STATE OF MARYLAND
BOARD OF CONTRACT APPEALS
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SUMMARY ABSTRACT
DECISION OF THE MARYLAND STATE BOARD OF CONTRACT APPEALS

Docket No. 2192	Date of Decision: 08/14/02
Appeal Type: [ ] Bid Protest	[X] Contract Claim
Procurement Identification: Under SHA Contract No. AW683-501-329	
Appellant/Respondent: R.R. Gregory Corporation State Highway Administration	

Decision Summary:

Timeliness - Notices of Claim and Claims - Notices of a claim and claims in construction contracts are required to be filed in accordance with the provisions of Section 15-219 of the State Finance and Procurement Article and COMAR 21.10.04.02.

BEFORE THE
MARYLAND STATE BOARD OF CONTRACT APPEALS

In The Appeal of The R.R. Gregory Corporation	)	
	)	**Docket No. MSBCA 2192**
Under SHA Contract No. AW 683-501-329	)	

APPEARANCE FOR APPELLANT: **Douglas G. Worrall, Esq.**
Howard S. Stevens, Esq.
Wright, Constable & Skeen, LLP
Baltimore, MD

APPEARANCE FOR RESPONDENT: **Dana A. Reed**
Assistant Attorney General
Baltimore, MD

OPINION ON REMAND BY BOARD MEMBER HARRISON

By Order dated May 9, 2002 as explained in a Memorandum Opinion dated May 9, 2002, the Circuit Court for Baltimore City upon its review of the Board's decision of September 5, 2001 vacated the decision and remanded the captioned appeal to the Board for entry of a statement of the facts and reasons supporting the Board's decision that the Appellant's claim was timely filed. Such findings of fact and rationale follow.

Findings of Fact

1. The Board incorporates herein by reference all Findings of Fact contained in its decision dated September 5, 2001. A copy of the Board's decision dated September 5, 2001 is attached as Exhibit A.
2. The Board further specifically finds that the "Project Engineer established quantities per truck measurement and count merely to make progress payments until the item quantity was exhausted."
3. Such determination by the Project Engineer, Mr. James Daffin, an employee of the State Highway Administration (SHA), was

conveyed to Appellant by letter dated August 27, 1997 from Mr. James R. Keseling, Chief, Facilities Management Division.

4. The August 27, 1997 letter from Mr. Keseling reads as follows:

> Reference is made to your correspondence dated June 11, 1997 and AccuBid's Letter dated June 4, 1997 concerning pay quantities for Class 1 Excavation (Contract Item # 2001).
>
> A meeting was held at the construction site on July 16, 1997 where AccuBid stated they believed the quantity for the class 1 excavation has overrun by 13,011 cubic yards.
>
> Our design team re-surveyed the site, using the spot elevations obtained from the field a computer generated plot was developed then overlaid on the contract document grading plan, Drawing No. C-4. The findings were that both the existing and proposed elevations were accurate compared to the original contract plan.
>
> As stated in section 201.04.02 of the Standard Specifications for Construction and Materials dated October 1993 "Unless otherwise specified, excavation will be computed using the template from preliminary cross sections of the original ground surface combined with the template of the typical cross sections". The project Engineer established quantities per truck measure and count merely to make progress payments until the item quantity was exhausted.
>
> Based on this information, we are denying AccuBid's request to revise the contract quantity contained in pay item 2001.

5. The Board finds that this letter establishes the agency position that SHA will base final payment on the template method and not the truck measurement or liquid measure load count method, i.e. truck count method.

6. Notices of claim and claims are required to be filed in accordance with the provisions of Section 15-219 of the State

Finance and Procurement Article and COMAR 21.10.04.02. See Cherry Hill Construction, Inc., MSBCA 2056, 5 MSBCA ¶459(1999). For purposes of this construction contract's effective date, a notice of claim was required within thirty (30) days after the basis of the claim was known or should have been known. The Memorandum Opinion of the Circuit Court observes that "SHA contends that Gregory [Appellant] knew, or should have known, of the faulty estimate more than thirty (30) days before Gregory sent its June 11, 1997 letter to SHA and cite Gregory's certified claim as proof that Gregory [had] such knowledge on or before April 16, 1997." The Board finds that Appellant knew [and if Gregory did not personally know, its subcontractor, AccuBid, knew, and AccuBid's knowledge is attributable to Appellant] that there was a quantity error more than thirty (30) days before it sent its June 11, 1997 letter to SHA.

7. The Board also finds, however, that Appellant would not have known more than thirty (30) days prior to June 11, 1997 that SHA would base final payment on the template method, notwithstanding that the template method did not accurately reflect the quantity of excavation required.

8. SHA's position that it would base final payment on the template method would have been conveyed by Mr. Keseling's letter of August 27, 1997. The record reflects, notwithstanding Mr. Keseling's assertion in his letter that after the re-survey of the site the findings were "that both the existing and proposed elevations were accurate compared to the original contract plan," that, in fact, original and final quantities could not be established by the template method or re-survey.

9. The Board agrees, as asserted by Respondent, that Appellant's job superintendent testified that he lacked authority to

change the Contract to provide for a measured liquid volume and truck count method to replace the template method of measurement. The Board also agrees that, as testified to by the SHA Project Engineer, Mr. Daffin, the agreement in the field was only to use the truck count method for the purpose of monthly pay estimates to pay the contractor as the work was done and was not an agreement to make final payment by use of the truck count method. The Board further finds that this agreement in the field did not, and legally could not, change the Contract between the parties that called for use of the template method of measurement to determine final quantities. See ARA Health v. Dept. of Public Safety, 344 Md. 85 (1996). This template method assumes that the quantity shown on the plans is the appropriate final quantity. The templates (cross sections) could not be found when the grade bust was encountered early in the job, prior to the start of excavation, and were only located after the excavation was substantially complete pursuant to the agreement in the field to use the truck count method for purposes of monthly pay estimates.

10. As noted above, Appellant sent a letter to SHA dated June 11, 1997. Enclosed with Appellant's letter was a letter from AccuBid dated June 4, 1997, reflecting that the cross sections had been located after completion of the excavation. The AccuBid letter stated in this regard: "The current cross sections were made available after completion of our excavation thus making it impossible to check the original site conditions, since we have no means to verify the cross sections it is our contention that we are to be paid by the original agreed upon method of load counts." Thus Appellant, AccuBid and SHA all seem to agree that the truck count method was for payment for monthly estimates and that final payment

would be governed by the cross sections or template method. However, the templates were flawed. As suggested by the testimony of Mr. Gupta (Finding of Fact No. 21 in the Board's Opinion of September 5, 2001) it is an unusual (if not unique) situation where "you're unable to get the volumes based on the drawings" which "have shown existing and the proposed." Nevertheless, such deficiency is what the record reflects, and accurate original and final quantities could not be established by the template method or re-survey.

Decision

Based on the above Findings of Fact on the issue of whether Appellant's claim is time barred, we determine that Appellant's letter of June 11, 1997, enclosing AccuBid's letter of June 4, 1997, constitutes a notice of claim that was filed within thirty (30) days of the time that Appellant knew or should have known that the State might insist on using the flawed preliminary cross sections of the original ground under the template method, which cross sections had then been found[1] but which were missing prior to substantial completion of the excavation on or about April 16, 1997.

The preliminary cross sections were made available April 24, 1997. The State's response to the Appellant's June 11, 1997 letter was to engage in a meeting on July 16, 1997 concerning the apparent overrun at the construction site and to conduct a subsequent re-survey of the site which determined (erroneously) that both the existing and proposed elevations were accurate compared to the original Contract plan. Such a response, combined with the State's allowance of the truck count measurement for progress payments, is not consistent with Respondent's assertion that Appellant should have known that Respondent would insist on the use of the flawed

[1] The preliminary cross sections were made available April 24, 1997.

template method once the preliminary cross sections were discovered. We thus find that the June 11, 1997 notice of claim is timely even though it was given more than thirty (30) days after the lost preliminary cross sections were found and made available.

While the Board recognizes that the Circuit Court may have rejected the Board's determination in the Board's September 5, 2001 opinion that the timeliness issue is to be resolved by resort to the provisions of GP9-04, we believe that the Board's assessment that GP9-04 should govern may have merit. The State presumedly paid Gregory progress payments that included monies reflecting at least some of AccuBid's excavation as measured by the quantities established per truck measure and count. The parties seem to agree that if the templates had been accurate the dispute would not exist. As noted by Appellant in its Memorandum in Regard to Remand with respect to the template method: "the volume of dirt for which payment is to be made is the arithmetic calculation of the difference between the pre-existing surface of the dirt as reflected in the preliminary cross sections and the surface of the dirt at planned finish grade. Such calculation is made without the need to take quantity measurements during the course of the work and, in fact, contemplates that the estimated quantities will be the pay quantities." Presumedly then if more excavation had not been encountered SHA would simply have paid Gregory its bid amount for Item 2001, Class 1 Excavation, derived by multiplying Gregory's $5.21 per cubic yard price times the estimated number of cubic yards appearing in the bid line item (29,740 cubic yards), and no quantity measurement of excavation would have been taken during the course of the job. GP9-04 deals with determination of, and payment for, actual quantities of contract items that are stated as estimated quantities. It would not ordinarily apply to the facts herein because it is unusual for the template method to be flawed, and the contractor usually receives his bid price times the

quantity shown by the template which appears on the bid line item, i.e. the pay quantities equal the estimated quantities. Here, however, the flaw meant that, whatever timeline is used, another method of measurement had to be used because more excavation was, in fact, necessary than that which was shown by the template method. Such other method was the liquid volume truck count method, approved by SHA for progress payments. Such a method would be covered by GP9-04 which focuses on final actual quantities.

In any event, the Board finds, for the reasons stated above, that the notice of claim filed by letter dated June 11, 1997 was filed within thirty (30) days after the basis for the claim was known or should have been known. Accordingly, the Board awards an equitable adjustment and pre-decision and post-decision interest as set forth in the Board's opinion of September 5, 2001, which is hereto attached as Exhibit A.

So Ordered this day of August, 2002.

Dated:

_____
Robert B. Harrison III
Board Member

I Concur:

_____
Michael J. Collins
Board Member

Certification

COMAR 21.10.01.02 **Judicial Review.**

A decision of the Appeals Board is subject to judicial review in accordance with the provisions of the Administrative Procedure Act governing cases.

Annotated Code of MD Rule 7-203 **Time for Filing Action.**

(a) Generally. - Except as otherwise provided in this Rule or by statute, a petition for judicial review shall be filed within 30 days after the latest of:

(1) the date of the order or action of which review is sought;
(2) the date the administrative agency sent notice of the order or action to the petitioner, if notice was required by law to be sent to the petitioner; or
(3) the date the petitioner received notice of the agency's order or action, if notice was required by law to be received by the petitioner.

(b) Petition by Other Party. - If one party files a timely petition, any other person may file a petition within 10 days after the date the agency mailed notice of the filing of the first petition, or within the period set forth in section (a), whichever is later.

* * *

I certify that the foregoing is a true copy of the Maryland State Board of Contract Appeals decision on remand in MSBCA 2192, appeal of The R.R. Gregory Corporation under SHA Contract No. AW 683-501-329.

Dated:

_____
Loni Howe
Recorder

Exhibit A

BEFORE THE
MARYLAND STATE BOARD OF CONTRACT APPEALS

In The Appeal of The R.R. Gregory Corporation	)	
	)	
	)	
	)	**Docket No. MSBCA 2192**
Under SHA Contract No. AW 683-501-329	)	

APPEARANCE FOR APPELLANT: **Douglas G. Worrall, Esq.**
Howard S. Stevens, Esq.
Wright, Constable & Skeen, LLP
Baltimore, MD

APPEARANCE FOR RESPONDENT: **Steven L. Tiedemann**
Assistant Attorney General
Baltimore, MD

OPINION BY BOARD MEMBER HARRISON

Appellant, The R.R. Gregory Corporation (Gregory) timely appeals the denial of its claim relating to Bid Line Item 2001, Class 1 Excavation. The appeal was brought by Gregory on behalf of its first tier subcontractor, Accubid Excavation, Inc. (Accubid), as a pass-through challenge to the final pay quantity determined by the Respondent State Highway Administration (SHA) for Bid Line Item 2001 on the above captioned Contract.

Respondent raises a number of procedural issues which it argues require the Board to dismiss the appeal. The Board will deal with these procedural issues preliminarily. Although the Procurement Officer raised no issues of timeliness in his May 26, 2000 final decision, on appeal Respondent challenges the timeliness of Appellant's claim on multiple grounds involving application of the 30 day notice of claim requirement of §15-219 of the State Finance and Procurement Article and COMAR 21.10.04. The Board rejects these challenges because the thirty (30) day notice requirement does not apply to the unusual if not unique set of facts that emerge from the record in this appeal which reflects

an earthwork grade "bust" for Class 1 excavation where accurate original and final quantities could not be established by the template method or re-survey. What applies in this appeal are the provisions of GP 9-04 which require the contractor to notify SHA ten (10) calendar days after receipt of a tabulation of proposed final quantities from SHA whether the contractor will accept final payment upon such basis. Respondent has not demonstrated that Appellant has not timely rejected SHA's use of such inaccurate proposed final quantities.

Respondent also challenges the Board's jurisdiction to go forward with the appeal on grounds Appellant failed pursuant to the Contract's Differing Site Condition clause to timely notify Respondent of a latent quantity grade "bust" affecting the estimated quantity of Class 1 Excavation under Bid Line Item 2001. The Board declines to find that the "bust" constitutes a latent differing site condition as contemplated by COMAR 21.07.02.05 and that in any event the condition could not be accurately determined due to missing cross sections and so SHA agreed to utilize a liquid load count (truck count) method to track the liquid volume of Class I material hauled off site.

Next, the Board rejects several arguments that a waiver of lien from the subcontractor Accubid in favor of the prime contractor Gregory waived Accubid's right through Gregory to pursue the dispute resolution process provided by the General Procurement Law for an equitable adjustment based on corrected final quantities. Any such waiver would not apply to an asserted right to payment under the Contract where the State has never paid the amount claimed to the prime contractor.

Finally, the Board rejects Respondent's assertion that the claim involving the earthwork grade bust for Class 1 excavation which is the subject of this appeal was never raised initially (as required) at the agency level. The claim in this appeal related to the earthwork grade bust for Class 1 excavation was specifically denied by the Procurement

Officer in his May 26 2000 final decision. The Board shall now deal with the merits of the appeal.

Findings of Fact[1]

1. On or about February 10, 1997, Accubid entered into a subcontract with Gregory to perform all the necessary excavation and grading at a new SHA Maintenance Facility to be constructed in Montgomery County, Maryland (Fairland Maintenance Facility) pursuant to the above captioned Contract.
2. Under the Contract, certain bid items were to be provided on a lump sum basis, while others were to be bid based upon approximate quantities, with final quantities of each approximate quantity bid item to be determined at the end of the Contract in accordance with the General Conditions and Standard Specifications as set forth in the Green Book and incorporated into the Contract.
3. Pursuant to the bid sheet supplied with the Bid Documents, 29,740 cubic yards of Class 1 Excavation was approximated for bidding purposes under Bid Line Item 2001, Class 1 Excavation. Only this bid item remains challenged by the Appellant in this appeal.[2]
4. Payment terms under SHA contracts such as the Contract in question are found in the Green Book[3] and incorporated into the Contract.

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[1] Respondent's counsel has made accusations of misconduct in this appeal. There is comment in the Respondent's post hearing brief and past hearing reply brief inferring or asserting that Appellant's witnesses did not testify truthfully. Appellant's counsel has requested that the Board address such comment in its decision. For purposes of the Findings of Fact and Decision herein the Board has no reason to believe that any witness for either the Appellant or the Respondent did not testify truthfully to the best of their knowledge, information or belief.

[2] During the course of the closing of the Contract, SHA reviewed other claims for extra quantities submitted by Accubid, and they have been resolved, leaving only this bid item open.

[3] The Green Book consists of two volumes, one containing General Provisions and one containing Standard Specifications (Terms and Conditions, Technical Requirements). GP-8.01 SUBCONTRACTING provides that the contractor shall incorporate the General Provisions in every subcontract issued pursuant to or under the contract.

5. The terms relevant to this appeal and which also apply to the Gregory-Accubid subcontract for excavation are as follows:

TERMS AND CONDITIONS

TC SECTION 7
PAYMENT

TC-7.01 MEASUREMENT OF QUANTITIES

> For all items of work, other than those to be paid by lump sum, after the work is completed and before final payment is made the Engineer will make final measurements to determine the quantities of various items of work performed as the basis for final settlement. The Contractor in case of unit price items will be paid for the actual amount of work performed and for the actual amount of materials in place, in conformance with the Specifications as shown by the final measurements. All work completed under the Contract will be measured by the Engineer in conformance with the standards of weights and measures recognized by the National Bureau of Standards....
>
> Volumes of excavation, tamped fill and borrow pits will be calculated per cubic yard from the cross section and the use of average end area formulas. Volumes of other work such as masonry, removal of masonry, etc. will be calculated by using arithmetical formulas. Where the volume is bounded by varying dimensions and there is no simple volumetric formulas applicable, frequent cross section will be taken and the cubic yard volume computed from average end area formulas....

Standard Specifications for Construction and Materials, Green Book, pg. 26-27. Additional terms regarding payment appear in the General Provisions of the Contract as found in the Green Book, providing:

GP-SECTION 9

PAYMENT

GP-9.01 SCOPE OF PAYMENT

Payment to the Contractor will be made for the actual quantities of Contract items performed in accordancewith the Plans and Specifications and if, upon completion of the construction, these actual quantities show either an increase or decrease from the quantities given in the bid schedule, the Contract unit prices will still prevail, except as provided in GP-4.04 Variations in Estimated Quantities[4]....

GP-9.04 FINAL ACCEPTANCE AND FINAL PAYMENT

(a) When the Contractor has completed a Contract, and it has been accepted for maintenance in accordance with the provisions of GP-5.13, the Administration will promptly proceed:

(1) To make any necessary final surveys;
(2) To complete any necessary computation of quantities; and
(3) To submit to the Contractor within 60 days after final completion and acceptance of the project by the procurement officer for maintenance, for his consideration, a tabulation of the proposed final quantities....

(c) The Contractor shall then have a period of 10 calendar days, dating from the date upon which he received the aforementioned tabulation from the Administration, in which:

(1) To decide whether or not he will accept final payment upon such a basis, and

[4] While Appellant argues that its notice of claim was timely pursuant to the language of GP 4.04, the Appellant's claim herein is not one pursued under the Variations in Estimated Quantities provision set forth in GP-4.04, as the Appellant does not seek a unit price adjustment for the cost of the work it performed. Instead, the Appellant seeks payment for the quantities of dirt excavation hauled as measured by the truck count method at the Contract price bid for Bid Line Item 2001.

(2) To notify the Administration, in writing, of his decision. The Contractor may request an additional period up to 10 calendar days in which to notify the Administration of his decision. In the event the Contractor notifies the Administration that he protests final payment on such a basis, that notification shall outline the reason(s) for said protest....

With regard to Bid Item 2001, Class I Excavation, the following Green Book Contract terms apply:

TECHNICAL REQUIREMENTS

CATEGORY 200
GRADING

201.04 MEASUREMENT AND PAYMENT. Roadway Excavation will be measured and paid for at the Contract unit price per cubic yard. The payment will be full compensation for all excavation and hauling, formation and compaction of embankments and backfills, disposing of excess and unsuitable materials, preparation and completion of subgrade and shoulders except as otherwise specified, serrated slopes, rounded and transition slopes, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Payment will not be made for excavation of any material which is used for purposes other than those designated.

201.04.02 Template Method of Measurement. Unless otherwise specified, excavation will be computed using the template from preliminary cross sections of the original ground surface combined with templates of the typical cross sections. If this method is used, certain volumes will be excluded....

201.04.03 Cross section Method of Measurement. When specified, Excavation quantities for payment will be computed by average end areas, from the cross sections of the original ground combined with cross sections of the completed work. Class 1 Excavation will be allowed in median areas of cut sections only where 4 in. or greater of topsoil are to be placed. This method will also apply to Class 1-A and Class 2 Excavation unless otherwise specified.

201.04.07 Recomputation of Quantities. The Contractor or the Administration may elect to recompute quantities in any section where it is believed the planned quantities are incorrect. When recomputation reveals an error, the corrected quantities shall be used.

6. There is a dispute among the parties concerning whether more dirt was hauled by Accubid than the templates indicated. To the extent that more dirt was actually hauled by Accubid than the templates indicated, it has been SHA's position that the Contract requires the use of the "template method" for determining quantities and thus SHA was within its rights to utilize the template method or cross sections and base payment on those quantities. It is also SHA's position that since the approximate quantity of Class 1 Excavation set forth in the Contract was derived from the templates, it is not required to calculate final quantities nor was it required to compile any additional survey data aside from the initial topographic map study that was prepared. Thus the position taken by the Respondent is that since the templates or cross sections existed prior to the construction and have not been altered, they are not subject to challenge or revision. The Appellant disagrees and as articulated later in this opinion so does the Board.

7. Prior to the start of the excavation the cross sections for the project area could not be located, and thus their accuracy could not be verified. The missing cross sections became an issue when Accubid started to do preliminary earth work and installation of catch basins (storm water pond) and observed a grade bust. Accordingly, SHA's Project Engineer, Mr. James Daffin, and Accubid agreed to implement a system to track the liquid volumes of material hauled off-site on a truck-by-truck basis (i.e. the load or truck count method)[5].

[5] The extent of any "agreement" by the parties and whether any such "agreement" is legally enforceable is the matter under dispute in

8. It was Appellant's understanding that in the absence of the cross sections, the parties agreed to use the truck count method for determining final quantities for payment purposes. Appellant's counsel has stipulated that use of load (truck) count for determining final quantities for payment purposes is the issue to be decided by the Board and Appellant has waived any claims relating to a "contract modification".

9. As Accubid reached substantial completion on the project, it became apparent that the quantity of Class 1 materials removed from the site, as calculated by the load count method, well exceeded the approximate quantity anticipated by Accubid based on the 29,740 cubic yard approximate quantity provided in Bid Line Item 2001. Moreover, because Bid Line Item 2001 also included dirt that was cut-to-fill and not removed from the site, it was apparent that there was a large discrepancy.

10. In an attempt to resolve the discrepancy, Appellant notified SHA of the issue by letter dated June 11, 1997 and suggested that if necessary, a meeting be scheduled between the parties. On July 16, 1997 a meeting was held between the parties on the job site where it was determined that a re-survey would be conducted.

11. Following the meeting SHA's design team re-surveyed the site and by using the spot elevations obtained from the field, a computer generated plot was developed and then overlaid on the grading plan, Contract Drawing No. C-4.

12. In a letter dated August 27, 1997, SHA advised Appellant based on the re-survey that the "existing and proposed elevations were accurate compared to the original contract plan", and SHA denied the Appellant's request to revise the Contract quantity contained in pay item 2001.

13. Evidence produced during the course of the hearing reflected that

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this claim. However the Appellant has acknowledged that if the survey data or templates in question is deemed valid by the Board then the load count method may not be used, and the appeal would be denied.

this re-surveying merely constituted a perimeter survey and did not include any points within the perimeter as all of this area had been disturbed and was therefore unverifiable.

14. After SHA's initial decision on this issue was provided to Appellant, Appellant continued to question the accuracy of the templates because the truck count method reflected a substantial overrun.

15. Both the Appellant and SHA knew early in the project that the approximate quantity of excavation listed in the Contract did not reflect the actual site conditions. Mr. Craig Bollinger, Accubid's Site Superintendent, testified that he first became aware of a discrepancy between the site plan grades and the existing grades on the site early in the project during the installation of the storm water pond.

16. Mr. Bollinger notified SHA and Gregory, and asked for the cross sections and topographic data. However, the cross sections and volume computations were not available during pre-construction, and could not be located until after substantial completion of the haul-off operations.

17. Mr. Neil Kirkpatrick, a licensed land surveyor in the State of Maryland, gave testimony in this appeal for Appellant as an expert qualified in the use of cross sections, topographic map interpretation, and in performing average area volumetric calculations through comparison. The survey data he reviewed was extensive. As a result of his review, he identified errors in both the manner in which the survey data was collected and distributed, and the manner in which the cross sections were prepared and utilized.

18. After review of all of the survey data utilized in the computation of the quantity of Class 1 material[6], it was Mr. Kirkpatrick's opinion that the cross sections could not be relied on to

[6] Some of this review occurred during the hearing of the appeal based on certain evidence presented that Mr. Kirkpatrick believed should be considered.

accurately calculate the approximate quantities that were used for payment purposes in the Contract (i.e. were "useless in determination of volumes by the average [end area] method").

19. One of the most significant of the problems was that the cross sections were not prepared in parallel, but instead had the potential to intersect.

20. The absence of a straight baseline was another problem because this had the potential to cause areas outside of the site plan to be included in calculations. Use of a flawed topographic map and survey data in preparation of the cross sections was also a problem. Based on these and other problems identified by Appellant and the Board's independent analysis of the entire record, the Board finds that the cross sections did not reflect the actual quantities of Class 1 material and that the Appellant, in fact, encountered a significant overrun of Class 1 excavation.

21. The Green Book explicitly provides for the recomputation of Class 1 excavation quantities, regardless of whether the initial contract provided for measurement by the "template method" or the "cross-sectional method"[7]. Specifically the Green Book states:

> **201.04.07 Recomputation of Quantities.** The Contractor or Administration may elect to recompute quantities in any section where it is believed the planned quantities are incorrect. When recomputation reveals an error, the corrected quantities shall be used.

As to the method required for "recomputation" of suspect volumes, this section is silent. The re-survey was flawed. Thus, it is the Appellant's position that the liquid load count method instituted at the onset of mass grading should be considered as a reasonable

[7] During testimony evidence was presented regarding the distinction between Sections 201.04.02, "Template Method of Measurement" and 201.04.03, "Cross sectional Method of Measurement". Of important note, Section 201.04.02 is silent with regard to measurements taken for "payment purposes".

means for determining "corrected quantities." The Respondent's expert on construction principals, properties of excavated material and job site practices, Mr. Sachinder Gupta, concurred. Specifically during cross-examination by Mr. Worrall, the following exchange occurred:

Mr. Worrall: *Okay. The issue in this case, however, maybe it hasn't been explained to you -- well, let me back up. Let's assume you have a unit price contract, okay, and let's assume for some reason the method of measurement, disappears, and you cannot figure out how to do it, you know. It's just not there anymore. You would agree with me that the reasonable thing for the parties to do is to go to the next best way of measuring. ...*

Mr. Gupta: *It's a hypothetical question. First of all, I can't envision a case where you're unable to get the volumes based on the drawings. The drawings have shown existing and the proposed. Now assuming extreme hypothetical case like you've suggested, and, again, I can't envision when that might happen. If you can't do it by that method, I'd say there were no reconstruction contours available, then you go to second method.*

22. The Board finds for purposes of this appeal that the actual volume of Class 1 excavation cannot be determined from the drawings, templates or cross sections.

Decision

The Board continues to honor the principle articulated in Martin G. Imback, Inc., MDOT 1020, 1 MSBCA ¶52(1983) that the State warrants that the plans and specifications which it furnishes are adequate and sufficient for the purpose intended. In this appeal faulty survey data led to plans reflecting a quantity of Class 1 excavation that was in error such that use of the template method based on cross sections for measuring actual quantities was inappropriate. An alternate method, liquid measure load count system (truck count) was used. The Board finds that this alternate method was appropriate and will sustain the appeal.

As discussed previously, the parties instituted a liquid measure load count system (truck count) as soon as it became apparent that the

cross sections were not available[8]. Both parties dedicated significant resources to its management and the accuracy of this system, including Mr. Edward Dutton acting as SHA's inspector, and two Accubid employees working with Mr. Dutton to take the measurements. The procedure implemented conformed to the alternate method of measurement set forth in the Green Book for measurement and payment of borrow material at Section 203.04 and familiar to Mr. Daffin, SHA's Project Engineer, and Mr. Bollinger, Accubid's Project Foreman. Specifically, the Green Book sets forth the following conditions:

[8] Mr. Gupta testified that the Green Book does not specify that a dump truck be used, but merely requires a "hauling vehicle". Tr.4, pp. 599-600. See also, Green Book Section 203.04.

SECTION 203 - BORROW EXCAVATION

203.04 MEASUREMENT AND PAYMENT. ...

When requested by the Contractor in writing, the Engineer may approve an alternate method of measurement for the computation of borrow excavation quantities. This alternate method will not be considered for approval unless the Contractor can show that the cross section method computed by average end area is not a feasible method of measurement. When approved in writing by the Engineer, this alternate method shall consist of measuring the Borrow Excavation in approved hauling vehicles in the following manner:

(a) The Contractor shall designate, prior to the start of hauling operations, the identification number of vehicles to be used. The Engineer will determine the water level capacity of each vehicle so designated. The measured capacity shall be multiplied by a factor of 0.85 to determine pay volume.

(b) The Contractor shall furnish a delivery ticket to the Engineer for each load of borrow material delivered to the project. Any ticket not signed by the Engineer to acknowledge receipt will not be used in the computation of the borrow quantity.

The ticket shall include the following information:
(1) The supplier's name.
(2) The Administration's Contract Number.
(3) The date and ticket number.
(4) Vehicle identification number.
(5) Type of material delivered.
(6) Pay volume computed as specified in (a).

We recognize that this provision relates to borrow excavation and not on site excavation and that Bid Item 2001, Class 1 Excavation applied to all Class 1 (cut-to-fill and haul-off) on site excavation. However, because the recomputation (re-survey) performed herein does not cure the problem and because the cross sections were not provided with the Contract Documents, we find the early implementation of a sanctioned means for tracking excavation represented a reasonable approach to protect each party's interests. The evidence presented to the Board showed that this method, which has been referred to as the

"truck count" or "liquid load count" method, satisfied all of the informational requirements established by Section 203.04 of the Green Book for borrow excavation and was implemented under the direct supervision of SHA's Project Engineer, Mr. James Daffin, a person granted authority under the Green Book to approve such an alternate. We believe use of the requirements for the truck count alternative method of measurement for computation of borrow excavation is reasonable for on site excavation where quantities may not otherwise be measured. During the course of the hearing, evidence was presented from both parties regarding how the volume represented by the load tickets should be construed in light of other factors such as "swell" due to excavation, and a contractor's loading practices. While the truck count method may be subject to error we do not find error to be present herein to a degree that makes its use inappropriate. The Board finds that trucks utilized for haul-off operations were filled at or above their liquid level with the dirt mounded above the wooden sideboards that extended beyond the top of the measured truck by one foot. We find the measured capacities to be reasonably accurate. Both Mr. Pank, Accubid's President, and SHA's expert, Mr. Gupta, testified that a factor of 10-15% to account for swell is an appropriate number and the Board shall accept a 15% "swell" factor.

Because the record reflects that the trucks were loaded at or above their liquid measurements, we find the loads were within the 15% swell factor provided for in Section 203.04(a) of the Green Book.

The record reflects that there were errors in both the topographical and cross sectional data used by the SHA in calculating the final pay quantity for Line Item 2001 in the Contract. The existence of these errors was shown through expert witness testimony, and through the testimony of other witnesses with significant construction experience who knew that a problem existed. In accordance with procedures set forth in the Green Book, SHA and the Appellant deter-

mined accurate liquid truck measurements and maintained a well-supervised system to track each truck measured. Through the use of this load count system, a total cor-rected quantity for Line Item 2001 was determined.

Payment for Line Item 2001 is to include both cut-to-fill quantities and haul-off quantities. Accubid's Daily Reports, submitted by Respondent as Exhibit 2, and summarized by Appellant's Exhibit 14 reflects that at least 12,996 cubic yards of cut-to-fill material was handled and the Board will accept this amount as reasonably reflective of actual cut-to-fill quantities. The load tickets submitted as Appellant's Exhibit 2 reflect that based on the liquid measurements of the trucks used by Accubid, 36,295 cubic yards of Class 1 excavation was hauled off the site. The 36,295 cubic yards must be reduced by 5,444 cubic yards to allow for the "swell factor" discussed earlier. The net amount of the haul-off material removed from the site for which the contractor is seeking payment is 30,850 cubic yards. (36,295 x 0.85 = 30,850).

Combining the cut-to-fill quantity (12,996 cubic yards) and the adjusted haul-off quantity (30,850 cubic yards) equals a total 43,846 cubic yards for which the Appellant is entitled to be paid under the Green Book.

The Appellant requests that this Board find that it is entitled to be paid in accordance with the Contract unit price of $5.21 per cubic yard, for the total of 43,846 cubic yards of Class 1 excavation material, less any payments received to date, plus pre-decision interest on the outstanding balance. Accubid's price to Appellant Gregory for the Class 1 excavation bid was reduced to $4.50 per cubic yard. Gregory's bid was as noted $5.21 per cubic yard. Applying a 15% overhead and profit component to Accubid's $4.50 price yields a price of approximately $5.17 per cubic yard. We thus find the Contract unit price of $5.21 to be reasonable and base the award of an equitable

adjustment on such price. The Board awards pre-decision interest from the date of the Procurement Officer's decision, May 26, 2000, a date for commencement of pre-decision interest the Board finds to be fair and reasonable under Section 15-222 of the State Finance and Procurement Article. At the date of the Procurement Officer's decision all facts necessary to a determination of entitlement and quantum herein were available to the Procurement Officer.

Post decision interest shall accrue from the date of this decision. The appeal is thus sustained and the matter is remanded to SHA for appropriate action. So Ordered this day of 2001.

Dated:

Robert B. Harrison III
Board Member

I concur:

Randolph B. Rosencrantz
Chairman

Certification

COMAR 21.10.01.02 **Judicial Review.**

A decision of the Appeals Board is subject to judicial review in accordance with the provisions of the Administrative Procedure Act governing cases.

Annotated Code of MD Rule 7-203 **Time for Filing Action.**

(a) Generally. - Except as otherwise provided in this Rule or by statute, a petition for judicial review shall be filed within 30 days after the latest of:

(1) the date of the order or action of which review is sought;
(2) the date the administrative agency sent notice of the order or action to the petitioner, if notice was required by law to be sent to the petitioner; or
(3) the date the petitioner received notice of the agency's order or action, if notice was required by law to be received by the petitioner.

(b) Petition by Other Party. - If one party files a timely petition, any other person may file a petition within 10 days after the date the agency mailed notice of the filing of the first petition, or within the period set forth in section (a), whichever is later.

* * *

I certify that the foregoing is a true copy of the Maryland State Board of Contract Appeals decision in MSBCA 2192, appeal of R.R. Gregory Corporation under SHA Contract No. AW 683-501-329.

Dated:

_____
Mary F. Priscilla
Recorder