

BEFORE THE
MARYLAND DEPARTMENT OF TRANSPORTATION
BOARD OF CONTRACT APPEALS

Appeals of C. J. LANGENFELDER & SON, INC.)	MDOT NOS. 1000, 1003 & 1006
)	Consolidated
Under MPA Contract No. MPA-M78-4)	

August 15, 1980

Rescission — Partial rescission for unilateral mistake was denied where the contract was entire.

Constructive Change — Where a contract mandated the performance of work in a specific sequence, a directive altering the sequence constituted a change to the contract.

Constructive Change — A directive to dispose of certain oversized materials encountered in dredging at an alternate disposal site not specified in the contract was a constructive change.

Equitable Adjustment — Equitable adjustments are corrective measures utilized to keep a contractor whole when the State modifies a contract. The intent is to restore a contractor to the economic position he was in prior to the modification.

Equitable Adjustment — The standard of measurement for an equitable adjustment is the difference between what the work reasonably cost as directed and what it reasonably would have cost as performed under the original contract terms.

Equitable Adjustment — Historical (actual) costs are presumed reasonable and the State has a heavy burden of showing that the incurred cost should not have been expended or was too high.

Interest — By statutorily waiving the defense of sovereign immunity in contract actions, the State impliedly waived its immunity to interest on judgments entered in contract cases.

Interest — Post-decision interest properly should be payable on the equitable adjustment found due from the date of the Board's decision until payment. Interest should accrue at the Legal Rate in the same manner as it does on judgments nisi pursuant to Rule 642 of the Maryland Rules of Procedure.

Interest — The award of predecision interest as part of an equitable adjustment lies within the discretion of the Board.

Interest — Predecision interest was included in the award of an equitable adjustment but did not commence to run until (1) the contractor submitted its monetary claim, (2) the MPA had a reasonable opportunity to review it for accuracy and (3) the MPA had a reasonable period to process the payment of the principal amount due.

Differing Site Condition — Where a contractor encountered original river bottom above project grade in a "maintenance dredging" contract, it was found to be a "type 1" differing site condition. The term "maintenance dredging" indicated that only materials resulting from natural siltation would be encountered above project grade.

Differing Site Condition — A contractor was not obligated to verify, by site investigation, contractual indications concerning subsurface conditions.

Differing Site Condition — The encountering of debris, the existence of which was ascertainable from a reasonable site investigation, was not a "type 2" differing site condition.

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OPINION BY CHAIRMAN BAKER

These three appeals arise under a contract between the Maryland Port Administration (MPA) and C. J. Langenfelder & Son, Inc. for the performance of maintenance dredging in the Baltimore Harbor. Although the appeals were consolidated for purposes of hearing, they have been considered separately.

MDOT 1003 (Priority Claim)

I. FINDINGS OF FACT

A. Entitlement

The Maryland Port Administration (MPA) performs an annual sounding survey of the navigable waters in and around its terminal facilities in Baltimore Harbor. Such a survey records the depths below the mean low water mark at particular control points

along a shipping channel or docking area.¹ Soundings are taken and plotted on a hydrographic map of the navigable waterway concerned and then reviewed to ascertain that the minimum required channel depths for safe ship movement are met. Where the actual depth, as determined by soundings, is less than the prescribed minimum, a requirement for dredging is determined. Dredging, undertaken to restore an existing ship channel or slip to a previously established minimum depth, is referred to as maintenance dredging.

In 1977 the MPA conducted a sounding survey in and around its terminals and determined those areas which required dredging. Since it was then uncertain whether appropriated funds would be available to allow for all the necessary dredging, priorities were established by the MPA's Department of Terminal Operations. These were determined in accordance with the number of complaints received from the various terminal facilities and the degree to which shoaling² had occurred at each area where dredging was indicated.

In March 1978 the MPA issued a Notice To Contractors inviting sealed bids on Contract No.MPA-M78-4 entitled "Maintenance Dredging, Terminals and Inner Harbor Channel, Baltimore Harbor." The work to be performed under this invitation was based upon the 1977 soundings which established an estimated 200,000 cubic yards (cy) of material to be dredged. This work was to be performed within 200 calendar days from the date of Notice To Proceed. The priorities established by the MPA Department of Terminal Operations were communicated to prospective bidders under Special Provision SP-3 with the following caveat:

"(c) Because of the limited funds available, portions of the work may have to be deleted from the contract; therefore, the dredging shall proceed in the following sequence of priorities scheduled as follows:

(1) Priority I

- 1-a. Inner Harbor Channel in the vicinity of Jones Falls.
- 1-b. Approach channel and slips in the vicinity of small boat piers at the foot of President Street and the Fallsway.

(2) Priority II

North Locust Point Marine Terminal

- 2-a. Slip between Piers 4/5 and 6
- 2-b. Slip between Piers 3 and 4/5

¹The term "docking area" is used interchangeably with the words "pier" or "slip" and refers to a berthing facility for loading and unloading of cargo. These piers are generally part of a terminal facility.

²Shoaling refers to the accumulation of silt and other materials which flow into a harbor from storm drains and streams.

- 2-c. Slip between Piers 9 and 10
- 2-d. Slip between Piers 7 and 8
- 2-e. Slip between Piers 6 and 7

South Locust Point Marine Terminal

- 2-a. Wharfside Channel at United Brands, Inc.
- 2-b. Access Channel and Turning Basin to United Brands, Inc.

(3) Priority III

Dundalk Marine Terminal

- 3-a. Wharfside Channel Berths Nos. 11 and 12
- 3-b. Wharfside Channel Berths Nos. 1 and 6

(4) Priority IV

Clinton Street Marine Terminal

- 4-a. Slip North Side of Pier No. 1
- 4-b. Slip South Side of Pier No. 1

(5) Priority V

Atlantic Terminals Auto Facility

- 5-a. Slip West Side of Pier
- 5-b. Access Channel to Pier"

Appellant's Messrs. Stokes and Hazelhurst prepared a bid pursuant to this Notice To Contractors. In so doing, an independent determination of dredging quantities was made based upon the MPA soundings set forth in the Contract Drawings. Appellant's estimate of the quantities involved as compared to the MPA breakdown set forth under Special Provision SP-9(b) appears as follows:

<u>LOCATIONS TO BE DREDGED</u>	<u>MPA TOTAL ESTIMATED QTYS. (CU. YDS.) [sic]</u>	<u>APPELLANT'S ESTIMATED QTYS. (cy)</u>
1. Inner Harbor Channel in the Vicinity of Jones Falls	32,000	34,535
2. Approach Channel and slips in the vicinity of small boat piers at the foot of President Street and the Fallsway	4,000	4,455
3. <u>North Locust Point Marine Terminal</u>		

A. Slip between Piers 3

	and 4/5	6,000	11,737
B.	Slip between Piers 4/5 and 6	8,000	8,584
C.	Slip between Piers 6 and 7	19,500	18,954
D.	Slip between Piers 7 and 8	11,500	10,565
E.	Slip between Piers 9 and 10	14,500	20,919
4.	<u>South Locust Point Marine Terminal</u>		
A.	Wharfside channel at United Brands, Inc.	13,000	26,342
B.	Access Channel and Turning Basin to United Brands, Inc.	12,500	59,616
5.	<u>Dundalk Marine Terminal</u>		
A.	Wharfside Channel Berths Nos. 1 thru 6	23,500	11,836
B.	Wharfside Channel Berths Nos. 11 and 12	16,000	22,569
6.	<u>Clinton Street Marine Terminal</u>		
A.	Slip North Side of Pier No. 1	5,000	9,057
B.	Slip South Side of Pier No. 1	20,500	17,361
7.	<u>Atlantic Terminals Auto Facility</u>		
A.	Slip West Side of Pier	5,000	12,066
B.	Access Channel to Pier	3,000	
	Estimated Totals	194,000 ³	268,596

As is evident, the major disparity between the two estimates appears under Priority II, South Locust Point Marine Terminal, where Appellant estimated an additional 60,458 cy of material to be removed. The bulk of this difference (59,616 cy) involved the dredging

³The MPA estimated 200,000 cy for bidding purposes. This apparently represents a rounding of the figures set forth in Special Provision SP-9 and considers the inexact nature of the estimating process and the probable buildup of additional silt from the date of the 1977 soundings until the work would be performed.

of the Turning Basin to the United Brands pier. No inquiry was made by Appellant prior to bid concerning the disparity in its estimated quantities as compared to those generated by the MPA.

On April 4, 1978, Appellant submitted its bid in the amount of \$3.81 per cubic yard for a total price, based upon the estimated 200,000 cy,⁴ of \$762,000. This price was the lowest responsive and responsible bid received, thereby warranting an award of the contract to Appellant, subject to Board of Public Works approval. The contract award subsequently was approved by the Board of Public Works on June 21, 1978 and a Notice To Proceed was issued on July 10, 1978.

Prior to commencing work, a preconstruction meeting was conducted by the MPA on June 27, 1978. Although there is some dispute as to what actually was said at this meeting, a number of facts are uncontroverted. First, Appellant informed the MPA representatives of the large variation in estimated quantity at the Turning Basin to the United Brands pier. The error disclosed was of such magnitude that the MPA decided to check its own computations upon which their contractual estimates were based. Second, the volume of the design capacity for the Masonville disposal site was also considered. Appellant indicated that it was designing the disposal dike for a 250,000 cy capacity rather than the suggested 230,000 cy⁵ which appeared on Contract Drawing No. 9 of 9.

The parties are in disagreement concerning whether Appellant disclosed the precise magnitude of the discrepancy during the preconstruction meeting and as to who originated the discussion concerning this matter. Appellant's witnesses maintain that they revealed the magnitude of the error at the Turning Basin in their explanation of the enlarged design capacity for the Masonville Disposal Site. The MPA's witnesses testified that the exact number of cubic yards was never discussed. The Board in its resolution of this dispute considers it unnecessary to make a finding concerning this controverted matter. The significance of the June 27, 1978 meeting is that the MPA became aware of an error in its dredging estimate which was so substantial that it elected to check its computations and eventually take the further actions which are hereinafter described.

On June 28, 1978 the MPA's Mr. Trenton Vickery performed an independent estimate of the dredging quantities at the Turning Basin. This estimate disclosed an error of 60,787 cy in the volume set forth in the contract estimates for the Turning Basin dredging. Mr. Neal Hasson, the MPA's Chief of Design, concomitantly directed a review of the original MPA estimate. This check determined an arithmetical error in the computation of the areas to be dredged resulting in a difference of 69,941 cy in the estimate for the Access Channel and Turning Basin. Consequently, regardless of whether the MPA was informed of the extent of its error on June 27, 1978, it was on notice of its magnitude by the next day.

The degree of error promptly was communicated to Mr. Robert Nelson, the MPA Director of Engineering. Mr. Nelson testified that a 60,000 cy error would have resulted in approximately 260,000 cy of dredging, a volume which would have exceeded

⁴The estimated 200,000 cy figure appeared on the MPA bid form and was to be used to ascertain the low bidder.

⁵The 230,000 cy capacity was sufficient for 200,000 cy of spoil material with allowance for swelling of the dredged material when disturbed from its consolidated form (Tr 130).

the funding available for maintenance dredging. Mr. Nelson, on July 7, 1968 advised the Port Administrator of the error and recommended deletion of the Turning Basin dredging, thereby reducing the estimated dredging quantity to approximately 200,000 cy. This recommendation was concurred in by the Department of Terminal Operations and accepted by the Port Administrator. On July 19, 1978, Contract Drawing No. 5 of 9 was revised to include the following notation:

"Delete Turning Basin Area I"

Appellant acknowledged receipt of this revised Contract Drawing by letter dated July 28, 1978 and apprised the MPA that:

"The revisions on both⁶ drawings result in deletions of the dredging required under Priority II of the work sequence. This is a definite 'Change' from the sequence of priorities to be followed as specified under SP-3, Schedule of Work."

Contract General Provision GP-4.05 is entitled "Changes" and reads as follows:

"A. The Engineer may, at any time, without notice to the Sureties, by written order designated or indicated to be a Change Order, make any change in the work within the general scope of the Contract, including but not limited to changes:

- (1) In the Specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Administration-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.

"B. Any other written order or an oral order (which terms as used in this paragraph B. shall include direction, instruction, interpretation or determination) from the Engineer, which causes any such change, shall be treated as a Change Order under this clause, provided that the Contractor gives the Engineer written notice stating the date, circumstances, and source of the order and that the Contractor regards the order as a Change Order.

"C. Except as herein provided, no order, statement, or conduct of the Engineer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.

⁶A revision was also made to Contract Drawing No. 4 of 9 on June 6, 1978 (Rev. 1) wherein the width of the dredging area between Piers #6 and #7 was reduced from 175 feet to 135 feet. Appellant has not claimed this to be a change.

"D. If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this Contract, whether or not changed by any order, an equitable adjustment shall be made and the Contract modified in writing accordingly, provided, however, that except for claims based on defective specifications, no claim for any change under B. above shall be allowed for any costs incurred more than 20 days before the Contractor gives written notice as therein required; and provided further, that in the case of defective specifications for which the Department or Administration is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with such defective specifications.

"E. If the Contractor intends to assert a claim for an equitable adjustment under this clause, he must, within 30 days after receipt of a written Change Order under A. above or the furnishing of a written notice under B. above, submit to the Engineer a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Administration. The statement of claim hereunder may be included in the notice under B. above.

"F. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract."

By letter dated September 11, 1978 the MPA's Robert Nelson denied the claim for an equitable adjustment. The denial was based upon the premise that there would remain a quantity of 200,000 cy to be dredged, just as was indicated in the invitational documents. Under this theory, no change to the contract resulted from the Turning Basin deletion. The September 11 letter also contained an amendment to the contract substituting the following language in lieu of General Provision GP-5.15:

"All disputes arising under or as a result of a breach of this Contract which are not disposed of by agreement between the Contractor and Engineer shall be decided by the Administrator or his duly authorized representative who shall reduce his decision to writing and mail by certified or registered mail or otherwise deliver a copy thereof to the Contractor. Any such decision shall be final and conclusive unless within thirty (30) days of receipt of same the Contractor mails or otherwise furnishes a written appeal to the Department of Transportation Board of Contract Appeals. Pending any decision by the Board of Contract Appeals of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract

and in accordance with the decision of the Administrator or his duly authorized representative."⁷

Pursuant to this disputes clause, the Maryland Port Administrator issued a written decision on November 3, 1978 denying Appellant's claim. A timely appeal was taken by Appellant on November 7, 1978.

In March 1979, Appellant was performing dredging work at the Clinton Street Marine Terminal (Priority IV). By this time, Appellant had dredged close to 200,000 cy and was expected to exceed this volume in its completion of the Clinton Street work. The MPA, having funds to pay only for 200,000 cy, sought and obtained an additional appropriation to pay for a total of 235,000 cy of dredging, thereby allowing for completion of the Clinton Street work but not the remaining work at the Atlantic Terminal. By letter dated March 22, 1979, Respondent's Mr. Nelson authorized Appellant to complete all dredging at the Clinton Street Marine Terminal and directed that Priority V dredging at the Atlantic Terminals Auto Facility be eliminated. Pursuant to this letter, Change Order No. 1 to the contract was issued on March 23, 1979 and provided for a quantity increase of 35,000 cubic yards to be paid at the contract unit price of \$3.81 per cubic yard. There is no dispute with regard thereto.

Work under the contract was completed about March 31, 1979. The final quantities dredged and paid for thereunder follow:

<u>Location</u>	<u>Pay Quantity (CY)</u>
1. Inner Harbor Channel in the Vicinity of Jones Falls	48,244
2. Approach Channel and slips in the Vicinity of small boat piers at the foot of President Street and the Fallsway	5,474
3. North Locust Point Terminal	
A. Slip between Piers 3 and 4/5	8,841
B. Slip between Piers 4/5 and 6	6,651
C. Slip between Piers 6 and 7	16,459
D. Slip between Piers 7 and 8	9,969
E. Slip between Piers 9 and 10	14,825
4. South Locust Point Terminal	
A. United Brands Pier	14,420
B. Access Channel	23,794
5. Dundalk Marine Terminal	
A. Wharfside Berths Nos. 1 - 6	28,307

⁷Effective July 1, 1978, Chapter 418 of the Laws of Maryland of 1978 created the Maryland Department of Transportation Board of Contract Appeals. Although the Board's jurisdiction was limited to contracts dated July 1, 1978 or after, the parties modified their contract to include the new procedures.

B. Wharfside Berths Nos. 11-12	18,905
6. Clinton Street Marine Terminal	
A. Slip North Side of Pier No. 1	15,947
B. Slip South Side of Pier No. 1	<u>12,164</u>
Total Pay Quantity	224,000 cy

B. Quantum

Pursuant to the Board's prehearing order on proof of costs, Appellant submitted a detailed breakdown of its claim for an equitable adjustment in the amount of \$101,983.31. This claim is based upon historical costs and Respondent was provided an opportunity to audit the basic figures, costs and rates upon which it was computed. Respondent's auditor has not challenged the accuracy of these cost factors and they are thus accepted as correct.

The real disagreement between the parties concerns the measurement of an equitable adjustment and revolves around the methodology utilized by Appellant to prepare its claim. Simply put, Appellant has compared the actual unit cost of dredging the lower priority Clinton Street Marine Terminal and the Dundalk Marine Terminal with the estimated unit cost of the deleted, higher priority Turning Basin work. The basis for estimating the expense of dredging the deleted Turning Basin was the actual cost experienced in the dredging of the Inner Harbor Channel which is said to be similar to the Turning Basin area. The claim appears, in summary, as follows:

1.	Actual Cost of Work Performed for Priorities III & IV (Clinton Street and Dundalk Marine Terminals)	\$333,664.95
	Pay Quantity for Priorities III & IV	75,323 cy
	Unit Cost = \$333,664.95 : 75,323 cy	\$4.43/cy
2.	Actual Cost for Dredging Inner Harbor Channel	\$147,070.07
	Pay Quantity	48,244 cy
	Unit Cost = \$147,070.07 : 48,244 cy	\$3.048/cy
3.	Claimed Equitable Adjustment = \$4.43 - 3.048 = \$1.382/cy \$1.382 x 61,495 (deleted dredge quantity) =	\$85,986.09
	20% Overhead and Profit	<u>16,997.22</u>
		\$101,983.31

Respondent's arguments concerning quantum are fourfold. First, it is alleged Appellant suffered only "de minimis" damages to the extent of 1/225 of its fixed costs. This contention is based upon Appellant's admission that it would have recovered all of its fixed costs had 225,000 cubic yards been dredged and further upon its actual bid

computations which did not distinguish between the various priority areas as to unit costs. Since no single area was presumably more costly to dredge than another and because 224,000 cubic yards were actually dredged, Appellant's increased costs were therefore considered to be minimal.

The second point discussed by Respondent concerns Appellant's assumption that the Inner Harbor Channel was sufficiently similar to the Turning Basin so as to provide a measure of the cost of the deleted work. Respondent objects to this comparison and suggests that the South Locust Point Access Channel (SLPAC) and South Locust Point United Brands Pier were more representative of the Turning Basin work and would provide an accurate gauge of the unit cost of the deleted work.

The third argument raised by Respondent concerns the total quantity of material deleted. Respondent contends that only 47,786 cy were deleted when the Turning Basin work was eliminated from the contract.

Finally, Respondent maintains that even should the Board consider the Inner Harbor dredging to be comparable to the Turning Basin, it would not be reasonable to assume the disposal costs would also be comparable. It is suggested in this regard that the sequence of the work dictated that the unloading conditions were far more favorable for disposal of the Inner Harbor Channel material than would have been for the Turning Basin. The Inner Harbor dredging was the first spoil material placed in the dike and the work occurred in the fall of 1978. The Turning Basin work would have been performed in the winter months and the disposal dike already would have contained 150,000 cubic yards of material, thus making the unloading less efficient.

Appellant has also requested that interest at 6 percent per annum should be included as part of its equitable adjustment. There is no evidence of record, nor has Appellant shown, that it specifically borrowed funds for the performance of the changed work, thereby incurring interest expense as a cost thereof.

II. DECISION

A. Entitlement

Upon submittal of post-hearing briefs Respondent argued, for the first time, that the contract was divisible as it applied to each priority area. Further, the substantial error by Respondent, discovered by Appellant prior to bid, coupled with Appellant's failure to disclose its knowledge of the mistake, entitled Respondent to rescind that portion of the contract concerning the dredging of the Turning Basin. Accordingly, neither the "Changes" clause nor any other contract provision are considered applicable to the deleted work.

In Maryland, a unilateral mistake is sufficient to permit a partial rescission of a contract where the following conditions precedent are existent:

1. The contract must be divisible.
2. The mistake must be of such grave consequence that to enforce the contract as made or offered would be unconscionable.
3. The mistake must relate to a material feature of the contract.

4. The mistake must not have come about because of the violation of a positive legal duty or from culpable negligence.
5. The other party must be put in status quo to the extent that he suffers no serious prejudice except the loss of his bargain.

City of Baltimore v. DeLuca-Davis Construction Co., 124 A.2d 557, 210 Md. 518 (1956); Glassman Construction Co., Inc. v. Maryland City Plaza, Inc., 371 F. Supp. 1154 (D. Md., 1974). When such conditions are indicated, a party must elect to rescind the contract as soon as it becomes aware that a material mistake has occurred. Kemp v. Weber, 180 Md. 362, 24 A.2d 779 (1942); Latrobe v. Dietrich, 114 Md. 8, 78 A.983 (1910). In order to establish the rescission of a contract by implication, "... the acts relied upon must be unequivocal and inconsistent with the existence of a contract, and the evidence must be clear and convincing." Vincent v. Palmer, 179 Md. 365, 19 A.2d 183 (1941). These criteria impose a substantial burden on one seeking to establish rescission of a contract. We conclude for reasons hereafter stated, that this burden is too heavy for Respondent to bear under the facts of record.

Fundamental to Respondent's position is its contention that the Turning Basin dredging was severable from the remainder of the contract. Whether a contract is divisible or not is a question of intent of the parties which is to be determined from the terms and subject matter of the contract, including any pertinent explanatory circumstances. Equitable Trust Co. v. Delaware Trust Co., 30 Del Ch 118, 54 A.2d 733 (1947). In general the contract must be examined to determine whether "...1, performance of each party is divided into two or more parts, and, 2, the number of parts due from each party is the same, and, 3, the performance of each part by one party is the agreed exchange for a corresponding part by the other party." Restatement of Contracts, § 266 (1932); Williston On Contracts, § 860 (1962).

Upon initial examination of the bid invitation we observe a single unit item applicable to the total estimated quantity of 200,000 cy. Separate prices were not solicited for the dredging requirements at each of the priority locations and it cannot be stated with certainty that the unit price would have been the same for all areas. The contract payment provisions likewise did not provide for payment on the basis of completed performance at each location. Instead partial payments were to be made monthly for the approximate quantities dredged, regardless of location. The total payment under the contract was to be based upon actual quantities of material dredged on the entire job. In preparation of the invitational documents, Respondent's principal concern was to match available funds to a total quantity of dredging. While the MPA intended certain locations to be dredged before others, the priority system was designed to assure that the most urgent dredging requirements were included within the estimated 200,000 cy for which funding was available.

The Board finds significant the language of Contract Special Provision SP-10 as follows:

"(a) Whenever he deems it advisable or necessary to do so, the Engineer reserves the right, from time to time, to increase or decrease the amount or quantity of the work listed in Paragraph SP-1 of the Special Provisions, 'Scope and General Description of Work,' provided, however, that such changes shall not vary the total of 200,000 cubic yards mentioned in said paragraph more than twenty-five per cent (25%) either

way; and such changes in quantities shall in no way impair or vitiate the Contract.

"(b) The Contractor will be paid for the actual amount or quantity of authorized work done under the Contract at the Unit Price bid and stipulated for the item. In case the amount or quantity of work is increased as above provided, the Contractor shall not be entitled to any increased compensation over and above the Unit Price bid, and in case the amount or quantity of work is diminished as above provided, the Contractor shall not have any claim for damages on account of loss of anticipated profits or otherwise because of such diminution.

"(c) When the actual quantity of work performed under this Contract is more than 125%, or less than 75% of the estimated quantity stated in this Contract, an equitable adjustment in the Contract price shall be made upon demand of either party:

(1) For overruns, the equitable adjustment shall be limited to the number of cubic yards by which the actual quantity of work performed in this Contract exceeds 125% of the estimated quantity, but such adjustment shall not exceed the Contract Unit Price bid per cubic yard;

(2) Where the actual quantity of work performed in this Contract is less than 75% of the estimated quantity stated in this Contract, the final payment will be computed by applying the Contract Unit Price to 75% of the estimated quantity shown in the Contract and then deducting from the result an amount obtained by applying to the number of cubic yards of underrun below the 75% of the estimated quantity a negotiated price per cubic yard of such underrun. The unit price for the deduction shall represent the reasonable cost to the Contractor of performing the units of work and other fixed costs relating thereto." (Underscoring added.)

Considering this provision together with the proposal form provided for submission at the time of bid, it is apparent that Appellant agreed to dredge and dispose of a minimum of 150,000 cy (200,000 less 25%) and a maximum of 250,000 cy of material in accordance with the contract plans and specifications at a unit price of \$3.81. All fixed costs were included in such unit cost. Respondent reciprocally promised to pay \$3.81 per cubic yard for the total quantity of dredging it could afford within the stated limits. The contract unit price was keyed to the performance of the total amount of dredging and not to a particular priority location. For these reasons we conclude that no separate promise was made to pay a sum certain upon completion of the Turning Basin dredging segment and as such it was not a divisible element of the contract. Respondent therefore was not entitled partially to rescind the contract.

Alternatively, Respondent contends that even if the contract is entire and not severable, there was an "absence of valid mutual assent concerning the Turning Basin" and hence there was no contract for it to be dredged. Pursuant to this theory the

remaining portions of the contract would remain valid and unchanged. It is well settled however that where a contract is entire a party may not rescind it in part and affirm in part. Friedman v. Kennedy, 40 A.2d 72 (Mun. Ct. of App. for D.C., 1944); Kemp v. Maryland, *supra*. Rescission abrogates a contract and restores the parties to the relative positions which they would have occupied if no such contract had ever been executed. Consequently, unless the contract is divisible, it lives or dies as a whole. Glassman Construction Co. v. Maryland City Plaza, 271 F. Supp. 1154 (D. Md. 1974), cited by Respondent in support of its argument, is inapposite. In Glassman, plaintiff agreed to a turnkey contract for the construction of a shopping center. The contract provided, in part, for a sewer line extension although the exact path and length thereof was not known. The parties separately priced the extension at \$20 for each linear foot in excess of 125 feet. The testimony during trial indicated that the actual sewer extension required a larger, more expensive pipe than either side had contemplated at the time of contracting. A mutual mistake of fact was found and the court ruled that no contract with regard to the sewer line had been entered into. The court found the sewer work to be a divisible portion of the shopping center construction and thus did not annul the remaining contract provisions.

While the preceding is dispositive of Respondent's affirmative defense, we are compelled to comment briefly upon certain of the other elements essential to establish rescission. First, Respondent failed to show that it elected to rescind the contract upon becoming aware of its mistake. The only action taken by Respondent after learning of its error was to revise Contract Drawing No. 5 of 9 to delete the Turning Basin dredging. When Appellant promptly notified the MPA that it considered this action to be a change under General Provision GP-4.05, Respondent replied as follows:

"This will notify you that the Maryland Port Administration does not consider these revisions as changes to the Contract justifying adjustment to the Contract unit price." (Rule 4, Tab 4b)

Not only was there no repudiation of the contract set forth therein but Respondent's Mr. Nelson attached to this letter an amendment to the contract which revised the contractually mandated disputes procedure.⁸ This action and the subsequent issuance of a final decision concerning the instant dispute were indicative of Respondent's belief that the contract General Provisions were applicable to the claim for an equitable adjustment resulting from the deletion of the Turning Basin. Accordingly, the actions of the MPA were not inconsistent with the existence of a contract and its failure promptly to rescind is necessarily fatal to its affirmative defense.

The Board also finds that the error in computing the Turning Basin quantities was not of such grave consequence that an unconscionable bargain would have resulted. In arriving at this conclusion the Board observes that the Turning Basin dredging was a high priority item as provided by Contract Special Provision SP-3. The evidence reflects that these priorities were established upon a basis of the number of complaints received

⁸Under the subject contract, the administrative disputes procedure was solely contractual. The contract modification substituted the Board of Contract Appeals for the Secretary of Transportation as the final tier of the administrative procedure. Absent such a contractually mandated disputes procedure, Appellant presumably could have immediately instituted court action.

from the various shipping terminals and the degree to which shoaling had occurred. Consequently, a bidder would not be aware of and could not therefore be charged with knowledge that an increase in quantities at the Turning Basin would reduce the priority for dredging at that location. Further, there has been no showing or suggestion that Appellant seized upon the error to profit at the expense of the MPA.

Without considering whether the remaining conditions precedent to a valid rescission are present, we next address the issue as to whether the deletion of the Turning Basin dredging from the contract constituted a constructive change. While no written change order was issued by the Engineer, the contract may have been constructively changed pursuant to General Provision GP-4.05(B), provided it is determined that the deletion of this work resulted in a change to the specifications or the method and manner of performance.

Contract Special Provision SP-3 states that the MPA had limited funds available for the performance of the dredging operations and that portions of the work might have to be deleted from the contract. This clause further provides that because of the funding limitation the work was to be performed in a specified sequence of priorities. The only reasonable interpretation of the contract as a whole with respect to this provision is that performance was to proceed in accordance with the established priorities, in strict sequence, until the money ran out. Obviously if there were insufficient funds to perform all of the work listed, the lower priority areas would not be dredged and would necessarily be omitted from the contract. In this manner the most urgent work would be performed with the funding available. This was contemporaneously understood by both parties.

Respondent however now contends that while Special Provision SP-3 imposed a duty upon the contractor to dredge the specified areas in a particular sequence, there is no obligation imposed on the MPA to delete the work in any particular sequence. Such an interpretation would render the schedule of priorities nugatory and meaningless. If Appellant was obligated to perform in accordance with the sequence of priorities listed in Special Provision SP-3 then absent specific language in the contract, Respondent could not alter the schedule to Appellant's detriment without constructively changing the contract. The Board therefore finds that the deletion of priority II dredging at the Turning Basin to United Brands, Inc. in lieu of lower priority work at the Atlantic Terminals Auto Facility, Clinton Street Marine Terminal and Dundalk Marine Terminal respectively, amounted to a constructive change to the contract.

B. Quantum

The term equitable adjustment and the "changes" clause which recites it are derived from Standard Form 23-A, the general provisions of a federal government construction contract. The definition and parameters of an equitable adjustment and the "changes" clause itself have been the subject of innumerable decisions by the federal courts and the various Agency Boards of Contract Appeals. This vast body of law, referred to as the federal common law of government contracts provides a practical source for consideration when as here, the Board is confronted with a dearth of relevant Maryland case law. Accordingly, it is appropriate that we look to this body of law for guidance in computing the equitable adjustment due Appellant under the "changes" clause. See Dewey Jordan, Inc. v. Maryland-National Capital Park and Planning Commission, 265 A.2d 892 (C.A. Md, 1970).

The leading decision concerning equitable adjustments was issued by the U. S. Court of Claims in Bruce Construction Company v. United States, 163 Ct. Cl. 97, 324

F.2d 516 (1963). Judge Durfee in writing for the Court stated that:

"Equitable adjustments...are simply corrective measures utilized to keep a contractor whole when the Government modifies a contract. Since the purpose underlying such adjustments is to safeguard the contractor against increased costs engendered by the modification, it appears patent that the measure of damages...must be more closely related to and contingent upon the altered position in which the contractor finds himself by reason of the modification."

In determining the altered position of the contractor the Court compared the reasonable cost of performing the work as changed to the reasonable cost of performing as originally required. The Court further stated that:

"...the standard of reasonable cost 'must be viewed in the light of a particular contractor's costs'..., and not the universal, objective determination of what the cost would have been to other contractors at large. To say that 'reasonable cost' rather than 'historical [actual] cost' should be the measure does not depart from the test applied in the past, for the two terms are often synonymous. And where there is an alleged disparity between 'historical' and 'reasonable' costs, the historical costs are presumed reasonable.

"Since the presumption is that a contractor's claimed cost is reasonable, the Government must carry the very heavy burden of showing that the claimed cost was of such a nature that it should not have been expended, or that the contractor's costs were more than were justified in the particular circumstance."
(Underscoring added.)

Respondent first contends that the actual costs incurred by Appellant are unreasonable in view of its bid estimate which provided no variation in costs among the various priority areas. Since each such area was priced identically in the bid, the cost of performing at the various locations were presumably the same. This argument however is not persuasive. Bid estimates do not necessarily reflect actual costs of performance which may be affected by contingencies and mistakes in estimating. A contractor's bid may therefore result in a profit or loss depending on the effect of such contingencies and errors. The use of bid estimates in computing the equitable adjustment would alter the economic position of the contractor brought about by actual performance conditions and is therefore inappropriate. This principle was clearly recognized by the U. S. Court of Claims in S. N. Nielson Co. v. United States, 141 Ct. Cl. 793 (1958). In Nielson a change deleted an item of work which was estimated in the bid documents at \$19,800. The reasonable cost of performing this work however was \$60,800. Had the work been performed, the contractor would have lost \$41,620 on this one item. In equitably adjusting the contract amount, the Court affirmed the Contracting Officer's reduction in the amount of \$60,800, thus maintaining the loss position of the contractor as it existed prior to the deductive change.

Respondent next contends that the Inner Harbor Channel costs are not suitable for comparison with the actual cost which would have been incurred in performing the deleted Turning Basin. In analyzing this issue we observe that Appellant's work in each priority area consisted of three separate operations: (1) dredging, (2)

towing, and (3) unloading. For reasons discussed hereafter, only dredging and towing costs are a function of the configuration and location of a particular priority area and hence are considered separately from the unloading aspects of the work.

Appellant's dredging operation involved the use of a 5 cy⁹ clamshell bucket on a crane which was mounted on a barge. The crane would lower the bucket to the river bottom, excavate the material, raise it and deposit the load onto another barge that would be utilized later to transport the spoil material to the disposal site. The crane and bucket could swing to cover a radius of 30 feet around the barge. Thus where the area to be dredged was 60 feet in width, maximum production could be achieved from the dredging equipment. Where the width of an area to be dredged was less than 60 feet, such as at piers and isolated, narrow areas (e.g., South Locust Point Access Channel), production time was lost due to the need frequently to move the dredge. In this regard the Turning Basin and Inner Harbor were both large, open areas with little or no ship traffic to impede the dredging operations. The opportunity for optimum production existed at each of these two sites.

There are other factors which affect productivity. The depth of the dredging operation, for example, affects the cycle time for each swing of the bucket. At the Turning Basin the dredging depth would have been 28 feet as compared to 24 feet at the Inner Harbor. This represents an additional 8 feet, 4 feet down and 4 additional feet up, that the bucket would have to travel during each digging cycle at the Turning Basin. Further the type of material to be removed is also a factor for consideration. The harder and heavier the material to be excavated, the more difficult it is to remove. The Inner Harbor bottom contained a soft, mushy silt while the Turning Basin bottom consisted of a heavier mud. Although Appellant's Mr. Hazelhurst testified that the Inner Harbor also contained sand and gravel which was heavier and more difficult to excavate than mud, the Board finds this a bare assertion not consistent with the probative information generated by Appellant's own Mr. Williams¹⁰ and the observations of Respondent's Mr. Elliott. The predominant material dredged in the Inner Harbor consisted of a soft silt which moved freely and could be easily excavated. As such the Inner Harbor material was substantially different from that which existed at the Turning Basin.

The towing costs were also more costly for the Inner Harbor than those which would have been experienced at the Turning Basin. The Turning Basin was the closest area to the Masonville disposal site while the Inner Harbor was the most distant.

This evidence of record reveals that the anticipated production rate at the Turning Basin for both dredging and towing would not have been identical to that actually experienced by Appellant at the Inner Harbor. While the effect of the differences on costs cannot be determined with mathematical precision, this is not a bar to an equitable

⁹ A 6 cy capacity digging bucket was also used where relatively hard material was encountered.

¹⁰ Kenneth Williams is employed by Appellant and has worked on dredging operations for over 20 years. Prior to bid Mr. Williams investigated the types of material to be encountered in performing the contract by using a probing rod. He determined that the Inner Harbor material was comprised of fine silt, mud and perhaps small lenses of fine sand. The material at the Turning Basin was found to be a heavier mud.

adjustment where, as here, there is a reasonable basis for computing increased costs. Wunderlich Contracting Co. v. U. S., 173 Ct. Cl. 180 (1965).

Appellant's actual costs have been utilized by the Board to prepare a breakdown of the unit costs for dredging and towing at each priority area.¹¹ These costs appear as follows:

Small Boat Pier	\$2.81/cy
Inner Harbor	\$1.85/cy
North Locust Point	\$2.83/cy
South Locust Point Access Channel	\$2.70/cy
South Locust Point United Brands Pier	\$3.22/cy
Dundalk Marine Terminal	\$2.51/cy
Clinton Street Marine Terminal	\$2.45/cy

Our consideration of these unit costs confirms that the principal loss of productivity and consequently the highest unit costs was occasioned by the requirement frequently to move the dredging barge at the smaller and isolated areas. For example, the Small Boat Pier dredging involved the same material found in the Inner Harbor, the identical towing distance to Masonville and shallower channel depths, 10 feet at Small Boat Pier versus 24 feet at the Inner Harbor. Nevertheless it cost nearly a dollar per cubic yard more to dredge at the Small Boat Pier where the slip was narrow and frequent movement of the dredging barge was necessary. In considering the factors which affect dredging productivity therefore the Board finds most significant the open, contiguous nature of the two priority areas. Considering the other productivity factors, the Board further finds that greater labor costs involved in dredging the heavier, deeper material at the Turning Basins would outweigh the cost savings incurred by the shorter towing distance from the Turning Basin to Masonville. For this reason the Board has determined that the unit cost of dredging and towing at the Turning Basin area would have been \$2.00 per cy.¹²

The unloading operation at Masonville involved the use of a stationary crane mounted on a temporary dock adjacent to the disposal site. The crane was equipped with a 3 cubic yard clamshell bucket which was lowered into the incoming barges to pick up the spoil material which was then raised, rotated and deposited into the dike. The material in the dike would thereafter be dispersed by use of a drag scraper.¹³ The unloading costs were thus solely related to the efficiency of the crane and drag scraper.

¹¹See Appendix 1.

¹²The process of weighing the probative value of various elements of a cost presentation and arriving at a judgmental decision thereon is referred to as the "jury verdict" approach. It is commonly used by Courts and Boards in arriving at an equitable adjustment.

¹³The drag scraper originally used on the job was equipped with a 2 cubic yard perforated bucket which allowed water to escape. It was attached to cables which were strung on a winch in an A-shape configuration along the length of the Masonville dike. The bucket, resting on its side, would be pulled by the cable-winch and thereby drag material from the deposit area to the lower reaches of the dike.

The following compilation lists the actual unit costs for unloading experienced at each priority area and the dates of performance:

	<u>Unit Cost</u>	<u>Dates</u>
Small Boat Pier	\$1.37/cy	9/18 - 9/22/78
Inner Harbor	\$1.20/cy	9/23 - 10/23/78
North Locust Point	\$2.37/cy	10/23 - 12/7/78
		12/29 - 1/11/79
South Locust Point Access Channel	\$2.17/cy	12/7 - 12/13/78
		12/27/78
		1/11 - 1/27/79
South Locust Point United Brands Pier	\$2.39/cy	12/14 - 12/28/78
Dundalk Marine Terminal	\$1.80/cy	1/29 - 3/6/79
		3/14/79
Clinton Street Marine Terminal	\$2.05/cy	3/7 - 3/31/79

A sharp increase in unloading costs was experienced from late October 1978 through late January 1979. There is no evidence showing that this cost increase was caused by the onset of cold weather. Instead most of the cost increase resulted from the problems Appellant encountered in unloading and dispersing the materials encountered at the North Locust Point Marine Terminal and the United Brands Pier.¹⁴ When work began at the Dundalk Marine Terminal, the unloading costs were reduced to \$1.80/cy. This is significant in that no unusual materials were encountered in this area and a new, shop fabricated drag scraper appeared to be working efficiently. It is also observed that the Turning Basin dredging would have been performed at the same time of year as the Dundalk work. The Board accordingly finds that the \$1.80/cy unloading cost at Dundalk is representative of the costs which reasonably would have been incurred at the Turning Basin. The Board attributes the increase in unloading cost between the Inner Harbor and Dundalk Marine Terminal to the more difficult task of dispersing materials over the Masonville dike which had already absorbed 148,677 cubic yards by January 29, 1979. The total reasonable cost for dredging, towing and unloading the deleted Turning Basin work thus would have amounted to \$3.80/cy (\$2.00 plus \$1.80).

We next consider the issue of how many cubic yards of dredging material were deleted due to the elimination of the Turning Basin work from the contract. Respondent's estimate of 47,786 cy is unsupported by estimates, made by either party, prior to the onset of the dispute. Appellant's estimate of 61,495 cy is also unsupported by computations or other convincing evidence. We find the most reasonable estimate is that appearing in Appellant's bid papers showing a quantity of 59,616 cy.

¹⁴These problems necessitated the replacement of the drag scraper in mid-December 1978 (Tr 411) and are the subject of separate claims.

Based on the foregoing findings of fact, Appellant is entitled to an equitable adjustment as follows:

1.	Unit cost of dredging at Clinton Street minus unit cost of dredging at Turning Basin times the quantity dredged at Clinton Street	
	$(\$4.50 - \$3.80) \times 28,111 \text{ cy} =$	\$19,677.00
2.	Unit cost of dredging at Dundalk minus unit cost of dredging at Turning Basin times 31,505 cy	
	$(\$4.31 - \$3.80) \times 31,505 \text{ cy} =$	16,067.55
3.	Total additional cost of dredging 59,616 cy at Clinton Street and Dundalk =	35,744.55
	Overhead and profit at 20% ¹⁵	<u>7,148.91</u>
	Total	\$42,893.46

Appellant also demands interest be awarded as an element of the equitable adjustment. The propriety of an interest award, initially at least, must depend upon the extent to which sovereign immunity has been waived by the State Legislature. In Maryland, the Legislature has not expressly waived sovereign immunity as it pertains to interest on judgments obtained against the State. The Board is further unaware of any Maryland contract cases which decide the issue of whether a private litigant may recover interest from a State agency. For this reason the Board takes notice of other jurisdictions which have decided this issue and considers such decisions in the light of apparent trends in Maryland case law.

In Spier v. Department of Labor, 29 P.2d 679 (1934), the Supreme Court of Washington held that the State, without its consent, could not be required to pay interest on its debt. Spier involved a Workmen's Compensation action and the applicable statute did not provide for interest on such judgments. The rule of Spier was gradually broadened to provide that the State "...is not liable for interest in any case except where expressly, or by a reasonable construction of a contract or statute, it has placed itself in

¹⁵Special General Provision SGP-4.03 "Changes" provides as follows:

"If the Contractor claims an equitable adjustment, the Contractor shall be allowed to add the following maximum percentages for overhead and profit to his costs for labor, materials and equipment:

- A. 20% may be added by the Contractor for overhead and profit for work performed by his own forces."

a position of liability." (Underscoring added.) Thus even though the Legislature enacted a statute authorizing interest on judgments, the State of Washington was considered immune from interest liability since the law omitted to impose an express requirement upon the State. Moen v. State, 560 P.2d 728 (Wash. App., 1977). Recently, the Supreme Court of Washington overruled the Moen case and declared that a state may impliedly consent to interest liability by waiving its immunity in contract actions. The waiver of immunity to suit imposes the identical responsibilities and liabilities upon the State as it does upon private litigants. Architectural Woods, Inc. v. State of Washington, 92 Wash. 2d 521, 598 P.2d 1372 (1979).

The Supreme Court of Kansas in Shapiro v. Kansas Public Employees Retirement System, 532 P.2d 1081 (Kan., 1975) arrived at a comparable result. This case concerned a contract action brought by a private litigant against the Kansas Public Employees Retirement System (KPERs), a State agency. The plaintiff alleged that the payments due from KPERs had been unreasonably delayed and requested interest thereon. The court noted prior decisions which denied interest in actions against the State and ruled that:

"The antipathy toward the allowance of interest was also expressed in the concept that the state or a governmental body should not be required to pay interest on its contractual obligations unless it has expressly agreed to do so or unless it is required to do so by statute. The theory of the rule is that the sovereign is different from other litigants and always fair. It is a carryover from the theory 'that the king can do no wrong.' The reason for the rule was stated by the courts to be that 'the government is presumed to be always ready to pay, and it would be against public policy to declare it otherwise.' (Milwaukee v. Firemen Relief Assoc., 42 Wis.2d 23, 165 N.W.2d 384). We believe that the theory that a rule of law requiring government to pay interest is by implication a slander that the sovereign does not meet its obligations is not based upon sound factual grounds and cannot be taken seriously today. It needs no documentation to assert that the sovereign on occasion, willfully or not, does do a wrong, and in its dealings with its citizens is not infrequently subject to criticism by the public and correction by the courts. The common law rule that the state should not be required to pay interest on its just debts is untenable in our times. In our judgment the loss of the use of money, whether occasioned by the delay or default of an ordinary citizen or of the state or one of its political subdivisions, ought to be compensated. This is especially true in those situations where the state has agreed by an express contract to pay retirement and death benefits to its employees and where it has been found to have wrongfully withheld the same. We see no justice in a rule which permits the state to retain for its use without interest money which it was legally obligated to pay over to a widow for her support.

"Where the state legislature has consented that one of its agencies may be sued on its express contracts, the waiver of sovereign immunity should extend to every aspect of its contractual liability including the right of the other contracting party to recover interest where it is customarily

included as a part of the damages to be awarded for breach of contract." (Underscoring added.)

Accord, State Highway Department v. Knox-Rivers Construction Co., 117 Ga. App. 453, 160 S.E.2d 641 (1968); Roadmix Const. Corp. v. State, 9 N.W.2d 741 (Neb., 1943); Otto B. Ashbach & Sons, Inc. v. State of Minnesota, 247 Minn. 573, 78 N.W.2d 446 (1956).

In Maryland the courts have applied strictly the common law doctrine of sovereign immunity and consistently observed that its waiver was a legislative and not a judicial function. Nevertheless over the years the application of this doctrine has also been narrowed along the same lines followed by the Supreme Court of Washington. In Brohawn & Bros., Inc. v. Board of Trustees of Chesapeake College, 269 Md. 164, 165, 304 A.2d 819, 820 (1973) the Maryland Court of Appeals stated that:

"[A] litigant is precluded from asserting an otherwise meritorious cause of action against this sovereign State or one of its agencies which has inherited its sovereign attributes, unless expressly waived by statute or by necessary inference from such a legislative enactment."

The Court of Appeals in American Structures v. City of Baltimore, 278 Md. 356, 359, 364 A.2d 55, 56 (1976) and in Board v. John K. Ruff, Inc., 278 Md. 580, 584, 366 A.2d 360, 362 (1976) refined this rule somewhat so that:

"[A]n action ... brought for a money judgment in contract or in tort against the State or an agency of the State without the State's consent, actual or implied,...must be defended on the ground of sovereign immunity, which cannot be waived unless funds have been appropriated for the purpose or the agency can provide funds by taxation..."
(Underscoring added.)

These later decisions are consistent with the modern trend and indicate that an express statute waiving the State's immunity from interest liability is unnecessary where there is an implied consent to such exposure and funds have been appropriated or may otherwise be raised by the agency. This conclusion is supported by the Court of Appeals decision in Hammond v. State Roads Commission, 241 Md. 514, 217 A.2d 258 (1966) where interest was allowed against the State in a condemnation proceeding. The Court there held that direct statutory language authorizing the payment of interest on condemnation judgments is unnecessary since such authorization may be implied from the Maryland Rules of procedure which authorizes the payment of interest on such judgments. The Board thus determines that the issue of sovereign immunity is effectively resolved by Chapter 450 of the Laws of Maryland of 1976 and Rule 642 of the Maryland Rules of Procedure which provide as follows:

"1. Chapter 450 (1976) — 41 Md. Ann. Code, § 10A

(a) Defense not to be raised in certain actions. — Unless otherwise specifically provided by the laws of Maryland, the State of Maryland, and every officer, department, agency, board, commission, or other unit of State government may not raise the defense of sovereign immunity in the courts of this State in an action in contract based upon a written contract

executed on behalf of the State or its department, agency, board, commission, or unit by an official or employee acting within the scope of his authority.

(b) No liability for punitive damages. — In any such action, the State, or its officer, department, agency, board, commission, or other unit of government is not liable for punitive damages.

(c) Limitation of actions. — A claim is barred unless the claimant files suit within one year from the date on which the claim arose or within one year after completion of the contract giving rise to the claim, whichever is later.

(d) Funds to be provided in budget. — In order to provide for the implementation of this section, the Governor annually shall provide in the State budget adequate funds for the satisfaction of any final judgment, after the exhaustion of any right of appeal, which has been rendered against the State, or any officer, department, agency, board, commission, or other unit of government in an action in contract as provided in this section.

"2. Rule 642. Interest on Judgment...Law

A judgment by confession or by default shall be so entered as to carry interest from the time the judgment was rendered. A judgment on verdict shall be so entered as to carry interest from the date on which the verdict was rendered. A judgment nisi entered by the court following a special verdict pursuant to Rule 560 (Special Verdict) or trial by the court without a jury pursuant to Rule 564 (Trial by the Court) shall be so entered as to carry interest from the date of the entry of judgment nisi. (Underscoring added.)

In providing that the defense of sovereign immunity shall not be raised in an action based upon a written contract executed on behalf of the State, the Legislature by implication has mandated liability on the part of the State for the same damages, other than punitive, as a private litigant. Such damages obviously may include interest under the Maryland Rules of Procedure. The Board is of the opinion therefore that the doctrine of sovereign immunity does not preclude the inclusion of interest in our computation of the equitable adjustment due Appellant. See Bouland, "Abrogation of Sovereign Immunity In Contract Cases In Maryland," 6 Baltimore Law Review 337, 344 (Spring 1977).

Respondent next contends that federal common law has established that interest properly is not included as part of an equitable adjustment unless it may be shown that the contractor borrowed money and incurred interest expense specifically for the performance of the changed work. Dravo Corporation v. United States, 594 F.2d 842 (1979). This decision however is not for application here. In 1964 Congress codified the common law doctrine of sovereign immunity

with respect to liability for interest on judgments against the United States and provided that:

"Interest on a claim against the United States shall be allowed in a judgment of the Court of Claims only under a contract or Act of Congress expressly providing for payment thereof."
28 U.S.C. § 2516(a)

This statute not only precluded the federal courts from awarding interest but restricted the various federal Boards of Contract Appeals from doing so as well. The U. S. Court of Claims and federal Agency decisions cited by Respondent stand only for the principle that an equitable adjustment may not include interest where the sovereign exercises its inherent immunity. In enacting the Contract Disputes Act of 1978, 41 U.S.C. § 611, to provide for the resolution of claims and disputes relating to federal government contracts, Congress waived the Federal Government's immunity from interest liability by specifically declaring that:

"Interest on amounts found due contractors on claims shall be paid to the contractor from the date the contracting officer receives the claim pursuant to section 6(a) from the contractor until payment thereof. The interest provided for in this section shall be paid at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41 (85 Stat. 97) for the Renegotiation Board."

The award of equitable adjustments under remedy granting clauses in a Federal Government contract may now include interest as may judgments against the Government for breach of contract. See Blackhawk Heating & Plumbing Co., Inc., et al. v. U.S., Ct. Cl. No. 364-74 (May 14, 1980) __ Ct. Cl. __, __ F.2d __.

There yet remains for decision here the questions as to when interest commences to run and how it should be computed. The leading case on this issue is I. W. Berman Properties v. Porter Brothers, Inc., 276 Md. 1, 344 A.2d 65 (1975) wherein the Maryland Court of Appeals discussed both prejudgment and post-judgment interest as follows:

"The purpose of the allowance of prejudgment interest is to compensate the aggrieved party for the loss of the use of the principal liquidated sum found due it and the loss of income from such funds. The purpose of post-judgment interest is obviously to compensate the successful suitor for the same loss of the use of the monies represented by the judgment in its favor, and the loss of income thereon, between the time of the entry of the judgment nisi — when there is a judicial determination of the monies owed it — and the satisfaction of the judgment by payment."

Although it is recognized that these administrative proceedings do not result in a judicial determination of amounts due, they nevertheless culminate in a final administrative decision which is binding upon the parties absent reversal or modification by the courts on review of the record. Since a trial de novo is not available to the parties in the courts of this State, the Board's decision is akin to the entry of a final judgment by a State trial court which permits the parties therefrom to appeal. See 41 Md. Ann. Code § 255; Lucke v. Commissioner of Personnel, 245 Md. 706, 228 A.2d 313 (1967), cert. denied, 392 U.S.

926, 88 S. Ct. 2270, 20 L. Ed.2d 1384 (1968). The Board therefore determines that interest should accrue on its decision, at "the Legal Rate,"¹⁶ from the date of issuance of this decision.

The award of predecision interest however is a more difficult issue. Respondent maintains that Appellant's claim for an equitable adjustment was unliquidated and, under existing case law, predecision interest may not be assessed. The Board's review of pertinent Maryland case law discloses no prohibition against the award of predecision interest on unliquidated claims where it is otherwise warranted. A & A Masonry Contractors, Inc. v. Polinger, 259 Md. 199, 269 A.2d 566, 569 (1970). The general rule in Maryland is that the award of interest should be left to the discretion of the jury, or the court when sitting without a jury except under those circumstances where it is payable as a matter of right. I. W. Berman v. Porter Bros., *supra* at 344 A.2d 75; accord, Restatement, Contracts, § 337. Since the Board is functioning in the same capacity as a non-jury trial court, discretion should also rest with the Board to award predecision interest as a part of an equitable adjustment.

In this instance Appellant clearly has lost the use of the substantial funds which it spent in performing the changed work. Under Berman, *supra*, predecision interest is sanctioned for this very circumstance. The primary issue here concerns when Appellant was entitled to payment of its equitable adjustment under the contract. A failure by the MPA to make payment on this date deprived Appellant of its funds and the income therefrom, and thus entitled it to interest.

Appellant seeks interest from April 1, 1979. This date was determined by taking the completion dates for work performed at Clinton Street and Dundalk Marine Terminal and adding 30 days as the reasonable period to process the equitable adjustment payment. (Tr 53)

Appellant's right to payment of an equitable adjustment and, concomitantly the State's obligation to pay, is governed by the remedy granting language contained in the "Changes" clause. Of particular significance is Paragraph E of this clause which provides that "...[i]f the Contractor intends to assert a claim for an equitable adjustment under this clause, he must, within 30 days after the furnishing of a written notice [informing the Engineer of the date, circumstances and source of the order, directive, etc. which he believes to constitute a change.]...submit to the Engineer a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Administration." (Underscoring added.) This language implicitly states to a contractor that the submittal of its monetary claim is a condition precedent to the State's obligation to equitably adjust the contract. Consequently the date upon which the changed work was completed is of no significance here.

The Board further observes that the language of the "Changes" clause does not require that the payment of an equitable adjustment be made immediately upon

¹⁶In applying Rule 642 of the Maryland Rules of Procedure the courts have uniformly inferred that the interest rate to be charged is the legal rate. Paape v. Grimes, 256 Md. 490, 260 A.2d 644 (1970). Article III, § 57 of the Maryland Constitution provides that "[t]he Legal Rate of Interest shall be Six percent per annum; unless otherwise provided by the General Assembly." Chapter 798 of the Laws of Maryland of 1980, effective July 1, 1980, raises the Legal Rate from 6 to 10 percent per annum.

receipt of a contractor's monetary claim. The monetary claim may be complex, involve numerous assumptions and computations and/or depend upon the accuracy of the historical costs contained therein. The "Changes" clause thus necessarily implies a reasonable period for review of the claim and processing of any payment due. The determination of what constitutes a reasonable period should consider the complexity of the claim, the degree to which a contractor has supported its monetary claim with actual cost data referenced to its books of account, and the extent to which any estimates used are accompanied by the supporting assumptions and computations.

In the instant appeal, Appellant's monetary statement of claim was not received until May 27, 1979, the date upon which the Complaint was filed with this Board. The Complaint simply requested an equitable adjustment in the amount of \$101,983.31 without any breakdown of costs. Thereafter, pursuant to Order of the Board, Appellant furnished Respondent with a breakdown of its claim for equitable adjustment on July 30, 1979. This claim and the breakdown were based on Appellant's actual costs. Respondent, pursuant to an "Order On Proof Of Costs," was accorded 60 days to audit Appellant's books, verify said costs and prepare its counterstatement of costs if it so desired. This period was later enlarged to allow Respondent until October 26, 1979 because of the parties' desire to consolidate three appeals for hearing, each of which required an audit. The Board finds that Respondent had sufficient opportunity by October 26, 1979 to review Appellant's claim presentation. Allowing 30 days as a reasonable period for processing payment, the Board finds Respondent liable for predecision interest, at the Legal Rate, commencing November 26, 1979.

Appellant accordingly is entitled to an equitable adjustment as follows:

1.	Additional Costs plus Overhead & Profit =	\$42,893.46
2.	Predecision Interest at 6% from November 26, 1979 to June 30, 1980 (\$7.03/day x 217 days) =	1,525.51
3.	Predecision Interest at 10% from July 1, 1980 to August 15, 1980 (\$11.72/day x 46 days) =	<u>539.12</u>
4.	Total	\$44,958.09

Interest shall also accrue on the principal sum of \$44,958.09 at the rate of 10 percent per annum from the date of this decision.¹⁷ The appeal is allowed in this amount.

¹⁷This does not constitute the compounding of interest which is prohibited. I. W. Berman v. Porter Bros., supra.

I. FINDINGS OF FACT

A. Preparation of Bid

Contract Special Provision SP-11 "Materials To Be Dredged" provides as follows:

"(a) The materials to be dredged under this Contract consist of the original river bottom and deposits from natural siltation.

"(b) The Administration will not be held responsible for the accuracy or the completeness of the above information. It is only provided to give an indication of the type of material it is thought will be encountered in the work. The Contractor shall assume all responsibility for conditions and types of material to be dredged and disposed of under this Contract. Prior to submitting a bid on this Contract, the Contractor shall carry out his inspections and bottom probings to such an extent as to be under no misapprehension concerning the types of materials to be dredged or the equipment needed to properly carry out the dredging work." (Underscoring added.)

A similar requirement is also contained in Contract Special Provision SP-7(a) as follows:

"In order that they may be fully conversant with all conditions attendant upon the location to be dredged, bidders are expected to make extensive examinations of the locations to be dredged, together with the territory contiguous thereto; they should also make such inquiries concerning the locations as may be necessary to acquaint themselves with actual circumstances as to prevailing or changing conditions, in order that there be no misunderstanding concerning present and probable obstacles and obstructions to their method of conducting dredging operations."

Prior to bid, Appellant sent Mr. Kenneth Williams to investigate the job sites and make probings. Mr. Williams made three separate trips to the dredging areas on behalf of Appellant. The initial trip occurred on March 24, 1978 and was limited to the Masonville disposal area. Mr. Williams took soundings, with a lead line and a survey rod, in the channel adjacent to the proposed disposal dike and observed the tide so as to determine whether the tugs and barges transporting spoil material could navigate with safety. A second trip was later made to the Inner Harbor area to check for overhead obstructions which might interfere with the planned bucket dredge operation. Finally a third trip was made for the purpose of probing¹⁸ the harbor bottom to determine the type of material to be encountered during dredging. In performing this final task, Mr. Williams visited

¹⁸A probing rod is a 1" aluminum piece of conduit with a 3' steel point which is stuck into the harbor bottom. The degree of resistance encountered indicates to an experienced person the hardness and type of material encountered.

each of the priority areas except for the Small Boat Pier, Clinton Street and the Atlantic Marine Terminal. The probings taken were random in nature and all piers were not investigated. Mr. Williams made no attempt to establish the depth of the materials encountered at each site. The conclusion from this investigation was that the work would involve only the dredging of mud, silt and sand. This information was transmitted verbally to Appellant's Messrs. Hazelhurst and Stokes and no contemporaneous written report was prepared.¹⁹

In addition to Mr. Williams' oral report, Appellant relied upon the contract documents and the permit application by MPA to the Army Corps of Engineers in order to satisfy itself as to the materials which might be expected during dredging. The principal representation in the contract is found in its very description, "Maintenance Dredging, Terminals and Inner Harbor Channel, Baltimore Harbor." Appellant's experience based upon 15 to 20 years in the dredging business was that maintenance dredging, as distinguished from new or capital dredging, is intended to remove materials which have accumulated on the harbor bottom due to siltation. Consequently, Appellant did not anticipate encountering hard, undisturbed clay.

Contract Special Provision SP-15(d) provides as follows:

"The Army Corps of Engineers Permit and the State Wetlands License, which will be issued to the Administration authorizing the proposed dredging and disposal operation are subject to certain conditions contained therein. The Contractor shall be responsible for meeting all of the requirements of the said permit and license, and shall indemnify and save harmless the Administration, its agents and employees, against and from all suits, actions, claims, demands, damages, losses, expenses and/or costs of every kind and description to which the Administration may be subjected or put by reason of failure by Contractor, his agents and employees or subcontractors, to comply with all requirements of the said permit and license." (Underscoring added.)

Although the MPA applied for both the Corps of Engineers Permit and the State Wetlands License prior to bid, neither was received until after award of the contract. Appellant did however obtain, prior to bid, copies of the Public Notices published by the Corps of Engineers in response to the MPA application for a dredging permit. The public notices reiterated the pertinent information set forth in the MPA application for permits dated February 22, 1978.²⁰ These documents clearly stated that a "clam shell bucket" operation was to be used to perform the following work:

¹⁹ Mr. Williams prepared a memorandum on October 2, 1979, approximately two months before the hearing, which outlined his investigation.

²⁰ Appellant did not have a copy of the permit application prior to bid.

<u>Area</u>	<u>Description In MPA Permit Application (Exh. 24)</u>	<u>Description In Public Notices</u>
Northwest Branch - Inner Harbor and Pier 7	Dredge sections of the Northwest Channel to restore the Channel project depth to 24 feet below Mean Low Water (MLW). * * *	To perform maintenance dredging in an existing channel and a docking area. Approximately 36,000 cubic yards of silt material to be dredged... (Exh. 18)
	Approximately 36,000 cubic yards of black and gray river silt...	
North Locust Point Marine Terminal	Dredge to suitable navigation depths, the berthing areas (slips) adjacent to the existing terminal piers * * *	To perform maintenance dredging in existing berthing areas. Approxi- mately 59,600 cubic yards of silt material to be dredged... (Exh. 19)
	Approximately 59,600 cubic yards of black and gray river silt material will be dredged...	
South Locust Point Marine Terminal	Dredge sections of the existing turning basin, access channel and berthing area adjacent to the terminal to restore the project depth to 28 feet below Mean Low Water (MLW). Approximately 25,800 cubic yards of black and gray river silt to be dredged...	To perform maintenance dredging in an existing turning basin, access channel and berthing area. Approximately 25,800 cubic yards of silt material to be dredged... (Exh. 20)
Dundalk Marine	Sections of the existing wharfside channel will be dredged to suitable navigation clearances by restoring the project depths to 34 feet below Mean Low Water (MLW). Approximately 40,000	To perform maintenance dredging in a wharfside channel. Approximately 40,000 cubic yards of silt material to be dredged ... (Exh. 21)

cubic yards of black and gray river silt to be dredged...

Clinton Street Marine Terminal

Dredge to suitable navigation depths, the berthing area adjacent to the existing pier.

* * *

Approximately 25,400 cubic yards of black and gray river silt material will be dredged...

To perform maintenance dredging in existing berthing areas. Approximately 25,400 cubic yards of silt material to be dredged...

(Exh. 22)

Atlantic Terminals

Maintenance dredge and widen the existing access channel and berthing area servicing the existing pier.

Approximately 13,000 cubic yards of black and gray river silt material will be dredged to 28 feet below Mean Low Water (MLW) to restore suitable navigational clearances.

To perform maintenance dredging in an existing channel. Approximately 13,000 cubic yards of material to be dredged (Exh. 23)

The Corps of Engineers public notices therefore reinforced Appellant's expectation as to the type of material to be encountered. The MPA application for Corps of Engineers permits and the State Wetlands License issued in September 1978 are also consistent with Appellant's understanding that the work would involve the dredging of relatively soft materials.

B. Additional Contract Provisions

Contract Drawings 4, 6, and 7 of 9, each depict a ten foot width of channel immediately adjacent to pier areas at North Locust Point, Dundalk Marine Terminal and Clinton Street Marine Terminal respectively. These ten foot sections of dredging were in every case referenced to the following notation:

"Contractor shall dredge this area with extreme caution at the direction of the Engineer."

The origin of this note was explained by the MPA's Neal Hasson who stated that:

"To the best of our knowledge, prior dredging contracts in these slip areas were carried to elevation 34 feet to a point 10 feet away from the face of the dock. So, in this area we were concerned of it being original bottom, and if this area was

removed, there could be a possible disturbance to the material under the adjacent structure. Therefore, we advised the contractor to dredge this area with caution." (Tr 125)

Appellant's Mr. Hazelhurst testified that he interpreted these notes to require care in the dredging operation immediately adjacent to a pier so as not to damage it structurally. Mr. Hazelhurst further stated that he had no reason to understand from this note that the material to be encountered would be any different from that expected elsewhere.

C. Encountering of Original River Bottom (Hard Clay)

The dredging process is a relatively inaccurate procedure in that a contractor cannot observe the harbor bottom as the material is being excavated and removed. This factor was recognized by Contract Special Provision SP-18 as follows:

"(a) Overdepth: To cover inaccuracies of the dredging process, material actually removed from within the specified areas to be dredged to a depth of not more than two (2) feet below the required depth will be measured and paid for at the contract price.

"(b) Side Slopes: Material actually removed, within limit approved by the Engineer, to provide for final side slopes not flatter than one vertical on three horizontal, but not in excess of the amount originally lying above this limiting side slope will be estimated and paid for, whether dredged in original position or by dredging space below the pay slope plane at the bottom of the slope for unslope material capable of falling into the cut. In computing the limiting amount of side-slope dredging, an overdepth of two (2) feet measured vertically will be used."

This provision therefore permits a contractor to dig below project depth and obtain payment for such work in order to assure that the minimum contract requirements are satisfied.

On or about November 1, 1978²¹ Appellant encountered hard clay material above project depth²² while dredging between piers 6 and 7 at North Locust Point. Appellant concluded that this was an area that had not previously been dredged to project depth and thus, by letter dated November 14, 1978, requested MPA to issue a directive for performance of this unanticipated work. By letter dated November 20, 1978, MPA's Robert Nelson instructed Appellant that the conditions encountered were foreseeable under the contract and that the work was to be performed at no additional

²¹Dredging along the W. side of Pier 7 occurred initially between October 30, 1978 and November 3, 1978. (Exh. 33) Other areas were worked between November 3 through 14th. Thus we conclude that the clay was encountered in early November.

²²Since maintenance dredging involves the restoration of a harbor bottom to a previously dredged depth, Appellant did not expect to encounter original river material above project depth. Such material was possible in the 2' overdepth area.

cost. Subsequent to this exchange, Appellant encountered additional clay while dredging between piers 5 and 6 and the slip between piers 9 and 10 at North Locust Point. After again informing the MPA of its discovery by letter dated December 7, 1978, Appellant was advised by Respondent's Mr. Nelson in correspondence dated December 12, 1978:

"You have continuously made a distinction between the soft silty dredged materials versus the harder clay material and encountered debris which results from overboard and overdock spillage, or was waterborne. The method of handling all material is your responsibility and all costs related thereto are included in your contract price."

In order to dredge the clay material, Appellant obtained a 6 cy "digging bucket." The major differences between this digging bucket and the rehandling bucket used elsewhere on the project are threefold:

1. The digging bucket has teeth while the rehandling bucket does not.
2. The digging bucket has a rounded nose as compared to the flat bottom of a rehandling bucket.
3. The digging bucket is much heavier.

The advantage of the digging bucket in dredging clay was explained by Appellant's Mr. Hazelhurst:

"The rehandling bucket, in attempting to close and grasp the clay material, would merely slide along the top of it. The bucket would raise up and the edges of the lips would slide along the hard material, and the bucket would close with little or no material contained in the bucket upon closure.

* * *

"The digging bucket, by its weight and configuration and teeth, when it started to close, it tends to dig itself into the material rather than slide along the top of it, thereby enabling you to get a productive load into the bucket." (Tr 330)

The digging bucket was obtained by Appellant on November 24, 1978 under lease from Norfolk Dredging Company and was first utilized on November 28, 1978.

While awaiting the arrival of the digging bucket, Appellant continued to dredge as best it could using the rehandling bucket. This resulted in the need to redredge those areas where clay was heavy, thereby reducing Appellant's productivity.

The encountering of clay material also affected Appellant's unloading efficiency at the Masonville disposal area. The clay arrived in chunky, dense pieces which had to be grasped as a whole. This prevented the crane operator from obtaining full bucketloads of material at all times as he unloaded the barges. Additional difficulty was experienced in the dike itself. The drag scraper could not disperse the heavy clay and a severe buildup occurred at the point of deposit. A water pump was used to help disperse the clay to a point where the drag scraper could spread it over the remainder of the dike. On December 16, 1978 a new shop fabricated drag scraper was substituted for

the original piece of machinery and provided assistance in dispersing the material.

By letter dated February 8, 1979, Appellant requested a final decision of the Port Administrator concerning its claim for an equitable adjustment under General Provision GP-4.04, "Differing Site Conditions." A final decision was issued on March 1, 1979 denying the claim and this timely appeal was entered on March 14, 1979.

C. Quantum

Appellant alleges that it is entitled to an equitable adjustment in the amount of \$46,154.07. In computing this amount, Appellant has compared the actual costs incurred in dredging the hard clay at North Locust Point with the actual costs incurred during "normal" dredging at the Small Boat Pier, Inner Harbor Channel and the South Locust Point Access Channel as follows:

1.	<u>North Locust Point - Hard Clay</u>	
	Total cost incurred =	\$115,456.21
	Total quantity dredged =	14,504 cy
	Unit Cost =	\$7.96/cy
2.	<u>Small Boat Pier, Inner Harbor, South Locust Point</u>	
	Total cost incurred =	\$285,691.92
	Total quantity dredged =	77,512 cy
	Unit Cost =	\$3.686/cy
3.	Additional Cost of dredging clay =	
	$\$7.960 - 3.686 = \$4.274/\text{cy}$	
4.	Quantity of clay above Project	
	Grade ²³ = 8,999 cy	
5.	Equitable Adjustment =	
	$\$4.274/\text{cy} \times 8,999 \text{ cy} =$	\$38,461.73
	20% Overhead and Profit =	7,692.34
		<u>\$46,154.07</u>

Appellant's books and records were made available for audit and Respondent took no exception to its cost data. Respondent contests the 8,999 cy which purports to represent the amount of clay encountered above project grade. This figure was based on soundings taken when the clay was discovered. Respondent contends that the clay was not uniform throughout the volume measured and that the 8,999 cy figure is much too high. The Board finds however that clay (original river bottom) was encountered on a continual basis, above project grade, at North Locust Point. Although the quantity of clay may have been minimal or nonexistent in certain isolated areas, we are concerned here with the cost impact of the clay material on the dredging operation. By spreading the actual costs incurred while dredging clay over the entire 8,999 cy we get a reasonable, average unit cost for the clay removal. If we were somehow able to isolate the costs and

²³ Appellant has not included any clay quantities encountered in the 2' overdepth area.

quantities of the less expensive normal dredging performed above project depth at North Locust Point, the unit cost for clay removal could only increase. Consequently the Board accepts Appellant's quantity estimate of 8,999 cy as a reasonable figure for use in computing any equitable adjustment due here.

The principal remaining argument by Respondent concerning quantum involves a comparison of dredging costs at the Inner Harbor with those Appellant experienced at North Locust Point. As the Board has already found, the Inner Harbor Channel was open and contiguous and provided for more efficient dredging than did the pier areas at North Locust Point and elsewhere.

II. DECISION

A. Entitlement

Contract General Provision GP-4.04(A) provides, in pertinent part, as follows:

"The Contractor shall promptly, and before such conditions are disturbed, notify the Engineer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in this Contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Engineer shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly."

This language establishes two types of differing site conditions which may entitle a contractor to an equitable adjustment. A "type 1" differing site condition is contingent upon the existence of some contractual indication concerning the subsurface or physical conditions to be expected. The indication need not be express, may be proven by inference or implication, and need only be sufficient to impress or lull a reasonable bidder. Foster Construction Co., et al. v. U.S., 193 Ct. Cl. 587, 435 F.2d 873, 881 (1970).

In the instant dispute, the contract was for "Maintenance Dredging." Mr. George L. DeGraff,²⁴ Respondent's own experienced witness, acknowledged that maintenance dredging customarily involves the restoration of a channel to a previously established depth. Maintenance dredging is necessary due to the buildup of relatively soft materials such as sand, mud and silt which wash into the harbor from nearby streams. This is distinguished from capital dredging which is performed to deepen, widen

²⁴George L. DeGraff has approximately 44 years experience in dredging operations. His work for Arundel Corporation and Great Lakes Dredging Dock Corp. involved a number of contracts in and around the Port of Baltimore.

or establish a channel and involves the removal of original river bottom material such as hard clay. Consequently, the description of this contract implied that the material to be encountered above project grade would not include original river bottom and would generally be limited to deposits caused by natural siltation.

Notwithstanding the generally accepted meaning of "maintenance dredging," Respondent contends that the contract provided a special definition thereof which supersedes trade usage. This definition is said to be found in Contract Special Provision SP-11 "Materials To Be Dredged" which states that "[t]he materials to be dredged under this Contract consist of the original river bottom and deposits from natural siltation." The Board finds however that this language is insufficient to alter the generally accepted meaning of maintenance dredging because it omits to provide that the original river bottom could be encountered above project grade. Since Special Provision SP-18 permits measurement and payment for dredged material taken to a depth of two feet below project depth, a contractor would expect to incur original river bottom in this area. Thus, the contract as a whole, reasonably indicated that natural siltation materials would be encountered above project grade and original river bottom found in the two foot overdepth area.

The Board is convinced that Appellant did encounter substantial quantities of original river bottom above project depth. This material was much harder and more difficult to excavate and disperse than the anticipated mud, silt and sand and therefore necessitated obtaining and using additional equipment. The location of the original river bottom was thus materially different from that indicated in the contract.

The final issue to be resolved is whether Appellant had actual or constructive notice of the location of the original river bottom prior to bid. Respondent contends that an adequate site investigation including careful and precise probing would have disclosed the existence of the original river bottom above perfect grade and such knowledge should therefore be imputed to Appellant. It is well settled however that a contractor need not perform independent tests to confirm subsurface representations appearing in the contract even where a site investigation clause mandates a visit to the job area and an examination of the location and nature of the proposed work. Raymond International, Inc. v. Baltimore County, Inc., 412 A.2d 1296 (Md. Ct. of Spec. App., 1980); U. S. v. Atlantic Dredging Co., 253 U.S. 1, 40 S. Ct. 423, 64 L.Ed 735 (1920); Morrison-Knudsen Co., Inc. v. U. S., 170 Ct. Cl. 712, 345 F.2d 535 (1965); Farnsworth & Chambers Co., Inc. v. U. S., 171 Ct. Cl. 30, 346 F.2d 577 (1965). The principle inherent in these findings was expressed by the U. S. Court of Claims in Foster Construction C.A., et al. v. U. S., 193 Ct. Cl. 587, 435 F.2d 873 (1970):

"The procurement policy expressed in the standard mandatory changed conditions [differing site conditions] clause requires that the promise in the changed conditions clause not be frustrated by an expansive concept of the duty of bidders to investigate the site. That duty, if not carefully limited, could force bidders to rely on their own investigations, lessen their reliance on logs in the contract and reintroduce the practice sought to be eradicated — the computation of bids on the basis of the bidders' own investigations, with contingency elements often substituting for investigation. The changed conditions clause makes it clear that bidders are to compute their bids not upon the basis of their own preaward surveys or investigations, but upon the basis of what is indicated and shown in the specifications and drawings."

Here although not contractually obligated to confirm the subsurface indications set forth in the contract, Appellant nevertheless performed some random pre-bid probings at a number of priority areas. These probings indicated that mud and silt were to be encountered. Such findings were consistent with what is to be expected in a maintenance dredging project, as well as the permit applications made by the MPA to the Army Corps of Engineers. Appellant thus may not be charged with actual or constructive knowledge of the original river bottom material at elevations above project depth and the Board therefore finds that the encountering of such material constituted a differing site condition.

As an alternate defense Respondent contends that a claim for differing site conditions is barred by Contract Special Provision SP-7(e) which provides as follows:

"The bidder or Contractor herein agrees that he will not at any time after the execution of the Contract, raise the question of condition changes or have any claim against the Administration based upon a change in conditions, insufficient data, and/or incorrectly assumed conditions, or claim any misunderstanding with regard to the nature or amount of work to be done under this Contract, or conditions which surround a proper prosecution of it; he further agrees that in accepting conditions as he may find them, both before and after execution of the contract, he will assume all risk resulting from any difference found to exist or occur during the progress of the work."

Recognizing a conflict between Special Provision SP-7(e) and General Provision GP-4.04 "Differing Site Conditions," the MPA contends that the Special Provisions are entitled to precedence as set forth under Contract Special Provision SP-22 which states that:

"In any and all cases of conflict between the 'General Provisions and Supplemental General Provisions' and these 'Special Provisions, these 'Special Provisions' shall govern, but only to the extent of such conflict."

If Respondent's contention is correct, the "Differing Site Conditions" clause is rendered meaningless and unenforceable.

It is well settled that "...[t]he primary object of the construction of a contract is to give effect to the intention of the parties, greater regard being given to such intent, when clearly revealed, than to any particular words used in expression thereof." Williston On Contracts, 3rd Ed., § 618. Here the record discloses that neither party intended Special Provision SP-7(e) to prohibit equitable adjustments or the submittal of claims under the "Differing Site Conditions" clause. Appellant submitted at least two claims under this clause during the performance of contract work (Docket No. 1000, Rule 4 Tab 4h; Docket No. 1006, Rule 4 Tab 4e). In each instance the Maryland Port Administrator evaluated the claims under the "Differing Site Conditions" clause and later denied them based upon an analysis on the merits (Docket No. 1000, Rule 4 Tab 2; Docket No. 1006, Rule 4 Tab 2). The inapplicability of the "Differing Site Conditions" clause was never mentioned by the Administrator in reaching his decisions. Under Docket No. 1006, the Maryland Port Administrator even agreed to pay the additional costs of dredging long piles which he believed to constitute a differing site condition (Docket No. 1006, Rule 4 Tab 2, page 4). It is obvious therefore that the parties, prior to the onset of litigation, attached some meaning to Special Provision SP-7(e) that was not

inconsistent with the "Differing Site Conditions" clause.

Contract Special Provision SP-7(e) is part of a contract clause entitled "Existing Conditions" which reads as follows:

"SP-7. EXISTING CONDITIONS

(a) In order that they may be fully conversant with all conditions attendant upon the location to be dredged, bidders are expected to make extensive examinations of the locations to be dredged, together with the territory contiguous thereto; they should also make such inquiries concerning the locations as may be necessary to acquaint themselves with actual circumstances as to prevailing or changing conditions, in order that there may be no misunderstanding concerning present and probable obstacles and obstructions to their method of conducting dredging operations.

(b) It must be distinctly understood that conditions which the bidder might find to exist at the location, at the time of any examination, shall not be considered as permanent, nor shall conditions found to be existent at the time of any examination be considered as binding the Administration in any way toward providing continuance of them, or to creating circumstances which will provide identical conditions.

(c) It must be remembered that facilities for the proper conduct of navigation must not be unduly interfered with, and channels and fairways which might be empty of shipping at the time of examinations by the bidder, may be occupied by vessels of various sizes moored at, in them or in their vicinity. The Administration will exert every influence possible toward providing conditions favorable to proper progress of dredging operations, by soliciting the cooperation of owners or lessees of property adjacent to the locations to be dredged, in requesting the moving or removal of vessels or other floating equipment which may form obstructions to such operations. However, the Administration does not guarantee that such cooperation will be extended, especially at the time which would be most convenient to the Contractor.

(d) The Administration will not undertake to keep the existing channel free from vessels or other obstructions. The Contractor will be required to conduct the work in such manner as to obstruct navigation as little as possible, and in case the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable and safe passage. Upon the completion of the work, the Contractor shall promptly remove his plant, including ranges, buoys, piles and other marks placed by him under the Contract in navigable waters or on shore.

(e) The bidder or Contractor herein agrees that he will not at

any time after the execution of the Contract, raise the question of condition changes or have any claim against the Administration based upon a change in conditions, insufficient data, and/or incorrectly assumed conditions, or claim any misunderstanding with regard to the nature or amount of work to be done under this Contract, or conditions which surround a proper prosecution of it; he further agrees that in accepting conditions as he may find them, both before and after execution of the contract, he will assume all risk resulting from any difference found to exist or occur during the progress of the work."

The Board concludes from its reading of this clause that it applies only to physical conditions which are readily ascertainable from a reasonable investigation of the site and, as such, does not conflict with the "Differing Site Conditions" clause. The Board thus determines that Appellant's claim under the "Differing Site Conditions" clause is not barred by the language of Special Provision SP-7(e).

B. Quantum

The principal area of dispute concerns the unit cost of normal dredging, i.e., work not affected by original river bottom or unanticipated debris. Appellant has taken the combined unit cost of the Small Boat Pier, the Inner Harbor Channel and the South Locust Point Access Channel and used this as demonstrative of the actual cost of normal dredging. Respondent has prepared a counterstatement of costs which would exclude the Inner Harbor Channel from any comparison to the North Locust Point dredging.

For reasons already discussed, the Inner Harbor dredging was much less expensive than work in pier areas. Even if no differing site condition were encountered at North Locust Point, the cost of such dredging would have exceeded that incurred at the Inner Harbor. Consequently, it is considered inappropriate to use the actual unit costs incurred at the Inner Harbor Channel in computing the additional costs of dredging North Locust Point.

Although not raised by Respondent, the record shows the Small Boat Pier to be substantially different from the North Locust Point piers. The Small Boat Pier dredging was to a depth of only ten (10) feet below Mean Low Water (MLW). Conversely the North Locust Point dredging was to a depth of thirty-four (34) feet below mlw.²⁵ The latter location would require the bucket dredge to travel an additional forty-eight (48) feet on each cycle and thus the operation necessarily would be less efficient and more expensive.

While the South Locust Point Access Channel involved work of a nature more comparable to North Locust Point, there are some differences between these respective areas. For example, the access channel involved depths of twenty-eight (28) feet and was dredged in mid-winter. North Locust Point, on the other hand, required deeper dredging and was performed in more favorable weather.

²⁵One slip at North Locust Point, in fact, was to be dredged to thirty-nine (39) feet below Mean Low Water.

The area most analogous to North Locust Point and most representative of the "normal" costs of dredging at that location is the Dundalk Marine Terminal. Both areas involved similar quantities of work, the dredging of pier areas, identical project depths and were performed during similar weather periods (See Appendix 1). The Dundalk Marine Terminal was considered normal dredging by Appellant (Exh. 40). For these reasons the Board finds the actual costs involved in dredging, towing and unloading the Dundalk Marine Terminal to be representative of what reasonably would have occurred at North Locust Point absent the differing site condition. Appellant is therefore entitled to the following equitable adjustment:

1. \$7.96 (Actual Unit Cost at N. Locust Point) -
 \$4.31 (Actual Unit Cost at Dundalk Marine Terminal) =
 \$3.65/cy (increased unit cost)
2. \$3.65/cy x 8,999 cy (affected dredging) =
 \$32,846.35 (increased cost)
3. Overhead and Profit at 20% = \$6,569.27
4. Total = \$39,415.62

Appellant also requests interest on the above amount. Appellant's quantum claim was first submitted in detailed form on August 6, 1979. Under the same reasoning as applied earlier,²⁶ interest should run from November 26, 1979 and is computed as follows:

Predecision interest at 6% from Nov. 26, 1979 through June 30, 1980 217 days at \$6.46/day =	\$1,401.82
Predecision interest at 10% from July 1, 1980 to August 15, 1980 46 days at \$10.77/day =	\$495.42

The total equitable adjustment should therefore be \$41,312.86 with interest to run at the legal rate of 10% per annum from the date of this decision until payment. Appellant's appeal is sustained in the amount of \$41,312.86.

MDOT 1006

I. FINDINGS OF FACT

A. Entitlement

On October 23, 1978, Appellant commenced dredging along pier 4-5 at North Locust Point and encountered certain debris described in its job records as "cable, strap material, logs, planks, etc." (Exh. 33) Appellant continued to find these and other

²⁶Although Contract General Provision GP-4.04 "Differing Site Conditions" is the remedy granting clause involved here, we believe that the same conditions precedent to payment as exist under the "Changes" clause apply here.

materials, such as pilings, throughout the North Locust Point Marine Terminal piers. This debris appeared to be concentrated in the areas immediately adjacent to piers. (Exh. 33, 11/7/78 entry)

The North Locust Point Marine Terminal (and South Locust Point as well) receives and loads general ship cargo, including containerized and "break-bulk" varieties. The latter type cargo is normally handled on pallets or is bound together with bindings and straps. Much of the debris encountered while dredging in pier areas resulted from various shipping materials having fallen into the harbor during the loading and unloading of ships.

On October 30 and November 3, 1978 the parties met to discuss the disposal of such debris being encountered at North Locust Point. During these meetings the MPA requested that certain oversize materials be placed at an alternate disposal site. This request was made notwithstanding the following Contract Special Provisions:

"SP-8(c)

The Contractor shall remove and dispose of all the dredged materials, including any debris or other foreign matter not specifically classified as river bottom. (See also Para. SP-11, 'Materials To Be Dredged.')

"SP-16 Disposal Site

The dredged materials shall be deposited on an upland site located on property to be acquired by the Department of Transportation at Masonville on the southern shore of the Middle Branch of the Patapsco River, Baltimore City, Maryland. The designated disposal area is shown on Drawing No. 9 of 9."

The MPA has consistently argued that Appellant should have anticipated the debris encountered with the exception of long²⁷ wood piling. For this reason the MPA's Mr. Nelson authorized the establishment of an alternate disposal site and agreed to pay the additional costs incurred by Appellant in dredging, unloading and rehandling such pilings. Mr. Nelson further testified that the MPA was not opposed to the placement of additional debris at the alternate site, but such actions would be solely at the Appellant's election.

While the record supports Mr. Nelson's statements concerning the exception made for the additional cost of dredging and handling wood pilings, it is also apparent that the MPA decided that all debris be separated from ordinary mud and silt to the

²⁷ Appellant was never told exactly what a long pile was. At the hearing Mr. Nelson testified that it was any wood pile other than a cutoff.

extent possible. The Board's finding in this regard is supported by the agreement²⁸ reached on November 3, 1978 to truck mixed debris to the east corner of the Masonville site for disposal in an auxiliary internal dike. It is not reasonable to conclude that Appellant would volunteer to undertake such a costly procedure not specifically required by the contract, without a request or directive by the MPA.

The handling of debris substantially impacted Appellant's unloading operation. As barges arrived at Masonville for unloading, Appellant would have to segregate the wood piling and other oversize material from the mud and silt and place it on the outside slope of the dike. This material would later be loaded onto barges and towed to the alternate disposal site located approximately 150 yards north of Masonville. At the alternate site, Appellant was obliged to furnish an additional truck crane for unloading the barges and stockpiling the debris.

With regard to the debris which could not be separated from the matrix of mud and silt, Appellant altered the agreed plan to dispose of it by trucking it to the east corner of the Masonville dike. Instead Appellant considered it more economical to place the debris in the principal portion of the dike and then use its shop fabricated drag scraper²⁹ to transport the material to the west side of the dike where it would be in part segregated from the ordinary mud and silt. In this procedure however the debris from time to time caused a backup at the deposit area necessitating a portion thereof to be removed and replaced on the outside slope of the dike for towing to the alternate site. This measure further required that such debris be cleaned, by hosing with clear water, in order to avoid a runoff of silt and mud into the harbor in violation of the State water quality certification.

The efficiency of the dredging operation was also affected by the debris. When such material was encountered, the clam shell bucket could not close completely thereby precluding Appellant from getting a full five (5) cubic yard load. Often only a single piece of debris was raised to the surface. The dredging of large pieces of debris such as steel beams and wood pilings further required the crane operator to exercise care in its placement onto the barge in order to avoid puncturing its hull.

By letter dated November 6, 1978, Appellant gave notice to the MPA's Mr. Nelson of two claims arising out of these circumstances. Initially, Appellant alleged that the encountering of debris constituted a differing site condition within the meaning of Contract General Provision GP-4.04, "Differing Site Conditions." Second, it was alleged that the requirement to rehandle certain oversize debris and place it in an alternate disposal area constituted a change to the contract under General Provision GP-4.05, "Changes."

Subsequent to Appellant's claim letter, similar debris was encountered both at the South Locust Point United Brands Pier and at the Clinton Street Marine

²⁸This agreement is detailed in a November 6, 1978 memo to file written by Appellant's Mr. Hazelhurst who attended the November 3, 1978 meeting. Further the agreement is set forth in a November 6, 1978 letter to Mr. Nelson who raised no immediate objection or challenge to Appellant's understanding.

²⁹This was the second drag scraper used on the job and was designed and built by Appellant to disperse heavy clay and debris.

Terminal. The difficulties experienced in dredging and unloading debris at Clinton Street however are not involved in this dispute.

By letter dated August 14, 1979, Appellant requested a final decision of the Port Administrator concerning the aforesaid claims. On August 22, 1979 the Port Administrator issued a decision which recognized a differing site condition with respect to the encountering of long piles but denied Appellant's claim with respect to all other debris. This timely appeal was entered on September 4, 1979.

B. Quantum

Appellant claims an equitable adjustment in the amount of \$121,775.82 based upon a comparison of the actual costs incurred while dredging in so-called normal areas as opposed to those locations where "unanticipated" debris was encountered. The request for equitable adjustment is computed as follows:

1. Normal Dredging Cost
Actual cost incurred at Small Boat
Pier, Inner Harbor, Access Channel
to United Brands Pier \$285,691.92

Total Quantity = 77,512 cy
Avg. Unit Cost = \$285,691.92 77,512 cy = \$3.686/cy
2. Dredging Cost - Unanticipated Debris

Actual cost incurred at North Locust
Point Piers³⁰ and United Brands Pier = \$283,788.76
Rehandling Cost 26,527.85
\$310,316.61

Total Quantity = 56,661 cy
Avg. Unit Cost = \$310,316.61 : 56,661 cy = \$5.477/cy
3. Equitable Adjustment

\$5.477 - 3.686 = \$1.791/cy x 56,661 cy = \$101,479.85
20% Overhead and Profit = 20,295.97
Total \$121,775.82

These cost figures were extracted from Appellant's books and records. Respondent has audited these accounts, has raised no objection to their accuracy and thus such costs are accordingly accepted by the Board as undisputed. The quantity figures in the normal dredging areas represent the final pay quantities agreed to by the parties. The quantity of unanticipated debris dredging is computed by subtracting the volume of clay encountered from the final pay quantity for each area.

Respondent's major challenge to Appellant's computation concerns the inclusion of the Inner Harbor Channel in the estimate of normal dredging costs. The

³⁰This does not include cost of dredging clay at this location.

latter dredging is said to be less expensive than pier dredging for the reasons discussed and ruled upon earlier in this decision. Respondent would therefore include only the Small Boat Pier and the South Locust Point Access Channel in the costs of normal dredging.

II. DECISION

A. Entitlement

The Board has determined that maintenance dredging requires the restoration of a navigable waterway to a previously dredged depth. In restoring channel depth a contractor must remove all materials which have accumulated on the river bottom. Since debris and trash may accumulate on a harbor bottom over a period of years, especially at pier areas, maintenance dredging may involve the encountering of such materials. The term "maintenance dredging" thus does not indicate, either expressly or impliedly, the presence or absence of debris within the dredging limits.

Similarly Special Provision SP-21(a) provides that "[t]here will be no measurement of the removal and disposal of sunken or buried wrecks, snags, stumps, concrete, metal, piles, timber, debris, etc., which are located within the dredging limits." This clause necessarily pertains solely to the measurement of dredged materials for payment purposes and does not represent or otherwise indicate that such debris actually will be encountered.

A "type 1" differing site condition is dependent upon a contractual indication as to the existence of some latent or subsurface condition. Where, as here, the contract contains no such indication or representation as to the presence or absence of subsurface debris, a type 1 differing site condition may not be said to exist. S.T.G. Construction Co., Inc. v. U. S. 157 Ct. Cl. 409 (1962); Ragonese, et al. v. U. S., 128 Ct. Cl. 156, 120 F. Supp. 768 (1954).

Contract General Provision GP-4.04 also provides for a second type of differing site condition (hereafter referred to as a "type 2" differing site condition) requiring the encountering of a condition which is unknown, unusual and differs materially from that ordinarily encountered in the performance of the type of work contemplated by the parties. Appellant's burden of proof under this clause is best described as follows:

"Each decision under this clause is dependent upon the facts and circumstances of the particular case. Where defendant [Government] makes no representations about subsurface conditions, and the bidder is required to visit the site and determine for himself the 'actual conditions,' the bidder is required to make such inspection as is sufficient to reveal the conditions. If the facts show that the subsoil conditions encountered could not have been reasonably anticipated or foreseen from an adequate examination of the site, plaintiff [contractor] is entitled to an equitable adjustment..." S.T.G. v. U. S., supra.

The Board finds that an adequate site investigation would have apprised Appellant that the North Locust Point Terminal and United Brands Pier were general cargo piers handling substantial quantities of break-bulk cargo. The loading and

unloading of cargo of this nature necessitates the handling of loose materials and the accumulation of debris such as pallets, cable and strap material. A contractor should have noted this type of operation and anticipated debris on the harbor bottom, adjacent to the piers. The Board finds the encountering of such materials to be neither unknown nor unusual and thus cannot grant an equitable adjustment for a differing site condition.

Throughout the controversy however, the parties have treated the encountering of long piles as an exception. The Board concurs in this respect but finds that any pilings, regardless of size, would constitute a differing site condition. Such materials were neither expected debris from terminal operations nor products of storm runoff and even precise probings would not have disclosed their existence in large quantities.

As to Appellant's claim under the "Changes" clause for the increased cost of rehandling the debris, the Board finds entitlement. It is quite clear that the contract provided for a single disposal area at Masonville with no requirement to segregate any encountered debris from the matrix of normal mud and silt. Respondent's directive to segregate the debris and, in fact, place the "...long piles and other oversized materials, such as steel and pipe..." in an alternate disposal area constituted constructive change to the contract under General Provision GP-4.05.

B. Quantum

Appellant again seeks to compare the actual costs incurred at North Locust Point and the United Brands Pier with its normal dredging costs. For reasons discussed under Docket No. 1000, the actual costs incurred at the Dundalk Marine Terminal are accepted as the reasonable costs of dredging a pier area devoid of unanticipated debris. This provides a unit price of \$4.31 per cubic yard as the cost of dredging at North Locust Point and United Brands Pier absent the encountering of a differing site condition.

The actual costs incurred at North Locust Point and the United Brands Pier due to the encountering of pilings and other oversized materials is incapable of precise computation. As is evident from the record, pilings were encountered in the same areas where cargo related debris was discovered. Hence, the actual costs rendered for North Locust Point and the United Brands Pier dredging reflect inefficiencies which are attributable in part to foreseeable debris and in part resulting from the differing site condition.

Complicating the Board's computation problems is Respondent's assertion that Appellant dredged areas which were not affected by debris at both North Locust Point and at the United Brands Pier. However a review of the appropriate entries in Appellant's "Detailed Captain's Report" reveals only isolated areas where dredging was free of debris.

Notwithstanding these considerations, there is a reasonable basis for computing the equitable adjustment. In ascertaining the actual costs incurred due solely to the differing site, the Board reviewed the "Detailed Captain's Report" kept by Appellant, and concludes that 45% of the quantities dredged were affected by piles and other oversized, non-cargo related materials, 45% of the work was affected solely by cargo related debris, and 10% was unaffected.

In accordance with this premise the actual additional costs of dredging unanticipated debris at North Locust Point and United Brands is determined as follows:

1.	<u>Unit Cost - All Debris</u>	<u>Actual Cost</u>	<u>Quantity</u>
	North Locust Point	\$202,913.39	42,241 cy
	United Brands Pier	80,875.37	14,420 cy
		<u>\$283,788.76</u>	<u>56,661 cy</u>
	Unit Cost = \$283,788.76 : 56,661 = \$5.01/cy		
2.	<u>Additional Unit Cost Due to All Debris</u>		
	\$5.01 (Unit Cost - Debris) - \$4.31 (Unit Cost - Normal) = \$0.70/cy		
3.	<u>Total Additional Cost Due to all Debris</u>		
	\$0.70/cy x 56,661 cy = \$39,662.70		
4.	<u>Additional Cost Due to Differing Site Condition</u>		
	45% x \$39,662.70 = \$17,848.22		
5.	<u>Equitable Adjustment</u>		
	Additional Cost =	\$17,848.22	
	Overhead and Profit at 20% =	<u>3,569.64</u>	
	Total =	<u>\$21,417.86</u>	

Turning now to the issue of rehandling costs, the evidence of record indicates that Appellant recorded \$26,527.85 in actual costs incurred. Respondent maintains that only 50% of this total should be allowed since Appellant rehandled a substantial portion of the materials for its own convenience. The record is devoid of any evidence however which supports the 50% measurement.

While it is evident that Appellant did rehandle some smaller debris when backups occurred in the Masonville dike, the Board's observation of the alternate site and the pictures introduced by Appellant during the hearing establish that the bulk of the rehandling costs involved pilings and other oversized materials. Further the substantial expense of an additional crane at the unloading site was made necessary by the rehandling of piles and not any incidental rehandling performed for Appellant's convenience. In the absence of evidence sufficient to accurately establish the percentage of rehandling done in accordance with the MPA directive, the Board finds that at least 85% of the rehandling involved piles and other oversized material. Appellant is thus due an equitable adjustment as follows:

1.	<u>Rehandling Cost</u>	
	85% x \$26,527.85 =	\$22,548.67
2.	Overhead and Profit at 20% =	<u>4,509.73</u>
	Total	<u>\$27,058.40</u>

As discussed previously, predecision interest is assessable beginning on November 26, 1979. The total equitable adjustment due Appellant is as follows:

\$21,417.86	Differing Site Condition
<u>27,058.40</u>	Change
\$48,476.26	Total additional costs (plus overhead and profit)

Predecision interest at 6% from
Nov. 26, 1979 through June 30, 1980
217 days at \$7.95/day = \$1,725.15

Predecision interest at 10% from
July 1, 1980 to August 15, 1980
46 days at \$13.24/day = 609.04

Total Equitable Adjustment \$50,810.45

For the reasons set forth above, Appellant's appeal is sustained, in part, in the amount of \$50,810.45 with interest accruing at 10% from the date of this decision until paid.

APPENDIX 1

Priority Area	Dates Worked ³¹	Pay Quantity ³²	Expenditures Dredge & Tow	Expenditures Unload	Dredge & Tow Cost/Cy	Unloading Cost/Cy	Total Cy
1-b Small Boat Pier	Sept. 18-22, 1978	5,474 cy	\$ 15,392.94 ³³	\$ 7,519.39 ³³	\$2.81	\$1.37	\$4.18
1-a Inner Harbor Channel	Sept. 23 - Oct. 23, 1978	48,244 cy	\$ 89,397.93 ³³	\$ 57,672.14 ³³	\$1.85	\$1.20	\$3.05
North Locust Point Marine Terminal Priority (2a - 2e)	Oct. 23 - Dec. 7, 1978 Dec. 29 - Jan. 11, 1979	56,745 cy	\$184,112.52 ³⁴	\$134,257.08 ³⁴	\$3.24	\$2.37	\$5.61
South Locust Point Marine Terminal United Brands Access Channel Priority 2-b	Dec. 7 - Dec. 13, 1978 Dec. 27, 1978 Jan. 11, 1979 - Jan. 27, 1979	23,794 cy	\$ 64,134.92 ³³	\$ 51,574.60 ³³	\$2.70	\$2.17	\$4.87
South Locust Point Marine Terminal United Brands Pier Priority 2-a	Dec. 14-28, 1978	14,420 cy	\$ 46,417.76 ³⁵	\$ 34,457.61 ³⁵	\$3.22	\$2.39	\$5.61
Dundalk Marine Terminal Priority 3	Jan. 29 - Mar. 6, 1979 Mar. 14, 1979	47,212 cy	\$118,327.06 ³⁶	\$ 85,051.20 ³⁶	\$2.51	\$1.80	\$4.31
Clinton Street Marine Terminal Priority 4	Mar. 7 - Mar. 31, 1979	28,111 cy 224,000 cy	\$ 68,974.45 ³⁶ \$586,757.58	\$ 57,663.49 ³⁶ \$428,195.51	\$2.45	\$2.05	\$4.50
			\$1,014,953.09				

³¹ See Exhibit 34.

³² See Exhibit 30.

³³ See Exhibit 38-A.

³⁴ See Exhibits 38-A and 39.

³⁵ See Exhibit 39.

³⁶ See Exhibit 11.

