr. 99.) However, it does not follow that no one else at Delhur received the geotechnical reports. Furthermore, Mr. Hurworth also testified on cross-examination that a person from his office ordered the geotechnical reports, although the testimony is unclear regarding how many of the reports were ordered and how many were received. (S. Hurworth, Tr. 364-65.) Defendant entered an exhibit into evidence, a letter from the FHWA's Lori K. Rivera to Delhur's Chris Steinman indicating that Ms. Rivera sent the three geotechnical reports. (DX 81 at 10.) The letter in evidence is not the actual cover letter to the three geotechnical reports, but a later letter that refers to Ms. Rivera having sent the reports. Id. Taken together, the evidence on this issue is inconclusive. Sam Hurworth testified on direct examination that he did not request the reports, and on cross-examination that an employee of Delhur asked for the reports but may not have received them. Simply stated, Delhur had a duty to review these reports, but it did not. With the conflicting testimony of Sam Hurworth, Delhur failed to meet its burden.

2. Incorrect Excavation of MSE Walls

The Grading Summary for the project showed that 9,717 CCM of excavation would be required to construct the back slopes for all ten MSE walls. (Gillette, Tr. 1130-31; JX 5 at 15.) Mr. Gillette agreed at trial that there was a discrepancy in the Grading Summary

regarding the amount of excavation of about 4,600 cubic meters. (Gillette, Tr. 1131.) In the contracting officer's final decision, the contracting officer agreed that there was an error in the wall excavation quantity of 4,627 meters and awarded Delhur $34,474 for the additional excavation. (JX 91 at 12.)

In its post-trial brief, Delhur alleges that the total excavation of the MSE walls was 25,500 cubic meters, 15,783 cubic meters greater than shown in the plans. (Pl.'s Post-Trial Br. 3-4, 11-12.) Delhur seeks compensation for additional costs resulting from the excess excavation.

As with the swell analysis above, the Court will analyze the claim under the differing site conditions/misrepresentation standard set forth in International Technology Corp., 523 F.3d 1341. For this claim, Delhur is able to demonstrate the first two elements: that a reasonable contractor would interpret the contract as making a representation as to the site conditions, and that the actual site conditions were not reasonably foreseeable to the contractor. Id. at 1348-49. However, Delhur is unable to demonstrate the third and fourth elements, which require the contractor to demonstrate that it reasonably relied on the Government's representation and that its damages resulted from the differing site condition. Id. at 1349.

A reasonable contractor would have read the plans as representing only 9,717 CCM in wall excavation since sheet B-12 clearly indicated that there would be only 9,717 CCM of excavation necessary for the MSE walls. (JX 5 at 15.) There are no provisions in the contract documents that would have indicated anything other than 9,717 CCM was required for the MSE walls. Delhur meets the second prong because the additional excavation was not foreseeable to Delhur.

As discussed above, Delhur cannot satisfy the third requirement of a differing site conditions claim because the Court is not persuaded that Delhur relied on the representation of MSE wall excavation on sheet B-12 in preparing its bid. While Sam Hurworth asserts that he relied on sheet B-12 in preparing the bid, (S. Hurworth, Tr. 63-64, 70-71), Delhur's bid documents are indecipherable and therefore do not show which pages of the plan, if any, Delhur relied on. (JX 7.)

Delhur also cannot prove the fourth element, causation. Delhur argues that it suffered damages because it had to haul the extra excavation from the MSE walls a distance of 5.6 miles. (S. Hurworth, Tr. 131.) Besides this general statement, Delhur provides no further evidence of the extent of its damages. It claims that the MSE walls produced a total of 25,500 cubic meters of excess excavation. The basis for this 25,500 excess excavation figure is unclear from the record. Mr. Hurworth testified that the estimate was based on a survey by its engineering firm, id., but the referenced survey is not in evidence. The Court has no way of knowing if this estimate is reliable or how it was determined. The Court cannot assume that Delhur suffered damages because of 15,783 cubic meters of additional excavation.

Defendant argues that Delhur cannot prove causation because the excess excavation was a result of Delhur's own over-excavating of the MSE walls. (Def.'s Post-Trial Br. 43-44.) Defendant states that the total as-built MSE wall excavation was 27,277 cubic meters, and that Delhur over-excavated the MSE walls by 8,218 cubic meters. Id. Defendant further asserts that Delhur cannot recover for any excess excavation because the logistical problems and increased costs Delhur experienced during performance were the result of Delhur's failure to follow SCR 204.06(a) and Delhur's over-excavation of the slopes. (Def.'s Post-Trial Br. 46.) Defendant also contends that Delhur produced 33,000 cubic meters of select granular backfill at the quarry which it imported into the project, and this quantity contributed to the excess excavation that later had to be removed from the project. Id.

The Court questions the data used for Defendant's calculations. The source of Defendant's calculation for the 27,277 cubic meters in MSE wall excavation is unclear. While Defendant demonstrated that Delhur over-excavated the slopes, (Gillette, Tr. 1235-37), Defendant did not provide the Court with any indication of how much material resulted from over-excavation of the cut slopes. Similarly, the Court does not find Defendant's estimate that Delhur imported 33,000 cubic meters into the project particularly reliable. Mr. Gillette testified that he relied on the quantities recorded in the combined haul records to calculate this amount. (Gillette, Tr. 1155.) The Court determined at trial that the combined haul records were based on a number of faulty assumptions and estimates, were inherently unreliable, and therefore could not be admitted into evidence. (Tr. 1225-27.)

Furthermore, the Court finds that Defendant's own presentation at trial demonstrated that Delhur had to excavate more material for the MSE walls than it expected. First, Mr. Gillette admitted at trial that Delhur had to excavate approximately 4,600 cubic meters of additional material. (Gillette, Tr. 1131.) Second, Mr. Gillette testified about Defendant's Exhibit 87, an exhibit meant to show the manner in which Delhur over-excavated the MSE walls. (Gillette, Tr. 1142-43.) This exhibit shows that, as designed by the FHWA, the wall excavation quantity is 17,280 BCM. (DX 87.) This amount seems to be larger than 9,717 CCM shown in the plans. However, because DX 87 measures excavation in BCM and sheet B-12 measures excavation in CCM, the extent of the additional excavation is unclear.

Nevertheless, the burden of proof remains with Plaintiff. The Court finds that Delhur has not proven any damages that were the result of the error in the plans. The Court cannot find that the additional excavation caused Delhur to incur damages. The Court simply cannot determine what the effect of the possible additional excavation would have been on Delhur's costs if Delhur had followed SCR 204.06(a), and had imported no material or less material onto to the project. Thus, Delhur cannot show that its damages related to handling and hauling the excess excavation were the result of an error in the plans and not the result of Delhur's own mistakes.

Delhur has insisted throughout these proceedings that it did not need to comply with SCR 204.06(a) because that clause was not applicable to projects requiring the use of imported material. See, e.g., Pl.'s Post-Trial Br. 16. This position is unreasonable. If Delhur found that there was a contract provision made unnecessary by the plans, this was a patent ambiguity in the contract. "If a patent ambiguity is found in a contract, the contractor has a duty to inquire of the contracting officer the true meaning of the contract before submitting a bid." Conner Bros. Constr. Co. v. United States, 65 Fed. Cl. 657, 668 (2005) (quoting Newsom v. United States, 676 F.2d 647, 649 (Ct. Cl. 1982)). Delhur never asked the contracting officer about SCR 204.06(a). Having failed to follow a contract specification that may have limited the impact of any excess excavation from the plan error, Delhur cannot now prove that the error caused any damages.

3. Slope Excavation

The parties estimate that Delhur generated between 23,145 and 26,127 BCM from the excavation of the cut slopes behind (or uphill from) the roadway prism when comparing the as-built to the as-planned drawings. (Stip. ¶ 34b.) There were instances in which the FHWA ordered Delhur to round the cut slopes and in those instances, the wall was re-measured and the FHWA paid Delhur for the extra work. (Gillette, Tr. 1237.)

Delhur alleges that the FHWA is responsible for the additional 26,127 BCM of excavation from the cut slopes. Delhur argues that it should recover under either of two legal theories. First, Delhur alleges that there was a design defect in the plans, namely that the plans showed an excavation ratio of 1.25 vertical to 1 horizontal. (Pl.'s Post-Trial Br. 18.) Second, Delhur alleges that it excavated additional material because the FHWA directed it to do so. (Pl.'s Post-Trial Br. 18 n8.)[14] Delhur fails to prove either assertion.

a. Design Defect

Delhur asserts that the plans represented the majority of the slopes on the project to be excavated at a 1.25 vertical to 1 horizontal ratio (or ¾ horizontal to 1 vertical), which turned out to be incorrect. (Pl.'s Post-Trial Brief 18.) However, none of the cited pages of the plans actually show a slope of 1.25 vertical to 1 horizontal. Delhur cites Sam Hurworth's testimony, page 84, and the contract plans, page 78, for this proposition. (S. Hurworth, Tr. 84; JX 5 at 78.) Both this testimony and the page from the plans refer to the MSE walls, not to the cut slopes. Id. Furthermore, regardless of what this evidence actually references, both the testimony and JX 5 at 78 represent a slope of 1.25 horizontal to 1 vertical, not the reverse. Id. Delhur's post-trial brief also refers to JX 88, page 171, which is actually a section of page A3 of the plans. (JX 5 at 3.) This page does not make any representation of a 1.25 vertical to 1 horizontal slope. In fact, both slopes shown on this page show a 1 vertical to 1.25 horizontal ratio, although one of the drawings says that it is

[14] Although Delhur does not fully describe this legal theory in its post-trial brief, Delhur's reference to "constructive change" is sufficient for the Court to analyze the claim under the constructive change theory.

the drawing for slopes greater than 1 vertical to 1.25 horizontal. Id. Delhur's post-trial brief also suggests that the Court examine Mr. Hurworth's testimony for an example of a slope ratio of 1.25 vertical to 1 horizontal. Mr. Hurworth's testimony addresses page A3 of the plans and he says that "virtually in all cases we had to extend that top of slope well past the clearing limits. And the top of slope should never have had to go any further according to the drawings than about 1.5 meters from the clearing slope. So it was [a] tremendous extra amount of slope rounding." (S. Hurworth, Tr. 160.) This testimony is non-specific and inconclusive. Delhur has not directed the Court to a single place where the FHWA specified in the plans a slope ratio of 1.25 vertical to 1 horizontal. Delhur has not cited any compelling evidence for the Court to find that the slope requirements were a design defect, a differing site condition, or a misrepresentation.

b. Constructive Change

Delhur also contends that the additional slope excavation was a constructive change directed by the FHWA. Defendant agrees that there were instances in which the FHWA ordered Delhur to round the slopes but says that in all those cases, the wall was re-measured and Delhur was paid. (Gillette, Tr. 1237.) Defendant asserts that the excess excavation is the result of Delhur over-excavating the slopes. (Gillette, Tr. 1234-37.) Although the parties stipulated to an estimated range of excavation from the cut slopes, neither Delhur nor Defendant presented any data to show the extent of excavation. Thus, the Court has no evidence on the extent to which the FHWA may have directed Delhur to excavate the slopes, or the extent to which Delhur in fact over-excavated the slopes.

A constructive change arises when the Government, without more, "expressly or impliedly orders the contractor to perform work that is not specified in the contract documents." CEMS, Inc., 59 Fed. Cl. at 203 (quoting Lathan Co. v. United States, 20 Cl. Ct. 122, 128 (1990)). To prove a constructive change, the contractor must show the performance of work in addition to or different from the work required under the contract, either by express or implied direction of the Government or by Government fault. SIPCO Servs. & Marine, Inc. v. United States, 41 Fed. Cl. 196, 223 (1998) (citing Miller Elevator Co. v. United States, 30 Fed. Cl. 662, 679 (1994)). In order to receive an equitable adjustment, plaintiff must demonstrate "(1) increased costs from conditions materially different from what the contract documents indicated and that such conditions were reasonably unforeseeable based on all the information available to the contractor; and (2) the changes in the requirements caused the increased costs." Id. at 224 (citing Johns-Manville Corp. v. United States, 12 Cl. Ct. 1, 33 (1987)).

The FHWA believed that rounding the slopes was a change in the contract. Mr. Gillette testified that when the FHWA ordered Delhur to round the slopes, it compensated Delhur for the work. (Gillette, Tr. 1237.) The issue, then, is not whether rounding the slopes was a change in the contract, but whether the FHWA paid Delhur for this work, and if so, whether the payment was sufficient. Delhur has provided no evidence for the Court to make a determination in Delhur's favor.

Delhur's argument is limited to statements in the post-trial brief demonstrating that the FHWA told Delhur to round the slopes, (Pl.'s Post-Trial Br. 19-20), and testimony by Sam Hurworth that the orders amounted to 26,127 BCM of extra excavation. (S. Hurworth, Tr. 138.) These two broad assertions are insufficient for the Court to determine that Delhur was not paid for the slope rounding. The contractor cannot merely rely on the general, unsubstantiated pronouncements that the various acts of the Government caused the increased costs. Hoffman Constr. Co v. United States, 40 Fed. Cl. 184, 201 (1998), *aff'd in relevant part*, No. 98-5075, 1999 WL 37411 at *1 (Fed. Cir. Jan 22, 1999).

4. Plans Indicated an Import of Materials and Excavation on the North End Could Be Embanked within 1,000 Meters.

These final two plan errors alleged by Delhur are not actually separate errors but merely a result of the fact that the project had more excavation than expected. Therefore, these alleged errors do not need to be analyzed separately.

Specifically, the plans do not state explicitly that the project would be a borrow job. Instead, Delhur extrapolated the information from plan sheet B-12, which showed an import of 11,467 cubic meters. (JX 5 at 15.) This is not an independent error in the plans but a result of the other alleged errors in the plans.

Furthermore, the indication that the material could be embanked within 1,000 meters also is not a separate error. Delhur does not argue that the plans incorrectly represented the area of embankment, rather it argues that because of the excess excavation the material could not be embanked as shown on the plans. See Pl.'s Post-Trial Br. 17. This claim then is a direct result of the excess excavation and not a separate error.

C. Inspection of the Subgrade

The FHWA's inspector, Nate Thompson, examined Delhur's aggregate base and assessed its compliance with the contract. (Stip. ¶ 73.) A "blue top" is a device used in checking the grade and is a stake set to within +/- ten millimeters of the design grade. The "blue top" provides a visual reference point which helps the equipment operators finish the aggregate base surface to the correct line and grade. (Stip. ¶ 72.) Using the "blue top" method, surveyors have plus or minus ten millimeters to set the grade to the finishing stake. The allowable finishing tolerance thus is twenty millimeters. (Gillette, Tr. 1244.) An inspector must constantly check the level, as there is no such thing as a perfect level. (Gillette, Tr. 1244-45.) Mr. Thompson regularly checked his level. (Gillette, Tr. 1246; DX 127.)

In its post-trial brief, Delhur made two allegations concerning Mr. Thompson's inspection of the subgrade. Delhur says that Mr. Thompson's method for checking the grade only allowed for a tolerance of ten millimeters, when in fact he should have allowed

for a tolerance of twenty millimeters. (Pl.'s Post-Trial Br. 30.) Delhur also alleges that Mr. Thompson used a faulty level that was off by a little more than half a tolerance. (Pl.'s Post-Trial Br. 31; S. Hurworth, Tr. 181.) Delhur asserts that Mr Thompson's method of checking the grade breached the implied covenant of good faith and fair dealing during the performance of the project. (Pl.'s Post-Trial Br. 29-31.) Delhur assessed the increased costs allegedly caused by Mr. Thompson's inspection methods by comparing its finishing costs for this project with the Flowery Trail project. Delhur seeks $133,856 in damages for additional surveying work on this project. (Pl.'s Post-Trial Br. 30-31.)

Delhur was unable to show that Mr. Thompson behaved unreasonably in using the incorrect level. Defendant demonstrated at trial that there is no such thing as a perfect level and that Mr. Thompson consistently checked his level. (Gillette, Tr. 1244-46.) For Sam Hurworth's allegation that Mr. Thompson used a level off by over half a tolerance, (S. Hurworth, Tr. 181), the Government demonstrated that the level was only three millimeters from Delhur's level. (Gillette, Tr. 1248-49.) Since Mr. Thompson was regularly checking to make sure that his level was accurate, the fact that there were occasions in which the level may have been off is insufficient to find a breach of the duty to cooperate.

The evidence on the issue of Mr. Thompson using the incorrect tolerance is less clear. Delhur presented one document suggesting that Mr. Thompson would not use the "blue tops" in his grade inspection. (JX 23 at 2047) (Mr. Thompson's diary in which he says "Billy asked me if I would go check blue tops with him from 2+940 up station so that they would know that blue tops are correct before they start cutting to grade. I told him No, that's his job, but I'd check grade when it's ready to be accepted.") There is also some evidence that the FHWA acknowledged a mistake in the measurement of the tolerance, specifically that the specifications could be read to allow for a tolerance of twenty millimeters. (JX 91 at 16.) Delhur, however, did not present any evidence on the extent of this problem. Sam Hurworth testified that Mr. Thompson consistently refused to measure the grade correctly. (S. Hurworth, Tr. 180-81.) However, Sam Hurworth was not present during the grade inspection. (S. Hurworth, Tr. 450.) The Court does not have sufficient evidence to know the extent to which Mr. Thompson may have used the incorrect tolerance in measuring the grade. It is, therefore, difficult for the Court to determine whether Mr. Thompson behaved unreasonably.

In assessing this claim, the Court finds that Delhur has failed to satisfy its burden of proof. Sporadic and anecdotal notations that Mr. Thompson may have caused Delhur to incur additional surveying and grading costs will not suffice. To receive an equitable adjustment, a contractor must show causation. Bath Iron Works Corp., 34 Fed. Cl. at 231 (citing Servidone Constr. Corp. v. United States, 931 F.2d 860, 861 (Fed. Cir. 1991)) (finding that to prove it is entitled to equitable adjustment, plaintiff must show liability, causation, and injury). Delhur has not shown any specific instances where it had to redo or correct work because of Mr. Thompson's alleged improper inspections. Just because Delhur's finishing costs were higher on this project than they were on the Flowery Trail project does not mean that all of the increased costs were caused by the FHWA. There are

so many unexplained variables between the two projects that the Court could not even begin to assess damages on this basis. In fact, due to Delhur's evidentiary shortcomings, the Court could not even say that *any* of Delhur's increased finishing costs were caused by the FHWA. See Hoffman Constr. Co., 40 Fed. Cl. at 201 ("plaintiff has not presented any specific, persuasive evidence or analysis demonstrating how any government action . . . caused [plaintiff's] overruns"). Delhur's subgrade inspection claim is denied.

D. Scaling of Slopes With Pry Bars

Delhur began excavation blasting in early February 2004. (Stip. ¶ 83.) Delhur had a choice of blasting methods to achieve the desired outcome on the slopes, the two most common methods being control blasting and production blasting. (Gillette, Tr. 1232.) "Control blasting" involves the use of closely spaced drill holes and reduced blast energy in each hole so that the blast damage is not as great. Id. Delhur chose to use production blasting. Id. After reviewing Delhur's blasting plan, the FHWA notified Delhur that its choice of blasting methods "along the control line will have a significant impact on the amount of post-blast work required to achieve acceptable results in the final slope" and "recommend[ed] that [Delhur] finish some of the slopes shortly after blasting gets underway" in order to "establish expectations early in the process and allow [Delhur] to evaluate [its] blasting methods accordingly." (DX 12.)

In a May 11, 2004 letter, Mr. Gillette notified Delhur that its hand scalers had been using rakes to remove loose rocks from rock cuts and that, while this method was effective for removing loose rocks, it was not effective for removing many of the fractured or wedged rocks. (S. Hurworth, Tr. 171-72; JX 88 at 213.) Mr. Gillette explained that these rocks present a safety hazard because they tend to work free due to erosion of soil filled joints and freeze/thaw cycles. (JX 88 at 213.) Mr. Gillette recommended using a scale bar to pry the rocks out of their bedding. Id.

In a February 9, 2005 letter, Delhur notified Mr. Gillette that it claimed compensation for the manlift and labor required to pry embedded rocks loose from the slope, which Delhur argued were contrary to the project specifications. (JX 63.) The FHWA denied the request by letter on November 8, 2005. (JX 86.)

Delhur alleges that the FHWA changed the scope of work by requiring Delhur to hand pry imbedded rocks from the slope face. (Pl.'s Post-Trial Br. 31-32.) It seeks $86,429 in increased costs for performing the hand scaling. (Pl.'s Post-Trial Br. 7.) Sam Hurworth testified that, when Delhur bid the project, he believed that SCR 204.13, the section on sloping, shaping and finishing the roadway, indicated that the slopes were to be left in "roughened fashion and were not supposed to be smooth or slick." (S. Hurworth, Tr. 90-91.) This type of slope finish would be achieved with a backhoe, not by hand. (S. Hurworth, Tr. 91.)[15]

[15] Although not explicitly stated at trial or in the post-trial briefs, Delhur appears to contend that, by requiring hand scaling, the project was changed from a rough surface project to a smooth surface project. See S. Hurworth, Tr. 90-91.

As discussed above, to prove a constructive change, the contractor must show both that it performed work in addition to or different from that required under the contract, and that the work performed was ordered by the Government, either by express or implied direction, or by Government fault. SIPCO Servs. & Marine, Inc., 41 Fed. Cl. at 223. For the "change" component, an equitable adjustment is justified by a change contrary to, or materially different from, the work contemplated by the contract. Ralph L. Jones Co. v. United States, 33 Fed. Cl. 327, 334 (1995) (citing Miller Elevator Co., 30 Fed. Cl. at 678). For the "order" component, the Government must have directed the contractor to perform the additional work and the work may not have been volunteered. SIPCO Servs. & Marine, Inc., 41 Fed. Cl. at 223 (citations omitted).

SCR 204.13, the relevant section of the contract specifications, states:

> Leave all earth and cut slopes steeper than 1:1.25 with a roughened surface as they are being constructed, to the extent possible. Leave rock outcrops undisturbed that are firmly in place and protruding from the cut slopes. Sculpt all cut slopes to irregular surfaces, preserving segments of solid rock outcrops, leaving staggered irregular ledges, shelves and outcrops with jagged edge appearance and planting pockets suitable for placement of topsoil and seeding. The dimensions of the ledges and outcrops will vary depending on the steepness of slopes and rock fracturing. Scale rocks to remove unstable material and to accent and/or blend newly exposed rock face. Break up uniform lines and surfaces with the resultant ledges appearing as a natural part of the overall landscape. Excavate soil pockets from cut slopes and backfill with weed-free topsoil to create locations for revegetation and planting.

(JX 9 at 54.) This section requires both that the slope be left in a roughened fashion and that rocks be scaled to remove unstable material. Delhur argues that production blasting was the only blasting method it could use to achieve the rough surface required by SCR 204.13. Mr. Hurworth states that, since a machine was used to achieve the rough surface, it made no sense for Delhur to return to the slopes and pry rocks loose by hand. (S. Hurworth, Tr. 170-71.) Delhur's contention is that, because it could meet the FHWA's specification of a rough surface by using a machine, requiring Delhur to pry rocks by hand is a change in the contract. However, this theory is not supported by the contract documents. If Delhur was planning to use production blasting, it also had to refer to the specification on production blasting, Standard Specification 205.08. This section states that the contractor may have to scale by hand.

Delhur's claim, however, does not relate to the required smoothness of the slope face but specifically that the use of hand scaling to remove embedded rocks was not required by the contract documents. Delhur presented no evidence that the FHWA's requirements turned the surface of the slope from a rough surface to a smooth surface.

> Remove or stabilize all cut face rock that is loose, hanging or potentially dangerous. Scale by hand methods using a standard steel mine scaling rod. Machine scale using hydraulic splitters or light blasting when necessary. Leave minor irregularities or surface variations in place if they do not create a hazard. Drill the next lift only after the cleanup work and stabilization work is complete.

(JX 1 at 139.) Thus, once Delhur decided to use production blasting, it should have been aware that it may have to scale by hand. The plain language of Standard Specification 205.08 states that in production blasting, hand scaling may be necessary to remove loose or hanging rocks. Hand scaling was plainly within the scope of the contract. See Conner Bros. Constr. Co., 65 Fed. Cl. at 667 (citing Triax Pacific, Inc. v. West, 130 F.3d 1469, 1473 (Fed. Cir. 1997)) ("If the language of the contract is unambiguous, the court must accept its plain meaning."). Since hand scaling was part of the contract, any requirement imposed by the FHWA that Delhur hand scale the slopes was not a constructive change. Delhur's hand scaling claim is denied.

E. Temporary Guardrail

From the beginning of the project until just before the winter suspension in 2004, public traffic traveled on the existing roadway in the area of station 9+580 to 12+100. (Stip. ¶ 89.) In the winter of 2004, Delhur determined that the existing roadway had become too narrow and unsafe for travel due to debris and drain water falling from above. (S. Hurworth, Tr. 176-77.) Delhur decided that traffic had to be moved to the road being built by Delhur and from late 2004 until completion of the project, public traffic was carried on the new road. (Stip. ¶ 89; S. Hurworth, Tr. 177.) A temporary guardrail was required during construction to assure public safety if Delhur wanted to route traffic onto the new alignment. (Stip. ¶ 105.)

Delhur installed a guardrail from station 9+580 to 12+020 prior to paving. (Stip. ¶ 90.) When it installed the guardrail, Delhur temporarily placed the blockouts on the backside of the guardrail post and attached the rail to the front of the post to facilitate paving operations. Id. After paving, Delhur removed the rail from the front of the posts, moved the blockouts to the front, and placed the rail on the blockouts. Id. The FHWA compensated Delhur for placing the guardrail at the contract unit price. (Stip. ¶ 92.) The FHWA, however, did not further compensate Delhur for rehanging the guardrail. Id.

The FHWA did not direct Delhur to divert traffic onto the new road alignment in late 2004. (Stip. ¶ 91.) The FHWA also did not direct Delhur to place the guardrail blocks on the back of the posts. Id.

Delhur argues that it is entitled to $23,419 in increased costs for installing and removing the temporary guard rail. (Pl.'s Post-Trial Br. 33; S. Hurworth, Tr. 177-79.) Delhur alleges that the FHWA's denial of Delhur's request to proceed with the installation

of a temporary guardrail as a pay item was a breach of contract and a breach of the duty of good faith and fair dealing. (Pl.'s Post-Trial Br. 32.)

The Court also might evaluate this claim as a constructive change, but none of Delhur's theories are supportable. Delhur has not identified any contract provision that the FHWA may have breached, and it has not shown that the FHWA ever directed Delhur to divert traffic or to construct a temporary guardrail. Although the diversion of traffic for safety reasons and the erection of a guardrail may have been sound ideas, contract procedures are in place to manage such issues in an orderly way. A contractor is not permitted to implement its own ideas without first obtaining the Government's concurrence, and then charge the Government for the increased costs. In effect, Delhur volunteered the diversion of traffic costs, and it may not recover those costs from the Government. See Calfon Constr., Inc., v. United States, 17 Cl. Ct. 171, 177 (1989) (finding that recovery under a constructive change theory will be denied where the contractor volunteered the work). Accordingly, Delhur's temporary guardrail claim is denied.

F. Topsoil Hauling

Delhur began placing topsoil on the project on approximately June 8, 2004. (Stip. ¶ 78.) Standard Specifications subsection 109.02(b)(2) of the contract provides in part:

> Measure the cubic meter volume in the hauling vehicle using three-dimensional measurements at the point of delivery. Use vehicles bearing a legible identification mark with the body shaped so the actual contents may be readily and accurately determined. Before use, mutually agree in writing on the volume of material to be hauled by each vehicle.

(JX 1 at 66.) Delhur hauled conserved topsoil in 350C Payhauler trucks with "Rock" or "Heavy Rock" body service types. (Stip. ¶ 77.) The trucks had no tailgates. Id. Delhur submitted nine progress estimates to the FHWA to receive compensation for placing topsoil. (Stip. ¶ 80.) Each estimate was based on topsoil truckload volumes of 19.11 cubic meters. Id. Mr. Thompson measured four loads of topsoil when the topsoil was dumped on the ground. He determined that the average of the four loads was 18.98 cubic meters. (Gillette, Tr. 1253-54; JX 82 at 3.) On April 1, 2005, Delhur submitted a letter to the FHWA requesting increased compensation at 32 cubic meters per load for topsoil that already had been placed and paid for by the FHWA. (Stip. ¶ 79.)

After filing its certified claim under the CDA, but before trial, Delhur determined that the appropriate level of compensation was at 26.18 cubic meters per truck. (Stip. ¶ 81.) Delhur's arrived at 26.18 cubic meters by going to a pit with topsoil and throwing topsoil into the truck as Delhur would have done on the Sacramento River Road job. (S. Hurthworth, Tr. 165.) Delhur undertook this exercise one year before trial on a different project with different topsoil. (S. Hurworth, Tr. 470.) There is no data confirming the 26.18 cubic meters measurement per load during this project. Id. Delhur alleges that it

should be compensated for the additional volume that each truck could carry. (Pl.'s Post-Trial Br. 33; S. Hurworth, Tr. 169.)

Delhur seeks an additional $74,517 for hauling topsoil based on a volume of 26.18 cubic meters per truck. (Pl.'s Post-Trial Br. 34.) The Court finds that Delhur did not meet its burden of proof for demonstrating that each truck carries a load of 26.18 cubic meters. A test conducted years after the completion of the project using different topsoil is insufficient to demonstrate the amount of material that the trucks could carry. Furthermore, even if the trucks could carry 26.18 cubic meters, Delhur did not provide any contemporaneous evidence to show that the trucks actually carried 26.18 cubic meters during the project. The only project-based evidence provided to the Court shows that the trucks carried approximately 19 cubic meters, and that the FHWA paid Delhur for those volumes. Thus, the Court finds that Delhur again has not met its burden of proof, and the topsoil hauling claim must be denied.

G. Overhead Claim

As discussed above, Delhur's As-Planned Schedule indicated that the project would be completed on August 21, 2004 (Stip. ¶ 30), but the project was not accepted by the FHWA until October 5, 2005. (Stip. ¶ 32.) Delhur seeks to recover overhead for the nineteen-week delay between June 19, 2004 and October 31, 2004 that it attributes to the excess excavation. (Pl.'s Post-Trial Br. 35; S. Hurworth, Tr. 145.) Delhur claims that this nineteen-week period delayed subsequent phases of the project. (S. Hurworth, Tr. 144.) Delhur seeks the recovery of $156,009 in home office overhead and $111,507 in field office overhead.[16] (Pl.'s Post-Trial Br. 35.)

The Court already has ruled that Delhur failed to satisfy its burden of proof and cannot recover under any of its excess excavation theories. The recovery of home office and field office overhead is intended to compensate a contractor for delays in contract performance caused by the Government. The theory for this recovery is that the contractor plans for the expenditure of resources on a project based upon the expected duration of the project, and if a project extends for a longer duration than planned, a greater level of resources must be devoted to the project. When the delay is the responsibility of the Government, it is appropriate for the contractor to recover the increased expenditure of overhead resources caused by the delay. See P.J. Dick Inc. v. Principi, 324 F.3d 1364, 1370 (Fed. Cir. 2003) (citing Sauer Inc v. Danzig, 224 F.3d 1340, 1347-48 (Fed. Cir. 2000)) (holding that to recover overhead damages, contractor must prove government-caused delay to the planned contract performance schedule, and the delay is not concurrent with contractor-caused or other delays); Wickham Contracting Co. v. Fischer, 12 F.3d 1574, 1578 (Fed. Cir. 1994) (finding that the recovery of unabsorbed overhead is intended to "allow fair compensation of a contractor for government delay.").

[16] Plaintiff refers to field office overhead as "Jobsight [sic] Overhead" (JX 88 at 300), "Job Overhead" (Stip. ¶ 36), and "Project Overhead" (Pl.'s Post Trial Br. 35). The Court has adopted the term typically used in the case law, that of "field office overhead."

Here, the Court has no basis to conclude that the FHWA was solely responsible for any performance delays. Delhur did not present any contract schedule analysis during its case in chief to establish that there was any government-caused delay.[17] The record evidence suggests that Delhur adopted an extremely ambitious project schedule, that Delhur predictably fell behind early in performance for reasons of its own making, and that it was never able to overcome its early performance delays. While the FHWA may have been responsible for some delay during the two-year performance period, Delhur has not shown what those delays were, and has not addressed whether Delhur's own concurrent delays were affecting performance at the same time. There is nothing to suggest that the FHWA delayed Delhur's performance for the claimed nineteen weeks. Sam Hurworth's general allegations of delay are insufficient to prove that the FHWA was the sole cause of the delay. (S. Hurworth, Tr. 144-45.)

Defendant's expert, Mr. Francis Brennan, did prepare a time impact analysis comparing Delhur's As-Planned Schedule with an As-Built Schedule that he constructed. (DX 105.) Performing this comparative analysis enabled Mr. Brennan to see how the work progressed and to determine who was responsible for the delays. (Brennan, Tr. 1403.) Mr. Brennan concluded that Delhur's planned schedule was too compacted at the front end, and that the project could not be completed in one year. (Brennan, Tr. 1409.) Mr. Brennan created an As-Built Schedule for the project based upon daily records from both Delhur and the FHWA. (Brennan, Tr. 1409-12; DX 105 at 87-88.) Mr. Brennan concluded that there were 409 calendar days of delay between Delhur's date of "early completion," August 21, 2004, and the date of actual project completion, October 4, 2005. (DX 105 at 4.) However, the actual project completion date was only 35 days late when measured against the August 30, 2005 contract completion date. Id.

Mr. Brennan determined that there were five controlling delays on the project accounting for the 409 calendar days of delay. (Brennan, Tr. 1413-14; DX 105 at 22-39.) The five controlling delays may be summarized as follows:

- The first delay of 37 calendar days, covering the period from the December 16, 2003 notice to proceed until May 3, 2004, is attributable to Delhur's late start of the MSE wall construction, caused by Delhur's late submittal of shop drawings. (Brennan, Tr. 1415-18; DX 105 at 90.)

- The second delay of 29 calendar days, covering the period May 3, 2004 until June 26, 2004, reflects that Delhur's MSE wall embankments still are not complete, and that Delhur had not started producing aggregate base on May 21, 2004, a critical activity. (Brennan, Tr. 1419-21; DX 105 at 91.)

[17] Plaintiff presented an expert witness, Dr. Gerald Williams, but he did not prepare any project schedule analysis, and did not offer any reason for the absence of such an analysis. (Williams, Tr. 686-87; PX 74 at 63.)

- The third delay of 218 calendar days, covering the period June 26, 2004 until October 31, 2004, includes the winter shutdown, when critical path activities like placing aggregate base cannot be performed. Delhur planned for paving to begin on September 16, 2004, but in October, Delhur projected the start of paving to March 31, 2005, 166 days after it was scheduled to begin. (Brennan, Tr. 1425-27; DX 105 at 92.)

- The fourth delay of 90 calendar days, covering the period October 31, 2004 until June 23, 2005, is attributable again to delays in the start of paving. (Brennan, Tr. 1428-30; DX 105 at 93.)

- The fifth delay of 35 calendar days, covering the period June 23, 2005 until October 4, 2005, again shows asphalt paving delays due to problems of Delhur's own making. (Brennan, Tr. 1431-32; DX 105 at 94.) Delhur had difficulty producing a proper job mix, and could not maintain the quality of the mix during manufacturing. Problems with Delhur's paving subcontractor also contributed to these delays. (Brennan, Tr. 1431-33.)

Of the 35 calendar days of delay in completing the project, Mr. Brennan found that Delhur was responsible for these delays, and that they were not excusable. The other delays ate up "float" in Delhur's planned schedule. (Brennan, Tr. 1434.) Mr. Brennan did not find any concurrent delay on the project. (Brennan, Tr. 1435.)

Based upon Mr. Brennan's analysis, and Delhur's failure to present any contrary analysis, the Court concludes that Delhur's claim for home office and field office overhead must be denied.

H. Liquidated Damages

Section 108.04 of the Standard Specifications provides that liquidated damages "in the amount specified in Table 108-1 will be assessed for each day beyond the time allowed to complete the contract until substantial completion of the work." (JX 1 at 62.) Further, twenty percent of liquidated damages "will be assessed for each day beyond the time allowed to complete the contract beginning with the day after substantial completion and ending with the date of final completion and acceptance." Id. Table 108-1 of the Standard Specifications contains a range of daily charges from $300 to $2,100 depending upon the dollar value of the contract. (JX 1 at 63.) For Delhur's contract, the daily liquidated damages rate is $2,100, because the contract price exceeds $10,000,000. Id.

The contract completion date was August 30, 2005. (Stip. ¶ 28.) The FHWA accepted the project as complete on October 5, 2005. (Stip. ¶ 32.) By letter dated October 11, 2005, the FHWA notified Delhur that liquidated damages would be assessed from August 31, 2005 until the project was substantially complete on September 23, 2005, and

that twenty percent of the daily rate would be assessed from September 24, 2005 through September 28, 2005. (JX 84.) The amount calculated by the FHWA and withheld from Delhur was $45,000.

Delhur claims that the project would have been substantially complete before the completion date if not for the excessive excavation caused by the FHWA's errors in the plans and specifications. (S. Hurworth, Tr. 142-45.) Delhur alleges that, because this delay was caused by the FHWA, the assessment of liquidated damages was improper. (Pl.'s Post-Trial Br. 34-35.) Delhur seeks reimbursement of the $45,000 in liquidated damages. (Stip. ¶ 36.)

The Court finds that Delhur is not entitled to reimbursement of liquidated damages because it has not met its burden of proving that the delays were excusable. "As a general rule, a party asserting that liquidated damages were improperly assessed bears the burden of showing the extent of the excusable delay to which it is entitled." Sauer Inc., 224 F.3d at 1347 (citing Dean Constr. Co. v. United States, 411 F.2d 1238, 1240-41 (Ct. Cl. 1969)). Here, Delhur contends that the FHWA was at least partially responsible for the delays experienced on the project. (Pl.'s Post-Trial Br. 35.) However, similar to the shortcomings in its other claims, Delhur has failed to present any schedule analysis or other persuasive evidence, and therefore has not met its burden of showing that any delays were excusable. Accordingly, the Court denies this claim.

Conclusion

Based on the foregoing, the Court finds that Delhur is not entitled to any damages on its contract claims against the Government. The clerk shall dismiss Plaintiff's complaint with prejudice, and enter judgment in favor of Defendant. No costs.

IT IS SO ORDERED.

s/ Thomas C. Wheeler
THOMAS C. WHEELER
Judge