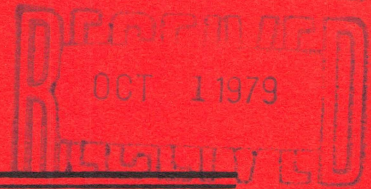


221VA1128

SUPREME COURT OF VIRGINIA



RICHMOND, VIRGINIA

IN THE
Supreme Court of Virginia
AT RICHMOND

RECORD NO. 790435

THOMAS P. HARKINS, INC., et al.,

.....Appellants

v.

REYNOLDS ASSOCIATES, et al.,

.....Appellees

JOINT APPENDIX

Randolph W. Church, Jr.
Grady K. Carlson
McCANDLISH, LILLARD, BAUKNIGHT,
CHURCH & BEST
4069 Chain Bridge Road
Fairfax, Virginia 22030

Counsel for Appellants

Haynie S. Trotter
BOOTHE, PRICHARD & DUDLEY
4103 Chain Bridge Road
Fairfax, Virginia 22030

Louis Pohoryles
POHORYLES, GOLDBERG,
STATON & HARRIS
1801 K Street, N.W.
Washington, D.C. 20006

Counsel for Appellees

TABLE OF CONTENTS

APPENDIX
PAGES

1. AMENDED MOTION FOR JUDGMENT WITH ATTACHMENTS FILED SEPTEMBER 25, 1978	1-14
2. ANSWER AND GROUNDS OF DEFENSE FILED BY DEFENDANT HARKINS ON OCTOBER 31, 1977	15-16
3. ANSWER AND GROUNDS OF DEFENSE FILED BY DEFENDANT MARYLAND CASUALTY ON OCTOBER 31, 1977	17
4. JUDGMENT ORDER ENTERED DECEMBER 22, 1978	18-21
5. MOTION TO SET ASIDE VERDICT OF THE JURY AND TO THERE- AFTER ENTER JUDGMENT FOR THE DEFENDANTS OR FOR A NEW TRIAL OR IN THE ALTERNATIVE TO PUT THE PLAINTIFFS ON TERMS FILED DECEMBER 15, 1978	22
6. ASSIGNMENTS OF ERROR.....	22a-22b
7. EXCERPTS FROM TESTIMONY OF EDWARD HOLLAND HEARD ON NOVEMBER 16, 1978	23-33
8. EXCERPTS FROM TESTIMONY OF ALEXANDER SAKENOVSKY HEARD ON NOVEMBER 20, 1978	34-44
9. EXCERPTS FROM TESTIMONY OF LEO PAUL GAUTHIER HEARD ON NOVEMBER 21, 1978	45-68
10. EXCERPTS FROM TESTIMONY OF DONALD E. DIXON HEARD ON NOVEMBER 21, 1978	69-77
11. EXCERPTS FROM TESTIMONY OF DOUGLAS SAMUEL KINLOCH HEARD ON NOVEMBER 21, 1978	78-80
12. EXCERPTS FROM TRANSCRIPT OF HEARING HEARD ON NOVEMBER 22, 1978	81-86
13. EXCERPTS FROM TRANSCRIPT OF HEARING HEARD ON NOVEMBER 22, 1978	87
14. EXCERPTS FROM TESTIMONY OF JOHN J. FOLEY HEARD ON NOVEMBER 22, 1978	88-92
15. EXCERPTS FROM TRANSCRIPT OF HEARING HEARD ON NOVEMBER 22, 1978	93-100
16. EXCERPTS FROM TESTIMONY OF ANTHONY VALLANCE HEARD ON NOVEMBER 29, 1978	101-241
17. DEFENDANTS' MOTION TO STRIKE THE EVIDENCE AT THE CONCLUSION OF PLAINTIFFS' CASE-IN-CHIEF HEARD ON NOVEMBER 30, 1978	242

18. EXCERPTS FROM TRANSCRIPT OF HEARING HEARD ON NOVEMBER 30, 1978	243-246
19. DEFENDANT' MOTION TO STRIKE THE PLAINTIFFS' EVIDENCE AT THE CONCLUSION OF DEFENDANTS' CASE-IN-CHIEF HEARD ON DECEMBER 5, 1978	247-248
20. DEFENDANTS' MOTION TO STRIKE THE PLAINTIFFS' EVIDENCE AT THE CONCLUSION OF PLAINTIFFS' CASE-IN-REBUTTAL HEARD DECEMBER 6, 1978	249-250
21. EXCERPTS FROM TRANSCRIPT OF HEARING HEARD ON DECEMBER 22, 1978 (TRIAL COURTS RULING ON THE MOTION TO SET ASIDE THE VERDICT)	251-252
22. PLAINTIFFS' EXHIBIT NUMBER 2-A (Contract)	253-261
23. PLAINTIFFS' EXHIBIT NUMBER 52	262-287

FILED

VIRGINIA:

SEP 25 1978

IN THE CIRCUIT COURT OF FAIRFAX COUNTY

JAMES A. DUFFY, JR.

Clerk of the Circuit Court
of Fairfax County, Va.

REYNOLDS ASSOCIATES, et al.,

Plaintiffs

vs.

AT LAW NUMBER 39787

THOMAS P. HARKINS, INC., et al.,

Defendants.

AMENDED MOTION FOR JUDGMENT

Plaintiffs hereby move the Court for judgment against the Defendants upon the following cause of action:

1. Plaintiff, Reynolds Associates, is a limited partnership organized under the laws of the State of Virginia, having its principal place of business in the State of Virginia. Plaintiffs, Benjamin B. Weitz, Herbert Cohen, Maury Young, Joel S. Kaufmann, and Donald E. Hudson are general partners of Reynolds Associates. Defendant, Bucher-Meyers & Associates, Inc. ("Bucher-Meyers"), a Maryland corporation, with its principal place of business located at 8777 1st Avenue, Silver Spring, Maryland, has no registered agent in Virginia. The cause of action against this Defendant arises out of some or all of the grounds enumerated in §8-81.2 of the Code of Virginia.

2. Plaintiffs and defendant, Bucher-Meyers, entered into a certain owner-architect agreement dated January 23, 1973 (Exhibit "A" hereto) wherein Defendant Bucher-Meyers agreed to provide architectural engineering and consultant services for the construction of a 209 unit high-rise apartment project

located in Alexandria, Virginia, known as Cameron Overlook. Such services were to include the design, plans, and specifications, supervision of work, and inspections of the project during construction.

3. Plaintiffs and Defendant Thomas P. Harkins, Inc. ("Harkins") entered into a contract dated March 29, 1973 (Exhibit "B" hereto) for the construction of the apartment building designed by Defendant Bucher-Meyers. In accordance with the terms of the contract, Defendant Harkins, as principal, and Defendant Maryland Casualty Company, as surety, jointly and severally, executed a performance bond dated March 29, 1973, (Exhibit "C" hereto) in the penal sum of \$1,887,185.00 for the benefit of Plaintiffs, conditioned upon Defendant's fully indemnifying and saving Plaintiffs harmless from all costs and damages which Plaintiffs may suffer by reason of Defendant Harkins' failure to well and truly perform all undertakings, covenants, terms, conditions, and agreements of the construction contract.

4. In addition to compliance with plans and specifications prepared by Defendant Bucher-Meyers, Defendant Harkins was further required to construct the building in accordance with construction standards prescribed by the United States Department of Housing and Urban Development, manufacturers and supplier specifications, good construction practices and local applicable building codes (hereinafter referred to as "Construction Standards"). Construction of Cameron Overlook commenced in April of 1973 and was substantially completed in June of 1975.

5. During the course of construction and after substantial completion, severe deficiencies in the building were identified resulting from Defendant Harkins' failure to perform its obligations pursuant to the terms of the Bond, and Defendant Bucher-Meyers' negligence in preparing plans and specifications, and supervising the work as hereinafter set forth.

COUNT I

6. Defendant Harkins failed to perform its obligations under the bond in that it did not complete certain requirements of the work in accordance with the plans and specifications and construction standards for the project, including, but not limited to, deficiencies in the heating, ventilating, and air-conditioning system, the electrical system, the masonry work, windows, roof, site-work, concrete columns, laundry rooms, plumbing, finishes, waste compactor, and cabinets.

7. As a result of Defendant Harkins' failure to perform its obligation, Plaintiffs suffered and incurred and will suffer and incur in the future costs, damages, and expenses, for redesign of the building and repair of defective conditions, loss of rent occasioned by infiltration of water into the building, rendering certain apartments uninhabitable and unrentable, which condition directly resulted from such defective construction, all to Plaintiffs' damage in the amount of \$1,450,000.

COUNT II

8. Defendant Bucher-Meyers was negligent in its design

of the building in that the roof, window, concrete and masonry design allowed infiltration of water into the building.

9. Defendant Bucher-Meyers failed to properly supervise the work and permitted the deviations from plans and specifications and from construction standards by Defendant Harkins.

10. Defendant Bucher-Meyers was negligent in that it designed the building and located it with respect to the site without adequately ascertaining subsoil conditions. Defendant Bucher-Meyers' failure to make adequate test borings to determine subsoil conditions resulted in the need for a subsequent redesign of the building, increasing the costs of completing the building and delaying its completion.

11. Bucher-Meyers' negligent design and supervision caused and permitted the damages to Plaintiffs as set forth in Count I hereof.

WHEREFORE, Plaintiffs move the Court for judgement against the Defendants, and each of them jointly and severally, in the sum of \$1,450,000 plus interest and costs of this action.

REYNOLDS ASSOCIATES

By Counsel

BOOTHE, PRICHARD & DUDLEY
4085 University Drive
Fairfax, Virginia 22030

By Haynie S. Trotter
Counsel for Plaintiffs

OF COUNSEL:

A. Fred Freedman
Pohoryles, Goldberg, Staton & Harris
1801 K Street, N.W., Suite 1105L
Washington, D.C. , 20006

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing Amended Motion for Judgement, by mailing a true copy thereof, postage prepaid, the day of , 1978, to the following:

James C. Gregg, Esq.
Macleay, Lynch, Bernhard & Gregg
1911 N. Fort Myer Drive
Suite 703
Arlington, Virginia . 22209
Counsel for Defendant Bucher-Meyers
and Associates, Inc.

Robert H.J. Loftus, Esq.
McCandlish, Lillard, Bauknight, Church & Best
4069 Chain Bridge Road
Fairfax, Virginia 22030
Counsel for Defendants, Thomas P. Harkins,
Inc., and Maryland Casualty Company

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL HOUSING ADMINISTRATION

EXHIBIT A

OWNER - ARCHITECT AGREEMENT
For Services

Prior to and in the Construction Period

THIS AGREEMENT, made this 6th day of March 19 73

by and between Reynolds Associates

(hereinafter called Owner)

and Bucher-Meyers & Associates, Inc.

(hereinafter called the Architect).

WITNESSETH, that whereas the Owner intends to erect a 209 unit high rise
apartment project located in Alexandria, Virginia, known as

"Cameron Overlook", FHA Project No. 000-44178-LD

NOW THEREFORE, the Owner and Architect, for the considerations hereinafter named, agree as follows:

1. The Owner agrees to pay the Architect a total fee of \$ 116,284.00
to be paid in the following installments: ~~*75 percent~~ at the completion and acceptance of the working drawings
and specifications, the balance monthly as the work progresses, the monthly payments to be at a rate equal to
the percentage of completion of construction of the project. All payments shall be subject to the prior approval
of the Federal Housing Commissioner (hereinafter called the Commissioner).

*\$89,449.00

2. The Architect agrees to provide all architectural, engineering, and consulting services except such
field engineering services as may be employed and paid for by the contractor. The services shall include all
services already performed. The provisions of this Agreement supersede and void all inconsistent provisions
of any prior contract between the parties hereto for the services to be performed hereunder.

3. The Architect's services shall include the necessary conferences, the preparation of preliminary
studies, working drawings, specifications, large scale and full size detail drawings, as may be required, the
issuance of certificates for payment, the keeping of accounts, supervision of the work, as well as inspections
during the guarantee period, and the preparation of drawings and specifications and written opinions in connection
with construction changes. The Architect shall pay all expenses in connection with site planning and site
structural, mechanical and special engineering pertinent to the preparation of the drawings and specifications
or their interpretation and the determination of compliance, as may be required in the completion of the project.

4. The Architect agrees to provide for the cost of transportation and living incurred by him and his assistants
or associates while traveling in the discharge of duties connected with the work.

5. The Owner has furnished the Architect with a current certified topographic survey of the project site
and adjacent land and facilities, as prescribed by the Commissioner, and the Architect has based the drawing
thereon. The Owner will authorize and pay for test borings or pits, and consultation with a soils engineer and
for chemical, mechanical, or laboratory tests when required, but not for tests specifically required under the
Construction Contract.

6. The Architect will advise the Owner and the Commissioner of any omissions, substitutions, defects
and deficiencies noted in the work of contractors, but does not guarantee the performance of their contracts.

The supervision by the Architect is to be distinguished from the continuous personal supervision by a resident inspector. The Architect or his agent shall visit the project as often as the nature and progress of the work and interests of the Owner and the Commissioner require. During the guarantee period the Architect shall inspect the project for evidence of faulty materials and workmanship. The landscape work, heating and cooling systems shall be inspected in appropriate seasons and the project in general shall be inspected at or about the ninth month after completion. In addition, the Architect shall make such other inspections and perform services as may be necessary and incidental to the requirements of the drawings and specifications. When authorized by the Owner, a resident inspector satisfactory to both the Owner and the Architect shall be hired by the Architect at a salary satisfactory to the Owner who shall reimburse the Architect for the cost thereof in addition to the agreed fee.

7. Drawings and specifications as instruments of service are the property of the Architect whether the work for which they are made be executed or not, and their use for any other project is not authorized.

8. Architect's certificates evidencing recent inspection and acceptability of the work and certifying as to the validity of requested payments shall be executed simultaneously with requests for advances for payment covering construction cost, or monthly reports of progress and compliance when advances during construction are not requested. The foregoing shall be in the form prescribed by the Commissioner and shall be based upon personal inspection of the work by the Architect or his agent. The name of the inspector shall be indicated if the inspection is not made by the Architect.

9. Notwithstanding any other provisions hereof, if the work for which the drawings and specifications are executed has not been completed and there is a default or foreclosure under the mortgage insured by the Commissioner, the Mortgagee or the Commissioner may use the drawings and specifications to complete construction of the work without additional cost.

10. The Architect and the Owner recognize the interest of the Mortgagee and the Commissioner and any action, inaction, or determination by either the Architect or the Owner is subject to acceptance or rejection by the Mortgagee and by the Commissioner. The Architect is required to act and serve in a professional capacity without bias or partiality. No portion of the Architect's work or responsibility may be sublet or delegated to any one not acceptable to the Commissioner.

11. Either the Architect or the Owner may, upon 5 days prior written notice to the Commissioner, terminate this Agreement for reason of noncompliance with any of the aforesaid provisions by the other party. In addition, both principals shall recognize as a valid reason for termination, any request by the Commissioner for termination because of inadequate performance, undue delay or misrepresentation which may make the further services of the Architect unacceptable to the Commissioner. In the event of termination, the Architect shall be entitled only to the prescribed portion of the fee determined by the percentage to which construction is completed. The remaining balance of the Architect's fee shall be used either to obtain acceptable service or to secure reduction of the mortgage indebtedness, as may be determined by the Commissioner.

12. The Owner agrees to pay, in addition to the contract price, the cost of any supplementary drawings required by reason of construction changes as agreed to by both parties. It is understood that the Architect, under the terms of this Agreement, will review and act in an advisory capacity in connection with each construction change submitted by the Owner, and will give his written opinion as to the acceptability and effect of each change without additional cost to the Owner.

13. The Architect will furnish copies of all field orders and change orders to the Owner, the Mortgagee and the Commissioner.

14. Upon completion of construction, the Architect will certify to the Owner, the Mortgagee and the Commissioner that to the best of his knowledge, information and belief, and on the basis of his observations and inspections, the work has been completed in accordance with the terms and conditions of the contract documents.

15. All questions in dispute under this Agreement shall be submitted to arbitration at the choice of either party.

16. This Agreement shall bind, and the benefits inure to, the parties hereto, their legal representatives, executors, administrators, successors and assigns.

17. The Architect understands that he has been retained for services hereunder as an independent practitioner having no identity of interest with the Owner or the builder, and having no financial interest in the project or the real estate upon which it is to be constructed other than the fee set out above. The Architect further understands that the Commissioner's approval of this Agreement is based upon knowledge of the Architect's relationship with the Owner, the builder, and the project, and that any change in such relationship which will result in the Architect's having an identity of interest with the Owner or the builder, or his having a financial interest in the project, will be grounds for termination of this Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement the day and year first above written.

ATTEST:

Harold R. Butta

~~ATTEST~~

WITNESS:

W. Keller

Bucher-Meyers & Associates, Inc.

By Walter Bucher
Architect

Reynolds Associates

By Wesley W. Reynolds
Managing General Partner

PRINTERS NOTE:

Exhibit B to the Motion for Judgment is the same as Plaintiffs' Exhibit Number 2-A. This exhibit may be found on Appendix pages 253 through 261.

Project No. 000-44176-L1

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL HOUSING ADMINISTRATION

PERFORMANCE BOND-DUAL OBLIGEE

Know All Men By These Presents, THAT WE, THOMAS F. HARKINS, INC.of 5720 Georgia Avenue, Silver Spring,Maryland.

as Principal, (hereinafter called the Principal)

and MARYLAND CASUALTY COMPANY, a Maryland corporation as Surety,(hereinafter called the Surety) are held and firmly bound unto Reynolds Associates

Owner, (hereinafter called the "Owner-Obligee")

and unto Advance Mortgage Corporation, its successors and assigns,of Washington, D.C. (hereinafter called the "Lender")as their respective interests may appear, as OBLIGEEs, in the sum of One Million Eight HundredEighty Seven Thousand One Hundred Eighty-Five Dollars (\$ 1,837,185), lawful money of the
United States of America, for the payment of which Principal and Surety bind themselves, their heirs, ex-
ecutors, administrators, successors and assigns, jointly and severally, firmly by these presents.WHEREAS, Principal has entered into a Construction Contract dated MARCH 29, 1973 withOwner-Obligee for the construction of a Housing Project designated as Cameron OverlookFHA Project 000-44176-L1Cost Plus

a copy of which Construction Contract is by reference made a part hereof; and

WHEREAS, Lender has agreed to lend to Owner-Obligee a sum of money to be secured by a mortgage on said project and to be used in making payments under said Contract, and desires protection as its interests may appear, in event of default by Principal under said Contract, said protection to be subject to the performance by the Obligees, or either of them, of the obligations to Principal in connection with said Contract.

NOW, THEREFORE, the condition of this obligation is such that, if Principal shall well and truly perform all the undertakings, covenants, terms, conditions and agreements of said Contract on its part, and fully indemnify and save harmless Obligees from all cost and damage which they may suffer by reason of failure so to do, and fully reimburse and repay Obligees all outlay and expense which Obligees may incur in making good any such default, then this obligation shall be null and void; otherwise

it shall remain in full force and effect.

The foregoing, however, is subject to the following further provisions:

1. The Surety shall not be liable under this Bond to the Obligees, or either of them, unless the said Obligees, or either of them, shall make payments to the Principal strictly in accordance with the terms of said Contract as to payments, and shall perform all the other obligations to be performed under said Contract at the time and in the manner therein set forth.

2. Surety agrees that any right of action that either of Obligees herein might have under this bond may be assigned to the Secretary of Housing and Urban Development, acting by and through the Federal Housing Commissioner, and that such assignment will in no manner invalidate or qualify this instrument.

3. No suit, action, or proceeding by reason of any default whatever shall be brought on this bond after two years from the day on which the final payment under the Contract falls due.

4. The prior written approval of Surety shall be required with regard to any changes or alterations in said Contract where the cost thereof, added to prior changes or alterations, causes the aggregate cost of all changes and alterations to exceed 10 percent of the original Contract price; but, except as to the foregoing, any alterations which may be made in the terms of the Contract, or in the work to be done under it, or the giving by the Obligees of any extension of time for the performance of the Contract, or any other forbearance on the part of either the Obligees or Principal to the other, shall not in any way release Surety or Principal of the obligations of this instrument, notice to Surety of any such alteration, extension, or forbearance being hereby waived.

5. The aggregate liability of Surety hereunder to the Obligees or their assigns is limited to the penal sum above stated, and Surety, upon making any payment hereunder, shall be subrogated to, and shall be entitled to an assignment of, all rights of the payee, either against Principal or against any other party liable to the payee in connection with the loss which is the subject of the payment.

SIGNED and SEALED this

29th

day of March

, 1973

~~Witness~~ as to Principal—
ATTEST

THOMAS P. HARKINS, INC. (SEAL)

(Principal)

By

MARYLAND CASUALTY COMPANY

(Surety)

By

Robert G. Reilly, Attorney-in-fact

\$ _____

(Surety)

PERFORMANCE BOND-DUAL OBLIGEE

No. _____

On Behalf of

To

Date _____, 19__

Expires _____, 19__

GP O 887-148

PROOF OF SERVICE

Virginia:

IN THE CIRCUIT COURT OF THE COUNTY OF FAIRFAX

OMAS P. HARKINS, INC.
SERVE: Stephen Best, Registered
Agent
4069 Chain Bridge Road
Fairfax, Virginia 22030

LAW NO. 39787

REYNOLDS ASSOCIATES et al

vs.

THOMAS P. HARKINS, INC. et al

RETURNED BY
SHERIFF

JUN 22 1977

JAMES E. HOOVER
Clerk

Returns shall be made hereon, showing service of Notice issued June 16, 1977,
with copy of Motion for Judgment filed June 10, 1977, attached:

Executed on the 21st day of JUNE (4:00 PM), 1977, in the County
of Fairfax, Virginia, by delivering a true copy of the above mentioned papers attached to each other,
to STEPHEN BEST, R/M FOR THOMAS P. HARKINS, INC.
in person.

Executed on the day of, 19, in the County of Fairfax,
Virginia, by calling at the usual place of abode,
of and not finding h. there, or any other
person upon whom service could be made, I left a true copy of the above-mentioned papers, attached to
each other, POSTED at the front door of h. usual place of abode.

Not finding at h. usual place of abode
the above mentioned papers, attached to each other,
were executed on the day of, 19, in the County of
Fairfax, Virginia by delivering a true copy of same to
whom I found at the usual place of abode, a member of h. family above the age of sixteen years, and
by informing h. of its purport.

Executed in Fairfax County, Virginia, this day of, 19,
by the within named not being found in my bailiwick.

JAMES D. SWINSON, SHERIFF

By James E. Hoover
13 Deputy Sheriff



COMMONWEALTH OF VIRGINIA
OFFICE OF THE GOVERNOR

SECRETARY OF THE COMMONWEALTH
RICHMOND, VA. 23219

June 22, 1977

FILED

JUN 24 1977
JAMES E. HARRIS
CLERK OF THE SUPREME COURT

39787

AFFIDAVIT OF COMPLIANCE

I, Pat Perkinson, do hereby certify that Notice Of Motion For
Judgment, Motion For
Judgment and Exhibits in the case pending in the Circuit Court of
County of Fairfax, Virginia under the style of Reynolds

Associates, a Virginia limited partnership et al vs Thomas P. Harkins,
Inc., a Maryland Corporation et al
was served on me as statutory agent for Bucher-Meyers & Associates, Inc.

by the City Sheriff of Richmond, Virginia in accordance with

Section 8-81.3 of the Code of Virginia and that copy of Notice Of Motion For
Judgment, Motion For
Judgment and Exhibits was forwarded by Certified

mail return receipt requested to the defendant at:

8777 1st Avenue
Silver Spring, Maryland

Pat Perkinson

Secretary of the Commonwealth

City of Richmond
State of Virginia

Subscribed and sworn to before me this 22nd day of June, 1977

Notary Public
My commission expires:

Glenda Harkins
9/23/77

I was commissioned as
GLENDIA BROWN

OCT 21 1977

GROUND OF DEFENSE

JAMES E. HOOVER
Clerk of the Circuit Court
of Fairfax County, Va.

COMES NOW Thomas P. Harkins, Inc., referred to herein as "Harkins", by counsel, and in response to the Motion for Judgment, states as follows:

1. Harkins does not have sufficient knowledge or information to state whether or not the allegations contained in paragraph No. 1 are true, and neither admits nor denies same.

2. Harkins admits the allegations contained in paragraphs No. 2 and 3. With respect to the first sentence of paragraph No. 4, Harkins states that the responsibilities of Harkins are contained in Exhibit B; to the extent that the allegations are covered under Exhibit B, they are admitted, and to the extent the allegations are not covered under Exhibit B, they are denied. The allegations contained in the second sentence of paragraph No. 4 are admitted.

3. The allegation contained in paragraph No. 5, it is denied that there were any severe deficiencies in the building which resulted from any failure by Harkins to perform its obligations. Harkins does not feel it appropriate to respond to the remaining allegations, as they are directed against other defendants.

4. The allegations contained in paragraphs No. 6 and 7 are denied.

5. Harkins does not feel it appropriate to respond to the allegations contained in paragraph No. 8 as they are directed against another defendant.

WHEREFORE, Harkins prays that the Motion for Judgment be dismissed as against Harkins, with its costs herein expended.

Thomas P. Harkins, Inc.

By Counsel

McCANDLISH, LILLARD, BAUKNIGHT,
CHURCH & BEST, a Professional Corporation
4069 Chain Bridge Road
Fairfax, Virginia 22030

By Stephen L. Best
Stephen L. Best, Counsel for
Thomas P. Harkins, Inc.

I hereby certify that on this 28th day of October,
1977, I mailed copies of the foregoing Grounds of Defense to all
counsel of record.

Stephen L. Best
Stephen L. Best

IN THE CIRCUIT COURT OF FAIRFAX COUNTY, VIRGINIA

REYNOLDS ASSOCIATES, et al,)
)
Plaintiffs,)
)
v.)
)
THOMAS P. HARKINS, INC., et al,)
)
Defendants.)

OCT 31

JAMES E. HOFFMAGLE

Clerk of the Circuit Court

At Law NO. 39787

GROUND OF DEFENSE

COMES NOW Maryland Casualty Company, by counsel, and adopts the grounds of defense filed by Thomas P. Harkins, Inc., as its grounds of defense, stating that it has no knowledge or information beyond the knowledge and information of Harkins, and admitting those allegations admitted by Harkins and denying those allegations denied by Harkins.

WHEREFORE, Maryland Casualty Company prays that the Motion for Judgment be dismissed as against Maryland Casualty Company, with its costs herein expended.

Maryland Casualty Company

By counsel

McCANDLISH, LILLARD, BAUKNIGHT, CHURCH
& BEST, A Professional Corporation
4069 Chain Bridge Road
Fairfax, Virginia 22030

By Stephen L. Best
Stephen L. Best, Counsel for
Maryland Casualty Company

I hereby certify that on this 28th day of October, 1977, I mailed copies of the foregoing Grounds of Defense to all counsel of record.

Stephen L. Best
Stephen L. Best

JUDGMENT ORDER

This case came on to be heard on the 14th, 15th, 16th, 20th, 21st, 22nd, 27th, 38th, 29th and 30th of November and on the 4th, 5th, 6th, 7th and 8th days of December, 1978, upon trial by jury consisting of seven jurors and two alternates, all of whom were duly called and examined upon voir dire, of which each side struck three leaving seven jurors and of the alternates each side struck one of four called leaving two, all of whom were thereupon sworn to well and truly try the issues joined.

Whereupon the plaintiffs presented their proof, the testimony of their witnesses, introduced various exhibits, and rested their case. The defendants then moved to strike the evidence of the plaintiffs which motions were denied by the Court with all defendants objections and exceptions thereto duly noted.

Whereupon the defendants presented their proof, the testimony of their witnesses, and introduced their exhibits, and rested their cases, and renewed their respective motions to strike the plaintiffs evidence which motions were again denied with all defendants objections and exceptions duly noted. The plaintiffs then presented rebuttal evidence in the form of testimony of witnesses and exhibits, following which the defendants again renewed their respective motions to strike the plaintiffs' evidence which were again denied with objections and exceptions duly noted by all defendants.

Whereupon counsel submitted and argued their respective instructions, the Court granting some and refusing others, to which action the parties noted their respective objections and exceptions. The Court thereupon instructed the jury following which counsel

for the parties delivered final arguments. The jury then retired to deliberate its verdict, and in due course of the 8th day of December, 1978 returned with a unanimous verdict in favor of the defendant, Bucher-Meyers & Associates, Inc., and in favor of the plaintiffs against the defendants, Thomas P. Harkins, Inc. and Maryland Casualty Company, the sum of Two Hundred Eighty-One Thousand Ninety-Two Dollars (\$281,092.00).

The alternates were excused at the close of all of the evidence prior to the submission of the case to the jury. The Court then continued the case to the 22nd day of December 1978, for the purpose of hearing arguments on any motions.

And the Court having maturely considered arguments of counsel in support of their motions to set aside the verdict and being of the opinion that the motions should be denied that the verdicts are fully supported by the evidence, and accordingly, judgment should be entered thereon, it is by the Court

ORDERED AND ADJUDGED that the verdict in favor of the defendant, Bucher-Meyers & Associates, Inc., is hereby approved and a judgment rendered thereon in favor of that defendant, to which action of the Court the plaintiffs duly noted and preserved their objections and exceptions; and it is

FURTHER ORDERED AND ADJUDGED that the verdict in favor of the plaintiffs against the defendants, Thomas P. Harkins, Inc. and Maryland Casualty Company, is approved and the plaintiffs are hereby granted judgment against the defendants, Thomas P. Harkins, Inc. and Maryland Casualty Company, ^{Jointly and Severally} in the sum of Two Hundred Eighty-One Thousand Ninety-Two Dollars (\$281,092.00), together with

WITH INTEREST FROM DECEMBER 8, 1978
costs of this action, to which action of the Court the said defendants, Thomas P. Harkins, Inc. and Maryland Casualty Company, duly noted and preserved their exceptions.

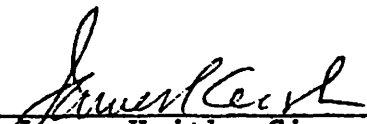
And it appearing to the Court that the Maryland Casualty Company and Thomas P. Harkins, Inc. intend to prosecute an appeal of this action in the Supreme Court of Virginia, it is hereby ORDERED that this judgment order is suspended pending the prosecution of said appeal and so long as this matter is under consideration by the Supreme Court, provided the said Maryland Casualty Company or Thomas P. Harkins, Inc., or someone for it, shall file an appeal bond in the Clerk's office of this Court within 30 days of the entry of this Order in the amount of \$15,000, conditioned according to the provisions of §8.01-676 of the Code of Virginia, 1950 as amended.

Pursuant to Rule 5:9, the transcripts of all hearings, motions and the trial of this case are hereby made a part of the record.

To all of which the Maryland Casualty Company and Thomas P. Harkins, Inc. objected and excepted on the grounds stated in objection at trial, as stated in memoranda submitted to the Court, and as stated orally to the Court, all of the same being expressly incorporated herein.

AND THIS ORDER IS FINAL.

ENTER:

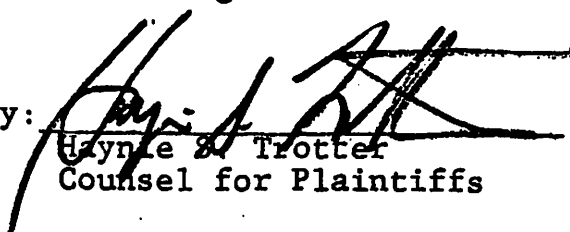

James Keith, Circuit Judge

Dec 22, 1978
Date

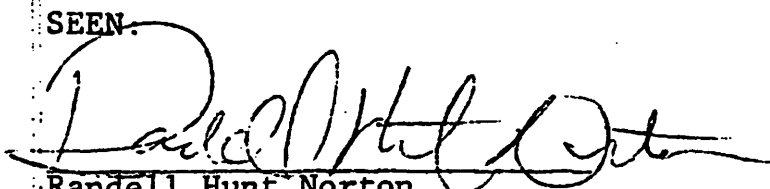
PRESENTED BY:

BOOTHE, PRICHARD & DUDLEY
4085 University Drive
Fairfax, Virginia 22030


By:


Hayne S. Trotter
Counsel for Plaintiffs

SEEN:


Randell Hunt Norton
1911 North Ft. Myer Drive
Suite #703
Arlington, Virginia
Counsel for Defendant, Bucher-
Meyers & Associates, Inc.

checked and
SEEN AND EXCEPTED TO:


Gerald R. Walsh
4069 Chain Bridge Road
Fairfax, Virginia 22030
Counsel for Defendants, Thomas
P. Harkins, Inc. and Maryland
Casualty Company

FILED

MOTION TO SET ASIDE VERDICT OF THE JURY AND TO
THEREAFTER ENTER JUDGMENT FOR THE DEFENDANTS
OR FOR A NEW TRIAL OR IN THE ALTERNATIVE TO PUT
THE PLAINTIFFS ON TERMS

DEC 15 1978

JAMES E. HOOFNAGLE
Clerk of the Circuit Court
of Fairfax County, Va.

COMES NOW Thomas P. Harkins, Inc. and Maryland Casualty Company, by counsel, and move the Court to set aside the verdict and to enter judgment for the Defendants as permitted by §8.01-430 of the Code of Virginia, or to set aside the verdict and to award a new trial pursuant to §8.01-383 of the Code of Virginia, or to put the Plaintiffs on terms and in support of the matter sets forth the following grounds:

1. The Court erred in admitting the testimony of Anthony Valance, Edward Holland and William Cumberland, and in admitting Plaintiffs' Exhibit #52, and Plaintiffs' Exhibit #22.

* * * * *

5. The Court erred in not striking the evidence of the Plaintiffs.

6. The Court erred in submitting questions of law to the jury, including, inter alia, the measure of damages and the admissibility of evidence.

* * * * *

THOMAS P. HARKINS, INC.
by counsel

MARYLAND CASUALTY COMPANY
by counsel

McCANDLISH, LILLARD, BAUKNIGHT, CHURCH & BEST
A Professional Corporation

By:


Gerald R. Walsh

ASSIGNMENTS OF ERROR

Petitioners,, Thomas P. Harkins, Inc. and Maryland Casualty Co., Inc. assign as error the following:

1. The Court erred in permitting the witness Anthony Vallance to testify regarding damages in that:

A. Vallance was not qualified to testify concerning costs of construction and repair in Northern Virginia in October 1978;

B. Vallance was not qualified to testify concerning costs of construction and repair in Northern Virginia on June 12, 1975, and Vallance was improperly allowed to reduce his 1978 figures to 1975 figures.

2. The Court erred in admitting Reynolds' Exhibit No. 52, and Vallance's testimony relating to it and the quantum of damages since they were speculative, based on exhibits and reports of experts not in evidence and included damages which were unsupported by any testimony and other damages which Vallance admitted were incorrect.

3. The Court erred in refusing to rule that some or all of Reynolds' damages should be determined under the "diminution in value" rule rather than the "cost to repair" rule.

4. The Court erred in failing to grant Harkins' Motion to Strike the Evidence at the conclusion of Plaintiff's case, at the conclusion of Defendants' cases and at the conclusion of all the evidence and in refusing to set aside the verdict.

5. The Court erred in preparing on its own motion and

giving Reynolds' Instruction No. 28A.

6. The Court erred in granting Reynolds' Instruction No. 13A.

7. The Court erred in permitting the witness Holland to testify concerning conditions which he found on the site in 1978 and in admitting Exhibit 22, prepared by Holland.

8. The Court erred in failing to grant Harkins' Instruction No. 0.

9. The Court erred in refusing to grant instructions P of Defendant Harkins and AA of Defendant Maryland Casualty .

10. The Court erred in permitting witnesses to testify regarding photographs which they did not take and were unable properly to identify and the Court further erred in permitting these pictures to be received into evidence as Plaintiff's Exhibits 37A, 37D, 37E, 37F and 31F.

11. The Court erred in admitting Exhibit 11E in evidence.

12. The Court erred in permitting the witness Dixon to testify in rebuttal to an improperly framed hypothetical question.

13. The Court erred in admitting Reynolds' Exhibit No. 49.

14. The Court erred in admitting Reynolds' Exhibit No. 42.

15. The Court erred in permitting improper impeachment of the witness Rupert by alleged prior inconsistent statements.

16. The Court erred in permitting rebuttal testimony by Walter Bucher.

Testimony of Edward Holland

BY MR. TROTTER:

Q During that same meeting in August or September, whichever it was -- I think September of '72, could you tell us whether or not the question of whether Mr. Carcaterra would be paid for redesigning of the building entered into this discussion with Mr. Bucher?

A I -- there was so much involved in the discussion, I am not prepared to state whether or not Mr. Carcaterra was to be paid extra money or not. I don't know that.

Q Did he voice any opinion with regard to revising the plans?

A He objected to revising the plan, but I do not know his qualms.

Q All right, sir. Now, Mr. Holland, did you perform any service with regard to the site work as built or as installed on the property for the owner?

A Are you speaking of in recent weeks or months?

Q Yes, sir, I'm talking about in this past September, I believe. Specifically I'm referring to Plaintiffs' Exhibit No. 22. Can you tell us whether that is your plan?

A Yes, sir. I took a copy of the site plan which is already in evidence known as our As-Built Site Plan -- I don't recall the number.

1 Q That's all right. You're right; it is in evidence,
2 I believe.

3 A And simply added to it comments, 20 comments
4 which shows in white on the drawing, commenting on the
5 conditions which I found on the site, not as they related
6 to the building itself, but as to the site.

7 Q Now, what do you mean by the site?

8 A I mean the grounds around the building. The
9 appurtenances relating to the buildings. There were
10 broken pieces of curb and gutter; there was sunken asphalt;
11 there was places alongside the stairways in front of the
12 building which was erroded. There was a portion of the
13 driveway in front of the garage that had sunk. There was
14 a terrace south of the garage which was sunk; and there
15 were places where, by symbol and by number we have shown
16 schematically, where the crown vetch had not taken hold
17 substantially and where other vegetation was either missing
18 or inadequate. This is more or less of a review of the
19 site improvements, and as such, had no direct relationship
20 with the building itself.

21 Q Just to the grounds?

22 A Just to the grounds.

23 Q Do you know what caused the pavement and the

1 sidewalks to sink or whatever it was that sunk?

2 A Well, I was --

3 MR. LOFTUS: Well, Your Honor, the witness has
4 referred to a large number of deficiencies -- curb and
5 gutter -- I think he should pin this down as to which
6 particular one he's talking to.

7 THE COURT: All right.

8 THE WITNESS: Well, No. 1, curb and gutter broken
9 at catch basin; replace one ten foot section, and it's
10 marked one and there's a No. 1 area designated on the
11 drawing.

12 No. 2, sidewalk from middle edge --

13 MR. LOFTUS: Your Honor, the witness' answer is
14 not responsive to the question asked him.

15 THE COURT: I think it is; objection overruled.

16 BY MR. TROTTER:

17 Q Go ahead Mr. Holland.

18 A Sidewalk from middle entrance to front corner of
19 building sinking.

20 THE COURT: Is that indicated on your plat?

21 THE WITNESS: Yes, sir, as Item No. 2 -- right
22 here.

1 BY MR. TROTTER:

2 Q All right, continue.

3 A There's a number with each one of these statements,
4 Your Honor.

5 THE COURT: All right.

6 THE WITNESS:--has separated from main building.

7 No. 3, asphalt surface parking lot low; water
8 stands outside of gutter; surface is deteriorating. Four,
9 gravel exposed on terrace from back of curb to top of
10 terrace along 45 feet of north side of parking bay; no
11 top soil apparent, some concrete and wooden rubble near
12 surface.

13 4A, same condition as four above at area about
14 25 square yards is involved, and again, I have a symbol
15 on the map to correspond.

16 BY MR. TROTTER:

17 Q For each one of these, you have a symbol on your
18 map corresponding to the notation?

19 A Yes, sir.

20 Q Go ahead.

21 Q No. 4B, same condition as four above, an area
22 20 feet square -- yards square involved; wood and concrete
23 rubble on the surface. By that I mean that there was debris

1 from construction mixed with the earth and gravel and
2 material in that area such that it was not possible for
3 vegetation to grow on top of it.

4 Five, side of stairs exposed revealing jagged
5 and broken concrete; stairs poorly finished; and terrace
6 on each side is not sodded; severe erosion.

7 No. 6, slope very steep; erosion from top to
8 bottom of stairs in back field and provide with growing
9 soil in place of present clay-gravel material -- in place
10 of present clay and gravel material, a vine or other close
11 growing dense plant material should be used.

12 Seven, number two and one-eighth inch pipes are
13 sticking out of the building wall. They are dripping
14 water which is causing erosion. This water is entering
15 the ground above the deep back fill around the building
16 foundations, and basement walls. It should be dumped
17 into the wide concrete ditch less than two feet away:
18 This last item, seven, is on the rear side of the building,
19 and is just adding water on the back side where we can ill
20 afford to have water because it's being pocketed right up
21 against the steep side of the building.

22 Eight, grading in this area is still irregular
23 as it was over three years ago. Gravel and other poor

1 growing soil are exposed. Vegetation is weedy or non-
2 existent over 60 to 70 square yard area. Again a diagram
3 is shown.

4 Nine, this concrete ditch is not satisfactorily
5 constructed. The top edges of the ditch are from a quarter
6 of an inch to an inch and a quarter thick. It's an oval-
7 shaped affair. The minimum acceptable thickness should
8 have been four inches at the top. The ditch is 120 feet
9 long along the hillside above the swimming pool area and
10 should be replaced. That comment was based on the fact
11 that there was many pieces of this narrow, thin edge, that
12 the top of the ditch was just crumbling off.

13 The section of the concrete ditch described in
14 Item 9 which extends along the west side of the parking
15 garage is not only too thin at the top edges, but is not
16 bonded to the garage and is subsiding and pulling away
17 from the garage wall. If this condition -- if this
18 continues the ditch may collapse and excessive water will
19 be trapped behind the wall and create a serious weakening --
20 weakened condition in the 40 foot terrace which the garage
21 is assisting in support of. The ditch should be re-
22 constructed, firmly affixed to the garage wall with water-
23 proof jointing material.

1 No. 11, the uphill side of the major concrete
2 drainage ditch along that side of the main building --
3 we're still speaking of -- now we're talking of the
4 apartment building. Before that comment on No. 10 was
5 shown as being against the garage. The uphill side of
6 the major concrete drainage ditch on the west side of
7 the main building is not sodded or covered with lespedeza;
8 gravel and clay are exposed and no growing soil is evident
9 above; 25 yards of new soil and plant material are needed.

10 No. 12, gravel soil is exposed; no top soil is
11 evident; little or no acceptable vegetation is present;
12 area is about ten feet by 60 feet.

13 No. 13, same as Item 12 -- area 40 by 45 feet,
14 involved with pieces of wood and concrete protruding from
15 the soil. Mowing machine cannot safely be used on this
16 area because of the debris.

17 No. 14, curb and gutter broken. One ten foot
18 section north of catch basin should be replaced, surrounding
19 curb and gutter broken. One ten foot -- I beg your pardon,
20 I'm repeating myself -- surrounding embankment should be
21 excavated two or three feet and consolidated to a 90 percent
22 compaction.

23 Q Excuse me, Mr. Holland, could you tell me what

1 caused the curb and gutter to break?

2 MR. LOFTUS: Excuse me, Your Honor, which number
3 are we referring to now?

4 THE COURT: Twelve, I reckon -- fourteen.

5 MR. LOFTUS: Mr. Holland, which one is it?

6 THE WITNESS: We're talking about the curb and
7 gutter along the south side of the garage.

8 MR. LOFTUS: All right, which number is it on
9 your diagram?

10 THE WITNESS: And it's the number on my-- 14 and
11 15 were both pertaining to that subject.

12 MR. LOFTUS: Thank you, sir.

13 MR. TROTTER: Would it be all right to circle
14 those for convenient reference, Your Honor -- the
15 numbers?

16 THE COURT: Which --

17 THE WITNESS: Fourteen and fifteen.

18 MR. LOFTUS: Your Honor, I don't see any need
19 for counsel to mark up the exhibits.

20 MR. TROTTER: All right.

21 MR. LOFTUS: I object to that.

22 BY MR. TROTTER:

23 Q What caused the curb and gutter to break in those

1 areas?

2 A The terrace on the south side of the driveway
3 into the garage, that fill along there is sinking; it's
4 very easy to see that it's settling in an uneven manner
5 and that fill was not a part of the landslide. It in no
6 way related to the landslide. That was material that was
7 placed there in the course of construction of the driveway.
8 And I don't know what all -- what the various soils and
9 materials are in it. They are simply inadequate and were
10 not properly compacted.

11 Q All right, thank you. Continue with the next
12 item, please sir.

13 A Asphalt paving on garage driveway is poorly graded,
14 high and low areas prevent proper drainage; water is standing
15 near both entrances. This occurred several days after a
16 rain -- small rainstorm and the water was still there. New
17 asphalt paving will be required to drain this driveway
18 properly.

19 To the far side, gutter, which would be the south
20 side, driveway serves as a walkway--driveway also serves as
21 a walkway. Before replacing asphalt, a base course should be
22 installed and compacted to 98 percent compaction.

23 Eighty feet of the far side gutter and paving is

1 sinking and must be replaced. The area near the curb and
2 the gutter, and for three feet each side of it, must be
3 excavated two or more feet as determined when -- as deter-
4 mined when area under subsiding pave and curb and gutter
5 and terrace are inspected. As excavation proceeds, bank
6 gravel plus A21 crushed stone, or equivalent base material,
7 should be used in this area to prevent further subsidence.

8 No. 15, the terrace appears to be composed of
9 bank gravel, silty clay, some construction debris, no
10 sign of topsoil, shrub or dead shrubs are dead or in
11 poor condition -- area with growth on them are covered
12 with rank weeds (ragweed, et cetera). Affected area requires
13 topsoil, lime, fertilizer -- requiring is an an area of
14 an average of 35 feet wide by 200 feet long. Dense coverage
15 of shrubbery and lespedeza is required to retard the
16 movement of the embankment which is now subsiding.

17 No. 17, remove three sections of curb and
18 gutter; excavate two feet under; consolidate back fill
19 of bank gravel or equivalent two feet, or as required to
20 98 percent compaction.

21 No. 18, fill eroded area 10 by 30 with topsoil;
22 provide shrubbery and lespedeza. Dense planting with
23 ample growing soil and fertilizer will be required to --

1 will be required to steepness of terrace as sudden change
2 occurs in the alignment.

3 Nineteen, regrade lawn with topsoil at face of
4 the building 30 feet long; raise grade on terrace to cover
5 exposed rough concrete foundation and pargeting; resod
6 three feet by 30 feet.

7 No. 20, fill lawn around concrete slab with top-
8 soil and sod. Area involved is about five square yards.

9 Note all workmanship and material required to
10 perform the completion and repair of this site and its
11 improvements shall be equal or equivalent to the original
12 specifications for such landscape materials set forth in
13 the contract specifications for Cameron Overlook.

14 Q Mr. Holland, could you tell us whether or not
15 these comments you made were based on the specifications
16 of the job?

17 MR. LOFTUS: Your Honor, I'd have to object on
18 that grounds. If we're going to get into what these items
19 relate to, I believe that should be related to each
20 particular item. I don't think overall blessing that these
21 are all under specifications is proper.

22 THE COURT: Well, were some of them under specifica-
23 tions and some of them are not under the specifications?

1 why these windows failed the test?

2 A Yes, I did.

3 Q And what were the reasons, in your opinion, as
4 to why it failed the test?

5 A I think possibly it might be appropriate to look
6 at the sketch of the windows so I think everyone has a
7 better understanding of really what we're talking about.

8 Q Is this a sketch that you prepared today?

9 A That's a sketch that I prepared, and it
10 represents the window, typical of the bedroom.

11 Q If you would like to come down here and point, it
12 would be --

13 A Outlined in black is the window assembly. The
14 black is the window frame. Below that is another window
15 frame. The upper unit consists of a fixed glass; this
16 is non-moving, which itself has a frame around it
17 represented by the dotted red lines. To the right of it,
18 as shown, is a sliding glass panel also contained in its
19 own frame or sash. And there is a weatherstrip around the
20 perimeter of this glass panel. There is weatherstrip around
21 the perimeter of this glass panel.

22 This glass panel below is similar to this one
23 except it's turned on its side. The window installer in

1 the building -- there's brick masonry, or there is masonry
2 on the two sides of the window, and there is a panel above
3 and below -- above and below. The installer installs the
4 lower unit. He stacks the upper unit on top of that.
5 There is a horizontal joint between the two metal frames.
6 This joint reached to the inside; it reached also to the
7 outside.

8 Now, our problem was when we wetted the window,
9 this window sill which functions as a gutter overflowed;
10 water ran through to the inside.

11 THE COURT: What did you say? I can't see.

12 THE WITNESS: I'm sorry. The window sill is the
13 bottom half of the upper frame; that's the sill that
14 persistently overflowed.

15 This window sill functions as a gutter to collect
16 water and then drain water to the exterior through weep
17 holes installed by the manufacturer in the face of the
18 window.

19 Since this is a gutter, the ends of it have to
20 be closed off, and this vertical framing member at the
21 jambs serves as the end dam and the end dam or the bottom
22 of the jamb has to be sealed watertight to the sill member.

23 By just spraying water on the outside of the

1 window, with no simulated wind pressure, sufficient water
2 came around the weatherstrip that the sill filled and
3 overflowed in four out of six cases. In the other two
4 cases, when we applied wind pressure, water leakage
5 occurred at a faster rate than without wind pressure,
6 and these two window sills also overflowed.

7 So part of the question is why are we taking so
8 much water? My opinion is that the weatherstrip does
9 not fit properly. It allows too much water past it into
10 the small weep holes, and the window sill cannot accommodate
11 the water draining it to the outside. Instead the water
12 fills up the sill and drains to the inside, so we have water
13 overflowing the sill as the initial case.

14 We, in some cases, had water leaking through
15 the sill jamb joint which functions as the end dam for
16 that sill and lets water to the interior. By visual
17 inspection, we also find that this horizontal metal-to-
18 metal joint between windows is not adequately sealed.
19 That lets water in. That's item two.

20 Item three: By taking the sash out of the opening,
21 you can inspect the weatherstrip, and frequently we found
22 that the weatherstrip was short. It was cut too short. It
23 did not fit the full height of the window. In some cases

1 the weatherstrip was even completely missing. The fixed
2 glass panel is clamped in place. It fits tightly into a
3 channel at the head and tightly into a channel at the sill.
4 Around the glass panel is weatherstripping to make a seal.
5 However, at the jambs the glass panel is held by a piece
6 of vinyl that drives into a groove in the framing and this
7 vinyl was very flexible and did not tightly clamp the
8 ventilator or this panel against the weatherstrip.

9 And, visually, you could look -- take this window
10 out and look and see gaps between the weatherstrip and the
11 frame. There are also some joints along the bottom --
12 there's a joint at the bottom of this member that penetrates
13 the top portion of the sill allowing water into the area
14 that's served by the weep holes; and the combination of
15 these various -- well, one more item.

16 Also, some of the windows were out of level.
17 They're not installed level, so the water would tend to
18 run to one end, and then, of course, the water would
19 normally overflow at that low end.

20 The weep holes furnished by the manufacturer were
21 not uniform in size. For a proper function there has to be
22 a happy balance between the size of the weep holes and the
23 amount of the water being taken into the window sill.

1 One might ask if the window is taking on water
2 too rapidly for the weep holes to accommodate that water,
3 let's make the weep holes larger.

4 Well, if we put large weep holes, you also increase
5 air leakage and when the wind pressure is acting on the
6 outside of the window -- air blowing through the weeps
7 and through the puddle of water collected in the sill, you
8 get percolation and the water flows out of the sill. So
9 there has to be a happy balance. Too many weep holes are
10 just as detrimental as an insufficient number or under-
11 sized weeps.

12 But the windows were sloppily manufactured with
13 non-uniform weeps so that there was no way of knowing which
14 was the proper weep configuration. The way they were
15 punched, they were not punched cleanly, and hence they
16 varied in size.

17 One other item regarding the window framing.
18 The jointery was misaligned. The weatherstrip is basically
19 all in one plane, and where they had misalignment of
20 joints at the corners, the weatherstrip also did not fit
21 there; did not properly fill the gap because it could not
22 accommodate the tolerances involved.

23 And I believe that basically covers the window

1 deficiencies as I observed them.

2 MR. FREEDMAN: Your Honor, may I have this
3 marked as Exhibit 47.

4 THE COURT: All right.

5 (The document heretofore referred to
6 was marked Plaintiffs' Exhibit No.
7 47 for identification.)

8 MR. FREEDMAN: I'll keep it up there. And, I'd
9 like to offer it into evidence as Plaintiffs' Exhibit 47.

10 THE COURT: Any objection?

11 MR. NOPTON: None for me, Your Honor.

12 THE COURT: It will be admitted.

13 (The document heretofore marked for
14 identification as Plaintiffs'
15 Exhibit No. 47 was received in
16 evidence.)

17 BY MR. FREEDMAN:

18 Q Mr. Sakhnovsky, did you ascertain the
19 manufacturer of this particular window unit?

20 A Yes.

21 Q And who is it manufactured by?

22 A Acorn Products in Detroit, Michigan.

23 MR. FREEDMAN: Bear with me a moment.

1 single glass.

2 Q Have you an opinion as to whether the 2500
3 Window, or the window you saw at Cameron -- which window
4 is the better window; the one that is at Cameron or the
5 2500 window?

6 A From an air leakage, and water leakage and
7 structural standpoint, both windows are supposed to meet
8 the same set of standards. However, the Acorn Insul-Wal
9 2500 Window has significantly better thermal performance
10 than the windows that were actually installed.

11 In other words, the window has -- specified
12 window has better insulating value.

13 Q Is it a more or less expensive window?

14 A It would be a more expensive window.

15 Q Now, Mr. Sakhnovsky, did you prepare, at our
16 request, a suggested -- a remedial program for rehabilita-
17 ting these windows?

18 A Yes, I did.

19 Q And what did that consist of?

20 A Basically it consisted of a program intended to
21 correct the observed defects that were already pointed out
22 in these windows.

23 Q And how was that to be done?

1 A I'll refer to page four of my report, and it
2 involved removing the fixed glass panel that's at the
3 bottom of the assembly, as well as the fixed glass panel
4 to the lefthand side of the assembly as sketched; and
5 once these panels are removed, then there is an opportunity
6 to re-seal the metal jointery that is exposed. The jointery
7 is in point concealed by the panels, so the panels have to
8 be removed to expose the joints to give access to re-seal
9 them. In some cases the fixed glass panel plastic wedges
10 or inserts, retainers, are missing. Those would have to
11 be replaced after the panel is reinstalled.

12 And a means has to be provided to lock that
13 insert in place so it cannot come out. The various
14 installation screws, exposed installation screws, need to
15 be sealed, which they were not originally sealed. The
16 concept of correcting the sill overflow, in my opinion,
17 would involve making the -- transferring the prime
18 gutter sill from where it's presently located there
19 above the lower fixed panel and dropping it down to the
20 lower portion of the window; making that sill deeper by
21 applying a flat bar; make a deeper gutter; and then
22 provide a drain tube to drain the water from the upper
23 sill to this lower sill.

1 Now, it has to be recognized that the deeper
2 the sill, the larger the quantity of water we can
3 accommodate before the water overflows to the inside;
4 and secondly, you have to recognize that the weep holes
5 do not function to drain water out under high wind pressure
6 conditions.

7 A 40 mile an hour wind requires a window sill
8 that is three-quarters of an inch deep before any water
9 will exit through the weep holes. In other words, the
10 outside pressure, 40 mile an hour wind, is equal to a
11 water head of three-quarters of an inch. Now the same
12 water head is built up inside the window sill to at least
13 three-quarters of an inch before any water starts flowing
14 out the weeps, so the deeper the sill, the better the
15 window can drain against outside pressure conditions.

16 Q What further corrective action would your
17 specifications require?

18 A The weatherstrip in the window and the sliding
19 panel is pile -- actually it's polypropylene fibers woven
20 into a backing material. The fibers are like a bunch of
21 fingers on a comb and water flows through them. There is
22 a better type weatherstrip called Fin-Seal, which has a
23 plastic leaf woven in between the short fibers and it's

1 far more effective in keeping out more air and water, so
2 I would change the weatherstrip on the sliding sash.

3 Because of the problems with excessive leakage
4 around the fixed glass panels, those should be sealed and
5 placed from the outside with silicone sealant. The
6 horizontal joint between the two sashes, or between the
7 upper and lower windows needs to be sealed and the various
8 framing joints exposed to the exterior have to be sealed.

9 Q And what exterior work?

10 A Well, the exterior would involve sealing around
11 the exterior panels where the vinyl gasket, or where the
12 stripping, is not fit properly. It involves sealing the
13 exposed metal-to-metal joints on the outside -- the
14 horizontal joints, as well as between window units, as
15 well as the various framing joints that are exposed; and
16 sealing the upper sash weep holes, retaining only the
17 lower set of weep holes.

18 Q Now, Mr. Sakhnovsky, I show you what has been
19 marked -- it's a part of Exhibit 42; it's pages four, five
20 and six of your report -- and ask you whether you have --
21 you are familiar with this and this constitutes your
22 corrective program?

23 A Yes, it does.

1 Q Now, Mr. Sakhnovsky, I direct your attention to
2 what has -- on page six of that report and ask you to
3 comment, if you would, as to the relative merits of going
4 through this corrective program which you have described,
5 and replacing the windows?

6 A The main problem with the corrective work is that
7 it requires a craftsman to perform it properly -- someone
8 that is familiar with metalworking, familiar with sealants.
9 And for the remedial work to function as intended, it has
10 to be very carefully and meticulously effected, and I
11 think there will be a serious problem in finding suitable
12 craftsmen that are capable of doing this work. It's not
13 something that you could look in the phone book and find
14 someone that would be qualified to do this.

15 Q And what would your recommendation then be as to
16 the corrective action for the aluminum windows?

17 A If the cost of replacing the windows is not too
18 different than the cost of rehabilitating the windows,
19 I think it would be better to replace the windows.

20 MR. FREEDMAN: Your Honor, at this time, I'd
21 like to offer page four, five and six of the Sakhnovsky
22 report into evidence, and as our Exhibit 42 as previously
23 marked.

MR. NORTON: I have none.

BY MR. TROTTER:

Q Mr. Gauthier, did you have occasion to review the plans and specifications of Cameron Overlook Apartments?

A Yes, I did.

Q Approximately when was that?

A Within the last two months of this year -- October and November.

Q And did you also visit the site?

A Yes, I have.

Q On what occasions?

A Within the last two months -- October and November -- at various times.

Q All right. What was the purpose of your review of the plans and visits at the site?

A To see if there were any obvious differences between the contract documents, plans and specifications and the conditions on site.

Q Now, directing your attention to the electrical specifications and plans could you tell us whether or not you noted any deviation from the plans and specifications?

A Yes, I did.

Q And what was that?

1 A The one deviation I noted was the aluminum feeders
2 to the apartments and to the ranges, whereas the contract
3 documents called for copper.

4 Q Copper?

5 A Yes.

6 Q With respect to maintenance, is there any
7 difference between the two?

8 A Yes, aluminum requires more maintenance.

9 Q What do you mean by that -- in what respect?

10 A Well, periodically you have to check the
11 connectors, all the connections on aluminum conductors
12 and tighten them up.

13 Q All right, sir.

14 Now, was anything else with regard to the
15 electrical system that you checked?

16 A The other thing I noticed was in the lightning
17 protection system where there are some dissimilar metals
18 on site, whereas the contract documents call specifically,
19 or they're not to have dissimilar metals, that all metals
20 are to be similar type.

21 Q And why is that? What difference does it make
22 whether they're similar or dissimilar?

23 A Well, dissimilar metals under a moisture condition

1 is the same as a battery, and corrosion will result, and
2 in this particular case, the pipe supports holding up the
3 electrical cables will corrode and the cables will then
4 sag, and eventually you'll have a failure condition in
5 the lightning protection system in time.

6 Q Where is the lightning protection system that
7 you refer to located?

8 A It's on the roof of the building.

9 Q Could you draw us a rough diagram to indicate
10 what the problem is there, if any?

11 MR. TROTTER: Can he use the blackboard, Your
12 Honor?

13 THE COURT: Help yourself.

14 BY MR. TROTTER:

15 Q I understand this will not be to scale, but just
16 for diagrammatic purposes, could you just explain to the
17 jury what you mean?

18 A The condition that I noticed with the roof and
19 the parapet of the building, this being the face of the
20 building, the parapet of the building, and this being
21 the roof, the cable -- the lightning protection cable
22 runs along the roof this way, and then comes up this way,
23 and connects to the lightning rod which is up here. So

1 correct that by replacing the aluminum with copper wire?

2 A No, I don't think so. I think it would be
3 better left.

4 Q Is there a difference in the cost between the
5 aluminum and the copper wire?

6 A Yes, a substantial difference.

7 Q All right, and, under contract documents that you
8 reviewed -- did you see any credit given to the owner for
9 that?

10 A I have not seen anything like that.

11 Q Now, Mr. Gauthier, turning to the mechanical
12 system of the building, did you investigate certain items
13 in the mechanical system and --

14 A Yes, I did.

15 Q What are they?

16 First of all, can you do that accurately without
17 referring to your notes to refresh your recollection?

18 A Well, I think I'd like to refer to my notes,
19 if I could.

20 MR. TROTTER: May he do that, Your Honor?

21 THE COURT: (Nodding head.)

22 BY MR. TROTTER:

23 Q Now, first, I'll ask you if you made any

1 investigation with respect to the vertical dual
2 temperature condensate drain, and fire protection piping?

3 A Yes, that piping is a piping that runs through
4 the floors, from floor to floor, and rises up the full
5 height of the building. And those -- and piercing the
6 floors are no sleeves, whereas the contract documents
7 call for sleeves which rise two inches above the floor;
8 there are no sleeves on those.

9 Q Now, how many apartments would this be that
10 you're speaking of, or is this probably throughout the
11 building?

12 A Well, I looked at some 15, 16 apartments, maybe
13 more, and I didn't see any, and I assume from that --

14 MR. LOFTUS: I object to the assumption that's
15 true for the rest of the building.

16 THE COURT: All right. Go ahead.

17 BY MR. TROTTER:

18 Q You didn't see any sleeves?

19 A No.

20 Q Now could you describe what a sleeve looks like
21 for the jury, and in what apartment room it would be.

22 A You want me to draw it on the board?

23 Q Step over here to the blackboard if you would, sir.

1 And what room are we concerned with on these
2 sleeves?

3 A This is the mechanical room, heating room of each
4 apartment.

5 Q Each apartment has a separate heating and air
6 conditioning and ventilation system?

7 A Yes.

8 Q And would this be fed by separate units or is
9 there a central boiler room?

10 A Well, there is a central unit that feeds them and
11 the heating water and cooling water is sent up through a
12 riser pipe which goes through closets, and the closets are
13 over one another, and there is a floor between each one.
14 Of course, the floor goes on in each apartment, and then a
15 pipe runs through and in here is the heater, and then this
16 comes out and feeds the heater. In other words, as this
17 pipe pierces the floor, the sleeve called for in the
18 documents, and this should protrude about the floor level
19 about two inches --

20 Q Why?

21 A Well, it's kind of a safety device to sort of
22 insure that if there is some kind of leak in here that
23 the water will not automatically just drip on down through

1 and flood all the other apartments. It would be confined
2 reasonably to one floor.

3 If you have an absolute, major leak, why perhaps
4 this might not work completely, but for -- under normal
5 conditions if there's a normal leak here, this would tend
6 to minimize the amount of damage that you would get from
7 a --

8 Q How far would this be in terms of inches from
9 the floor?

10 A Well, the documents, I believe, call for two
11 inches.

12 Q And is what you mean that you found omitted?

13 A Yes, I didn't see any of those.

14 Q Is there any corrective action that can be taken
15 to bring this --

16 A Split sleeves could be installed and parked in
17 place, so that is in effect -- it can be done.

18 Q And did you determine how many split sleeves?

19 A I didn't see any in those apartments that I looked
20 at.

21 ~~Q Mr. Gauthier, based upon your knowledge of~~
22 ~~mechanical construction, have you formed an opinion as~~
23 ~~to whether these sleeves are present in the building?~~

1 MR. LOFTUS: Your Honor, I object to that. It's
2 not an opinion; it's a statement of fact as to whether
3 they were there or not.

4 MR. TROTTER: I mean based on his experience and
5 observation.

6 THE COURT: There's none in the 16 apartments
7 he visited. Objection sustained.

8 MR. TROTTER: All right, sir.

9 BY MR. TROTTER:

10 Q Now, with respect to the apartment fan coil units,
11 did you make any investigation with respect to the dampers
12 in the living room?

13 A Yes. The contract documents call for volume
14 dampers on the living room duct, and I did not see any on
15 the job.

16 Q Are those the ones that you shut off and shut on
17 the heat or the air conditioning flow?

18 A Yes, they provide a manual means of balancing
19 the flow between the room so you have reasonable balance
20 of heat between the different rooms and the apartments.

21 Q All right, now did the contract documents call
22 for those?

23 A Yes.

1 Q Can these be added now without any damage to the
2 building?

3 A Yes.

4 Q In reviewing the plans and the specifications,
5 were these called for in each apartment in the building or
6 not?

7 A Yes, they are, in each apartment.

8 Q Now, with respect to the absorption machine,
9 did you make any inspection of that?

10 A Yes, I did.

11 Q What did you find?

12 A I found the piping set up in such a way that it's
13 very difficult to get access to the parts of the machine
14 for proper servicing.

15 Q What is the effect of this as far as the building
16 is concerned, or the maintenance is concerned, if any?

17 A Well, it makes it more difficult to maintain the
18 building, and if you have problems with the chiller, then
19 you have to disconnect all the piping to get at it and in
20 the process, you tend to loose all the water in the system,
21 which is fairly valuable because it's been treated so that
22 it becomes a major operation to disconnect this piece of
23 equipment --

1 MR. LOFTUS: Your Honor, I have to object to
2 this testimony. I think he's got to point to something
3 in the specifications.

4 MR. TROTTER: That was going to be my next
5 question.

6 BY MR. TROTTER:

7 Q Had you reviewed the specifications, sir?

8 A Yes.

9 Q Did you find anything in the specifications calling
10 for this?

11 MR. NORTON: Excuse me, Your Honor, calling for
12 what?

13 THE COURT: All right, rephrase your question.

14 What did the specifications require, or call
15 for, as to the location of pipe?

16 BY MR. TROTTER:

17 Q Can you answer that question?

18 A The specifications in one paragraph requires --

19 Q What paragraph, sir?

20 A Paragraph 15b, 42.1, requires that the contractor
21 shall provide access to the piping adjacent to the machine
22 to allow removal of the headers.

23 Q Are there any other specifications bearing on this

1 particular problem we are concerned with?

2 A Not that I know of. I haven't looked that
3 deeply.

4 Q We're talking about the absorption machine now?

5 A Yes, right.

6 Q Were there any other problems with regard to the

7 A Yeah, the steam control piping. The contract
8 documents call for two modulating steam valves and there's
9 only one installed. The documents also call for a bypass
10 and that is not installed. The documents call for gate
11 valve installation, and those are not installed.

12 Q Well, now, with respect to the steam absorption
13 unit, is there any provision in the specifications con-
14 cerning its features?

15 A Yes. The documents show a diagram which shows
16 how the chiller should be piped up with the double modulating
17 valve and the bypass.

18 Q Now, did you happen to review the specifications
19 which, I believe, was Item Four of your report with regard
20 to the steam absorption units?

21 A Yeah, this was a matter of the decrystallization
22 device. The contract documents call for a decrystallization
23 device and that has not been installed.

1 Q What is the decrystallization device?

2 A The absorption unit works on -- on temperature
3 differences, and critical controls, and if the refrigerant
4 becomes too cold, it becomes crystalized and what that does
5 is while the unit, in effect, becomes -- freezes up and it
6 becomes in operative, and you can cause damage to the unit.

7 Q Well, what is an absorption unit in layman's
8 terms?

9 A An absorption unit is a refrigeration machine
10 which works on a principle of providing refrigeration out
11 of steam, which seems almost like a contradictory
12 thing, but rather than a combustive cycle that you get
13 out of most of your refrigeration units. Consequently
14 because of using the steam to get the refrigeration, it's
15 worked on temperature cycles which causes gas to expand
16 and contract, and in the process it provides a refrigera-
17 tion effect.

18 Q Now, again, what is the purpose of the automatic
19 decrystallization device then?

20 A It's to prevent the refrigerant from crystalizing
21 and the machine from freezing up.

22 Q Had that ever been installed on your last visit
23 to the site?

1 A No, it had not.

2 Q And that was within the past month or so?

3 A Yes.

4 Q Can you tell us whether or not this has any effect
5 on the maintenance of the system -- the air conditioning
6 and heating system?

7 A Yes, I believe it makes it more difficult to
8 maintain the unit.

9 Q And is there a way to correct this?

10 A Yes, you can add the decrystallization unit, or a
11 steam jacket, or an electric heater, which also is called
12 for in the contract documents.

13 Q Is a steam jacket or electrical element called
14 for in the plans and specifications?

15 A Yes, as an alternative to the decrystallization.

16 Q Did you ascertain from your visit whether that
17 was there?

18 A No, neither are there.

19 Q And what, if any, corrective action would you
20 suggest?

21 A Well, that unit could be installed, and I would
22 recommend that it be installed.

23 Q All right. Now, the next item, I believe, was

1 Number Six. Did you make any study of the piping in the
2 mechanical boiler room?

3 A Well, the other item that I observed was the
4 use of butterfly valves in many instances. The contract
5 documents call for gate valves to be used, but butterfly
6 valves have been used in place.

7 Q Where?

8 A Pretty generally throughout the main piping, and
9 the large piping in the boiler room.

10 Q Boiler room?

11 A Yeah.

12 Q Is there any difference in the cost between a
13 butterfly valve and a gate valve?

14 A Yeah.

15 Q Which costs more?

16 A Gate valve.

17 Q And, could you, for the jury, describe the
18 difference between the operation of a gate valve and a
19 butterfly valve? You can go to the board if you want to.

20 A I think it's kind of difficult to draw on the
21 blackboard. Maybe I could spare you that.

22 Q Okay, first describe what a gate valve is?

23 A A gate valve is a positive shut-off device, and

1 once you shut it off, it will hold against pressure, so it's
2 a very positive thing.

3 The butterfly valve is used more for control, and
4 modulating controls, through pipes. It's not generally
5 used as a shut-off device.

6 The contract documents in this particular case
7 called for gate valves.

8 Q Will a butterfly valve completely cut off the
9 flow of water, or steam, or whatever it is?

10 A Not as completely as a gate valve; no.

11 Q And the contract documents provide for which?

12 A Gate valves.

13 Q Now, can these be -- can a butterfly valve --
14 people can take those out now and replace them with gate
15 valves?

16 A Yes.

17 Q And did you specify any corrective actions in
18 this regard?

19 A I'd recommend that they be changed -- that they
20 be installed.

21 Q Now, did you make any recommendations concerning
22 the absorption machine, isolation of the absorption machine
23 steam supply in terms of replacing these?

1 A Yes, there is a --

2 Q What do you have to do?

3 A Yeah. The piping has to be revised, and the
4 gate valves installed, and the piping links put in and
5 for the isolation of the absorption machines so that
6 you can service it. And then for the steam supply, you
7 have to revise the piping and install pieces of piping,
8 install modulating valves and strainers to give the
9 double--to use the two modulating valves and the bypass.
10 These can be done; it's a matter of revising the pipe.

11 Q And where in the specifications are butterfly --
12 I mean gate valves called for as opposed to butterfly
13 valves? Did you find that?

14 A I don't believe I've identified the paragraph
15 where the gate valves are called for.

16 Q Is there mention of butterfly valves in the
17 specifications?

18 A Yes. There's a restriction on the use of the
19 butterfly valve, and the -- in paragraph 15b, 34.3, it
20 states that the butterfly valves cannot be used except as
21 two-position diverting valves, or for the control of
22 condenser water temperature.

23 Q And what you've been describing, does that fit

1 under that category or --

2 A No, the -- they've been used in other places.

3 Q All right.

4 Now, turning to Item Seven, would you tell us
5 whether you made any investigation concerning the corridor
6 supply ducts?

7 THE COURT: What ducts?

8 MR. TROTTER: Corridor supply ducts.

9 Q First of all, what are corridor supply ducts, if
10 you did make such an investigation?

11 A Each corridor is supplied with a certain amount
12 of outside air to keep the corridor fresh.

13 Q Now a "corridor," your speaking of corridor in the
14 halls of the apartment building?

15 A Yes.

16 Q Or a corridor in the apartment unit?

17 A No, the corridor in the halls between the --
18 in the apartment building, not in the apartments themselves.

19 Q All right.

20 A This is the inter-connecting hall between all of
21 the apartments which occurs on every floor.

22 Q And did you review the specifications concerning --

23 A Yes, the specifications call for the ducts to be

1 insulated.

2 Q What specifications do you have that --

3 A It's paragraph 15b, 31.5.

4 Q All right, now, how about the drawings -- the
5 mechanical plans, did you review those?

6 A Yes, I did.

7 Q And did they have any specification with respect
8 to these ducts?

9 A No.

10 Q They did not?

11 A No, they did not.

12 Q Did you visit the site to actually look at these
13 supply ducts?

14 A Yes, I did.

15 Q What did you find?

16 A The riser duct -- this one that comes up at the
17 end of the corridor at each end of the building -- I found
18 that one of them -- we broke into the wall so we could get
19 at the duct, and I found one of them did not have insula-
20 tion. I found the other one did have insulation.

21 MR. LOFTUS: Your Honor, I'd like the witness
22 to state what floor and where he broke into this wall.

23 THE COURT: All right, you can ask him that on

1 your cross examination.

2 BY MR. TROTTER:

3 Q Was that the only place you looked at the
4 corridor?

5 A No. I did at each floor. There's a branch duct
6 that comes off the riser duct, and comes through the stair-
7 well, and then --

8 Q Is that readily visible?

9 A Yes. That's visible.

10 Q When you look at it at each floor?

11 A At each floor, yes.

12 Q Could you tell us whether or not that was
13 insulated?

14 A No, they are not insulated.

15 Q All right, now is it economically feasible to go
16 in there now and insulate these ducts?

17 A Yes.

18 Q Did you, at the owner's request, specify or
19 provide for any corrective action?

20 A Well, I would recommend that they be insulated.

21 Q And how would this be done?

22 A By removing the block and insulating the riser
23 and then insulating each branch duct in the stairwell. It's

1 good for energy conservation too.

2 Q For what purpose?

3 A You can save energy by having it insulated.

4 Q Do you have an opinion as to whether the building
5 has any value with or without the corridor insulation ducts,
6 or insulation of the corridor supply ducts?

7 MR. LOFTUS: I object to that; that's a question
8 for an appraiser.

9 THE COURT: Sustained.

10 BY MR. TROTTER:

11 Q Now, turn to Item Eight, and tell us whether you
12 made any inspection or view of the expansion loops?

13 A Yes.

14 Q Did you review the specifications?

15 A Yes, the specifications at paragraph 15a, 33.1
16 requires the use of expansion loops or swing joints on hot
17 and recirculating water mains where indicated on the
18 drawings.

19 Q Now, what do you mean by expansion loops or
20 swing joints?

21 A Hot water lines expand a great deal as the
22 temperature varies, and on a building of this type, where
23 the risers are quite long, the riser pipes will expand

1 considerably, and to avoid having the pipes bend or break,
2 they install a very deliberate loop in the pipe which you
3 put elbows in and short pipes around to make a loop so that
4 when the pipe expands it bends the piece of pipe on the
5 loop, rather than twisting the pipe and breaking it off.

6 Q So you're talking about -- you said "risers", what
7 are they?

8 A Those are the pipes that run from the lower level
9 and rise on up through each floor, and at each floor, there's
10 a lateral taken off to feed each apartment, each piece of
11 equipment.

12 Q And you are speaking of the riser going all the
13 way from the basement to the top floor, or what?

14 A Yes.

15 Q Did you find any expansion loops or swing joints?

16 A No, I did not.

17 Q And when you say that the pipes expand, are you
18 talking about the diameter of the pipe expanding, or the
19 length?

20 A I'm talking about the length of the pipe
21 expanding.

22 Q And is that the reason for the expansion loops?

23 A Yes, it is.

1 Q Were there any other locations which you inspected
2 concerning this problem, or did you review any drawings with
3 respect to the --

4 A The drawings show, on sheet P-7 that the hot
5 water risers -- indicates a typical expansion loop location,
6 one at the top and one at the bottom of the riser.

7 Q Now, based on your experience and training, Mr.
8 Gautier, is it economically feasible to go in there now and
9 put in expansion loops?

10 A I doubt it very much.

11 Q And in your experience would this omission of
12 expansion loops increase or decrease the cost of the building
13 to the contractor?

14 A Decrease.

15 Q And under the contract documents that you reviewed,
16 did you see any indications where any credit was given to
17 the owner?

18 A No, I did not.

19 Q Under the contract documents, as you reviewed
20 them, and based on your experience would the owner have
21 been entitled to credit?

22 MR. LOFTUS: Objection.

23 MR. NORTON: Objection, Your Honor. That's a

1 legal question -- interpretation of the contract is not
2 something for Mr. Gauthier.

3 MR. TROTTER: Well, Your Honor, I think it's right
4 within the realm of his expertise.

5 THE COURT: Well, if it's in the contract, the
6 contract speaks for itself.

7 MR. TROTTER: All right, sir.

8 BY MR. TROTTER:

9 Q Now, we'll turn to Item Nine, Mr. Gauthier.
10 What, if any, investigation did you make with respect to
11 the condenser water system?

12 A The specifications require a bypass on the
13 condenser water.

14 Q What do you mean by "bypass"?

15 A It's a pipe which crosses between the supply and
16 return line, and allows for a short-circuiting of the
17 water through the piping, and avoiding the cooling power.

18 Q All right. Did you find any such bypass when
19 you visited the site?

20 A No, I did not.

21 Q How many locations would this be?

22 A One location.

23 Q And had any such bypass been installed when you

1 last went to the site recently?

2 A No.

3 Q Did you recommend any corrective action?

4 A That it be installed.

5 MR. TROTTER: Could I have the Court's indulgence
6 one moment please?

7 I have no further questions, Your Honor.

8 CROSS EXAMINATION

9 BY MR. LOFTUS:

10 Q Sir, when did you make the inspection that you've
11 been relating to the jury this morning?

12 A In October, sometime.

13 Q October?

14 A Of this year.

15 Q This year?

16 A Yes.

17 Q Was anyone present with you when you made this
18 inspection?

19 A Yes.

20 Q Who was that?

21 A The maintenance man in the apartment.

22 Q Was anyone present from the Thomas P. Harkins
23 Company?

1 THE COURT: This is the what?

2 MR. FREEDMAN: This is as the roof section was
3 designed.

4 THE COURT: What's your objection?

5 MR. WALSH: No foundation, Your Honor.

6 THE COURT: Well, he says he's seen the plans and
7 specifications.

8 MR. WALSH: I did hear that, Your Honor.

9 THE COURT: All right. Objection overruled.

10 THE WITNESS: I may state that this --

11 MR. WALSH: There's no question pending. I
12 object.

13 THE COURT: The question is, is that drawing in
14 accordance with the plans and specifications that you
15 examined?

16 THE WITNESS: I believe that is true -- this is
17 a true representation of what the details in the plans
18 and specifications require.

19 BY MR. FREEDMAN:

20 Q Now, what did you find when you went up to the
21 roof and made your observations on the roof?

22 A Well, this particular part of the roof where you
23 have the masonry parapet wall here, this part depicts the

1 details that we actually found and we had a rowlock course
2 which this is called.

3 Q Excuse me, what is a rowlock course of brick?

4 A This would be the top brick on the parapet wall
5 which would be turned to go across the wall so it would be
6 spanning the two parts of the wall -- the wall system,
7 the masonry system, you have an interior and an exterior
8 wyth; the rowlock would span both of those and it would be
9 the top part of the parapet.

10 For that particular detail to be waterproofed,
11 you need to cut the water off from entering into the
12 interior of the parapet so the flashing we found was
13 here directly underneath the rowlock and would not prevent
14 the moisture from penetrating into this porous -- it's not
15 as detailed as the drawings indicate it should have been
16 in that this flashing was to have gone into -- actually
17 it's a counter flashing that fits over the flashing for
18 the roof membrane -- was to penetrate into the interior
19 block joint here.

20 Q Now, what observations did you make on the
21 flashing running down the interior of the parapet wall?

22 A This is the flashing here and it's as detailed
23 except there's more of it. The flashing here should have

1 come out underneath this counter flashing here. You've
2 got a system that's coming in underneath this flashing
3 which is one course up from where it was designed to be.

4 Q How is that flashing on the as-built affixed?

5 A Well, it's supposed to be nailed at the top here,
6 fastened to the interior block here and it was not
7 fastened. It's free to come down and eventually have a
8 leak in there.

9 Q And what material is under -- is used for the
10 flashing immediately under the rowlock course?

11 A Again, this is a counter flashing. It's
12 supposed to go over the membrane flashing here. This
13 is a metallic material here that was used here.

14 Q Now, on both of these drawings, the word "cant"
15 is indicated. What is a cant?

16 A A cant -- a triangular-shaped block. It usually --
17 can be a fibrous material; it can be a wood, but it's
18 used to transition the membrane to the parapet. If you
19 didn't have a cant, your transition would be very sharp
20 and that causes a weak place in the membrane and cracking
21 and splinting can occur due to normal movements of the
22 building and the membrane so the cant is put there to give
23 it a smooth transition off of the horizontal membrane to

1 the vertical parapet wall.

2 Q Is that called for around the entire roof?

3 A Yes, it was.

4 Q Was it, in your observation, around the roof?

5 A In the -- no, it was not. In some places, it
6 was; and in other places, it was not.

7 Q And what was under the membrane in the places
8 where it was not?

9 A Nothing there, just space.

10 MR. FREEDMAN: You want to have a seat back at
11 the witness stand.

12 At this time, Your Honor, I'd like to move
13 Exhibit 32 into evidence.

14 THE COURT: All right, any objection? It
15 will be admitted.

16 (The documents heretofore marked for
17 identification as Plaintiffs' Exhibit
18 No. 32 were received in evidence.)

19 MR. WALSH: My objection is the same, Your
20 Honor.

21 THE COURT: I've forgotten what it was.

22 MR. WALSH: Foundation question, Your Honor,
23 on its comparison with the actual drawings.

1 MR. FREEDMAN: Yes, Your Honor.

2 THE COURT: Let's go.

3 BY MR. FREEDMAN:

4 Q Mr. Kinloch -- I'm sorry, Mr. Dixon, did you
5 make any observations on the roof when you were there in
6 December of '76 and January of 1977?

7 A Yes, I did. I observed --

8 MR. WALSH: Objection, no question pending.

9 THE COURT: All right. What did you observe.

10 BY MR. FREEDMAN:

11 Q What did you observe on the roof surface itself?

12 MR. NORTON: Your Honor, I'd object. As I
13 understood the question it was two visits and I would
14 object to him testifying generally as to what he saw on
15 both visits, unless it's specified.

16 THE COURT: All right, objection overruled.
17 Go ahead.

18 THE WITNESS: For the roof membrane itself, I
19 observed blisters.

20 THE COURT: What visit was this?

21 THE WITNESS: It was in December of '76. I
22 observed some areas where blisters had been marked --
23 circled with paint. I observed a condition of the

1 parapet wall rowlock course which is -- was made, that
2 inspection was made during the visit on the --

3 THE COURT: Is that what you've already told
4 us about?

5 THE WITNESS: Yes, sir.

6 THE COURT: All right.

7 THE WITNESS: I observed the condition of the
8 parapet wall and the flashing to the parapet wall.

9 BY MR. FREEDMAN:

10 Q Did you make a subsequent visit to Cameron
11 Overlook and view the roof?

12 A Yes, my last visit would have been in September
13 of this year and again I observed some blisters on the
14 roof. I observed some of the areas that had blisters
15 previously had been repaired. The markings -- some of
16 the markings that had -- I had originally seen paint
17 marking blisters were not there indicating that something
18 had been done there also. I observed some coping being
19 added to the parapet wall condition in one particular
20 area of the roof.

21 Q Now, what is the cause -- do you know what
22 causes roof blisters, Mr. Dixon?

23 A Yes. Basically a roof blister is caused by --

1 MR. WALSH: Your Honor, I object. I don't
2 think that's relevant, what caused these roof blisters,
3 if any. It's what's relevant, not what can cause them in
4 Arizona or Wisconsin.

5 THE COURT: All right, objection sustained.
6 Limit your answers to these blisters.

7 BY MR. FREEDMAN:

8 Q Have you formed an opinion as to what caused
9 these roof blisters?

10 A Yes, I have.

11 Q And what's your opinion?

12 MR. WALSH: I object, Your Honor, there is no
13 foundation for this answer. He just looked at them.

14 THE COURT: All right, objection overruled.

15 THE WITNESS: The blisters in this particular
16 job were caused by voids left in the membrane during
17 construction. These voids are air and some moisture,
18 and during hot weather the air expands causing the
19 internal pressure, like a balloon being blown up. You
20 start causing the membrane to blow up, expand, and this
21 continues to occur -- heating and cooling, the blisters
22 rise and fall during a period of even a day.
23

1 BY MR. FREEDMAN:

2 Q And what effect will this rising and falling of
3 the blisters have?

4 A Well, actually it's working the membrane and
5 it will -- it does two things. The aggregate which is
6 covering the membrane at that point, which is protecting
7 the flood coat, the top asphalt on the membrane -- the
8 aggregate is rolling off away from this area so it's
9 exposing the flood coat as it's called, or the top asphalt
10 on the membrane.

11 And also you're working the membrane -- it's
12 movement up and down, so you deteriorate the system,
13 cause splits and openings to occur and therefore leaks
14 into the membrane of moisture or water.

15 Q Now, have you formed an opinion as to whether or
16 not this blister situation should be corrected?

17 A Yes, I have.

18 Q What is your opinion?

19 A I believe left as it is, the membrane is going
20 to rapidly deteriorate from the condition it's in now,
21 and many leaks are going to occur due to this -- numerous
22 blisters working.

23 Q Have you formed an opinion as to what should be

1 done to correct this situation?

2 A Well, it's my opinion, due to the magnitude
3 of the blisters that are there, that the most appropriate
4 method is to remove the membrane and start over again,
5 place a new membrane down using the original specifications.
6 specified for the roofing system.

7 Q Is there any other corrective work that has to
8 be done? You mentioned earlier that the cant strip was
9 missing.

10 A Well, yeah, and the total roofing system which
11 would include the parapet wall area -- you've got to place
12 in the cant strips that are not there; you've got to
13 correct the flashing problem as existing; you've got to
14 correct the rowlock condition as existing. All of this
15 is a compatible--a repair program for a roof. It all
16 needs to be done at one time.

17 You need to put in the cant strips where they're
18 missing. You need to correct the flashing and counter
19 flashing problems. You need to correct the rowlock condi-
20 tion.

21 Q Now, I direct your attention to photograph number
22 12, the Law Engineering Report, and ask you what that
23 depicts?

1 be happening, and so I set up a program of testing of
2 the in-place walls. The purpose of the testing of the
3 walls was to evaluate the design, the materials used,
4 and the workmanship of the wall.

5 The test that was used is a standard test, ASTM
6 E-514. However, the standard is for a laboratory test and
7 we modified it -- the test procedure, so that we could, in
8 fact, run it on the in-place wall.

9 BY MR. FREEDMAN:

10 Q Mr. Kinloch, did you observe the exterior walls
11 of the building with respect to cracking in those walls?
12 Was that part of your investigation?

13 A Yes, sir, I did. There were both --

14 MR. WALSH: Well, Your Honor, I object. He's
15 answered the question. He was only asked if he did it.

16 THE COURT: All right. Tell us -- next question,
17 Mr. Freedman.

18 BY MR. FREEDMAN:

19 Q What was the extent of your investigation, Mr.
20 Kinloch?

21 A The extent was -- initially as I indicated, .
22 visual observation from the outside. What we observed --
23 what I observed was the occurrence of both vertical and

1 horizontal cracking. Cracking horizontally was generally
2 in the mortar joints. There was some noticeable bowing of
3 the walls, and the workmanship of the masonry construction
4 was such that open head joints, or -- they're the vertical
5 joints between the various individual bricks -- they were
6 open to a very large degree.

7 Q And did you form an opinion as to why the
8 masonry walls were cracking?

9 A Well, --

10 THE COURT: The answer is yes or no.

11 THE WITNESS: Yes.

12 THE COURT: All right.

13 BY MR. FREEDMAN:

14 Q And what was -- what was your opinion as to why
15 these walls were cracking?

16 A Well, the opinion was based on a couple of
17 things, the observance of the plans which apparently
18 overlooked a --

19 MR. NORTON: Objection, Your Honor. I think he
20 can say what the plans said or didn't say, not what might
21 have caused what, but if he's talking about what's over-
22 looked, we're getting back to the same area that we were
23 at before.

1 THE COURT: All right.

2 THE WITNESS: Well, the plans did not include
3 a detail for relief of the -- of the compresses, stresses
4 that would be placed on the brick masonry face due to a
5 shortening of the frame. If I may explain --

6 BY MR. FREEDMAN:

7 Q Mr. Kinloch, before you explain, have you had
8 experience with this in any other types of projects in
9 this area?

10 A This is not an uncommon problem, and we have
11 dealt with it before on other projects.

12 MR. WALSH: I object to the "we have dealt
13 with," Your Honor, and I'm going to ask him to -- request
14 him to say what he did and what he knows.

15 THE COURT: All right, I've done it, and I'll
16 keep on doing it, Mr. Kinloch.

17 THE WITNESS: Yes, sir.

18 MR. NORTON: Your Honor, I'm also going to object
19 to the business about stresses and that sort of thing
20 because it's my understanding from his testimony on my
21 voir dire that his -- the knowledge concerning structural
22 problems was taken from outside sources, and to the extent
23 that his opinion incorporated those other sources, I'd

1 put in. There are areas that -- it's basically a joint.
2 I guess you could call them different names, but it's
3 basically a joint that is put in there -- horizontal
4 joint that allows that, but there is a space at the top
5 of the brick. It may just be caulking in there, and then
6 when the slabs come together they just squeeze the caulking
7 rather than loading up the brick.

8 Q Now, in making your visual inspection, did you
9 make any inspection with respect to the flashing?

10 A I'm sorry, would you repeat that?

11 Q Did you make any inspection with respect to the
12 flashing?

13 A Well, the inspection with regard to the flashing
14 was twofold in that, again, we reviewed the --

15 MR. WALSH: Your Honor, I object to the "we." I
16 can't examine him on this.

17 THE WITNESS: I -- I beg your pardon.

18 I reviewed the plans with respect to the place-
19 ment of the flashing. I also reviewed the flashing in
20 place.

21 BY MR. FREEDMAN:

22 Q Did the flashing in-place match the flashing as
23 detailed on the plans?

1 MR. WALSH: Objection, leading questions, Your
2 Honor.

3 THE COURT: Don't lead the witness. Sustained.

4 BY MR. FREEDMAN:

5 Q Did you compare the two?

6 A Yes, sir, I did.

7 Q What was the results of the comparison, Mr.
8 Kinloch?

9 A The placement of the masonry -- excuse me --
10 the placement of the flashing in place was not in
11 accordance with the placement of the flashing on the
12 project drawings.

13 Q Mr. Kinloch, could you come down here and take a
14 look at this drawing that's been marked Exhibit 32 for
15 identification.

16 A Yes, sir.

17 THE COURT: Is that a new exhibit? Has that
18 been marked?

19 MR. FREEDMAN: Yes, Your Honor. It's Exhibit 32
20 for identification.

21 MR. NORTON: I think that's the one Mr. Nordstrom
22 was referring to.
23

1 BY MR. FREEDMAN:

2 Q Now would you look at this exhibit and explain
3 what the two figures show.

4 A The figure on the left was designated as as-
5 designed; that on the right is designated as as-built.
6 And these are typical wall sections, this being as far
7 as I can -- to the best of my knowledge, that's the
8 section that appeared on A-21 of the project documents.

9 The section as-built was the conditions that
10 I encountered in the building.

11 Q Now, you spoke of this joint earlier. Where
12 would that have been detailed if there had been such a
13 joint?

14 A Well, the exact spot is not fixed; however,
15 it would have to be up under the slab here somewhere.
16 You see here is your leading edge, your front edge of
17 the slab, here and here (indicating), and these two are
18 coming somewhat closer together so this material here is
19 the concrete block, so it's shrinking somewhat also, so
20 there doesn't seem to be a problem. But this material
21 out here -- these are the bricks, and if you notice,
22 it's caught here and it's also caught here, so as these
23 two slabs come somewhat closer together, they're squeezing

1 this front wall of brick, so the obvious place to put
2 it is not down here because if you put it on top of that
3 area, it would just squeeze out under its own weight.

4 But to put something up under the slab here,
5 a joint of sorts, so that when this slab came closer
6 together -- when these two slabs come closer together,
7 there is a spot in there for it to move and not load --
8 put a load on this brick face.

9 Q Now then, would you refer to the other drawing,
10 and does that fairly depict your personal observations of
11 the way the contractor built the building?

12 A Yes, sir, it does.

13 Q Now, I direct your attention to the -- on the
14 as-built section -- the flashing. Can you tell us what
15 observations you made of the flashing?

16 A And usually from the interior -- as I mentioned
17 before, there were several units that were vacant -- well,
18 they had to move the folks out -- and they tore this wall-
19 board off so that I could observe the back of this wall.

20 And one of the outstanding things that caught
21 my eye was this flashing here, that in each case where
22 it was encountered, it was turned down and when I say
23 "turned down," it exited the wall and then was down up

1 against the wall, this portion here.

2 Now, that's not a standard detail. As a matter
3 of fact, that's a problem. The reason it's a problem is
4 this: The reason that that flashing is there at all is
5 to channel any water that does get into the wall from
6 the exterior -- channel it away from the interior to the
7 outside so that if water were to come in cracks or what-
8 ever, and come in on top of this flashing, it's supposed
9 to channel it down and either out that way or laterally.

10 Now, if you think about it, if we had water
11 coming down on top of this flashing right here, it could
12 just as easily run right out into the interior as it could
13 out. And what's supposed to be done here is this is
14 supposed to be turned up and a mastic applied up against
15 the wall so that if it does get to that point it still
16 can't come out into the building or into the interior of
17 the building.

18 So this is an extremely poor detail. It was not
19 detailed on the design. However, we did encounter it --
20 I did encounter it when I observed the building.

21 Q Now, what is an end dam, Mr. Kinloch, as used,
22 the term?

23 A Well, as I told you before, the purpose of the

1 flashing is to channel water away from the interior. Now
2 water can move laterally along this plane also. If you'll
3 think about water coming down here and getting caught in
4 this little nook right here, it can run, when it comes
5 down the wall and it comes down this way or that way
6 (indicating), so when the wall comes to a window the
7 flashing should come out and up, so again it does not
8 allow it to come into the building at the window well.

9 Q Excuse me, Mr. Kinloch, what is this I'm holding
10 in my hand?

11 A This material is a polyvinyl, I believe, and
12 it's used -- it's a typical flashing-type material. It's
13 impermeable and it's flexible such that if this were
14 your brick and block, something like this (indicating).
15 It can come down -- the water can come down, run off the
16 flashing. It gets down here (indicating) and it can go
17 laterally.

18 And if this were the end of the wall, and the
19 window over here, and there was nothing here to stop it,
20 well it just runs off into the building at the window.

21 So what should be done is that the ends are
22 actually cut --

23 THE COURT: Keep your voice up, please.

1 BY MR. FREEDMAN:

2 Q What did you see in the mechanical room of
3 apartment 1412?

4 A 1412, the interior of the mechanical room was
5 not finished in that it didn't have wallboard. It was
6 just the bare block wall that was visible, and in both
7 1412 and also in room 1502 where we looked at --

8 MR. WALSH: Objection. He wasn't asked that,
9 Your Honor.

10 THE COURT: Just tell us what you found in
11 1412.

12 THE WITNESS: In 1412 we found that the block
13 wall --

14 MR. WALSH: I object to the use of "we," Your
15 Honor.

16 THE COURT: All right.

17 THE WITNESS: In 1412 I examined the inside of
18 the mechanical room, the block wall was damp and stained --
19 stained, damp.

20 BY MR. FREEDMAN:

21 Q Now, did there come a time in December of 1976
22 when you conducted testing at the Cameron Overlook Project?

23 A Yes, sir.

Testimony of John J. Foley

1 THE COURT: Next question. We're going to stay
2 here until you finish your direct examination, I hope.

3 MR. FREEDMAN: Your Honor, I think I could-- if I
4 had a chance to look at my notes at the lunch break, I could
5 really curtail the examination, to compare what other
6 witnesses have testified to; and if I had that -- five or
7 ten minutes to do that, I could probably shorten the
8 examination by half an hour.

9 THE COURT: How much longer you think you'll go
10 on the way you sit now?

11 MR. FREEDMAN: About 20, 25 minutes, Your Honor.

12 THE COURT: Let's go.

13 BY MR. FREEDMAN:

14 Q Mr. Foley, have you had occasion to view the
15 roof of the Cameron Overlook building?

16 A Yes, I have been on the roof on five different
17 occasions.

18 Q And what observations have you made on the
19 roof?

20 A There are numerous what are termed "bubbles" in
21 the roof construction. These bubbles extending five or
22 six feet in any direction over the entire roof appear--when
23 one places their foot on these bubbles gently, you can see

1 the bubble expanding. And in some instances where the roof
2 was fractured--the felt roofing was fractured--water was
3 revealed to be below these bubbles, and by putting pressure
4 of your foot on the bubble, the water would rise through
5 the fracture of the roof at that point. Roofing materials --

6 Q Now, what kind of roof is it? Would you describe
7 the roofing material used?

8 A That's a ply roof with insulation below it of a
9 20-year bonded construction.

10 Q And what is the significance of these bubbles?

11 A The significance of the bubbles can be attributed,
12 in my opinion -- two things: The felt roofing material was
13 either applied in too thin a thickness to permit the felt
14 roofing to seal itself to the insulation below; or there
15 was moisture in the roof at the time the roof felt was
16 applied which would destroy the bonding capacity of the
17 asphalt at that point.

18 Q Now you said "numerous bubbles." Can you be
19 more specific over what area of the roof?

20 A Over the entire roof, and -- well, one, I did
21 not count the bubbles. They were innumerable from standing
22 upon the roof and just looking. Many of them had been
23 designated by paint spray by someone other than myself and

1 there were other bubbles which had not been so designated.

2 Q Now, did you see any evidence of patching?

3 MR. WALSH: Objection, leading.

4 THE COURT: Don't lead the witness. Next
5 question.

6 BY MR. FREEDMAN:

7 Q Did you see any evidence of construction?

8 A Of what, sir?

9 Q Of construction on the roof?

10 A Construction is a broad term.

11 THE COURT: All right, if you can't answer the
12 question, say so.

13 THE WITNESS: I saw no evidence of new construc-
14 tion or any type of construction other than that which was
15 present.

16 BY MR. FREEDMAN:

17 Q Did you see any evidence of any corrective work
18 on the roof?

19 A I saw evidence of flashing corrections, where
20 additional flashings had been applied on the parapet wall
21 which were not originally required on the drawings; but in
22 observing the felt or the insulation, I saw no evidence of
23 corrections at that point. I did not look for them.

1 Q Now, have you observed or walked the perimeter
2 of the roof specifically looking at the cant strips?

3 A Yes, I have.

4 Q And what do the plans and specifications call
5 for for installation of the cant strips?

6 A The parapet wall as it circumvented the building
7 had three different conditions. One, masonry backed up by
8 cinderblock; one where a window-wall panel extended above
9 the roof; and the third where a concrete parapet was to be
10 installed.

11 The only evidence of a cant strip that I observed
12 was in the area behind the masonry, with a cinderblock
13 back-up, and there was an absence of any evidence of a
14 cant strip being applied behind the concrete parapet or
15 the window-wall construction parapet.

16 Q What is the significance of the absence of the
17 cant strip?

18 A The roof is subject to fracture at that point
19 because the felt would be brought into the back of whatever
20 material was extending above the roof in the form of a
21 parapet and there would be a right angle bend instead of
22 a 45 degree bend and it would be easily punctured by someone
23 standing close to the parapet with the toe of their shoe

1 or something of that nature.

2 Q Mr. Foley, have you formed an opinion as to whether
3 corrective action is required on the roof?

4 A Yes, I have formed an opinion that the --

5 Q What is your opinion, Mr. Foley?

6 A My opinion is that the roof, with the numerous air
7 bubbles that are present, should be corrected in a manner
8 that would maintain the integrity of the roof. And my
9 judgment is that the roofing should be taken off and
10 reapplied.

11 Q New roofing applied?

12 A New roofing applied.

13 Q Now, would you -- I'd like to direct your atten-
14 tion to drawing A-21, and ask you to look at the sections
15 relating to the parapet wall.

16 A Yes, sir.

17 Q Have you compared that, sections four and five,
18 with the as-built conditions?

19 A Yes, I have.

20 Q And does the as-built conditions comply with the
21 drawings?

22 A It does not.

23 Q What is the as-built condition?

1 basis for an opinion.

2 THE COURT: Well, before I let him answer that
3 question, ask him what's the basis of it, because I've
4 just reviewed my notes on his testimony and I'm not sure
5 that I'm agreeing with you. I'd like to hear from him again.

6 BY MR. FREEDMAN:

7 Q Mr. Kinloch, have you made personal observations
8 of the masonry walls at Cameron Overlook?

9 MR. WALSH: I object, Your Honor, leading.

10 THE COURT: Don't lead the witness. Just ask
11 him if he has an opinion and I'll ask him to answer yes
12 or no to that question without giving the opinion.

13 BY MR. FREEDMAN:

14 Q Do you have an opinion on the water resistance
15 capabilities of the masonry walls at Cameron Overlook?

16 A Yes.

17 THE COURT: What's the basis of that?

18 THE WITNESS: Well, they're -- the bases are
19 really more than one. One basis, the -- one basis is the
20 inspection of the in-place walls. The inspection of the
21 wall sections that were torn open and, of course, in
22 addition, the results of those tests.

23 THE COURT: All right, next question.

1 BY MR. FREEDMAN:

2 Q What is your opinion?

3 THE COURT: No, sorry. Do you have an opinion
4 based on your observation, apart from any results of the
5 tests or are the results of the tests an integral part of
6 your opinion, or the basis for your opinion?

7 THE WITNESS: My opinion can go so far without
8 the test results, and if I may explain that. My observa-
9 tions indicated the quality of workmanship of the wall,
10 both on the inside -- basically the quality of the workman-
11 ship and the condition of the wall as it is now.

12 THE COURT: All right, I think that's a basis
13 for an opinion.

14 Do you want to object, Mr. Walsh?

15 MR. WALSH: Yes, Your Honor.

16 THE COURT: State your objection.

17 MR. WALSH: Your Honor, my objection is that
18 there has been no proper foundation. He has not been
19 specific in his observations, and he is generalizing, he
20 is extrapolating. He himself earlier in his testimony
21 when he was asked by Mr. Freedman on the first -- at
22 least the first time he was on the stand, said that in
23 making his inspection and his review and in reaching his

1 conclusions, he consulted with both outside and inside
2 experts; and he verified things with the structural
3 engineer; and he talked with the Brick Institute of
4 America engineer; and he also conferred with consultants
5 internally. You will recall the other day he also
6 reported that Mr. Dixon was his in-house expert, who he
7 looked to for certain evidence.

8 And I think that all this man is doing is
9 guessing based upon information he's gotten from other
10 sources without foundation.

11 THE COURT: Well, I'm going to overrule your
12 objection. You can cross examine him on his basis for
13 this.

14 Go ahead, Mr. Freedman.

15 BY MR. FREEDMAN:

16 Q And what is your opinion, Mr. Kinloch?

17 A Well the opinion that I have based upon the
18 inspection is that the workmanship that I observed
19 contributes to the water permeance problems being
20 experienced at the site.

21 Q Have you formed an opinion as to whether
22 corrective action is necessary?

23 MR. WALSH: Objection on the same grounds.

1 There's no foundation.

2 THE COURT: All right, I'll let the question
3 stand. Objection overruled.

4 THE WITNESS: Yes, sir, I have.

5 BY MR. FREEDMAN:

6 Q And what corrective action would you recommend?

7 A There are basically three points to the corrective
8 action that I recommend.

9 The first point is the installation of three
10 horizontal joints around the building perimeter: one
11 directly beneath the roof slab; one beneath the fifth
12 floor slab; and one beneath the tenth floor slab.

13 The second part is the installation of vertical
14 expansion joints. Actually the locations are shown in the
15 report that was written in September of '78.

16 Q Would you like to refer to that report?

17 MR. WALSH: Objection, Your Honor. He hasn't
18 said he has to refer to it. This is just coaching this
19 witness.

20 THE COURT: All right; sustained.

21 THE WITNESS: Okay, the third point would be to
22 install a -- an insulated waterproof panel to the exterior
23 of the building.

1 BY MR. FREEDMAN:

2 Q What is the nature of this panel?

3 A Well, we looked at --

4 MR. WALSH: I object to the use of "we" again,
5 Your Honor.

6 THE COURT: All right.

7 THE WITNESS: I looked at several -- I looked at
8 several alternative panels. The -- a panel that is --
9 basically what I said is watertight and it also has
10 insulation such as insulates the wall.

11 MR. NORTON: Your Honor, I'd object to him
12 testifying about anything that has to do with any better-
13 ment of this particular project. As Your Honor knows,
14 the measure of damages in a case like this is to fix it,
15 and if it can't be fixed, then it's the difference in the
16 value of the building. And the case of Kirk Reid Company
17 vs. Fine, Your Honor, and others, stands for the proposi-
18 tion that when you get something better; and now what
19 you've got is you've got something that is going to be
20 actually better insulationwise than the regular waterproof
21 brick wall. And I think that's improper testimony.

22 THE COURT: At this point, I'm not sure I'm
23 able to pass on that objection. I'll overrule it at this

1 time, until I can determine whether this is a better -- or
2 what the cost of it is.

3 All right; objection overruled.

4 BY MR. FREEDMAN:

5 Q And how is that panel affixed to the building?

6 A Generally it's attached to furring strips that
7 are attached to --

8 MR. WALSH: I'd object, Your Honor, to this
9 witness testifying unless he has personal knowledge of
10 the information and not just hearsay information that he
11 got from another source or he read about.

12 BY MR. FREEDMAN:

13 Q Did you make a recommendation as to how it should
14 be affixed to the building.

15 MR. WALSH: Objection continues on the same grounds.
16 The question hasn't changed my objection.

17 THE COURT: Ask him what the basis of this
18 recommendation is -- something somebody told him or is
19 it his own conclusion?

20 THE WITNESS: Well, this is my own conclusion
21 based on the available methods that this panel can be
22 attached. Certain methods are suited to certain condi-
23 tions, and, based on the conditions that I see at the

1 site, I've concluded a certain method for attaching the
2 panel.

3 THE COURT: All right; objection overruled.

4 BY MR. FREEDMAN:

5 Q And what is that method?

6 A Well, there are at least two that have to be
7 used. For the majority of the building, the panel is
8 attached to furring strips which are attached to the
9 masonry -- excuse me, the brick facing. In some areas
10 where a furring strip cannot fit in -- there's not room
11 for it -- the panel can be applied directly to the brick
12 facing with an adhesive.

13 Q Do you make any recommendation with respect to
14 contraction joints in the panels?

15 MR. WALSH: Objection to the leading question,
16 Your Honor.

17 THE COURT: As to what -- contraction joints?

18 MR. FREEDMAN: Contraction joints in the panels.

19 THE COURT: Is that his first recommendation?

20 MR. FREEDMAN: Your Honor, his recommendation
21 was that -- Your Honor, that the building be covered with
22 panels.

23 THE COURT: He made three recommendations.

1 Does this have to do with his third recommendation?

2 MR. FREEDMAN: Yes, Your Honor.

3 THE COURT: I don't know whether he said they
4 ought to be vertical or horizontal; he didn't say.

5 Don't lead the witness anyway. The objection
6 is sustained. What's the next question?

7 BY MR. FREEDMAN:

8 Q How were the panels to be affixed to each other?

9 A The panels are essentially not affixed to each
10 other, but they butt against each other. At these locations
11 the manufacturer's recommendations would be followed in
12 terms of the proper caulking or sealant that would be
13 applied there.

14 Q Is any treatment required -- put it this way.

15 What, if any, treatment is required at the
16 places where the soft joints that you recommended --

17 A The soft joints are the horizontal joints that
18 go around the outside of the building at the three locations--
19 would require joints in the panels to occur at the same
20 location such that whatever movements were to occur at
21 the joints in the brick facing do not create cracks in
22 the panel facing at those locations.

23 ~~Q Mr. Kinloch, I show you what has been marked for~~

EXCERPT OF PROCEEDINGS

(Thereupon, the jury entered the jury box.)

THE COURT: Good morning.

All right, Mr. Freedman.

MR. FREEDMAN: Mr. Vallance, please.

(Witness sworn.)

Thereupon,

ANTHONY PAUL VALLANCE,

a witness, was called for examination by counsel for the plaintiffs, and, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. FREEDMAN:

Q What is your full name, please, sir.

A Anthony Paul Vallance.

Q What is your profession, Mr. Vallance?

A I am a quantity surveyor.

Q And what is a quantity surveyor, Mr. Vallance?

A The job of quantity surveyor is a profession which originates in the British Isles which is where I'm from. Under the British system of constructing buildings, when you hire an architect and an engineer, you also hire a third man called a quantity surveyor, and his

1 responsibilities are the control and management of
2 construction projects during both the design and construc-
3 tion phases.

4 Q And what is your educational background, Mr.
5 Vallance?

6 A My training as a quantity surveyor following
7 high school was a four year diploma course at the Poly-
8 technic of Central London and I obtained a diploma in
9 quantity surveying leading to the intermediate examination
10 of the Royal Institution of Chartered Surveyors.

11 Following that, I took post graduate studies
12 at the Northern Polytechnic in London leading to the
13 final examination of the Royal Institution of Chartered
14 Surveyors.

15 Q Now, is there a comparable society in the United
16 States?

17 A There is no direct comparable to the best of
18 my knowledge. The closest organization that I'm aware of
19 is an organization called the American Association of Cost
20 Engineers.

21 Q And what is that organization?

22 A It's an organization of professionals in the
23 construction industry whose main expertise is related to

1 the cost control of construction projects.

2 Q What is required to be a member of this associa-
3 tion?

4 A To become a member of the Association, it is
5 merely required that you have related experience in the
6 field of cost control and estimating out construction
7 projects. To become a certified member, which I am, of
8 that Association, one is required to have proven expertise,
9 education and experience of some substance in the profes-
10 sion of cost estimating.

11 Q Now, have you presented any papers either in
12 the United States or abroad on cost control?

13 A Yes, I have.

14 Q Could you give us the titles of those and where
15 they were given?

16 A At the American -- I beg your pardon -- at the
17 Architectural Association School in London, I contributed
18 to seminars for architects on cost control during design.
19 At the Royal College of Arts in London, Interior Design
20 School, I prepared papers of a similar fashion and
21 presented those.

22 At the University of Chicago I presented a
23 paper titled Cost Control of Renovations to the Society of

1 College and University Planners. At the University of
2 Illinois, a colleague and I -- in Urbana, presented papers
3 to the Post Graduate School of Architecture on cost control
4 for architects.

5 Q Now, what has been your experience in determining
6 costs of construction projects in the United States?
7 Would you mention some of the major projects that you've
8 worked on?

9 A Yes, the State of Illinois Center in Chicago
10 which is an 81 million dollar facility. It's an office
11 building in downtown Chicago.

12 George Washington University in Washington, D.C.,
13 which is an academic building valued at approximately 14
14 million dollars.

15 Remodeling for the NASA facilities at Wallops
16 Island in Virginia. And some work on the Naval Hospital
17 in Portsmouth, Virginia.

18 Q Have you ever done any determination of costs
19 or analysis of costs for any multi-family housing?

20 A Yes, I have.

21 Q And, where was that?

22 A For a period of three years, I was based in
23 Memphis, Tennessee, where I was doing exclusively

1 multi-family housing under the 236 and 221 D3 Federal
2 Housing Program.

3 MR. FREEDMAN: I submit Mr. Vallance as an
4 expert.

5 THE COURT: Is he familiar with costs in this
6 area?

7 THE WITNESS: Yes, I am.

8 THE COURT: All right, ask him about that.

9 BY MR. FREEDMAN:

10 Q What has been your familiarity with costs in
11 this area? Where is your office, Mr. Vallance?

12 A My office is in Alexandria, Virginia, and I have
13 worked on projects in Alexandria; specifically a church for
14 the Alfred Street Baptist Church, the architects for VVKR.

15 Q Have you, besides George Washington, have you
16 estimated costs on any other project in the Washington
17 Metropolitan Area?

18 A Yes, the project of Pemberton Manor in
19 Salisbury, Maryland.

20 I'm trying to recall some others. I can't
21 recall.

22 Q To your knowledge, are the principles for deter-
23 mining estimates of construction costs different in

1 Virginia than they are in any other locality?

2 A No, they're not.

3 Q Is there a Virginia standard that you know of?

4 A For estimating?

5 Q Yes.

6 A Not that I'm aware of. If I might say so --

7 MR. WALSH: No question pending.

8 BY MR. FREEDMAN:

9 Q Would you explain, Mr. Vallance?

10 A As far as I am aware, there is no specific
11 method of estimating projects. Certainly in the United
12 States, estimation is very largely an individual process
13 by individual estimators. There are some guidelines to
14 follow. There are generally accepted principles as to
15 the way you do things, and those are pretty much followed
16 by everyone. But there is no, as far as I'm aware,
17 codified system for Virginia or any other state that
18 I've worked in.

19 Q Is there any licensing regulation that you know
20 of in Virginia?

21 A Not that I'm aware of.

22 MR. FREEDMAN: I submit --

23 THE COURT: Any objection?

1 MR. WALSH: I'd like to approach the bench, Your
2 Honor.

3 THE COURT: All right.

4 BENCH CONFERENCE

5 MR. WALSH: Your Honor, I'd like to tender at
6 this point a memorandum of law on the subject which I just
7 completed. I think we're entering into a very severe
8 area of testimony because there are two theories of the
9 elements that I know of, of damage in Virginia that I know
10 of, that the plaintiff can recover for. One is the cost to
11 repair, and the second is the diminution of value of the
12 property.

13 If the Court were to review the memorandum and
14 the various Virginia cases, the Court will see that the
15 question of economic waste is involved that the proper test
16 is the diminution of value and not the cost to repair. You
17 cannot take a project substantially complete and redo it
18 when the project is serving the purpose for which it was
19 constructed, and as the Appalachian Power case, a very
20 recent Virginia case, talks about the motivation -- the
21 motive of the project -- the reason for the project --
22 clearly the reason for this project is to rent apartments
23 to produce income to be an investment vehicle for the owners

1 We have before the Court to this point no evidence
2 that there's been a diminution of value, but I think the
3 Court can review the evidence and find that it's prima
4 facie a case of economic waste which would call into play
5 the principles set forth in the various Virginia cases:
6 Mann v. Clowser, and the cases cited in the memorandum.

7 It seems to me that the cost to repair is the
8 inappropriate standard to apply. I'd like to point out
9 a few of the things, Your Honor, now that I've made my
10 basic points.

11 One, this report that he's going to testify to
12 was filed after the deadline set by the Court. Two, the
13 report on its face indicates that in preparing the estimates
14 and I use that word guardedly, he has relied upon Philip
15 Maslow's report which is not even in evidence. Mr. Maslow
16 hasn't even testified.

17 He talks about a Law Report of September. I've
18 reviewed my files and my notes, and I'm not at all sure that
19 that information is in evidence.

20 It contains in it a figure on replacing all the
21 windows. It contains in it the replacing of the roof, which
22 is --

23 THE COURT: Let me interrupt you a minute.

1 MR. WALSH: Yes.

2 OPEN COURT

3 THE COURT: Members of the jury, we're going to
4 be some time. Would you retire, and we'll tell you when
5 we're ready to go.

6 (Thereupon, the jury was temporarily excused.)

7 MR. WALSH: Return to the table, sir?

8 THE COURT: (Nodding head.)

9 MR. FREEDMAN: Your Honor, do you want the witness
10 on the witness stand or --

11 THE COURT: He can go out, too. I think probably
12 the witness ought to retire.

13 MR. WALSH: Yes.

14 MR. FREEDMAN: Okay.

15 THE COURT: Tell him where to go, Mr. Hillmore.

16 (Thereupon, the witness was temporarily excused.)

17 THE COURT: Go ahead, Mr. Walsh.

18 MR. WALSH: Your Honor, I believe the Court
19 probably is aware of the Kirk Reid v. Fine, Mr. Louie V.
20 Fine's building down in Norfolk where he didn't like the
21 mechanical installation, and wanted \$87,000 or \$97,000 to
22 replace it. And it went through a lengthy hearing, and
23 went to the Supreme Court, and the Supreme Court said,

1 that's a classic case of diminution of value, and not cost
2 to repair, because the building was being used for the
3 purpose it was designed. There was no indication that
4 it was not a functional building, although some items of
5 the installation may have been omitted or improperly
6 installed.

7 It appears to me, Your Honor, based upon the
8 Virginia cases, and those cases in the Federal Circuit,
9 construing the Virginia law, that this really is the most
10 significant issue to come before the Court. And that is,
11 what are the damages of this case and despite all the
12 hullaballo and who struck John that's gone on for these
13 seven, or perhaps eight days, is the jury going to be
14 permitted to hear from this witness an estimate of
15 \$1,157,000, or thereabouts as the cost to repair when
16 the record, I think, is replete at this point without even
17 a presentation by the defense of its evidence that the
18 building is being used, it's being occupied. There is
19 no diminution of value, and that in a case where you have
20 the concept of the economic waste involved considering
21 tearing out walls, and considering tearing out windows,
22 and considering tearing off roofs, and considering doing
23 \$78,000 worth of work to a heating and mechanical system

1 that's been heating and cooling day in and day out for
2 four years; that's economic waste, and that's why the
3 diminution of value theory ought to be applied.

4 And I have one point which I'd like to reserve
5 and not bother arguing because it might be a waste of the
6 Court's time, until the Court -- for it to determine which
7 of those two theories of damages is the appropriate one.

8 Thank you.

9 THE COURT: Well, you know, the thing that
10 concerns me, Mr. Walsh, is you're making this argument
11 and I take it you're making it sincerely, and I'm con-
12 cerned about it, but why you asked for a jury trial --
13 we're sitting here eight, or two weeks with a jury and
14 you make a motion like this where there's no jury question
15 and you're the one who asked for a jury.

16 MR. WALSH: Well, Your Honor, I'm not sure that
17 that's at all relevant, most respectfully, sir.

18 THE COURT: It just concerns me though, just
19 because of the --

20 MR. WALSH: Well, Your Honor, could I address
21 that because this has been thrown up to me by every Judge
22 who has heard anything in this case, and I think that if I
23 were to lose all of the legal points in this case, and I

1 can't start a case where my client's sued for a million
2 and a half dollars assuming I'm going to win all the legal
3 points, and I have to take to a trier of the fact the type
4 of evidence that's come on this stand -- I don't have any
5 disrespect for the Judges sitting in the Circuit, but I'd
6 like to try to argue that to seven people in this County,
7 Your Honor, that's why. And I hope that the Court under-
8 stands that.

9 THE COURT: Well, it just makes me hard to go
10 along with you on this argument because we've spent this
11 much time and my inclination is to go the whole way, even
12 though I think I might be wrong.

13 MR. WALSH: My position is correct, Your Honor,
14 there's no question about my motives in what I've done.

15 THE COURT: I'm not either, but it does give me
16 some concern and that's why I hate to spend two weeks in
17 the trial of a case and then let it go on a Motion to Strike,
18 and I think the Court of Appeals said we shouldn't do that.
19 So, that's my first reaction to your motion.

20 MR. WALSH: I understand.

21 THE COURT: Let me read his memorandum.

22 Well, Mr. Walsh, how can I pass on your motion
23 without knowing the amount that the property is diminished

1 in value, if any? How can I make the comparison and say
2 you are right?

3 MR. WALSH: Your Honor, I think that's a two part
4 issue. One is I think the Court can, on the evidence that
5 has been presented, conclude that it would be economic
6 waste, and in the first instance be able to do that.

7 If the Court doesn't agree with that, then the
8 Court can, at the conclusion of the evidence --

9 THE COURT: If you put on some evidence as to
10 the value.

11 MR. WALSH: Yeah.

12 THE COURT: All right, I would reserve passing
13 on your Motion till the conclusion of the case.

14 MR. WALSH: Let me raise the other point now
15 that you've taken that position, Your Honor.

16 I think it's rather clear in Virginia with
17 regard to the question of damages and when they are
18 fixed that they are fixed in a contract case at the time
19 of the breach of the contract, and that authority in
20 Virginia comes from a Supreme Court case out of the
21 Circuit Court of Fairfax County in United Virginia Bank
22 v. Ford, at 215 Va. 373. The very same holding is found in
23 State v. Hudson in the West Virginia Supreme Court at

1 113 SE 251.

2 THE COURT: Is there any argument about that,
3 that the measure of damages is as of the time of the
4 breach, and not today?

5 MR. FREEDMAN: Your Honor, our whole theory of
6 the case, our whole theory of damages is that the building
7 cannot be repaired until such time as we recover and until
8 that is done --

9 THE COURT: Have you got any cases that say that?
10 I never heard that theory in my life. That way you could
11 put off getting the repairs done until the price really got
12 right. I think the rule is as stated, that the measure of
13 damages is as of the date of the breach.

14 MR. WALSH: Now, what Mr. Vallance's report says,
15 and what I understand he's prepared to testify, is the
16 estimate of the cost to repair as of October 5th or 9th,
17 1978, and I think that's improper. I think that's not
18 admissible. I think that flies in the face of United
19 Virginia Bank v. Ford and Hudson, or Randolph v. Hudson,
20 and I don't think his testimony is admissible, Your Honor.

21 THE COURT: Well, maybe he can adjust it to what-
22 ever the costs were. What's the date of the breach? Can
23 we -- when was the building turned over -- '76 -- '78 --

1 something like that?

2 MR. WALSH: Seventy-five.

3 THE COURT: Well, what's that day that we
4 mentioned the other day?

5 MR. WALSH: June 12th, 1975, is the date of
6 substantial completion.

7 MR. TROTTER: Final payment was August 19, 1976,
8 Your Honor.

9 MR. FREEDMAN: August 19th, 1976, Your Honor, and
10 Mr. Vallance can make such an adjustment on the request --

11 THE COURT: I think that's what you ought to get
12 him to do.

13 MR. WALSH: Excuse me.

14 THE COURT: Sir?

15 MR. WALSH: Let me just finish it. It's an
16 important point.

17 Some of these breaches, as have been testified
18 to, took place when the installation was made, and I think
19 that's the law when you do it improperly, that's when --

20 THE COURT: Well, you've got a lot of questions
21 and, you know, when it's discovered -- when is it made?
22 I don't think they've got to come in when it's made. They
23 don't know about it.

1 MR. WALSH: That's a negligence issue, Your
2 Honor, and I went round and round with Judge Middleton
3 on that same question in March, and that's a negligence
4 question. I respectfully say that we're talking about the
5 breach of contract theory, and, further, Your Honor, let me
6 say that the evidence that has been presented through the
7 Interrogatories and the report that Mr. Vallance prepared
8 fixes the damages and the information on those damages as
9 of October 1978, and that's what he was supposed to testify
10 to.

11 Now, if you're to testify to that --

12 THE COURT: I'm going to let him testify to
13 another date. I haven't decided what date, so you can
14 have your exception on that point.

15 I don't see how he could fix a date when the Court
16 hasn't ruled on it, and I'm not going to make him take that
17 risk and be out of Court because his lawyer shows the wrong
18 date.

19 MR. NORTON: Your Honor, I would join in Mr.
20 Walsh's Motion, and I would just add one corollary to his
21 first Motion and that's the one set forth in Kirk Reid
22 Company v. Fine case cited in his memo, and I raise this
23 because if you recall in my objection when Mr. Kinloch

1 was testifying about putting on the skin coat as the Kirk
2 Reid case points out, it's not the policy of our law to
3 award damages which would put a plaintiff in a better
4 position than if the defendant had carried out his contract.
5 And they said to hold otherwise would put the defendant --
6 apparently it's a counter claim in this case -- in a better
7 position than he would have occupied if the contract had
8 been performed with precise exactness.

9 Now, his testimony, if Your Honor will recall,
10 Mr. Kinloch's testimony was that you get a better insulation
11 you get a better water repellant from the -- this, what is
12 it called, Driv-It panels that he was talking about, than
13 you would get if he built the building exactly the way --
14 according to the precise contract, and it would be my
15 position that that's not proper to testify as to the cost
16 of putting that on.

17 THE COURT: I'll let you argue that to the jury.

18 MR. NORTON: Thank you, Your Honor.

19 THE COURT: Now, Mr. Walsh raised some other
20 questions though, and -- as to what this -- as many of
21 them as we can eliminate now, or pass on now, before the
22 jury comes back -- he mentioned windows.

23 What evidence, or what damages are you claiming

1 for the windows?

2 MR. FREEDMAN: The replacement of the windows,
3 Your Honor.

4 THE COURT: All of them?

5 MR. FREEDMAN: All of the windows.

6 THE COURT: What's the matter with them?

7 MR. FREEDMAN: The testimony of Mr. Sakhnovsky --
8 they're out of plumb; they allow water to come in; they
9 didn't pass the ASTM test.

10 THE COURT: Now, what witness is this?

11 MR. FREEDMAN: Mr. Sakhnovsky -- A. A. Sakhnovsky,
12 and he testified on Monday, November the 20th.

13 THE COURT: Wait a minute.

14 MR. FREEDMAN: If it will help Your Honor, I have
15 a transcript of his testimony.

16 THE COURT: All right. What are some of the
17 other items you mentioned, Mr. Walsh?

18 MR. WALSH: The roof, Your Honor. They propose
19 to take off the roof and install a new roof, and, if you'll
20 remember those repeated questions that -- is the roof leaking;
21 is the roof leaking; is there any evidence of the roof
22 leaking -- in fact, the requirement in the specifications
23 says that there is a one year guarantee to repair leaks,

1 not to replace it. That's just economic waste and over kill.

2 THE COURT: Okay, who's testified that the roof
3 had to be replaced?

4 MR. FREEDMAN: Both Mr. Dixon and Mr. Foley,
5 Your Honor.

6 THE COURT: Didn't Mr. Foley say he didn't see
7 anything wrong with it except that it bubbled?

8 MR. FREEDMAN: He also said that he had an opinion
9 that it be replaced and Mr. Dixon's testimony was to the
10 same effect, and I don't think that the plaintiff has to
11 wait until the water comes cascading down through the roof
12 if the roof is obviously defective to an expert and has to
13 be replaced. And certainly a roof is necessary for the
14 purpose for which the building was built and it's certainly
15 something that should be repaired rather than diminished --
16 diminish the cost of the building. It's something that
17 imminently will have to be replaced and should be replaced
18 now, and as far as the bond goes, that's a matter of
19 defense which isn't in evidence.

20 MR. WALSH: Your Honor, even more importantly,
21 all of the objections to the roof by Mr. Alavarado --
22 excuse me, Mr. Vallance, apparently are based upon Philip
23 Maslow's report which is not in evidence. Maslow never even

1 testified.

2 Right here in his testimony, he says it's based
3 upon Philip H. Maslow.

4 MR. FREEDMAN: Well, Your Honor, that has been
5 deleted from his report, and he is basing it on the other
6 report, the other report of Law Engineering where Mr. Dixon
7 says that the roof has to be replaced. And there is
8 certainly evidence, replete, as to the roof being -- having
9 to be replaced from which he could testify, and on which
10 he can base his estimate.

11 THE COURT: All right, Mr. Foley says that.
12 What was the next item, Mr. Walsh?

13 MR. WALSH: Did you go over finish the windows,
14 Your Honor?

15 THE COURT: Well, I've read that witness'
16 testimony, and that's what he said. That's a jury
17 question.

18 MR. WALSH: He said --

19 THE COURT: Have to replace it.

20 MR. WALSH: He said if the cost of repairs was
21 more than the cost to replace, Your Honor, is what he said,
22 if the Court will remember.

23 THE COURT: All right.

1 MR. WALSH: And that's based upon six windows
2 that he tested, less than one percent, Your Honor, and
3 there's no showing --

4 THE COURT: I'm not going to rule on it. I'll
5 let the jury pass on that.

6 MR. FREEDMAN: Your Honor, Mr. Vallance is
7 prepared to testify as to the cost of repairs specified
8 by Mr. Sakhnovsky as opposed to cost of replacement.

9 Now, Your Honor, we've also prepared a memo citing
10 the same conclusion -- citing the same cases that counsel
11 for Harkins has cited, but we've come to a completely
12 different conclusion. We based this upon the fact, Your
13 Honor, and as is very much in evidence, that the Virginia
14 Health Department had condemned several units and we don't
15 have a rental license and until the water leakage into this
16 building is stopped, the likelihood of our having a building
17 is in doubt.

18 Now, this is a lot different from having equipment
19 of lesser capacity which would diminish the value of the
20 building. It's not economic waste to fix a leaking building
21 because your cost of repairing a leaking building of some
22 three hundred thousand dollars, as opposed to a loss of the
23 building itself as unfit for human habitation of five million

1 dollars. And I think that certainly that this is a question
2 for the jury, as Your Honor pointed out. Since we are at a
3 point like this, I would state quite frankly what I intend
4 to do.

5 I would like to put Mr. Vallance on the stand
6 and have him identify his 25-page report, and I'd like
7 to have it put into evidence, and then just have him testify
8 as to certain matters about it. That would take perhaps an
9 hour. I anticipate that there will be an objection to this
10 report, and I have done some reading of authorities,
11 specifically Lee McCormick on evidence which Your Honor was
12 looking at yesterday. And I got into the morass of past
13 recollection recorded, and refreshing of recollection. I
14 think there is no doubt that he can testify from his report.

15 I also feel that I have found nothing in Virginia
16 against it, and the overwhelming weight of authority is that
17 a report such as his should go into evidence, and I think
18 that since Your Honor is permitting the jury to take notes,
19 and since we are reaching into what has been a protracted
20 trial, I would think that his exhibit, after it has been
21 adjusted by him to the appropriate date -- that is either
22 agreed upon, or that we contend is the appropriate date --
23 then that should be allowed to go into evidence, and counsel

1 can cross examine him on it, because we're talking about
2 thousands of entries here all made by him.

3 THE COURT: Well, what is your position as to the
4 date which you're entitled to recover damages?

5 MR. FREEDMAN: Well, I've read the cases, Your
6 Honor, and the construction cases -- the cases in construc-
7 tion -- I think it's Mann v. Clowser case, and some of the
8 others -- say it's the cost of getting the work done.

9 THE COURT: As of what time -- that's what I'm
10 asking.

11 MR. FREEDMAN: The implication would be that the --
12 that when you have to go out and do it, which would be
13 subsequent to this hearing. We have a situation now where
14 the Harkins Company, with respect to the walls which is a
15 substantial item of damages, entered into a corrective
16 program as late as 19 -- completed in May of 1978, where
17 the evidence shows that they made -- took corrective action
18 on both the roof and the exterior walls which our evidence
19 is to the effect that they were ineffective, so why we should
20 be held to a date of June 19 --

21 THE COURT: I'm asking you what you think the
22 law is.

23 MR. FREEDMAN: I would say, Your Honor, that it

1 would be August 19th, 1977, one year from the date of
2 completion by the owner because we have a contractual
3 guarantee for a period of one year. And the evidence is
4 that it wasn't fixed within that one-year period.

5 THE COURT: You say then -- have you got any
6 authorities saying it's the date of the breach?

7 MR. WALSH: Yes, sir.

8 THE COURT: Let me see it please.

9 MR. WALSH: Yes, Your Honor.

10 THE COURT: Let me see what I can find.
(Brief recess.)

11 THE COURT: I've come to the conclusion that in all of the
12 various and sundry conflicts on fixing the time when damages
13 must be calculated in a breach of contract that in this
14 case the fairest date would be the date on which the
15 contract was completed, or the date called for in the
16 contract for the completion date. And I think -- I
17 think that date was mentioned by somebody.

18 MR. WALSH: June 12, 1975.

19 THE COURT: So, that's the date I'm going to
20 fix. Now you get your expert and adjust your figures as
21 of that date.

22 MR. FREEDMAN: Your Honor, is that the date of
23 the final -- I'm not clear on Your Honor's ruling. The

1 date we agreed upon --

2 THE COURT: The date called for in the contract
3 for the completion. What date --

4 MR. TROTTER: I think that was extended, Your
5 Honor, so --

6 THE COURT: I realize that, so whatever date it
7 was extended to would be the date of completion.

8 MR. TROTTER: I understood that to be August 19,
9 1976.

10 MR. WALSH: That's absolutely incorrect, and the
11 plaintiffs' own evidence shows it to be June 12th, 1975,
12 Your Honor, and the fact that they closed with HUD a year
13 later has no bearing on when the project was substantially
14 completed.

15 THE COURT: I would agree to that.

16 MR. TROTTER: That's June what, Your Honor?

17 THE COURT: I don't know what the date is. I
18 just think the date when the contract was completed
19 according to its terms -- there must have been something
20 that happened.

21 MR. FREEDMAN: Now, Your Honor, Plaintiffs'
22 Exhibit No. 52 is a marked-up copy of the amended, of the
23 amended -- of the cost estimate as of November 26, 1978,

1 and it will require another amendment to adjust it. I'm
2 showing it to Your Honor so that we -- I can raise the
3 point about introducing this to the jury.

4 With all -- if Your Honor -- what I would prefer
5 to do is to introduce this into evidence and have him testify
6 as to the reduction that he has computed and give the
7 figures on this, or, in the alternative, to change the
8 bottom line figures for each of the various systems.
9 Otherwise, it's going to take quite some time to adjust
10 every end item in his own hand. But I believe that this
11 document as finally turned out by him would be admissible
12 into evidence, and if admitted would save us all a lot of
13 time in completing our end of the case and also would be
14 more understandable to the jury.

15 MR. NORTON: Your Honor, does plaintiffs' counsel
16 have an extra copy of that? I've got the original, and I
17 don't mind being left out in this case at all. I eventually
18 hope to be, but I think if he is going to --

19 MR. FREEDMAN: Yeah, I have another copy.

20 MR. NORTON: Thank you.

21 MR. TROTTER: He just gave you my copy.

22 MR. NORTON: I'm sorry.

23 MR. FREEDMAN: You can use my copy; I'll get you a

1 copy.

2 THE COURT: Are you objecting to this, Mr. Walsh?

3 MR. WALSH: Your Honor, I haven't even finished
4 looking at it, sir.

5 THE COURT: All right.

6 MR. NORTON: Your Honor, there's one point that
7 I would raise. Apparently this is still -- the report is
8 still based on the contract being awarded on November 15th,
9 1978, and I don't know if that's the fact. I was under the
10 understanding that this was some sort of adjusted one for
11 sometime in 1976.

12 THE COURT: He hasn't done it yet. That's going
13 to take a little while.

14 MR. WALSH: I've gotten through it, Your Honor.

15 THE COURT: All right.

16 MR. WALSH: In order to be consistent, Your
17 Honor, with my position, I can take no other position with
18 regard to this proffered exhibit except to object to it
19 on the ground that it's not a proper recitation of the
20 proper cause on the proper theory and has improper founda-
21 tion for the conclusions of the estimator.

22 THE COURT: All right, I understand, and you can
23 have that objection in the record, but what I'm asking now

1 is, do you object to this statement as however he amends
2 it being given to the jury?

3 MR. WALSH: Do I understand we're both talking
4 about what Mr. Freedman just handed out, sir?

5 THE COURT: This is called "Cost Consultant,"
6 Exhibit 52.

7 MR. WALSH: Yes, sir, I would object; yes, sir.

8 THE COURT: Then I'd like to know why.

9 MR. WALSH: Your Honor, because I think we have
10 the same problem that I have mentioned to you on numerous
11 occasions in this case, and I'll briefly state them: That
12 this man has taken the assembled knowledge, if any existed,
13 in the minds of some of these purported experts whose reports
14 are not in evidence, but whose reports are referred here and
15 set forth, step-by-step, what they're saying to do, and an
16 item-by-item basis explaining how this fellow from the
17 Royal College of Estimators is going to build a building.
18 He never had any knowledge about building in the first
19 place, but he's gleaned it from experts' reports which
20 are not in evidence, and all this happened in his office
21 in Alexandria or Cameron Overlook and I'm trying the case
22 in the dark again.

23 It's replete with somebody else's out-of-court

1 statements about the manner in which this should be done,
2 or should have been done, and I think that's inappropriate
3 and prejudicial.

4 THE COURT: Just for instance, Mr. Freedman, on
5 page E9, the last item -- well, they're all page E9's, so
6 let's see -- where are your pages numbered? Sheet No. 4,
7 up at the top.

8 MR. FREEDMAN: Yes, Your Honor.

9 THE COURT: Install new metal coping over window
10 panel head of a size wide enough to cover the existing
11 panel and support frame, and a new Driv-It exterior panel
12 system; seal both edges with a new sealant at the back of
13 the parapet and the face of the Driv-It panel.

14 Now, where in the evidence do I find that, or
15 the jury find it?

16 MR. FREEDMAN: Well, Your Honor, you have a situa-
17 tion where you having existing metal coping on the top of
18 the parapet wall -- you also have Mr. Kinloch's testimony
19 saying that Drive-It panels have to be installed on the
20 walls. Mr. Vallance then says to install the -- to make this
21 watertight in his judgment, you have to remove the existing
22 coping.

23 THE COURT: Who's saying this?

1 MR. FREEDMAN: Mr. Vallance.

2 THE COURT: Who is Mr. Vallance?

3 MR. FREEDMAN: Mr. Vallance is the witness who
4 is going to be here.

5 THE COURT: All he's telling us is cost.

6 MR. FREEDMAN: Well, he's telling us cost and
7 how it's going to be done. There are things in here where
8 he specifies you do this, and you do this to accomplish this.
9 In other words, to break out his costs he's got to compute
10 certain things and certain things are going to be done.

11 For instance, there are going to be items in
12 here of interior work that have to be done--breaking out
13 drywall--that have to be in order to put in the windows.
14 And he has computed those and set them out separately.

15 THE COURT: Well, who says we've got to tear it
16 out -- the drywall to put in the window?

17 MR. FREEDMAN: Mr. Vallance. In order to
18 accomplish this corrective program, there are certain items
19 which Mr. Vallance has computed. The experts have said
20 you have to put the -- a coating of the Driv-It panel on
21 the exterior of the building. To do this, you have to
22 cover it with a coping in Mr. Vallance's judgment, and
23 these are his assumptions. Certainly, things that he feels

1 are costs for carrying out the corrective program that
2 was specified. He can be cross examined on it, or
3 examined on it, on any one of these items,

4 Many of the items are just what was testified
5 to, but when it comes to connectors, like Your Honor
6 pointed out, it's his judgment.

7 THE COURT: Well, I thought all he was going to
8 testify to was what it would cost to do what your experts
9 said was necessary.

10 MR. FREEDMAN: That's all he's testifying to,
11 Your Honor.

12 THE COURT: Well, that's what I'm asking you --
13 where do you find in the page five --

14 MR. FREEDMAN: On page five, that's all in Mr.
15 Kinloch's testimony, Your Honor, and also in Kinloch's
16 report.

17 THE COURT: About the soft joints?

18 MR. FREEDMAN: Absolutely, Your Honor. That's -- I
19 had this marked for -- I know because I had trouble pulling
20 it out of Mr. Kinloch, but I checked it against his report
21 and everything that was in his report came into evidence and
22 that's verbatim from his report.

23 THE COURT: Who testified about lightning conductors?

1 MR. FREEDMAN: Mr. Gauthier, Your Honor. I have
2 the transcript here, Your Honor.

3 THE COURT: All right. Is your man working on
4 new figures for this?

5 MR. FREEDMAN: No, Your Honor.

6 THE COURT: Well, when's he going to do it?

7 MR. FREEDMAN: As soon as we establish the date,
8 Your Honor.

9 THE COURT: I thought I'd established the date.

10 MR. FREEDMAN: Well, I'd like to ask Your Honor
11 to reconsider it and look at the contract which provides
12 here that the contractor shall correct any defect due to
13 faulty materials and workmanship which appear within one
14 year from the date of substantial completion. I would
15 think that we would be entitled to the one year.

16 THE COURT: All right; that motion is denied.
17 I'm going to stick to the date. I've thought of all of
18 them, Mr. Freedman, and that's the fairest one that I
19 can come up with.

20 MR. FREEDMAN: Let me make sure -- that's
21 June 12th, 1975?

22 THE COURT: There must be some completion date
23 called for in the contract that was arrived at in fact.

1 MR. FREEDMAN: That was the substantial completion
2 date.

3 THE COURT: All right.

4 MR. FREEDMAN: Thank you.

5 MR. TROTTER: Your Honor, in the interest to save
6 time, I'll be glad to tell Mr. Vallance to adjust his
7 figures as of June 12th, '75.

8 THE COURT: I don't care who tells him.

9 MR. WALSH: Are we going to let the lawyers tell
10 him what he's supposed to testify to now, Your Honor?

11 THE COURT: No. I want them to tell him what
12 date to readjust his figures to.

13 MR. TROTTER: You can go with me if you want.

14 THE COURT: That's all I want him to do is to
15 readjust his figures to that date.

16 MR. TROTTER: Will it be all right then?

17 THE COURT: Yes.

18 MR. NORTON: Your Honor, could I reserve any
19 objection on the admissibility of this? I join in
20 Mr. Walsh's objection. I'd also like to see how he
21 readjusts it. I'd obviously like to see what the product
22 is going to be before --

23 THE COURT: All right. Well, tell me when he's

1 ready, Mr. Freedman.

2 MR. FREEDMAN: Thank you, Your Honor.

3 THE COURT: You want to ask him how long he thinks
4 it's going to take him.

5 MR. FREEDMAN: Well, I'll check with him right
6 now, Your Honor.

7 THE COURT: All right.

8 (Thereupon, at 11:15 a.m., the hearing in the
9 above-entitled matter recessed to reconvene at 11:35 a.m.)

10 THE COURT: What's your problem?

11 MR. FREEDMAN: Your Honor, Mr. Vallance has come
12 up with his deflation figure adjusted back down to the date
13 that Your Honor has specified in his ruling. In order for
14 him to go through every item in the report, which I suggested
15 he do--he's done it on the total-- for every item that he's
16 done in the report he tells me it would take him two hours
17 to do it twice.

18 He would like to do it once and then check it,
19 so if we may recess until 2:00 and we will come back then
20 with the exhibit in the form that we will want it in to
21 introduce it.

22 THE COURT: All right.

23

1 MR. NORTON: Your Honor, before we do, I might as
2 well raise this now. It seems to me that he's just taking
3 a general deflation figure and I don't know what he's doing,
4 but I -- some percentage. It's my understanding that the
5 cost of building material has gone up -- I mean lumber has
6 gone up more than concrete; it's gone up at different rates.

7 And, I don't think it would be appropriate to take
8 today's figure and then just take 20 percent or whatever
9 figure they're going to take and take it on back, so I would
10 object to that type of computation being done at this time
11 and I just wanted to let the Court and counsel know before
12 they went and did it.

13 THE COURT: Well, as far as I know, his figures
14 are going to be what they would have been in 1975.

15 MR. NORTON: All right.

16 THE COURT: I don't know how he's doing it. You
17 all can cross examine him on it.

18 MR. NORTON: I understand, Your Honor. I just
19 wanted to advise everybody.

20 THE COURT: All right. Call the jury down.

21 It's a quarter of twelve. How long is it going
22 to take him to do it -- two hours?

23 MR. FREEDMAN: Two hours, Your Honor.

1 THE COURT: I hope they feed you, Mr. Vallance.

2 THE WITNESS: So do I, Your Honor.

3 (Thereupon, the jury entered the courtroom.)

4 THE COURT: You all can just wait right there.

5 Come right on in; we're still working. We're
6 not ready to come back to the witness stand yet, so I
7 don't reckon you can get any Christmas shopping done, but
8 we won't reconvene until 2:00.

9 (Thereupon, at 11:37 a.m., the hearing recessed
10 to reconvene at 1:54 p.m.)

11 (Thereupon, the jury entered the jury box.)

12 THE COURT: All right, go ahead.

13 MR. FREEDMAN: Mr. Vallance.

14 Thereupon,

15 ANTHONY PAUL VALLANCE,

16 a witness, resumed the stand, having been previously sworn,
17 was further examined and testified as follows:

18 DIRECT EXAMINATION (resumed)

19 BY MR. FREEDMAN:

20 Q Mr. Vallance, I show you what's been marked as
21 Plaintiff's Exhibit No. 52, and ask you whether you can
22 identify it.

23 A Yes, I can.

1 Q And what is it, Mr. Vallance?

2 A It is the estimate that I prepared of the
3 remedial works at Cameron Overlook Apartments.

4 Q And, who made the entries in it?

5 A I did.

6 Q Do you have an independent recollection of the
7 basis for each of those entries?

8 A Yes, I do.

9 Q And, can you --

10 MR. WALSH: He answered; it's been asked and
11 answered, Your Honor.

12 THE COURT: All right, next question.

13 BY MR. FREEDMAN:

14 Q Can you testify as to the entries made without
15 reference to that report?

16 A No.

17 Q Do you have an independent recollection without
18 reference to notes of the matters -- backup matters --
19 that went into those figures in the report?

20 A No.

21 Q And, Mr. Vallance, what was this estimate based
22 on? What did you originally make it on?

23 A I based the estimate on the original contract

1 drawings for the project, and on the repair procedures
2 that were in the reports prepared by Messrs. Gauthier of
3 Gauthier, Alvarado & Associates, Holland Engineering, Construction
4 and Research of Artery, and Law Engineering Associates of
5 Virginia.

6 I inspected the project in October. I inspected
7 three specific dwelling units. I looked at the roof. And,
8 I also made a general inspection of the site.

9 Q In your opinion, Mr. Vallance, was this report
10 which you prepared based upon generally accepted cost
11 engineering standards?

12 MR. WALSH: Excuse me, Your Honor, I wish to
13 object. I don't believe, if my recollection is correct,
14 that the Court has ever accepted this gentleman as an
15 expert; that there was the tender that was never ruled
16 on, and I would like to voir dire him before the Court
17 would rule on his expertise.

18 THE COURT: All right. I asked you two if you
19 had any objections and you didn't state any. You stated
20 some other objections which I assume you forgot whether
21 there was any objection to his being an expert in going
22 over the others. I would ask you if you would suspend,
23 Mr. Freedman, and ask counsel for the defendants if they

1 have any objections to this witness testifying.

2 MR. WALSH: Yes, sir, I do.

3 THE COURT: All right, state your objections.

4 MR. WALSH: I state my objection to say, Your
5 Honor, that he has not testified and shown that he has the
6 necessary competence, the necessary background, the
7 necessary foundation, qualifications to testify as to the
8 costs to perform the various items that were -- and supply
9 the various items of material as of June 12th, 1975.

10 THE COURT: Objection overruled.

11 MR. NORTON: I would join the objection, Your
12 Honor.

13 THE COURT: All right. Do you have any specific
14 questions you want to ask him?

15 MR. WALSH: Yes, I do, sir.

16 THE COURT: All right. You go ahead, ask him any
17 questions you want to.

18 VOIR DIRE EXAMINATION

19 BY MR. WALSH:

20 Q Where were you living in June 1975, sir?

21 A In Chicago, in Evanston, Illinois.

22 Q Were you working in June 1975?

23 A In Chicago, Illinois.

1 Q And when did you first come to live in Virginia?

2 A In April, '78.

3 Q And when did you first come to work in Virginia?

4 A In April, '78.

5 Q And did you begin employment with Hanscomb
6 Associates in Alexandria, Virginia, in April of '78?

7 A No, I did not.

8 Q You had been employed by them in the Chicago
9 office, hadn't you?

10 A That's correct.

11 Q When you came in April, 1978, were you working
12 for Hanscomb?

13 A Yes, I was.

14 Q So your first work for Hanscomb in the Virginia
15 office was in April, 1978, when you came here to work at
16 that office?

17 A That is correct.

18 Q Now, prior to April, 1978, had you worked in
19 Virginia?

20 A No, I had not.

21 Q When did you begin to work in Chicago?

22 A In April, 1974.

23 Q And how long did you work in Chicago?

1 A Until April of '78.

2 Q And were you assigned to Tennessee for some
3 work while you were in Chicago, sir, or did you do that
4 work on the Tennessee projects from Chicago?

5 A No. I was employed by a different company prior
6 to joining Hanscomb in Chicago, in Tennessee.

7 Q You were employed by what company in Tennessee?

8 A By a company called TSG International.

9 Q And what does that stand for, sir?

10 A Technical Support Group.

11 Q And what was your function in Tennessee, sir?

12 A I was the Assistant Chief Cost Comptroller for
13 that company.

14 Q And during what period of time did you work for
15 TSG in Tennessee?

16 A I worked there from March of '71 until I left to
17 go to Chicago in April of '74.

18 Q From '71 to '74 you worked in Tennessee, sir?

19 A That's correct.

20 Q Did you ever work as a construction superintendent
21 or in the construction field of the mortar and brick during
22 the course of your work from '71 to present?

23 A No.

1 Q Do you have any degree in construction such as
2 mechanical engineering, structural engineering, things of
3 that nature?

4 A No. My degree is in quantity surveying.

5 Q That was gained in England?

6 A Yes, it was.

7 Q To prepare the report that has been marked as
8 an exhibit -- that's the third edition of your report,
9 obviously -- the first, second, and the third?

10 A Yes, it is.

11 Q You stated in your report that it was based upon
12 currently prevailing material and labor prices in the
13 Alexandria area and that report was dated October 9th,
14 1978; correct?

15 A That's correct.

16 Q Now you gained that information from various
17 sources in this area, didn't you?

18 A That is correct.

19 Q Did you work with the prevailing prices or wages
20 for labor or material in the Alexandria, Virginia area as
21 of June, 1975, while you were in Chicago, sir?

22 A No, I did not.

23 Q And did you work -- you were in Chicago in '74,

1 am I right?

2 A Yes.

3 Q So you'd have to have done it between that period
4 of time when you left Chicago; correct -- because it was
5 '74 to '78?

6 A Yes. I was in Chicago.

7 Q I'm just trying to get the dates right, Mr.
8 Vallance.

9 Now, to prepare the revised figures which are
10 shown in the third amended report you had no personal
11 knowledge of the prevailing wages or costs for labor or
12 material as of June, 1975, did you, in the Alexandria area?

13 A I find it hard to answer that question; strictly
14 speaking, no. There's a lot of things that surround that
15 question, however.

16 Q Well, sir, you are asked to prepare a report
17 by the plaintiff setting forth costs to do certain work
18 and to provide certain material as of the October - November,
19 1978 time frame; correct?

20 A That is correct.

21 Q And to get that information you called various
22 people and checked with various people and compiled it;
23 correct?

1 A That is correct.

2 Q Now you were never asked until 10:30 or 11:00
3 today to prepare an estimate of the labor and material
4 costs as of June, 1975, in the Alexandria, Virginia area;
5 isn't that correct?

6 A That is correct.

7 Q And what you did was just deduct percentages from
8 your first calculation; correct?

9 A That's correct.

10 Q You didn't have any independent knowledge of
11 what the prevailing wages and prices of labor and material
12 were in June, 1975, in this area; correct?

13 A Correct. There is an interesting thing I found --

14 Q Thank you; thank you, sir.

15 MR. WALSH: Your Honor, I again renew my objection.

16 THE COURT: All right. I will hear what he's got
17 to say as how he got the 1975 figures.

18 DIRECT EXAMINATION (resumed)

19 BY MR. FREEDMAN:

20 Q On what basis did you obtain the 1975 figures,
21 Mr. Vallance?

22 A The basis I used was to assume a rate of escala-
23 tion in the period since June 1975 of an average of 9 percent

1 per annum simple -- this is a figure that I have used on
2 other projects in other areas, and in my opinion is the
3 good, general escalation figure. If I can go on to mention
4 the point that I was about to mention earlier -- after I'd
5 done all my calculations, and it was the very last calcula-
6 tion I did during the lunch hour, I happened to look back
7 and I had the contractor's breakdown for Cameron Overlook
8 Apartments for the costs of the kitchen cabinets in his
9 schedule of value --

10 MR. WALSH: Well, Your Honor, I object. That's not
11 even in his estimate. They've taken that out. I don't
12 think that's at all relevant.

13 THE COURT: Objection overruled.

14 THE WITNESS: I then compared the -- I have
15 calculated a credit value for a different specification.
16 I compared what the cabinets would have been by my
17 estimation and my use of these percentages with the figures
18 that were in the contractor's schedule of values. I would
19 have calculated a value of \$44,000, and he had a value of
20 approximately \$43,000. I think it's relevant.

21 MR. FREEDMAN: Your Honor, I submit that the
22 witness is qualified to testify those cost estimates are
23 valid. And under the case cited by Mr. Walsh at lunch, the

1 litigant is not required to prove damages with precision,
2 and all he needs is a reasonable estimate of the damages
3 and certainly this was a reasonable estimate of the damages.

4 THE COURT: All right. You want to ask him any-
5 thing, Mr. Norton?

6 MR. NORTON: No, I don't have any questions, Your
7 Honor.

8 THE COURT: All right. Your objection is over-
9 ruled, Mr. Walsh.

10 MR. FREEDMAN: At this time, Your Honor, I'd
11 like to offer the cost estimate prepared by Mr. Vallance
12 into evidence as Plaintiffs' Exhibit No. 52.

13 THE COURT: Any objection?

14 MR. WALSH: Yes, Your Honor.

15 THE COURT: State your objection.

16 MR. WALSH: Let me explain it here at the bench.

17 THE COURT: Wherever you want to.

18 MR. WALSH: This is --

19 THE COURT: Maybe you better come up here and do
20 it.

21 MR. WALSH: Yes, I think probably I better, Your
22 Honor.

23

BENCH CONFERENCE

1
2 MR. WALSH: Your Honor, I can't take any other
3 position except to object to this because every -- every
4 point I've made has been premised on the fact that this
5 man ought not to testify. I can't concede that he --
6 just because you've overruled on my objections, you're
7 right, most respectfully.

8 THE COURT: Unfortunately that's true.

9 MR. FREEDMAN: I --

10 MR. WALSH: I know the Court appreciates my
11 position and we have that same problem, Your Honor.

12 THE COURT: Well, my only comment on this is
13 that by and large I think something like this should be
14 admissible, and especially in this case, but I've gone over
15 this exhibit and I don't find any items that weren't covered
16 in the testimony. And I tried to pick out some this morning,
17 but all I picked out were covered in the testimony. Now,
18 if there are any items in here that were not covered in the
19 testimony, regardless of what he says he based them on,
20 the reports and so forth, as far as I'm letting it in, it's
21 because it's based on the testimony that's been admitted in
22 this case.

23 MR. WALSH: You and I have an honest disagreement

1 on that, Your Honor.

2 THE COURT: Well, you tell me what hasn't been
3 admitted, that's what I --

4 MR. WALSH: First of all, Your Honor, I can tell
5 you that the Law Engineering Associates report of
6 December, 1978, which he bases this on has not been admitted
7 into evidence.

8 THE COURT: Right.

9 MR. WALSH: And that report contains in it, on
10 page three or four, I think, a September 20th report --
11 Mr. Maslow's recommendations -- what they do is adopt
12 Maslow's recommendations. Maslow's recommendations aren't
13 in evidence. He hasn't testified; his report hasn't come
14 in, and I'm going to show this witness that, but that's
15 how the boot's strapping.

16 We've got report on report upon report, Your
17 Honor, which is culminating in a third revised edition of
18 estimates, and it's almost impossible to do anything except
19 to prejudice and to taint that jury's mind with all of this
20 editorializing. I just want to make my objection clear and
21 I know that you and I have a disagreement.

22 THE COURT: Well, let's take this page out -- is
23 there any objection to taking that page out?

1 MR. FREEDMAN: Not at all, Your Honor.

2 THE COURT: All right, sheet number one is
3 removed.

4 MR. WALSH: Excuse me, Your Honor, that's my --

5 MR. FREEDMAN: This is it, Your Honor.

6 MR. WALSH: You've got to give me something to
7 examine.

8 THE COURT: All right, sheet number one is
9 being removed from Exhibit No. 52.

10 MR. NORTON: Your Honor, I join --

11 THE COURT: All right, let me just hear one of
12 you all at a time.

13 MR. WALSH: Let me just say finally, Your Honor,
14 that it's my understanding that all of these notes here
15 came in the written reports that he's reviewed or they
16 came from the owner's representatives that he got from
17 talking to them. And the only way I can handle that is
18 through cross examining him because we know -- we know
19 that the reports he said he reviewed aren't in evidence,
20 and we know that what he found out from the owner's
21 representatives isn't in evidence, so I've got to be
22 able to have wide latitude to examine him on these things.

23 THE COURT: I'm going to give you all the latitude

1 you need. The only thing I'm saying is that the reason
2 I am admitting this is because I have been through it and
3 I don't find anything in here that I didn't hear testimony
4 on from the witness stand. Now, if there is something in
5 here that's not -- that would come from those reports and
6 not have come from the witness stand had he been here to
7 hear it, then I think I would take it out if I could find
8 it. And I think then from then on it's going to be a jury
9 question between you and your cross examination and this
10 witness as to whether or not this is necessary, and so
11 forth.

12 All right, this will be admitted and Mr. Walsh
13 has his exception and you have your exception.

14 (The document heretofore marked for
15 identification as Plaintiffs' Exhibit
16 No. 52 was received in evidence.)

17 MR. NORTON: Thank you, Your Honor.

18 OPEN COURT

19 BY MR. FREEDMAN:

20 Q Would you refer to your copy of the report, Mr.
21 Vallance.

22 Now, Mr. Vallance, have you computed a total
23 figure for the exterior wall repairs, including installing

1 the horizontal soft joints and the installation of Driv-It
2 and the waterproofing material?

3 A Yes, I have.

4 Q And what is the total amount of that figure?

5 A The total amount is \$202,284.00.

6 Q And I direct your attention to page six of your
7 report, Mr. Vallance. Did you calculate the cost of repair
8 as specified by Mr. Sakhnovsky?

9 A Yes, I did.

10 Q And compare it with the cost of replacement of
11 the windows?

12 A Yes, I did.

13 Q And what were the respective costs?

14 A The cost of the repair -- I'm sorry.

15 MR. NORTON: Your Honor, I object. I don't think
16 that Mr. Sakhnovsky made any specifications as far as the --
17 as what it would take to repair the windows. I don't think
18 there were any specifications on that.

19 THE COURT: Now, I don't have a good enough
20 recollection to pass on your objection. Members of the
21 jury, you heard the objection he's making. Now, if this
22 man is testifying to something that's not been testified
23 to before as a necessary repair, then you are to disregard

1 it.

2 BY MR. FREEDMAN:

3 Q Have you made an estimate as to the repair versus
4 the replacement cost of the windows?

5 A Yes, I have.

6 Q And what is the repair cost?

7 A The repair cost is \$148,485.00.

8 Q And what is the replacement cost?

9 A I beg your pardon, I'm reading you the wrong
10 figure. Can I correct that figure?

11 Q Yeah.

12 A It's \$142,483.00 -- the replacement cost; no that
13 figure does not apply; that's the current cost. I beg your
14 pardon.

15 The current cost of the replacement of the
16 windows was \$100,100.57. Now, that's been deflated to
17 \$69,289.61. I have not, with respect, had time to deflate
18 the repair costs back to the same date, but the repair,
19 in my opinion, costs more than the replacement of the
20 windows.

21 Q Now, have you prepared a cost estimate for
22 replacing the roof at Cameron Overlook?

23 A Yes, I have.

1 Q And, how much is that?

2 A \$50,520.18.

3 Q Now, turning to sheet nine of your report,
4 interior finishing, can you explain to us what that is?

5 A In order to accomplish the repairs specified in
6 the remedial repairs, some damages will be done to --

7 MR. WALSH: Your Honor, I object to that. That's
8 got to be his conclusion based upon what everybody else has
9 told him, and I think that he's here to give dollars. He's
10 not a builder. He's testified he's not. All he's doing is
11 dreaming up ideas.

12 THE COURT: Mr. Freedman, I hope we understand
13 that this testimony is limited to estimates of costs for
14 doing work that other people have said is necessary, not
15 what this man thinks might be necessary.

16 MR. FREEDMAN: Well, Your Honor, this is the --
17 I think the -- this page is the one situation. These
18 people have specified certain work to be done and Mr.
19 Vallance in his expertise says, sure, but to do that work
20 there are a couple of other little things that you've got
21 to do to get these windows out, so he is computing the cost
22 of doing that. This was not specified by anybody else and
23 Mr. Vallance will testify that in his opinion this is

1 necessary to accomplish the work that was specified, and
2 I will so ask it.

3 THE COURT: Objection sustained.

4 MR. FREEDMAN: May I approach the bench, Your
5 Honor?

6 THE COURT: All right.

7 BENCH CONFERENCE

8 THE COURT: Go ahead.

9 MR. FREEDMAN: I haven't ascertained the basis
10 of Your Honor's ruling. If your ruling is that I can't go
11 into anything that Mr. Vallance thinks is necessary in
12 order to accomplish the -- the work that the other people
13 specified, then I'll, of course, abide by Your Honor's
14 ruling.

15 THE COURT: That's what I'm ruling. I think that
16 you are limited to what they testified was necessary. I
17 don't think we can expand on that now. There wouldn't be
18 any end to where we are. This man is a cost estimator of
19 what it'll cost -- what it'll cost to do what they said was
20 necessary, and if they didn't go into that, I'm not going to
21 let him go into it; I'm sorry.

1 OPEN COURT

2 BY MR. FREEDMAN:

3 Q Now, Mr. Vallance, I direct your attention to
4 sheets 11, 12, 13, 14 and 15, and ask you what these
5 estimates are based on.

6 A These estimates are for the remedial repairs to
7 the heating, ventilating and air conditioning system. The
8 total cost of those repairs is \$44,261.68.

9 Q And would you turn to sheet 18 of your report,
10 and what does that specify?

11 A This specifies the remedial work to the lightning
12 protection system on the roof, and I have a total estimated
13 cost of \$869.40.

14 Q Now, in preparing this estimate, Mr. Vallance,
15 did you add into each element an item of overhead and
16 profit to a contractor who would perform the work?

17 A I did that as --

18 MR. WALSH: Objection.

19 THE COURT: Just ask him what it included then.

20 BY MR. FREEDMAN:

21 Q What did your estimate include?

22 A Those items that I previously addressed include --
23 for the labor and material and equipment involved; nothing

1 else.

2 Q Is there any other items that should be included
3 in order to get the work done?

4 A Yes.

5 Q And what are those items?

6 A Those are items generally referred to as general
7 conditions items. There is also an overhead item to be
8 added to a contractor for doing the work and a percentage
9 for a reasonable profit.

10 Q And have you computed an estimate of such general
11 conditions?

12 A Yes, I have.

13 Q And what is that amount?

14 MR. WALSH: Your Honor, I object. There is no
15 evidence it's going to be necessary to have a general
16 contractor, and that the owner, if he's going to do this,
17 he can't do it himself.

18 THE COURT: All right, I'm going to let it
19 stand. Objection overruled.

20 THE WITNESS: The total cost for the general
21 conditions, overhead and profit is \$109,013.88.

22 BY MR. FREEDMAN:

23 Q Now, Mr. Vallance, on sheets 23 through 27, you

1 list 20 items of site improvement. Do they refer to --
2 excuse me, may I have Exhibit 22?

3 Are they cost estimates of the --

4 MR. WALSH: Well, Your Honor, I object to him
5 showing him that and saying is this what you did? That's
6 leading the witness right down the primrose path.

7 THE COURT: I don't know enough to pass on it. I
8 don't know what these items are. What pages are you
9 referring to?

10 MR. WALSH: Twenty-three, Your Honor, is what
11 he said.

12 THE COURT: Through the end?

13 MR. FREEDMAN: Twenty-three through twenty-seven,
14 Your Honor. There are twenty items which are listed on
15 Mr. --

16 MR. WALSH: Well, I object to this man testifying
17 where they came from.

18 THE COURT: He's telling me where they came from,
19 Mr. Walsh, I don't know where they came from.

20 MR. WALSH: Well, he can --

21 MR. FREEDMAN: I'm asking the witness, Your Honor,
22 if they are the same items that are listed on item 22 or
23 Exhibit 22 which is in evidence.

1 THE COURT: Tell me what item 22 is.

2 MR. FREEDMAN: Mr. Holland's report with a list
3 of 22 -- 20 items of corrective work to be done on the
4 site.

5 THE COURT: I don't have any evidence that this
6 is in evidence.

7 MR. FREEDMAN: The Clerk has advised that it has
8 been admitted, Your Honor.

9 MR. WALSH: I have a copy of the transcript of
10 Mr. Holland's testimony.

11 THE COURT: All right, let's see if it's in
12 there. Exhibit 22 -- all I know is that I don't --

13 MR. TROTTER: I believe it's admitted in page 64,
14 Your Honor.

15 THE COURT: Yes, sir; thank you.

16 The objection is overruled.

17 BY MR. FREEDMAN:

18 Q Are these the items upon which you are -- your
19 cost report is based?

20 A Yes, they are for items one through twenty in
21 my report.

22 Q And did you also make a computation for work to
23 the parking deck and work to the entrance steps?

1 A Yes, I did.

2 Q And what is the total amount of that work of
3 the parking deck and the -- those listed on item 22 and
4 the site work, other site work?

5 A Total cost for all of that work is \$42,396.64.

6 Q In your opinion, Mr. Vallance, are the figures
7 for each of the corrections -- corrective programs to which
8 you testified fair and reasonable?

9 A Yes, they are.

10 MR. WALSH: I object. That's not the standard.

11 THE COURT: That's not what?

12 MR. WALSH: That's not the standard.

13 THE COURT: I'll let the question stand. All
14 right.

15 BY MR. FREEDMAN:

16 Q In your opinion, Mr. Vallance, do these costs --
17 do the figures you have set forth in your report represent
18 the cost to get the work done as of June 12, 1975?

19 MR. WALSH: I object to that.

20 THE COURT: State your objection.

21 MR. WALSH: Leading question.

22 THE COURT: Overruled.

23 MR. WALSH: I object on the previous grounds,

1 Your Honor, that he's not qualified for the reasons that
2 I've stated to the Court.

3 THE COURT: Overruled.

4 THE WITNESS: Yes, they are.

5 THE COURT: Anything further?

6 BY MR. FREEDMAN:

7 Q Do you have an opinion as to whether it would be
8 economically feasible to perform the corrective work which
9 you have prepared cost figures for?

10 MR. WALSH: I object, Your Honor, he is not
11 qualified to answer that question -- give that opinion,
12 to state that conclusion.

13 THE COURT: I think that's a jury question.

14 MR. FREEDMAN: I have nothing further.

15 THE COURT: All right.

16 CROSS EXAMINATION

17 BY MR. WALSH:

18 Q When was it you did the preliminary cost estimate
19 for the Alfred Street Baptist Church?

20 A That was, I believe, two or three weeks ago.

21 MR. FREEDMAN: Excuse me, Your Honor, there are --
22 there is a line of three or four questions which I overlooked.
23 I don't want to interrupt Mr. Walsh, or go back and try to

1 get it on redirect, but if I may ask these few questions.

2 THE COURT: All right, Mr. Walsh, thank you very
3 much.

4 MR. WALSH: I defer, Your Honor.

5 DIRECT EXAMINATION (continued)

6 BY MR. FREEDMAN:

7 Q Mr. Vallance, do you have an opinion as to the
8 difference in value between copper wire and aluminum wire
9 as of June 12th, 1975?

10 A Yes, I do.

11 MR. WALSH: Your Honor, I object. He's never been
12 tendered as an expert on that, in any manner, shape or form.

13 THE COURT: All right. Objection overruled.

14 BY MR. FREEDMAN:

15 Q For the Cameron Overlook Project?

16 A Yes, I do.

17 Q And what is that amount?

18 A \$11,491.00.

19 Q And have you an opinion as to the difference in
20 value between the kitchen cabinets as installed and the
21 kitchen cabinets as specified?

22 A Yes, I do.

23 Q And what is that?

1 MR. WALSH: Object on the same grounds, Your
2 Honor.

3 THE COURT: All right; same ruling.

4 THE WITNESS: The difference is \$14,861.00.

5 BY MR. FREEDMAN:

6 Q And do you have an opinion as to the cost -- as
7 to the difference in value of the risers in Cameron Overlook
8 as between those if they were constructed with or without
9 expansion joints?

10 A Yes, I do.

11 MR. WALSH: Objection.

12 MR. FREEDMAN: Excuse me, expansion loops.

13 THE COURT: I don't know what this is. What is
14 this?

15 MR. FREEDMAN: In this -- this is expansion loops
16 in the risers that Mr. Gauthier talked about.

17 THE COURT: Oh, this is the hot water pipes.
18 All right, same ruling, Mr. Walsh.

19 BY MR. FREEDMAN:

20 Q And what would that be?

21 A The difference is cost is \$5,214.00.

22 Q And do you have an opinion as to the value of
23 the trash compactor at Cameron Overlook as specified in the

1 plans and specifications as of June 12th, 1975?

2 MR. WALSH: Objection, same grounds, Your Honor.

3 There hasn't been any testimony about that.

4 MR. FREEDMAN: Your Honor, Mr. Cumberland
5 testified that the trash compactor didn't work. Mrs. Berg
6 said they replaced it, and now Mr. Vallance is testifying
7 as to the value in accordance with Your Honor's ruling of
8 yesterday.

9 THE COURT: Now, I said he could testify as to
10 what the value of a trash compactor was on June 9, 1975.

11 THE WITNESS: I regret to say that I did not get
12 that one done during the lunch hour. I don't have a cost at
13 that date.

14 BY MR. FREEDMAN:

15 Q Can you make an estimate?

16 THE COURT: He says he didn't do it.

17 THE WITNESS: I can make an estimate.

18 MR. WALSH: I object.

19 THE COURT: All right.

20 BY MR. FREEDMAN:

21 Q Would you make the estimate? Do I understand
22 correctly that you have the figure as of another date and
23 you're just adjusting the figure?

1 A I have, in fact, three quotations for a current
2 cost of such a compactor. I do not have it adjusted back
3 to the date in question.

4 Q Would you do so, Mr. Vallance?

5 A In my opinion it would have been \$4,000 --

6 MR. WALSH: I object, Your Honor, on the same
7 grounds.

8 THE COURT: I'll just have to say this, members
9 of the jury, the Court is letting this testimony in. As to
10 whether or not you can get the value of a trash compactor
11 by saying what the value of one is today and taking off
12 so many percentage points, I'm not passing on that. I'll
13 let you all give such weight to that testimony as you all
14 think it's entitled to. Four thousand and what?

15 THE WITNESS: \$4,224.00.

16 THE COURT: All right.

17 MR. FREEDMAN: That's all the questions I have,
18 Your Honor.

19 THE COURT: Thank you; Mr. Walsh.

20 CROSS EXAMINATION (resumed)

21 BY MR. WALSH:

22 Q Now, Mr. Vallance, was the Alfred Street Baptist
23 Church done by you personally?

1 A Yes.

2 Q And that's the first job you've done in Virginia
3 other than Mr. Weitz' Cameron Overlook, right?

4 A No.

5 Q Did I misunderstand your answer, because I thought
6 that you said that was all you had done?

7 A No.

8 Q Which one did you do before that?

9 A Remodeling at Wallops Island, NASA facility.

10 Q Before that?

11 A West Portsmouth Naval Hospital.

12 Q And before that?

13 A I believe those are the only ones.

14 Q Portsmouth Naval Hospital is in Portsmouth;
15 Wallops Island is on the Eastern Shore down at the northern

16 A Yes.

17 Q So the Alfred Street Baptist Church is the only
18 one you've done up here?

19 A Yeah.

20 Q So I had it right.

21 Now, who is the general contractor on that job
22 that you did that for?

23 A There was no general contractor.

1 Q In fact, there's just a foundation permit issued
2 on the job, isn't that right?

3 A It hasn't gone to bid yet. I don't know what
4 stage it's at, but they've not taken bids.

5 Q So you were doing this for the architect?

6 A Yes.

7 Q What architect is that?

8 A VVKR.

9 Q Vosburg --

10 A Vosbeck, Vosbeck, and I can't remember the last
11 two names.

12 Q And that's a two-story addition to the church,
13 isn't it?

14 A Yes.

15 Q Is that the Alfred Street Baptist Church that's
16 on Duke Street, or is that the Alfred Street Baptist
17 Church that's on Alfred Street?

18 A It's on Alfred Street.

19 Q So you've done the three jobs in Virginia other
20 than Cameron Overlook; right?

21 A Yes.

22 Q Since April -- since April?

23 A No, the one -- the work I did on Portsmouth, which

1 is a very different sort of project, I actually was doing
2 while I was in Chicago.

3 Q All right. Then you've only done two other than
4 Cameron Overlook while you've been in Virginia?

5 A Yes.

6 Q You did Wallops Island while you were in the
7 Alexandria office?

8 A Yes.

9 Q And what were you building there?

10 A There are two hangers which are being used as
11 offices and workshops by the NASA Flight Center and they're
12 remodeling both of those buildings.

13 Q Into offices or into hangers?

14 A Into offices.

15 Q They're not poured-in-place concrete slab and
16 column with solid masonry walls, are they?

17 A They have masonry walls. The frame is steel.

18 Q Just one deck, the floor right?

19 A No, it's two levels.

20 Q How did you get into doing this job for Mr. Weitz
21 who retained you?

22 A It was retained by Mr. Weitz.

23 Q That's because you had done another job for him

1 on Pemberton Manor in Maryland; correct?

2 A I did do a previous job there, yes.

3 Q And you didn't have any dealings with Mr. Weitz
4 before Pemberton Manor, did you?

5 A No, I did not.

6 Q What has your bill been up to this point for
7 these three revisions of your estimate and your testimony
8 and all this time you spent?

9 A I haven't billed up until this point.

10 Q Well, what will it be?

11 A I don't know. The invoices will go out for this
12 month probably the end of the week.

13 Q You have some idea, don't you? You're pretty
14 good with figures, aren't you?

15 A Very good.

16 Q Well, you must have some idea of your own bill
17 if you're so sure of what it ought to take to prepare this,
18 right?

19 A Yes.

20 Q Well, give me an idea of what your bill is?

21 A I would guess it's going to be 12 to 13, \$14,000.00.

22 Q Now, did you do anything between the time you were
23 sent out of the courtroom this morning around 10:30 or so

1 and 2:00 other than recompute your second revised estimate?

2 A No.

3 Q You worked feverishly on revising your figures,
4 I take it?

5 A Either that or I was walking up and down the
6 corridor.

7 Q You didn't call anybody?

8 A I made no phone calls.

9 Q So you didn't have an opportunity to get any
10 input from any other source that you had used to get the
11 input for the first report you made in October, 1978;
12 correct?

13 A I had no input from any other source.

14 Q Now, when did you first get involved with Mr. Rainey -
15 well, Mr. Rainey is not here today, but you know Mr. Rainey,
16 don't you?

17 A Yes, I do.

18 Q When did he come on the scene to start helping you
19 to prepare this information?

20 A Initially by telephone conversation; I was
21 introduced to Mr. Rainey in Mr. Freedman's office. He then
22 was collecting reports for my use.

23 Q And when was that, sir?

1 A I don't recollect the day.

2 Q Could you recollect the month?

3 A I believe it would have been September -- I may
4 be wrong. It may have been August, but I think it was
5 September.

6 Q Now, on how many occasions have you met with
7 Mr. Rainey?

8 A Probably three or four times.

9 Q And what was the purpose of those consultations,
10 sir?

11 A To collect information from them, or collect the
12 reports, to visit the sites -- site, to inspect the project.

13 Q When was the last time you spoke with Mr. Rainey
14 in person or on telephone about the project?

15 A The last time I spoke with Mr. Rainey was, I think,
16 Monday, briefly in Mr. Trotter's office, but that was just
17 conversation. I don't think we discussed any technical
18 things at all at that point.

19 Q What were you doing on Monday, sir?

20 A I was waiting to be called.

21 Q And when was the last time you spoke with Mr.
22 Rainey before Monday?

23 A I don't recall an exact date.

1 Q Well, was it a week before Monday, or two weeks
2 before Monday, or was it two days?

3 A It was probably a couple of weeks at least.

4 Q Now, tell me the documents Mr. Rainey provided
5 you which you studied to prepare your first, second and
6 third estimate?

7 A The documents I used in my first estimate were
8 as indicated in my report.

9 Q Well, did you get any additional documents to
10 do your second estimate, to revise your first estimate and
11 make estimate number two?

12 A I don't think there was any documentation; that
13 was basically taken -- taking some items out.

14 Q Did you get any input from Mr. Weitz from the
15 first time you got called in on this job until today
16 about what he'd like to have in your estimate?

17 A I've had conversations with Mr. Weitz generally
18 during the last two or three months, but I can't recall
19 anything -- technical things specifically discussed. I
20 think all my dealings were through Mr. Rainey.

21 Q Did you have any other dealings on preparing your
22 your list other than from Mr. Weitz or Mr. Rainey?

23 A Yes.

1 Q With whom, sir?

2 A I met with Mr. Holland and talked through with
3 him the scope of work I had done --defined on this drawing.

4 Q And that's all, Holland, Rainey and Weitz?

5 A No, I met also with a gentleman from Law
6 Engineering.

7 Q Kinloch, Dixon, Smith, Lawrence?

8 A Kinloch, I think.

9 Q When did you meet with Kinloch?

10 A Sometime in October -- no, it would be sometime in
11 November -- must have been October. I don't remember the
12 exact dates.

13 Q Well, where did you meet with him?

14 A In Mr. Freedman's office.

15 Q And how long did that meeting take place?

16 A How long was it?

17 Q Yes, sir.

18 A I think it was probably about 20 minutes.

19 Q And what was the purpose of that?

20 A They were redoing this document.

21 Q And did you get any input from Mr. Kinloch at that
22 time?

23 A I don't recall any.

1 Q Was he mute on the subject of Cameron Overlook
2 during this meeting?

3 A I'm sorry?

4 Q Was he mute, silent?

5 A No, no, I'm just trying to remember what he said.

6 Q Do you have any notes of any of these meetings,
7 sir?

8 A No, I don't. He did take a copy of this. I think
9 he commented on the description of the roof repair. I think
10 that may have been Mr. Kinloch -- Kinloch.

11 Q Do you have any notes of any of the meetings or
12 telephone conversations with any of these experts or the
13 representatives of Mr. Weitz?

14 A I have various notes made at various times. I
15 can't say exactly which meetings and which conversations.

16 Q Do you keep your notes by date?

17 A Usually.

18 Q Do you indicate who you are conferring with, sir?

19 A Sometimes.

20 Q Did you confer with anybody else about this list
21 of items other than those you've named?

22 A I can't recall anyone else; there may have been,
23 but I can't recall, to the best of my recollection.

1 MR. WALSH: Excuse me.

2 THE WITNESS: Excuse me. I beg your pardon --
3 there was one other person.

4 BY MR. WALSH:

5 Q Who is that?

6 A Mr. Jim Howie.

7 Q The architect with the beard from New York?

8 A Yes.

9 Q And what did he say about it, sir?

10 A We were talking about the window repairs.

11 Q And where did you meet him?

12 A In my office.

13 Q And what did he tell you other than what you got
14 in his report?

15 A He prepared a list of items that interpreted the
16 window repair report.

17 Q From Mr. Sakhnovsky?

18 A Yes.

19 Q So you used Mr. Howie's statement of Mr. Sakhnovsky's
20 report?

21 A I used that as guidance.

22 Q Well, you said that you used the Construction
23 Research Laboratory Report, didn't you?

1 A Yes.

2 Q And you didn't say in this report that you used
3 Mr. Howie's reconstruction?

4 A Not for this first estimate, no, I didn't.

5 Q You didn't say that you used Mr. Howie's
6 reconstruction?

7 A Not for this estimate, no.

8 Q Now, the estimate that's dated October 29th,
9 1978, did you make a draft of that before this final was
10 typed, sir?

11 A Yes.

12 Q Now, who did you circulate that to for review?

13 A To the -- certainly to Law Engineering. I wanted
14 to be sure that the scope, as I described it, was the scope
15 that was intended by the remedial reports.

16 Q Now, Mr. Vallance, do you have that draft that
17 you circulated to Law with you?

18 A Probably not. It was done informally. It was --
19 I don't recall by transmittal.

20 Q Were there any changes, sir?

21 A The one change was --

22 Q In substance of the writing, but not of the
23 figures?

1 A The figures I don't believe changed at all. The
2 only thing that I didn't have in was the furring strips for
3 the waterproof clad into the building, and those I had to
4 add in. Other than that, the description I had of the
5 roofing was not exactly correct.

6 Q Well, did you add in the furring strips after
7 the report was prepared on October 9th, 1978?

8 A Yes.

9 Q And when did you add those in, sir, shortly
10 thereafter?

11 A No, I did that, in fact, November 26th.

12 Q Your original report dated October 9th, 1978,
13 which has been revised twice, and which is Exhibit -- the
14 exhibit you have up there.

15 THE COURT: Fifty-two.

16 MR. WALSH: Thank you, Your Honor. Fifty-two.

17 BY MR. WALSH:

18 Q It was based on Philip Maslow's report, wasn't it?

19 A Yes. Well, I'm trying to recollect what was in
20 Philip Maslow's report. The scope that I described was to
21 replace the roof.

22 Q Mr. Vallance, you have your report up there, don't
23 you? You have this exhibit up there?

1 A Yes, I do.

2 Q And you have some copies of it; don't you?

3 A Yes.

4 Q And you did say that it included Philip Maslow's
5 report?

6 A That's correct; yes.

7 Q Now you've taken out in the revised estimate any
8 reference to Philip Maslow's report; haven't you?

9 A Yes, I have.

10 Q Did you do that because somebody told you to, or
11 did you decide on your own?

12 A Yes, I did.

13 Q Who told you to take it out?

14 A Mr. Freedman said that Mr. Maslow's report was,
15 in fact, not put in evidence.

16 Q So you didn't have any information about the roof
17 to review and make an estimate on, did you?

18 A The cost I left was for replacing the roof; no
19 adjustment was made to that.

20 Q Well, did you make a determination as to the cost
21 to replace the roof based upon something in particular, sir,
22 some document in particular?

23 A It was left as described in the original report.

1 I never changed it.

2 Q Well, but in the original report, sir, you have
3 the roof repair -- can you help me, Mr. Vallance?

4 A I'm sorry.

5 Q Can you help me and tell me what the original
6 roof repair was?

7 A The original roof repair is as listed on sheet
8 number eight.

9 Q \$73,141.00; correct?

10 A That's correct. That was the current cost as of
11 today's date. I beg your pardon -- as of November 15th.

12 Q As of November, 1978, you figured it was going to
13 take \$73,141.00 to replace the roof. Now, what documents
14 did you use to consider the scope of the work to come up
15 with that figure, sir?

16 A The report listed on the front page.

17 Q And that was Philip Maslow's report, wasn't it?

18 A I believe it was.

19 Q And Philip Maslow's report you were told by Mr.
20 Freedman wasn't in evidence so you shouldn't consider it;
21 correct? And by -- when you were told that you scratched
22 Philip Maslow's report out of the reference in your estimate,
23 didn't you?

1 A As I recall the report -- and I'm working from
2 memory -- there were two alternative courses of action
3 possible; one was to repair the roof.

4 Q Excuse me, Mr. Vallance, I don't mean to be
5 impolite or discourteous to you, but you figured out the
6 estimate on the roof of \$73,141.74 based upon Philip
7 Maslow's report; correct?

8 A Yes.

9 Q Mr. Freedman came to you and said Philip Maslow
10 didn't testify and his report's not in evidence so you have
11 to strike that reference to his report in your report;
12 correct?

13 A I believe that's what happened.

14 Q Basically correct?

15 A I may be disremembering, but I think that's
16 what happened.

17 Q And you got the information to figure out the
18 19 -- November 1978 cost to replace the roof from Philip
19 Maslow's report, didn't you? We agree on that, don't we?

20 THE COURT: I don't think that's what he said,
21 Mr. Walsh.

22 THE WITNESS: What I'm trying to say is that this
23 document, when it was prepared, was reviewed by the group of

1 consultants and by the owner and they reviewed it to see if
2 the scope was what they intended. I can't tell you
3 specifically which report at that point may have been
4 current, but that was the scope I estimated.

5 BY MR. WALSH:

6 Q Your document was reviewed by everybody -- Mr.
7 Weitz and Mr. Rainey and the experts and it was what they
8 wanted; right?

9 A The scope of the work was as I described it.

10 Q And the scope of the work on the roof you got
11 from Philip Maslow's report, didn't you?

12 A I believe Mr. Kinloch was also involved in that
13 review, and I'm not exactly sure which report that may have
14 come from.

15 Q Would you please pull out your backup material on
16 the roof and let's look at it, and we'll find out how it
17 is you got \$73,000.00 in November, 1978, to replace the
18 roof.

19 MR. FREEDMAN: Your Honor, this is such an unfair
20 line --

21 THE COURT: I think -- excuse me, if you're
22 objecting, the objection is sustained. If you want to
23 cross examine him about the price, all right. As far as

1 the Court's ruling is concerned, this testimony is permitted
2 because it's based on testimony that's already been produced
3 on this witness stand, and not on Mr. Maslow's report.

4 That's something that's gone ahead that I don't
5 know about. I don't know about it. I don't know about Mr.
6 Maslow's report, and I don't know what it has to do with
7 this case.

8 MR. WALSH: Could I explain something to the
9 Court, Your Honor?

10 THE COURT: Yes, sir. That's not in evidence,
11 what you've got right there.

12 BENCH CONFERENCE

13 MR. WALSH: I understand that, Your Honor, but
14 how am I to examine this witness and test his -- test his
15 credibility, test his ability to compile this report when
16 he has said in the first instance that the roof work was
17 done as a result of Philip Maslow's report. They then say
18 Maslow's report isn't in evidence, so he scratches that
19 out. Don't you think that I have a right to ask him what
20 he used to figure out the price of \$73,000.00?

21 THE COURT: Exactly, but it's got nothing to do
22 with Maslow's report. It's a question of materials and
23 labor.

1 MR. WALSH: But who told him what materials and
2 what labor to use, sir, and what roof to put on there?
3 It's in Maslow's report.

4 THE COURT: Ask him those questions.

5 MR. WALSH: Well, Your Honor, let me explain some-
6 thing very briefly. I don't want to ask him the question
7 and have him say it's right here in Maslow's report and
8 Maslow's report told him to do this, this and this. And
9 we've got Maslow's report in evidence when the man never
10 came on the stand; do you see that?

11 THE COURT: I'm really not with you, no, I'm
12 sorry. It just seems to me it's the cost of materials.
13 If he used the wrong materials, then you can show he used
14 the wrong materials.

15 MR. WALSH: But how can I show that, Your Honor,
16 unless I find out what the man used?

17 THE COURT: Why don't you ask him what he used?

18 MR. WALSH: I just did. I asked him; he said he
19 used Maslow's report, and he said he'd show it to me.

20 THE COURT: Well, how have you got the cost of
21 \$73,000.00 or whatever cost he got, but we're just going
22 round and round about Maslow's report.

23

OPEN COURT

BY MR. WALSH:

Q Mr. Vallance, --

THE COURT: Wait a minute, let the lady sit down.

BY MR. WALSH:

Q Mr. Vallance, what documents did you use to work from to come up with the information on the roof as far as labor and material and scope of work; can you show me them, sir?

A These are the documents.

Q Now, --

MR. WALSH: Excuse me. Can we just go back to the beginning?

BY MR. WALSH:

Q The documents you're referring to, yes -- Philip Maslow's letter of September 16th, 1978, to Mr. Benjamin Weitz, three pages. The remedial work specifications prepared by Mr. Maslow. How many pages, sir?

A Five pages.

Q Now, that's just for the roof, sir, is that all?

A I believe -- that's it.

Q So what you used to come up with the figure on the roof are the two Philip Maslow reports which

1 Mr. Freedman later told you weren't in evidence; correct?

2 A Those are the reports that I used at that time.

3 MR. FREEDMAN: I have to object, Your Honor.

4 May I approach the bench and be heard?

5 THE COURT: All right.

6 BENCH CONFERENCE

7 MR. FREEDMAN: Your Honor, the witness has all
8 the reports that specify that there is -- a new roof is
9 needed. The witness knew that a new roof was needed. He
10 did an estimate based upon a new roof. This is biggest
11 red herring that I have ever seen.

12 THE COURT: I think we're talking about apples
13 and oranges too, but your objection is overruled. Let's
14 just go ahead. I reckon we'll finish some day.

15 OPEN COURT

16 THE COURT: Go ahead, Mr. Walsh. Your objection
17 is overruled.

18 BY MR. WALSH:

19 Q You said in your report when you first published
20 it that the measurements were made -- I take it that's the
21 cost figures, sir, the dollars?

22 A The measurements are the quantities.

23 Q Quantities, yes.

1 And the pricing is based upon material and labor
2 prices currently prevailing in the Alexandria area -- that's
3 the report of October 9th, 1978, sir?

4 A Yes.

5 Q Did you check on each particular area of work
6 with some source for the cost of the labor, sir?

7 A The cost of the labor?

8 Q No, sir, I'm sorry.

9 A Yes, I did. The source I used was, in fact, Means
10 Price Book.

11 Q Means Price Book?

12 A (Nodding head.)

13 Q Do you have that with you, sir?

14 A I believe it's in my briefcase behind you. It's
15 a generally accepted handbook for cost estimating among
16 several --

17 Q And what documents did you use to determine the
18 price of material as of October, 1978?

19 A In some instances I called for quotations and in
20 some instances I used my own judgment as to what they would
21 cost. You see you can't always get --

22 Q Thank you; thank you, sir.

23 Now, your first estimate dated October 9th, 1978,

1 was \$1,157,553.00, wasn't it?

2 A Yes, it was. I believe that's the figure.

3 Q And you amended that on November 26th, 1978,
4 down to \$782,759.00, didn't you?

5 A Yes, I believe that's the figure.

6 Q Now, you've amended that this afternoon about
7 2:00 down to \$541,827.00, didn't you?

8 A Yes.

9 Q As this trial has been going along, you've been
10 getting calls from people or meeting people telling you to
11 take this item out or remove that from the overall estimate,
12 haven't you?

13 A That happened specifically once.

14 Q All right, and who did you get the call from?

15 A From Mr. Freedman.

16 Q What were you told to take out?

17 A I took out --

18 Q What were you told to take out?

19 A The -- the replacement of the kitchen cabinets.

20 Q \$187,000.00?

21 A The figures are in my report. The replacement of
22 the aluminum wiring with copper wiring.

23 Q \$97,000.00.

1 A And the installation of expansion loops in the
2 risers.

3 Q \$7,000.00.

4 All that was in one conversation?

5 A Yes.

6 Q And then, of course, you went and changed the
7 painting from 150,000 square feet -- the 50 or 51,000 square
8 feet that you were going to paint which --

9 A That's an item I've not been allowed to talk about.

10 Q It's in your report, isn't it?

11 A Yes, it is.

12 Q Now, you have on page four various figures for
13 repairing the cavity wall; that's the wall on the roof?

14 A You mean the parapet coping?

15 Q Well, you've got cavity wall there.

16 A No, it's the parapet coping on top of the cavity
17 wall.

18 Q Yes, that's on the roof?

19 A Yes.

20 Q Now, you've got 642 lineal feet of metal coping,
21 was that measured by you, sir?

22 A From the drawings, yes, it was.

23 Q And that takes into account the perimeter of the

1 roof?

2 A The whole perimeter of the roof.

3 Q Well, you know, sir, that metal coping is not
4 on that entire parapet, don't you?

5 A I discovered that after I had done the report.
6 I did not ever change it.

7 Q You've never changed it?

8 A I beg your pardon.

9 Q You've never changed it, have you?

10 A No. And there's a reason.

11 Q When did you discover it, sir?

12 A I discovered it subsequently. I can't remember
13 when -- in conversation I think with someone. This report
14 was already in evidence, I think.

15 Q The report was in evidence?

16 A It was after October the 9th, let me put it that
17 way. It was after the original submission of the report.

18 Q You were going to repair and replace existing
19 brick in 642 feet of the parapet rowlock; right?

20 A Yes.

21 Q Now, that figure is incorrect, too, isn't it,
22 sir?

23 A I don't know; is it?

1 Q Well, you've inspected the site, haven't you,
2 sir?

3 A Yes.

4 Q Now, you know that the top of that roof is not
5 all -- is not all rowlock construction, don't you?

6 A The intention there, and it may have been worded
7 wrongly, was to repair the parapet generally, whether it
8 was brickwork or whether it was the top of the window
9 head.

10 Q But you didn't say that, sir, did you?

11 A No, but it's what I priced.

12 Q So you priced something you didn't say?

13 A That's right.

14 Q And you priced something that doesn't really
15 exist; correct?

16 A That's not true.

17 Q Well, there's not 642 feet of brick rowlock
18 coping up there; correct?

19 A No, but there is 642 feet of coping. What I
20 had intended by that item, and you have to look at the
21 quantities and the costing together, was to make at the
22 top of that parapet wall -- I should have been more precise
23 and it's something I guess that isn't there, and said both

1 to the rowlock parapet and the parapet of the window head.

2 Q Well, you were also going to install 642 feet of
3 new metal coping on top of the cavity wall, and of course
4 you know there's not 642 feet of cavity wall up there;
5 correct?

6 A That's correct.

7 Q So that's another mistake you made, isn't it?

8 A Just a minute; just a minute now. Why are you
9 saying that's a mistake? I'm not sure I agree with you.

10 One -- I have no -- you're confusing me. There
11 are two types of parapet coping. There's the metal coping
12 over the windows and there's the brick coping elsewhere,
13 both of which I described. I don't understand your question.
14 I beg your pardon.

15 Q All right, sir; we'll come around again.

16 Now, you've got \$13,000.00 originally to install
17 horizontal joints at three levels, and now you've cut it
18 down to \$9,000.00, don't you?

19 A That's right. That's the deflation figure that
20 I did during lunch hour.

21 Q And two, you've got a quantity of 2352 feet;
22 correct?

23 A Yes, I have.

1 Q And is that three times the perimeter of the
2 building, approximately?

3 A I think it is -- measures over the window areas
4 as well.

5 Q So you're putting a soft joint through the
6 windows.

7 A You see you have to look at the quantities and
8 the pricing together.

9 Q No, excuse me; excuse me. The quantities are
10 soft joints you've included here means putting a soft
11 joint through the window because that's added here, isn't
12 it?

13 A It's in there, yes.

14 Q Have you ever put a soft joint, or seen a soft
15 joint, go through a window?

16 A I'd have to check my backup to make sure that's
17 measured through the window. I'd have to check that.

18 Q Well, why don't you?

19 A It's something I'd like to do if I had time at
20 my leisure.

21 Q You're not going to have time to do it at your
22 leisure, sir; you've had months. Do it now please.

23 ~~THE COURT: Let's take a ten minute recess.~~

1 (Thereupon, at 3:10 p.m., the hearing recessed
2 to reconvene at 3:25 p.m.)

3 THE COURT: All right, Mr. Walsh.

4 MR. WALSH: Thank you, Your Honor.

5 BY MR. WALSH:

6 Q Mr. Vallance, pardon me, you were going to
7 recompute that, sir.

8 What page are you on?

9 A It's on page five.

10 Q Five. Did you want to tell us what it was, sir?

11 A You are correct, that computation is too high.
12 The measurements have been taken around the building,
13 including across the windows. There was no deduction made
14 for the windows. That quantity is high by 426 square --
15 lineal feet.

16 Q How did you figure 426 lineal feet as the
17 difference?

18 A Because I think that's the distance through the
19 windows. I don't have the drawings in front of me, but I
20 think that's the distance.

21 Q Well, why don't we turn to the windows -- what
22 number is that?

23 A The windows are on page six.

1 Q Thank you, sir.

2 Okay, and we've got -- we've got 423 windows
3 that are four feet wide, could you multiply that for me
4 with your calculator please, sir?

5 A I don't know what that's going to give you.
6 They're on each floor.

7 Q Well, I get 1692 -- you've got 212 windows that
8 are 7 feet wide, that's 1484. I get 3176 lineal feet of
9 windows.

10 A Yes.

11 Q If I use your figures?

12 A Yes. I think you're making an incorrect
13 computation for this particular situation. That would
14 imply --

15 Q Mr. Vallance, I'm not finished.

16 A I beg your pardon -- I'm sorry.

17 Q So on each floor there would be how many lineal
18 feet if we divide that by 14?

19 A There are -- the floors aren't equal. Some
20 floors have more; some floors have less windows on them.
21 The typical floor is --

22 Q All right, sir.

23 A It doesn't work that way.

1 Q But that would be the -- somewhat of a way to
2 approach it, wouldn't it?

3 A No.

4 Q You didn't approach it anyway before today, did
5 you, except to take all the measurements?

6 A Yeah, I am saying that I should have deducted
7 426 feet.

8 Q Page five -- could you tell me where it was
9 that you got the information to calculate for a soft
10 joint around the roof slab?

11 A That was from, I believe, Law Engineering.

12 Q Would you show that to me, sir?

13 A Again, I don't know if I have the report that says
14 exactly that.

15 Q So you got it from --

16 A Leave it there; leave it there.

17 Q You got it from them in one of your meetings?

18 A I'do have the report of Law Engineering of
19 September -- I'm sorry, the letter of September 28th
20 which recommends --

21 Q Just show it to me, sir; I'm only interested in
22 how you got it. That's where you got it from, that letter?

23 A Yes.

1 Q Did anybody ever explain to you why the joint
2 was going out the roof slab?

3 A My understanding is --

4 Q No, I don't want to know your understanding. I
5 just want to know if anybody ever explained to you why it
6 was going there.

7 A Specifically at that point, you mean?

8 Q Yes.

9 A I don't recall a specific explanation.

10 Q Could we turn to page six, sir? Do you have your
11 document there? Have you figured in -- strike that.

12 Can you tell me the windows that are -- what
13 brand will they be, sir; that's 635 windows you want to
14 put in?

15 A What type of window -- who manufactures them?

16 Q Yes, sir.

17 A We obtained quotations --

18 Q Just a second. What window is that?

19 A From Continental Aluminum and from General
20 Aluminum.

21 Q And, now where are the cut sheets on these, sir?

22 A I don't have cut sheets.

23 Q Did you get these quotations from them on the

1 telephone?

2 A Yes, I did.

3 Q Did you call them, sir?

4 A No, a colleague of mine called them.

5 Q So the information you got for the windows is
6 based upon a telephone call somebody in your office made
7 to somebody in another office; correct?

8 A No, I, in fact, included a cost that I calculated
9 myself from first principals.

10 Q From who?

11 A From first principals.

12 Q What is that?

13 A It means I calculated them myself through my own
14 experience of windows of this type. I developed a cost for
15 windows; two quotations were obtained to verify that my
16 costs were reasonable.

17 Q Mr. Vallance, you have this person in your office
18 who called these two people; right?

19 A Right.

20 Q And they talked on the phone and apparently not
21 when you're present?

22 A I don't believe so.

23 Q And they talked about the windows and the person

1 at the other end of the line gave your person some figures;
2 correct?

3 A That's correct.

4 Q And tell me the type of window, with regard to its
5 component parts, that each of those two sets of manufacturers
6 talked about?

7 A Broadly?

8 Q No, specifically.

9 A The windows were to have three-sixteenth inch
10 sheet glass, double strength.

11 Q Where are you getting that information -- you're
12 just reading from --

13 A From this sheet.

14 Q That's what somebody wrote down about that
15 conversation with this other person at the other end of
16 the line; right?

17 A Yes.

18 Q Let me look at that please, before you go reading
19 all that.

20 A Both of those quotations are in excess of the
21 figures I calculated.

22 Q What's on the back, please?

23 A Telephone numbers of dealers.

1 Q Did you talk with the person in your office who
2 got this information and then come up with these figures,
3 sir, that you put in your report?

4 A No; no. I calculated my cost figures --

5 Q Excuse me, you've answered my question, Mr.
6 Vallance, you didn't talk about it. You made a calcula-
7 tion?

8 A Yes.

9 Q What window did you make the calculation based
10 on?

11 A The window as specified in the original documents.

12 Q Which one was that?

13 A In the original bid documents.

14 Q Well, which window is that, sir. do you have a
15 present recollection of what it was?

16 A No, I don't; I'd have to go back.

17 Q Do you have any notes there of what it was?

18 A No.

19 Q So you made a calculation based -- using the
20 window originally specified; correct?

21 A Yes.

22 Q And did you get the figures to base that calcula-
23 tion from some source -- yes or no, please?

1 A The sort of sources I had were quotations I'd
2 had on other windows. Again, Means Price Book, my own
3 development and costs for materials.

4 Q Excuse me. Now Means Price Book doesn't have
5 anything in it about window costs or material, does it?

6 A That's correct. That's one of the sources I
7 used.

8 Q Well, let's exclude that if it doesn't have any
9 data on this -- on it; correct?

10 A It does have data, yes.

11 Q For labor?

12 A And material. Are you familiar with the Means
13 Price Book?

14 Q Could I ask the questions, Mr. Vallance?

15 A I'm sorry -- I beg your pardon.

16 Q Could I?

17 A Yeah.

18 Q Thanks.

19 Do you have that with you?

20 A Yes.

21 Q Could I see it please, if you don't mind, sir?

22 Now, please for my edification turn to the page
23 there that has the prices to purchase the window that was

1 specified in the contract.

2 A There is no such window in this book.

3 Q All right, would you close it then, please?

4 Where did you get the prices for the window that
5 you used in your calculation; just tell me the source with-
6 out explaining?

7 A Well, the source is within me; it's based on my
8 experience of estimating windows; that's really what the
9 source is.

10 Q Then you didn't use any of the information you
11 got from the person who made the telephone call; correct?

12 A No, that was done after I had already made my
13 calculations.

14 Q Then this report -- the original report of
15 \$100,000.00 for windows is based upon your calculations?

16 A Yes, it is..

17 Q Now, tell me, if you can, how you remembered the
18 price of the window that was specified in the contract just
19 by pulling it out of your head?

20 A I'm sorry. I don't understand the question.

21 Q Do I understand that you said you didn't find
22 in Means the price of the window, but you called upon your
23 own knowledge of the price of the window to make the

1 calculations; is that right?

2 A Using that and the --

3 Q Is that right, sir? To that point am I right?

4 A No. That's basic information.

5 THE COURT: No, you answered the question; no is
6 the answer.

7 BY MR. WALSH:

8 Q So you used something other than what you called
9 your own knowledge?

10 A The process of --

11 Q Is that right?

12 A It's hard for me to answer your question, because
13 I want to say something slightly different.

14 Q I know you do, and it may be hard, but answer the
15 question if you can, sir.

16 A I'm sorry. I've forgotten it even now. Can you
17 repeat the question?

18 Q You said that you calculated the price for the
19 purchase of the windows without reference to any documents
20 but you used the information you possessed at the time you
21 made the calculation; am I correct there?

22 A No.

23 Q Tell me where I'm incorrect.

1 A Apart from the information -- the stored informa-
2 tion I have from experience, I referred to, for instance,
3 Means to get guide figures on similar types of windows;
4 similar types of construction.

5 Q What similar type window did you find in Means?
6 And just open it up and show me.

7 A There isn't a window. It will be a series of
8 things. That's not the way I estimate if I'm estimating from
9 my own judgment. I will refer to any sources I can get, and
10 get a broad feeling of what the window is going to cost. It
11 can be as crude as a cost per square foot of the window area
12 or it can be as elaborate as costing out each member on each
13 pane of glass.

14 Q Show me your calculations, please, for the
15 \$100,100.00 that you figured out in October, 1978, for the
16 window work, please.

17 A I don't think there's any backup written down
18 that I can show you.

19 Q It's all in your head?

20 A I think in the end it became a judgment. It was
21 later verified by the quotations that we got.

22 Q But it wasn't changed by the quotation you got
23 from a person in your office who called several persons in

1 other offices; is that what you're telling us?

2 A I felt the figures I had --

3 Q Sir, just say yes or no.

4 A Yes.

5 Q Prior to you making this \$100,000.00 judgment on the
6 windows, when was the last time you had personally
7 calculated an estimate for the very same windows that
8 you're proposing be included in this \$100,000.00?

9 A I have never calculated the window exactly the
10 same as this one before.

11 Q You used the figure of -- an original figure of
12 \$2226.00 which you broke down to \$1540.84 to take out the
13 large windows?

14 A Yes.

15 Q Is that based upon an hourly rate of somebody
16 taking the window out?

17 A It's based upon a certain type of labor for a
18 certain period of time.

19 Q What's the hourly rate you used?

20 A \$13.50.

21 Q An hour?

22 A Yes.

23 Q Now, the \$100,000.00 windows, were they double

1 glazed windows that you were going to put in?

2 A No.

3 Q Where did you first prepare an estimate for
4 repair of the type of windows that are in Cameron
5 Overlook?

6 A Where did I prepare it?

7 Q When and where was the first time you ever
8 prepared an estimate for the repair of the type of
9 windows that are at Cameron Overlook other than the
10 \$148,000.00 repair bill you've testified to today?

11 A When I prepared this estimate --

12 Q Excuse me. Prior to your \$148,000.00 repair
13 estimate that you have made for the repair of Cameron
14 Overlook windows when was the last time you ever prepared
15 a repair estimate for the type of windows in Cameron Over-
16 look?

17 A You mean other than --you mean for another
18 project?

19 Q Yes.

20 A I never have.

21 Q Where was it your first read about how to
22 prepare an estimate to repair the windows of the type
23 in Cameron Overlook?

1 A From Mr. Sakhnovsky's description -- Sakhnovsky.

2 Q Sakhnovsky?

3 A I beg your pardon?

4 Q And you got that from his report, I take it?

5 A Yes.

6 Q From his written report you extrapolated into
7 \$148,000.00 -- excuse me, \$142,000.00 to repair the windows;
8 correct?

9 A Yes, on current costs.

10 Q Now tell me what the labor cost per hour was
11 that you used in the \$142,000.00 repair bill?

12 A \$19.50.

13 Q And did that include removing the windows?

14 A The procedure for doing the remedial repairs
15 would have included taking the windows out from inside
16 the room, making the repairs and putting them back in
17 again.

18 Q When were you first asked to prepare an estimate
19 of the repair of the windows?

20 A At the time that I was preparing my initial
21 estimate.

22 Q Do you have the breakdown of \$142,000.00, sir?

23 A Yes.

1 Q May I see it?

2 A That's the calculation.

3 Q And was this to prepare six hundred and thirty
4 some odd windows?

5 A It was to repair all of the windows on the
6 project.

7 Q Can I look at it?

8 A Uh-huh.

9 Q And is this here --

10 A This is one --

11 Q Well, let me just see that.

12 You said you did the repair estimate when you did
13 the original calculation; isn't that right?

14 A No, I said I did a repair estimate at that time;
15 that estimate was done later.

16 Q Well, where is the repair estimate you did at
17 the original -- at the first time you did the estimate?

18 A That repair estimate was --

19 Q Where is it?

20 A It's in my head, from my --

21 Q Okay. What was it?

22 A There was no lump sum figure.

23 Q Well, do you have an unlumpy sum?

1 A Yes, very much so?

2 Q What was it?

3 A Leaving Mr. Sakhnovsky's --

4 Q No, just give me the sum.

5 A Greater than the replacement of the windows.

6 Q Well, you made no note of that; you made no note
7 of that figure that you came up with out of your head early
8 in October; did you?

9 A No, there was not a figure. In reading Mr.
10 Sakhnovsky's report, in my opinion, there was so much
11 uncertainty and difficulty in making those remedial
12 repairs as to be inestimable and therefore, in my opinion
13 more expensive than simply removing the windows and replacing
14 them, which is what I estimated at that time.

15 Q Now, would you tell me who wrote this here,
16 please?

17 A That was written by Mr. Jim Howie.

18 Q The architect?

19 A I believe; I believe that's his handwriting.

20 Q And that's remedial window work; isn't it?

21 A Yes.

22 Q And you used that to work on your estimate, didn't
23 you?

1 A To get the \$142,000.00, yes.

2 Q Mr. Jim Howie, the architect, did some drawings
3 for you, didn't he?

4 A That's correct.

5 Q And you used those drawings to get your replace-
6 ment of repair estimate, didn't you?

7 A For the \$142,000.00, yes.

8 Q And you got a call from Mr. Rainey on November
9 20th, 1978, and he told you that Mr. Sakhnovsky was in his
10 office and he wanted an estimate on the repair of the
11 windows, right?

12 A That's correct.

13 Q And you busily went to work and came up with
14 \$142,000.00 repair job?

15 A That's correct.

16 Q Do you now, sir, what window it is that is
17 included in the \$100,000.00 replacement program?

18 A Exactly which one?

19 Q Yes, uh-huh.

20 A No.

21 Q Do you have an inexact idea?

22 A Well, it will be something similar to those items
23 that we subsequently got quotations for.

1 Q But you didn't -- you didn't call and get a
2 quotation, did you?

3 A No. It proved, in fact, to be extremely
4 difficult.

5 Q No thanks, Mr. Vallance; you've answered my
6 question.

7 Now, where did you get the \$10,000.00 --
8 \$10,669.00 original estimate which you pared down to
9 \$7,385.00 for caulking; just tell me where you got it?

10 A I measure the perimeter of all the windows and
11 caulked around all edges of those windows, and then
12 estimated the cost per lineal foot of that caulking.

13 Q What caulking?

14 A The sealant, I beg your pardon.

15 Q What sealant?

16 A The sealant between the edge of the window and --

17 Q What was it?

18 A Pardon?

19 Q What was it?

20 A An unspecified type of sealant.

21 Q How did you figure out a price on an unspecified
22 type of sealant?

23 A There are ranges of costs for sealants, and I used

1 a median range cost.

2 Q What's the range of price?

3 A I'd have to refer to some documentation to tell
4 you because I went to documentation to get it.

5 Q You didn't have that in your head?

6 A No, I didn't.

7 Q Did you get a quote from a reputable caulking
8 contractor?

9 A No.

10 Q You've got 11 -- excuse me, \$768.00 on page seven,
11 to clean out the masonry joint at the rowlock brick coping
12 to prepare to receive cap flashing. How many joints are
13 you going to clean out, and just give me a number please?

14 A As many as needed.

15 Q How many is that, sir?

16 A I don't know, because until you get there and find
17 out how many joints you have to repair, it's a contingent
18 type item.

19 Q All right, then tell me how you arrived at
20 \$1110.00 originally, modified twice to \$768.00; tell me
21 how you arrived at that.

22 A That was arrived at by calculating labor time at
23 an hourly rate?

1 Q Of what?

2 A It allowed for a bricklayer at \$17.30 an hour.

3 Q Now, how many hours were you going to have him
4 on the roof?

5 A I allowed for him cleaning out and repairing
6 ten lineal feet per hour.

7 Q Now tell me how many lineal feet had to be
8 cleaned out.

9 A He will go around all the joints.

10 Q No, Mr. Vallance. You tell me how many lineal
11 feet had to be cleaned out.

12 A I can't tell you.

13 Q Now you've got a figure here in your third
14 revised estimate of \$526.40 to clean out the reglets at
15 the head of the base flashing and caulk with sealing
16 compound, now what's the labor cost on that?

17 A Eighty-seven cents a lineal foot.

18 Q What's the cost per hour?

19 A \$17.30.

20 Q Now, how many lineal feet of reglets have to be
21 cleaned out, sir?

22 A Seven hundred and eighty-four.

23 Q How did you determine that?

1 A That's the perimeter of the flashing length
2 at the roof.

3 Q How many hours is he going to be up there?

4 A He's going to clean out 20 lineal feet per
5 hour.

6 Q And what if he doesn't? It's going to take
7 longer?

8 A It depends; it may take less.

9 Q When was the last time you oversaw a \$19.75 an
10 hour mason cleaning out reglets?

11 A \$17.30.

12 Q When was the last time you saw that; watched
13 somebody do it to determine how long it takes a man to
14 clean out a lineal foot of reglet?

15 A Perhaps a year ago.

16 Q And where was it?

17 A In Chicago, not specifically this job, but --

18 Q Now, you'd like to change the 642 feet of brick
19 rowlock that you've got in item three on page seven,
20 wouldn't you, because we now know there aren't 642 feet
21 of brick rowlock?

22 A Why?

23 Q Well, you agreed with me earlier that there weren't

1 six hundred and forty-two feet of brick rowlock on the
2 roof?

3 A No, I said I misunderstood your question. I
4 don't know whether that's so or not.

5 Q Well, I don't want you to misunderstand, so would
6 you look at the third item on page seven, and you've got 642
7 feet of -- lineal feet of rowlock brick coping, don't you?

8 A Yes.

9 Q Now, we all know that there are not 642 feet of
10 brick rowlock coping up there, don't we? Don't we?

11 A No. Why do we know that?

12 Q Well, you tell me how you get 642 feet then, sir?

13 A I measured that from the drawings.

14 Q Well, would you come over and look at the drawings
15 with me please, and show me which drawing you measured it
16 from, sir? They're right there, sir.

17 A Well, in fact, it's taken --

18 MR. WALSH: Excuse me; just look at them first,
19 Mr. Vallance.

20 THE WITNESS: Which drawing -- that is the roof
21 plan.

22 MR. WALSH: It is the roof plan.

23 THE WITNESS: Yes, it is. I have taken --

1 MR. WALSH: Can you hear?

2 THE COURT REPORTER: No.

3 MR. WALSH: I'll hold it up here for you, sir.

4 BY MR. WALSH:

5 Q Now, this is the roof plan on sheet A-6.

6 A Uh-huh.

7 Q Now, how did you get 642 feet of rowlock coping
8 from the roof plan on sheet A-6, sir?

9 A I took the length of the parapet everywhere except
10 above window heads.

11 Q Is that it?

12 A Yes.

13 Q Now, what did you do about the concrete parapet
14 on the front of the building?

15 A That did not get deducted.

16 Q So there is not 642 feet of rowlock coping on
17 the roof; is there?

18 A Probably not.

19 Q So you'd agree that whatever the actual measure-
20 ment of rowlock coping on the roof is that should be
21 substituted for all the areas where you've got brick
22 rowlock coping noted; correct?

23 A If there indeed is no brick rowlock on top of the

1 coping, yes.

2 Q Well, you've been at the building, sir, and you
3 know that that front parapet is concrete and there's no
4 brick there, don't you?

5 A Yes. In fact, when I went there I couldn't see
6 there was no brick on top of it, but I assume there isn't.

7 Q All right. But apparently you plan to have him
8 clean out every lineal foot of brick rowlock coping then?

9 A I measured the total length.

10 Q Yes.

11 A The implication is not that he has to clean out
12 every lineal foot, but that the cost that's included will
13 allow for him at least looking at all of it and cleaning
14 where necessary.

15 Q Okay; we've got \$19.75 an hour, and you figured
16 out 21 feet -- lineal feet an hour, did you?

17 A Twenty.

18 Q Twenty, okay. I see what you're doing.

19 And, of course, your item -- let's turn to the
20 roof on page eight, sir. Tell me please why it is you
21 determined to put a new roof on with 45 pound asbestos
22 base felt?

23 A That specification was as given to me by the

1 remedial repair consultants?

2 Q Mr. Maslow, correct?

3 A I assume that's where it came from originally.

4 Q And the same with the one inch rigid insulation?

5 A Yes.

6 Q Now, you have your workup on the roof, sir,
7 there?

8 A Yes.

9 Q May I please see it with you. What's on the
10 back page, sir? Now did you make the calls, sir?

11 A No, I did not.

12 Q Somebody in your office made the calls, sir?

13 A Yes, they did.

14 Q Were you present when they conveyed to the
15 roofing contractors the specifications that they wanted
16 the price on?

17 A On some of them, yes; on some of them, no.

18 Q Tell me which ones you were present, sir?

19 A I couldn't recollect which ones they were, sir.

20 Q How many were you present at?

21 A Probably one; maybe two. The calls were being
22 made while I was in and out of the office.

23 Q In your office?

1 A In my office.

2 Q And they were made at your desk?

3 A Well, at my colleague's desk.

4 Q Now, did you give your colleague the specifications
5 you wanted used to obtain the price?

6 A Yes.

7 Q And, where did you get those specifications that
8 you gave your colleague?

9 A They are the same that is -- that are in the
10 estimate here.

11 Q Where did you the specifications that are in the
12 estimate?

13 A From the consultants specifying the remedial
14 repairs.

15 Q And that's Mr. Maslow's reports?

16 A Initially, yes; yes.

17 Q And was it -- did you get a square foot cost to
18 remove the roof and to install a new roof?

19 A Yes. Again, however, those quotations --

20 Q Thank you. Thank you, sir.

21 Do you have any specific cost for the charge to
22 tear off the roof?

23 A No, I don't believe I do.

1 Q The costs you've got were tear it all off and
2 put a new one back on?

3 A Yeah, the cost in here -- the cost in the estimate
4 is to remove the existing roof and replace it with a new
5 roof.

6 Q Did you get any written estimates back from these
7 people, sir?

8 A No, I did not.

9 Q Thank you.

10 Did you make any independent calculations other
11 than what you got from these people over the phone to your
12 colleague to you?

13 A Yes. In fact, I made an independent estimate before
14 those quotations were received.

15 Q Okay. Show me that, sir.

16 A I don't have backup for that again.

17 Q That was made in your head?

18 A In reference to documents.

19 Q And then you made it -- it's been destroyed?

20 A Yeah, there's no record of it.

21 Q No record.

22 A It happened that the quotations --

23 THE COURT: No question pending.

1 BY MR. WALSH:

2 Q Did you ever determine, Mr. Vallance, from your
3 review of the specifications that these weren't the
4 specifications for the original roof?

5 A I don't recall checking that.

6 Q Did you interpret Mr. Maslow's reports and his
7 written remedial work document, or did someone else work
8 with you to glean from it the specifics of the specifications
9 there?

10 A Certainly, I worked with Mr. Rainey in collecting
11 the information. I can't tell you specifically what.

12 Q So there were various conversations between you
13 and Mr. Rainey about the roof and the scope of the work and
14 what you should be getting bids on; correct?

15 A I believe that's true.

16 Q Let's turn to page nine, sir. And we started
17 out with a cost of \$13 -- we started out with a cost of
18 \$13,870.48 for removing wallboard and installing casing
19 and installing new wallboard. Now, where did you get that
20 information to then start your calculations?

21 A I think it was in conversation about the window
22 repair, that it was not possible to remove the windows --

23 Q Sir, what was your source of that information?

1 I do not now want to know what somebody told you; just tell
2 me who told it to you.

3 A I think it was from Mr. Rainey.

4 Q Did he purport to tell you what his source was?

5 A I'm guessing that it came out of conversations
6 with Mr. Sakhnovsky.

7 Q Now, who did the calculation for the original
8 amount, sir -- the \$13,870.00 which has been reduced down
9 to \$9,601.00?

10 A I did.

11 Q How did you calculate 13,337 feet, sir? Where
12 did it come from, please?

13 A I believe that's the total window perimeter.

14 Q What are the window reveals -- the sides?

15 A Yeah, the window where it touches the wall,
16 touches the reveal or it touches something.

17 Q Sir, you're including in there the top and the
18 bottom of the window, aren't you?

19 A Yes.

20 Q And that's not a proper inclusion; is it?

21 A It doesn't in all cases require gypsum board,
22 but it will require repair of some kind.

23 Q Well, then it's not a proper calculation; is it,

1 Mr. Vallance?

2 A It's a proper --

3 Q Go ahead.

4 A In the sense that I'm trying to allow for fixing
5 the perimeter of the window, yes, it is.

6 Q How does the sill of the window require repairs,
7 sir, which you have included in your 13,000 feet?

8 A Yes, I have; you're right.

9 Q So that shouldn't be in there, should it?

10 A No, it should be in there. The description
11 doesn't say what I want it to say. But I am allowing for
12 fixing the surface of the sill where the window is removed
13 and replaced; it's an allowance item.

14 Q It's a judgment call?

15 A Yes.

16 Q Now, you've included elsewhere, but mentioned here,
17 two, three coats of paint, haven't you?

18 A Yes.

19 Q Now, do you know what the specifications call for
20 with regard to paint on gypsum board?

21 A I don't recall.

22 Q Did you ever know, sir?

23 A Yeah, I remember reviewing --

1 Q Would you be surprised if I told you two coats?

2 A No, not at all.

3 Q But you're going to put three coats?

4 A Yeah, because it's --

5 Q Thank you; thank you.

6 Now, how did you calculate 6,272 feet to open
7 gypsum board in isolated areas to gain access to duct work
8 and to furnish and install new gypsum board to seal the
9 openings on completion? Now, where are these isolated areas
10 that have 6,272 square feet?

11 A This was intended to cover for access to the
12 duct work for volume damper repair.

13 Q Tell me where the isolated areas are, sir?

14 A At the location of the duct work.

15 Q Tell me where that is.

16 A In the living room.

17 Q Would you show it to me on the plans, sir?

18 A Well, broadly speaking it's where the duct goes
19 through the living room area.

20 Q How about speaking specifically for a change,
21 Mr. Vallance, and tell me --

22 MR. FREEDMAN: I have to object, Your Honor.

23 MR. WALSH: Let me finish my question.

1 MR. FREEDMAN: Well, your question presupposes
2 something that --

3 MR. WALSH: Well, I withdraw my question.

4 MR. FREEDMAN: Thank you.

5 BY MR. WALSH:

6 Q How about being specific on this instance, and
7 telling me where 6,272 square feet of isolated drywall is?

8 A I have allowed 32 square feet of drywall as an
9 allowance to repair following work to the duct work.

10 Q In each apartment?

11 A Everytime there's a damper I have allowed for
12 something.

13 Q Thirty-two --

14 A I believe it's 32.

15 Q And that comes out to about 32 square feet for
16 each apartment, that's five foot by six foot opening; isn't
17 it?

18 A Approximately.

19 Q Now, how big are the volume dampers that are
20 going to be installed?

21 A I think they're eight by twelve inches -- an
22 average size of eight by twelve, I believe.

23 Q And you've got to cut out 30 square feet of

1 drywall to get an eight by twelve inch volume damper in,
2 is that what you're telling us?

3 A I am literally doing that; yes. It's a contingent
4 item again. I regard it as very high risk work.

5 Q Then would you kindly show me, sir, on the plans
6 the isolated area that you're going to cut out -- 32 square
7 feet of drywall -- each volume damper. I'd really like to
8 see it.

9 Let me try to be helpful to you to save some
10 time, Mr. Vallance. I understand that the volume dampers
11 in issue in this case are in the mechanical room, and are
12 not surrounded by drywall. Now, do you have any different
13 understanding than I do with regard to that?

14 A My understanding is that they are in the living
15 rooms of the units.

16 Q Well, then we'll have to find them.

17 A I can't tell you exactly where they are on the
18 drawings.

19 Q All right, sir, we'll come back to you rather
20 than waste the time. Thank you.

21 Now you've allowed now for 13,000 -- excuse me --
22 that's the last estimate -- \$9074.00 to paint 51,000 square
23 feet of walls and ceilings.

1 A That's 57,000 square feet.

2 Q Well, thank you, sir. It's not clear.

3 You started out with 150,000 square feet, didn't
4 you?

5 A That's when we had electrical work to do and
6 cabinet work to do, and other things as well.

7 Q Now tell me where on the ceiling you're going to
8 paint, sir.

9 A Actually it's almost all on the walls. It's
10 around the windows.

11 Q So actually there's nothing on the ceiling, is
12 there?

13 A Well, a little bit.

14 Q How much; do you have any figures?

15 A No, in fact, it's all on the walls. It's intended
16 to cover for the junction of the window.

17 Q Excuse me, I just want to correct this and
18 scratch that out, sir. So it's just the walls and that
19 would be how many square feet an apartment -- about 244
20 square feet, that's what my calculator tells me.

21 A Uh-huh.

22 Q Do you agree?

23 A That's probably correct; yes.

1 Q So that's almost two whole walls, 11 by 12 in
2 measurement?

3 A That's right. It's common to paint a whole wall
4 if you're going to paint part of a wall.

5 MR. WALSH: Thank you.

6 THE COURT: I don't --

7 BY MR. WALSH:

8 Q Now somebody apparently told you to delete from
9 your second and third revision of your first report the
10 last item on page 11 where you were going to simulate and
11 check out the operation of the freeze stats and charge
12 out \$1200.00.

13 A That's correct.

14 Q Now, who told you to scratch that?

15 A Mr. Freedman.

16 Q Let's turn to page 13, sir, and look at your
17 last item. It's now down to \$1052.00, and it says to
18 furnish and install three-quarter pound -- well, I've got
19 the wrong one, excuse me.

20 Let's go to the next page, it's where I want to
21 talk about, Mr. Vallance, excuse me.

22 I'm in error again. It's sheet 13, and it is
23 in that last item. You want to demolish eight inch concrete

1 block masonry walls and remove the debris from the site,
2 and you've got 900 square feet.

3 Now, would you tell me where that's going to be
4 done according to your information, sir?

5 A That was an instruction I picked up from the
6 consultants on the remedial repair; that's the amount of
7 masonry they suggested would need to be demolished.

8 Q You don't know where?

9 A No.

10 Q And, I guess you don't know where you're going
11 to install the insulation and put the blocks back up; right?

12 A With reference to the reports, I could remember.
13 Offhand I can't tell you.

14 Q We had the \$97,256.00 on the electricity. I
15 guess that's one Mr. Freedman called you and told you to
16 take out in your second and third revisions, isn't it?

17 A I'm sorry -- which page?

18 Q It's on page 17.

19 A Yes, page 17 has been removed.

20 Q Well, that sounds familiar to you, doesn't it?
21 Do you have your original --

22 A I've got the original. I'm sorry, the question
23 was?

1 Q That's something Mr. Freedman told you to take
2 out, too?

3 A Yes, it is.

4 Q Now, would you show me your figures for 1975 --
5 June, 1975, where you came up with a difference in value
6 between copper and aluminum of \$11,491.00?

7 A I can tell you my calculation.

8 Q Pardon?

9 A I can describe how we did our calculation.

10 Q No, do you have your figures is what my question
11 was?

12 A Yes.

13 Q Then you can tell me.

14 A \$11,491.00 was the amount of the saving.

15 Q That was what you testified to?

16 A Yes.

17 Q What my question was was how you came up with it,
18 sir; where the calculations were. Sir, would you tell me
19 how you came up with it please?

20 A We measured wiring in --

21 Q Who measured?

22 A I did. We measured wiring in each of the units,
23 came up with total lengths of wiring of each type. We then

1 calculated the value of that work currently.

2 Q You mean the wire?

3 A The wire.

4 Q Show me that.

5 A If you'll bear with me. I've got to find the
6 correct one.

7 Q Yes.

8 A We calculated the value of the wire currently
9 which is based on these measurements of wire priced out
10 at current prices.

11 Q The measurements of the wire on page 16?

12 A And 17.

13 Q And 17.

14 A Those costs added together give a current cost
15 of \$83,000.00.

16 Q Okay, what was the cost of that wire in June,
17 1975?

18 A We deflated it by --

19 Q I'm not interested in the deflated cost. What
20 was the actual cost, sir, that you had to pay for that
21 wire in June, 1975?

22 A I don't have that information.

23 Q Can you tell me, sir, if you changed your total

1 general conditions and profit \$247,743.00 to \$199,013.88
2 for any other reason other than your de-escalation of nine
3 percent?

4 A Yes, I did.

5 Q What other considerations did you take into
6 account to reduce certain of those charges?

7 A Because of the things that were deleted from the
8 original estimate -- the scope of the project was changed
9 quite considerably, and in my opinion became a much less
10 complicated project which would require less expensive
11 supervision; lesser general conditions items; lesser amounts
12 of insurance; and also a reduction in main office require-
13 ment, therefore, a reduction in that percentage.

14 Also I would use the profit percentage because I
15 again felt that there was less risk in the scope as we now have
16 it, as opposed to the scope that we had originally.

17 Q But you know, sir, that the going profit fee --
18 contractor's fee, is something closer to five percent in
19 this area on work like this than the eight percent you've
20 got, don't you?

21 A No.

22 Q With regard to the quarter million dollars for --
23 for the exterior cladding of this building on page five,

1 sir, it started out in your original report in October at
2 \$243,667.00, and it's gone down now to -- is it \$202,284.00?

3 A That's the total for all of the work on the walls
4 including the other things, apart from the cladding material.
5 The value of just the cladding material is \$188,072.41,
6 deflated again to 1975.

7 Q Well, you originally planned in October -- on
8 October 9th, 1978, to have a cost of \$223,140.00 to install
9 the Driv-It panel; correct?

10 A That's correct.

11 Q And, didn't you add something somewhere along the
12 line?

13 A Yes, I did.

14 Q \$44,000.00, or thereabouts, for furring strips?

15 A That's correct.

16 Q You left out \$44,000.00 of furring strips the
17 first time around?

18 A When we originally --

19 Q Did you or didn't you?

20 A Yes, we did.

21 Q How many lineal feet of furring strips were there
22 that you were going to put in?

23 A I put it in on a square foot basis rather than

1 lineal foot. I put an allowance per square foot.

2 Q Well -- but you don't put furring strips in on
3 a square foot--you put them in on lineal feet or square
4 foot?

5 A You estimate them on a square foot basis very
6 often. I do all the time.

7 Q Well, how many lineal feet of furring strips are
8 there going to be; do you know how far apart they're going
9 to be in the building?

10 A I'd assume they'd be two feet apart.

11 Q Has anybody told you that, or are you just
12 guessing?

13 A I allowed two feet; that's no instruction from
14 anybody.

15 Q Okay. Well, did you read the manufacturer's
16 cut sheets to determine the location of the furring strips
17 if you're going to clad a building like this with Driv-It
18 panels prefabricated?

19 A No, I did not.

20 Q Now, you got this information by calling the
21 Driv-It people, didn't you?

22 A Yes.

23 Q The people down in Falls Church?

1 A Al Riley.

2 Q Pardon?

3 A Al Riley.

4 Q Is his office down in Falls Church?

5 A I believe it is.

6 Q And tell me how you know what the cost of this
7 panel was in June of 1975 other than backing into it from
8 your present estimate?

9 A All we've done is back into it. I have not
10 researched that item to find that cost.

11 Q Who made the call to the Driv-It people?

12 A I did.

13 Q And who told you how they wanted it installed from
14 the Weitz organization; Rainey or Weitz or the experts?

15 A I think it was Low Engineering.

16 Q All right, sir.

17 Now, can you tell me, sir, with regard to the
18 work back here at the end -- Mr. Holland's revitalization
19 of this project --

20 MR. FREEDMAN: Your Honor, I would appreciate it
21 if counsel would stop making these offhand comments that
22 are not really part of the question.

23 THE COURT: All right.

1 BY MR. WALSH:

2 Q What the price of a backhoe per hour was in June
3 of 1975.--

4 A I don't have that information.

5 Q Can you tell me what the price of a bushhog
6 with an operator was in June of 1975?

7 A No, I cannot.

8 Q Can you tell me what the price of a cubic yard
9 of bank run gravel was in June of 1975?

10 A No, I cannot.

11 Q Now, can you tell me the specifications for the
12 asphalt that you have figured to put on these various
13 places around the driveway; is it S-2, S-3, S-4, S-5?

14 A Again, it would be as specified and I don't
15 recollect what's in those specifications.

16 Q Well, you've got them right in front of you,
17 sir. Would you mind looking at them, and tell me what
18 asphalt you calculated to use?

19 A When I estimated --

20 Q No, sir.

21 A When I estimated this cost the quantities are so
22 small that the specification of the asphalt would make it --
23 very insignificant difference in the cost of material.

1 Q All right. Can you tell me what the cost of a
2 cubic yard of S-4 asphalt was in June, 1975?

3 A I can't tell you that.

4 Q And tell me what the cost of B-5 or B-4 asphalt
5 was in June of 1975.

6 A I just don't carry that information around with
7 me.

8 Q Well, you never looked at it, did you?

9 A For 1975?

10 Q Yes.

11 A No.

12 Q You've got a CPM on this project too, don't you?

13 A Yes.

14 Q Critical Pad Method with all sorts of graphs and
15 procedures how to keep track of how much sod is going in
16 and how many bricks are being cleaned?

17 A Yes.

18 Q And in your estimate, you need a CPM for a six-
19 month project like this?

20 A I would assume it would take up to 12 months.

21 Q Did you confer with anybody but Mr. Holland about
22 the site work, sir?

23 A I don't believe -- no, that's not true. I think

1 Mr. Kinloch gave me some input on the parking deck. I
2 believe that's true.

3 Q Now, tell me what three compactors you checked
4 the price on as of June, 1975?

5 A I have checked no prices for this project on 1975
6 on any item of equipment, material or labor.

7 Q Well, what were these compactors you checked on
8 and gave Mr. Freedman an estimate on?

9 A Oh, I'm sorry. I thought you were talking about
10 earth compactors.

11 Q No, trash compactors.

12 A The trash compactors that we checked were MDL
13 XM40, a Tappan and a Whirlpool.

14 Q Do you know if the Whirlpool was in production in
15 June of 1975?

16 A No, I do not.

17 Q Do you know if the Tappan was in production in
18 June of 1975?

19 A No.

20 Q Do you know if the MDC XM40 was in production
21 in June of 1975?

22 A We could not get a quote.

23 Q Thanks, Mr. Vallance.

1 A Sorry.

2 Q Mr. Freedman's going to ask you all those
3 questions when I'm finished.

4 MR. WALSH: Your Honor, thank you.

5 THE COURT: Any questions.

6 MR. NORTON: Just a few, Your Honor.

7 CROSS EXAMINATION

8 BY MR. NORTON:

9 Q Mr. Vallance, it's a fact that the cost of
10 different building materials has gone up at different
11 rates over the past three years, isn't that true?

12 A That's correct.

13 Q So one thing might go up substantially more than
14 the nine percent per year that you figured on, and some
15 might be less?

16 A That's correct.

17 Q Now, if, for example, you had estimated the cost
18 of a building in June of 1975, and for some reason that
19 building wasn't built then and in 1978 the owner comes
20 back to you and says we've decided to build the building
21 now, and we want you to do a new estimate. Now if that
22 were done, would you prepare a new estimate based on costs
23 of today, or would you just merely do a nine percent per

1 year increase of your original estimate if your professional
2 reputation were on the line?

3 A I've done both with my professional reputation on
4 the line.

5 Q You have done both with your professional reputa-
6 tion on the line. No further questions, Your Honor.

7 THE COURT: Any redirect?

8 MR. FREEDMAN: Just a few questions, Your Honor.

9 REDIRECT EXAMINATION

10 BY MR. FREEDMAN:

11 Q Isn't it a fact that the roof at Cameron Overlook
12 is a Celotex 320C roof system?

13 MR. WALSH: I object; that's obviously a leading
14 question.

15 THE COURT: It is a leading question. Ask him if
16 he knows what it is now.

17 BY MR. FREEDMAN:

18 Q Do you know what the roof system is at Cameron
19 Overlook now?

20 A Not without reference to the specifications.

21 Q What did you specify?

22 A I specified a 320C Celotex roof.

23 Q Now, Mr. Vallance, in answer to Mr. Walsh's

1 question, you wanted to answer him why you specified three
2 coats on the gypsum board and he wouldn't let you. Now is
3 your chance.

4 A That sort of painting work is usually very messy
5 and it's good practice to use three coats. There was no
6 instruction for me to do that. I did use three coats. It's
7 hard to get two-coat coverage when you're painting only
8 part of --

9 THE COURT: All right, we got the point. Next
10 question.

11 BY MR. FREEDMAN:

12 Q Does it make any difference in your estimate
13 whether the top of the coping is rowlock or concrete for
14 the questions that Mr. Walsh asked you about about cleaning
15 them out?

16 A For some it will.

17 MR. WALSH: Well, Your Honor, I object to the
18 form of that question. It's obviously going to make a
19 difference. You can't clean out the mortar joints in a
20 concrete coping; that's an unfair and improper question
21 and I object.

22 THE COURT: Overruled. I think he asked if there
23 was any difference. That's the way I read the question

1 anyway.

2 THE WITNESS: I think in some cases it would
3 make a difference; in some, it won't. If you've got to
4 clean out the reglets of a flashing and there's a groove
5 you're flashing into, then you're going to have to do
6 work there of some kind. It won't change very much if
7 there's no rowlock and there's a concrete coping. You'll
8 still have work to do, but it will be different sort of
9 work. It may be more expensive or less.

10 MR. FREEDMAN: Nothing further, Your Honor.

11 THE COURT: All right. Ten o'clock tomorrow
12 morning.

13 (Thereupon, the jury was excused.)

14 THE COURT: Please stand aside sir. You're
15 free to go as far as I'm concerned. Tell me your name.
16 I had it one way, but I called you something different.

17 THE WITNESS: Tony Vallance -- V-A-L-L-A-N-C-E.

18 THE COURT: Thank you.

19 (Witness excused.)

20 THE COURT: You through?

21 MR. FREEDMAN: Unless Mr. Trotter has a clean-up
22 item that we want to put in.

23 THE COURT: Do you?

1 MR. FREEDMAN: No; we're through, Your Honor.

2 THE COURT: Plaintiff rests.

3 MR. WALSH: Your Honor, before we go, while it's
4 still fresh in everybody's mind, rather than start it in
5 the morning, I'd like to move to strike Mr. Tony Vallance's
6 testimony on the grounds that he had no basis for it. He
7 had no expertise. He had no foundation. He had no
8 competency. He used hearsay evidence. It was not credible
9 on all the grounds.

10 THE COURT: I'm going to think about that a long
11 time when you come to a motion to set aside the verdict, if
12 we ever get to that; I'll take that motion under advisement.
13 I'm worried about it myself, but I won't pass on it now.

14 MR. WALSH: Thank you.

15 THE COURT: All right, now. Do you want to take
16 up your motion to strike now or tomorrow morning? I'm
17 willing to go either way.

18 She's willing to stay too, she says.

19 MR. WALSH: Can we come a little early in the
20 morning?

21 THE COURT: I was going to say if we do it
22 tomorrow morning, we'll come at 9:00.

23 MR. NORTON: That would be fine, Your Honor.

1 direction of counsel.)

2 (Thereupon, a Motion to Strike was presented by
3 Mr. Loftus, counsel for Defendant Harkins and Defendant
4 Maryland Casualty Company, which was reported by the
5 court reporter, but not transcribed at the direction of
6 counsel.)

7 THE COURT: Well, in a case of this type it's
8 going -- as strong as this, I have always been, and I
9 think any Court is always, reluctant to decide it on a
10 Motion to Strike and that is certainly a big considera-
11 tion in my ruling now.

12 I'm going to hold now that there has been
13 sufficient evidence on each count to go to the jury. I
14 think there is sufficient evidence to establish a prima
15 facie case of negligence against the architect and that
16 there's been sufficient evidence to establish a prima
17 facie case of breach of contract against the general
18 contractor.

19 So the Motions to Strike are denied whether there
20 is -- Count Two contains allegation of breach of contract.
21 I'm not ruling on that at this point. My feeling is that
22 it does not. All right. You can have your exceptions.

23 MR. LOFTUS: Your Honor, there's one point.

1 has created an impression in the mind of the jury which
2 has just set the stage for a very difficult case in terms
3 of dealing with the jury.

4 We have the testimony of Mr. Cumberland. He
5 read off a list that I couldn't even follow myself, where
6 most of the stuff -- ninety percent of it by his own
7 admission, had been completed. And yet the jury listened
8 to that.

9 We also had the testimony of Mr. Vallance
10 yesterday, which for reasons I think are fresh in every-
11 body's memory, just wander all over the face of creation
12 and it's not tied down to specific provable points in
13 this case.

14 Now, I don't want to go through all that. I
15 simply say to the Court that I renew every objection that
16 we've made because it's there for a reason; it's to
17 prevent the introduction of this type of testimony which
18 has nothing to do with anything in this case.

19 Now, the major problems we've got in this case,
20 Your Honor, the major problem is the theory of damages in
21 this case. And I think that the Court has to consider
22 the language of the Supreme Court of Virginia in the
23 Kirk Reid case which is on all fours with the evidence on

1 recovery therefor.

2 And, Your Honor, the problem we've got in this
3 case is that the damages are left to speculation and the
4 principle goes deeper. It goes much deeper. The measure
5 of our whole responsibility to the owner is to build the
6 building in accordance with the plans and specifications.

7 And throughout the course of this case, we have
8 an enormous amount of testimony that is not tied down to
9 the plans and specifications. We have this from Mr.
10 Holland. I made that objection when Mr. Holland testified
11 to his list. I cross examined him on it, and I never found
12 out where the plans and specifications were that we failed
13 to do our work in accordance with.

14 He wanted a four inch thick concrete drainage
15 ditch out there in the back. He wanted to tear out a hundred
16 feet of that. I can't remember what the pricing on it,
17 but it's a substantial amount of money. I defy the Court,
18 I defy the Plaintiffs, I defy anyone who sat here and
19 listened to this case, to find where in the plans and
20 specifications four inch concrete is required.

21 Mr. Holland testified that that drainage ditch
22 should have been attached to the parking garage. I defy
23 anyone to point out where in the plans and specifications

1 properly performed.

2 What's your next point? Let's move on to some
3 other point now other than the testing.

4 MR. LOFTUS: Could I at least call the Court's
5 attention to any cases?

6 THE COURT: You file any cases with me you want
7 to, Mr. Loftus. I just want you to make your points for
8 the record now, please, sir.

9 MR. LOFTUS: That's what I'm trying to do, Your
10 Honor.

11 THE COURT: All right.

12 MR. LOFTUS: Habers vs. Madigan, 213 Va 485.
13 Tests made one year after the accident is out of question.
14 Portsmouth Transit Company v. Brickhaus, 200 Va
15 844.

16 Bell v. Kennedy, 181 Va 24. There's no
17 similarity between these tests and the actual natural
18 conditions existing there.

19 THE COURT: All right, now, we've got that
20 point; now what's your next point?

21 MR. LOFTUS: The final point, Your Honor, is
22 that the jury is going to be asked to try to determine
23 what is the cause of the leakage; what is the cause of

1 the windows. They are going to be asked to determine who
2 is responsible. They cannot apportion the damages as this
3 case stands. They're going to be presented with a problem
4 that the Plaintiffs have given them no reasonable basis on
5 which -- whether to determine whether the problems are from
6 design or from construction. And I don't think that can
7 stand either.

8 THE COURT: I'll be interested in that point
9 myself. Never have seen how you can mix tort and contract.

10 MR. LOFTUS: Your Honor, I will desist at this
11 point. I hope I've covered everything.

12 THE COURT: I'm sure you have, Mr. Loftus.
13 I had one further question.

14 MR. LOFTUS: Excuse me, Your Honor.

15 THE COURT: And I missed it, Mr. Trotter, you
16 might have done it in your -- what are the damages you're
17 claiming for the site being improperly selected or chosen
18 or whatever?

19 MR. TROTTER: That's in Change Orders 1 and 2,
20 and Mr. Weitz' testimony concerning the interest lost
21 because of the delay.

22 THE COURT: Wasn't a change order something that
23 was agreed to?

1 let you talk to him in the presence of opposing counsel.

2 Any objection?

3 MR. FREEDMAN: No, not at all.

4 THE COURT: All right.

5 MR. LOFTUS: Your Honor, I would like to note my
6 objection to him breaking the rule in terms of talking with
7 the witness.

8 THE COURT: Well, he's not breaking it if I let
9 him do it.

10 MR. LOFTUS: Well -

11 THE COURT: If that makes you feel any better.

12 MR. LOFTUS: No, sir.

13 (Thereupon, at 12:28 p.m., the hearing in the
14 above-entitled matter was recessed to reconvene at 1:29
15 p.m.)

16 (Thereupon, the jury returned to the jury box.)

17 MR. LOFTUS: May I approach the bench, Your
18 Honor?

19 THE COURT: Uh-huh.

20 BENCH CONFERENCE

21 THE COURT: Sir?

22 MR. LOFTUS: Your Honor, unfortunately the jury
23 is back here, but what I'd like to do is make a Motion to

1 Strike the plaintiffs' evidence and move for Summary
2 Judgment.

3 THE COURT: Motion denied.

4 MR. LOFTUS: All right.

5 THE COURT: You want to state the grounds?

6 MR. LOFTUS: Your Honor, of course, I renew the
7 grounds that I stated in my initial Motion to Strike, and
8 additional grounds, Your Honor, are that under the contract
9 documents, the shop drawings have been approved by the
10 architect as being in compliance with the contract require-
11 ments. I believe that Mr. Weitz' actions in accepting and
12 inspecting the windows, and his letter about the cabinets
13 constitutes at the minimum a waiver by him of any claims
14 concerning those cabinets. The same would hold true to his
15 actions by his authorized representative, Mr. Reed in
16 accepting the windows.

17 I also believe, Your Honor, that the evidence in
18 this case that the mechanical system is beyond --
19 repair -- a complete waste -- they show no grounds for
20 believing if that work needs to be done.

21 Your Honor, I also move the Court that the provi-
22 sions of the specifications, specifically Section 9.7.5
23 relating to final payment, provides that upon final payment

1 be attributable to the contractor on another source.

2 And that's basically it, Your Honor. If there's
3 any argument over lease, which I believe will be made on
4 behalf of the contractor as far as this HUD project goes,
5 I would state that under the contract documents that would
6 also release the architect from a subsequent claim being
7 made after this whole building was closed up and in effect,
8 put to bed.

9 For all those reasons, Your Honor, I would ask that
10 the plaintiffs' evidence be struck, and that such portions
11 of it that are not supported by the evidence not be allowed
12 to go to the jury.

13 THE COURT: All right, your motion is denied.
14 You have an exception.

15 MR. NORTON: Thank you.

16 THE COURT: All right, now, Mr. Loftus.

17 MR. LOFTUS: Your Honor, on behalf of the Harkins
18 Company and Maryland Casualty Company, I move to strike the
19 evidence and ask the Court to enter a summary judgment in
20 our favor on the grounds we stated at the conclusion of
21 the plaintiffs' case, and the conclusion of -- the beginning
22 of the rebuttal, let's put it this way, on the grounds
23 previously having been stated to the Court involving the

1 question of release, of course, and the costs for --
2 increased costs in the project. I think they specifically
3 released us.

4 The general condition specifically provided that
5 final closing is a waiver of those claims. I think the
6 major problem we have at this point is that there is
7 absolutely no evidence in the record whatsoever on which
8 the jury can apportion between the defendant Harkins and
9 the architect. That's a pure speculation.

10 I've made my other grounds known to the Court.

11 I also move to strike rebuttal testimony. I
12 believe it did not rebut anything in evidence. It simply
13 restated the plaintiffs' case. It dealt with no new matter.

14 Your Honor, on the grounds previously stated,
15 I'd move to strike the evidence.

16 THE COURT: All right, your motion is denied.
17 And the motion to strike the rebuttal is denied.

18 I'll -- just for my own information, Mr. Trotter,
19 we discussed this at the -- early in the trial as to whether
20 or not you were suing defendant Bucher or Bucher-Meyers in
21 tort or contract. It looks to me from the VMI case that,
22 whether you like it or not, you're in contract.

23 And it says that -- and it relies on the

EXCERPT OF PROCEEDINGS

1
2 THE COURT: I read your memorandum and your
3 grounds, and I've tried to consider all of them, sort
4 of with hindsight, two weeks of thinking about it. But
5 I'm sure that trying a case that took this long, error
6 was committed, but I hope it's going to be harmless
7 error. I hope you all don't have to do this again.

8 I've gone over your grounds. They were well
9 argued at the time you made your objections. Many times
10 you presented me with very helpful memorandum. I have
11 read the memoranda. I tried to take time then to consider
12 the objections. It seems to me we started the day with
13 one every day, and I think that I would decide them the
14 same now as I did then.

15 There was one thing that I might have done
16 differently. Mr. Loftus handed me an instruction at
17 10:15 one morning just as we were going to the jury, and
18 I reckon I was upset. I had asked you all for instruc-
19 tions the day before and we'd gone over for five or
20 six hours about a hundred instructions. And there were
21 some that I denied, and some that I denied but suggested
22 that they be rewritten and submitted and we met early the
23 next morning to consider the ones that had been rewritten.

1 And it took a little longer than I thought it
2 would take, but when we were all through Mr. Loftus
3 approached the bench and handed me another instruction
4 and I thought that was the straw that broke the camel's
5 back, and I denied it without considering it. I have
6 since gone over it and I think that I was -- if I had
7 considered it, I would have denied it anyway because it
8 was stating in an instruction what he had argued in his
9 motion to strike on behalf of Maryland Casualty Company.
10 And if I had granted that instruction, it would have been
11 a matter that would have amounted to a directed verdict.
12 And I don't think it would have been anything left to
13 the case if I granted that instruction, so I think it
14 was properly denied.

15 I think the evidence was -- I mean the verdict
16 was a just verdict, a fair verdict, and there was certainly
17 plenty of evidence to support it. And your Motion to
18 set aside the verdict is denied, and if you've got an
19 Order, I'll sign it.

20 (Thereupon, there was further discussion as
21 to preparing the Order.)
22
23

CONSTRUCTION CONTRACT--COST PLUS

THIS AGREEMENT, made the first day of March, 1973, by and between Thomas P. Harkins, Inc. (hereinafter called the "Contractor") and Reynolds Associates (hereinafter called the "Owner").

WITNESSETH, That the Contractor and the Owner, for the consideration hereinafter set out, agree as follows:

Article 1 - Scope of Contract

A. The Contract between the parties is set forth in the "Contract Documents", which consist of this Agreement, the Drawings and Specifications, to which are attached the current edition of AIA Document A201, "General Conditions of the Contract for Construction", and FHA Form No. 2554, "Supplementary Conditions of the Contract for Construction". The provisions of this instrument and the said FHA Supplementary Conditions take precedence over all inconsistent provisions in the said AIA General Conditions. Any provision in said AIA General Conditions whereby the undersigned waive all rights against each other for damages caused by fire and other perils covered by insurance shall be inapplicable. This Contract constitutes the entire agreement between the parties, and any previously existing contract concerning the work contemplated by the Contract Documents is hereby revoked.

B. The Contractor shall furnish all of the materials and perform all of the work (within the property lines) shown on, and in accordance with, the Drawings and Specifications entitled Drawings and Specifications for Cameron Overlook, City of Alexandria, Virginia
FHA Project No. 000-44178-ID/SUP, dated February 1, 1973

C. The Drawings, which are numbered 1-63, and the Specifications, the pages of which are numbered 1-288, have been prepared by Bucher Meyers & Associates, Inc.

The Architect administering the Construction Contract (hereinafter, and elsewhere in the Contract Documents, referred to as the "Architect") is Bucher - Meyers & Associates, Inc.

D. A master set of said Drawings and Specifications, identified by the parties hereto and by the Design Architect, the Architect, and the Contractor's Surety or Guarantor have been placed on file with the Federal Housing Commissioner (hereinafter referred to as the "Commissioner"), and shall govern in all matters which arise with respect to such Drawings and Specifications.

E. Changes in the Drawings and Specifications or any terms of the Contract Documents, or orders for extra work, or changes by altering or adding to the work, which will result in any net construction cost increase, or will change the design concept, or which will result in a net cumulative construction cost decrease of more than 2% of the contract amount may be effected only with the prior written approval of the Owner's Lender (more particularly identified below and hereinafter referred to as the "Lender") and the Commissioner and under such conditions as either the Lender or the Commissioner may establish.

Article 2 - Time

A. The work to be performed under this Contract shall be commenced ~~on or about~~ ~~the~~ ~~first~~ ~~day~~ ~~of~~ ~~March~~ ~~1973~~

~~of this agreement shall be completed by~~ 1/ , 19 . The time by which the work shall be completed may be extended in accordance with the terms of the said AIA General Conditions only with the prior written approval of the Commissioner.

B. The Contractor shall correct any defects due to faulty materials or workmanship which appear within one year from the date of substantial completion.

C. If the work is not substantially completed in accordance with the Drawings and Specifications, including any authorized changes, by the date specified above, or by such date to which the contract time may be extended, the maximum sum stated in Article 3A(1) below shall be reduced by \$ 1,092.29 as liquidated damages, for each day of delay until the date of substantial completion. The total of any such liquidated damages shall be reduced by an amount equal to the project's net operating income (as defined and determined by the Commissioner) for the period upon which liquidated damages are based.

1/ See Rider 1, Paragraph 1

D. The date of substantial completion shall be the date the FHA Chief Underwriter signs the final Project Inspection Report (FHA Form No. 2449).

Article 3 - Payments

A. (1) Subject to the provisions hereinafter set out, the Owner shall pay to the Contractor for the performance of this Contract the following items in cash:

- (a) The actual cost of construction as defined in Article 10 below; plus
- (b) A fee of \$ None

In no event, however, shall the total cash payable pursuant to this paragraph (1) exceed \$ 3,640,171 . See Rider 1, Paragraph 2 .

(2) In addition to any cash fee provided for in paragraph (1) Owner shall pay to the Contractor by means other than cash, the following:

- (a) A note in form prescribed by the Commissioner in the amount of \$
- (b)

(3) If, upon completion, the Contractor shall have received cash payments in excess of (a) the actual cost of construction, plus (b) the cash fee specified in paragraph (1), plus the additional amount to be paid under the provisions of paragraph (3), all such excess shall be refunded to the Owner.

B. Each month after the commencement of work hereunder, the Contractor shall make a monthly request for payment (in quadruplicate on FHA Form No. 2448) by the Owner for work done during the preceding month. Each request for payment shall be filed at least 10 days before the date payment is desired. Subject to the approval of the Lender and the Commissioner, the Contractor shall be entitled to payment thereon in an amount equal to (1) the total value of classes of the work acceptably completed; plus (2) the value of materials and equipment not incorporated in the work, but delivered to and suitably stored at the site; less (3) 10 percent holdback and less prior payments. The "values" of both (1) and (2) shall be computed in accordance with the amounts assigned to classes of the work in the "Contractor's and/or Mortgagor's Cost Breakdown", attached hereto as Exhibit "A". The Contractor agrees that no materials or equipment required by the Specifications will be purchased under a condi-

tional sale contract or with the use of any security agreement or other vendor's title or lien retention instrument.

C. The balance due the Contractor hereunder shall be payable upon the expiration of 30 days after the work hereunder is fully completed, provided the following have occurred:

(1) All work hereunder requiring inspection by municipal or other governmental authorities having jurisdiction has been inspected and approved by such authorities and by the rating or inspection organization, bureau, association or office having jurisdiction;

(2) All certificates of occupancy, or other approvals, with respect to all units of the project have been issued by State or local governmental authorities having jurisdiction; and

(3) Permissions to occupy (FHA Form No. 2485) for all units of the project have been issued by the Commissioner.

(4) See Rider 1, Paragraph 4.

D. With its final application for payment by the Owner, the Contractor shall disclose, on a form prescribed by the Commissioner, all unpaid obligations contracted in connection with the work performed under this Contract. The Contractor agrees that within 15 days following receipt of final payment, it will pay such obligations in cash and furnish satisfactory evidence of such payment to the Owner.

Article 4 - Receipts & Releases of Liens

The Owner may require the Contractor to attach to each request for payment its acknowledgement of payment and all subcontractors' and materialmen's acknowledgements of payment for work done and materials, equipment and fixtures furnished through the date covered by the previous payment. Concurrently with the final payment, the Owner may require the Contractor to execute a waiver or release of lien for all work performed and materials furnished hereunder, and may require the Contractor to obtain similar waivers or releases from all subcontractors and materialmen.

3. See Rider 1, Paragraph 3

Article 5 - Requirements of Contractor

A. The Contractor shall furnish, at its own expense, all building and other permits, licenses, tools, equipment and temporary structures necessary for the construction of the project. The Contractor shall give all required notices and shall comply with all applicable codes, laws, ordinances, rules and regulations, and protective covenants, and with the current regulations of the National Board of Fire Underwriters, wherever applicable. The Contractor further shall comply with the provisions of the "Manual of Accident Prevention in Construction" of the Associated General Contractors of America. The Contractor shall immediately notify the Commissioner of the delivery of all permits, licenses, certificates of inspection, certificates of occupancy, and any other such certificates and instruments required by law, regardless of to whom issued, and shall cause them to be displayed to the Commissioner upon his request.

B. If the Contractor observes that the Drawings and Specifications are at variance with any applicable codes, laws, ordinances, rules or regulations, or protective covenants, it shall promptly notify the Architect in writing, and any necessary changes shall be made as provided in this Contract for changes in the Drawings and Specifications. If the Contractor performs any work knowing it to be contrary to such codes, laws, ordinances, rules or regulations, or protective covenants, without giving such notice to the Architect, it shall bear all costs arising therefrom.

C. Upon completion of construction, the Contractor shall furnish to the Owner a survey showing the location on the site of all improvements constructed thereon, and showing the location of all water, sew-

er, gas and electric lines and mains, and of all existing utility easements. Such survey shall be prepared by a licensed surveyor who shall certify that the work is installed and erected entirely upon the land covered by the mortgage and within any building restriction lines on said land, and does not overhang or otherwise encroach upon any easement or right-of-way of others. In addition, if the Owner shall so require, the Contractor shall furnish a survey with each application for payment for any improvements, including structures and utilities, not theretofore located on a survey.

D. The Contractor shall assume full responsibility for the maintenance of all landscaping which may be required by the Drawings and Specifications until such time as both parties to this Contract shall receive written notice from the Commissioner that such landscaping has been finally completed. The Owner hereby agrees to make available to the Contractor, for such purpose, without cost to the latter, such facilities as water, hose and sprinkler.

Article 6 - Assurance of Completion

The Contractor shall furnish to the Owner assurance of completion of the work in the form of 5

Such assurance of completion shall run to the Owner and the Lender as obligees and shall contain a provision whereby the surety agrees that any claim or right of action that either the Owner or the Lender might have thereunder may be assigned to the Commissioner.

Article 7 - Waiver of Lien or Claim

The Contractor shall file no mechanic's or materialman's lien or maintain any claim against the Owner's real estate or improvements for or on account of any work done, labor performed or materials furnished under this Contract.

Article 8 - Right of Entry and Interpretation

A. The Lender and its agents or assigns and the Commissioner and his agents shall, at all times during construction, have the right of entry and free access to the project and the right to inspect all work done and materials, equipment and fixtures furnished, installed or stored in and about the project. For such purpose, the Contractor shall furnish such enclosed working space as the Lender or Commissioner may require and find acceptable as to location, size, accommodations and furnishings.

B. The Commissioner shall also have the right to interpret the Contract Documents and to determine compliance therewith.

Article 9 - Assignments, Subcontracts and Termination

A. This Contract shall not be assignable by either party without the prior written consent of the other party, the Lender and the Commissioner, except that the Owner may assign the Contract, or any rights hereunder, to the Lender or the Commissioner.

B. The Contractor shall not subcontract all of the work to be performed hereunder without the prior written consent of the Owner, the Lender and the Commissioner.

5/ See Rider 1, Paragraph 5

C. Upon request by the Owner, the Lender or the Commissioner, the Contractor shall disclose the names of all persons with whom it has contracted or will contract with respect to work to be done and materials and equipment to be furnished hereunder.

D. The Contractor understands that the work under this contract is to be financed by a building

loan to be secured by a mortgage and insured by the Commissioner, and that the terms of said loan are set forth in a Building Loan Agreement between the Owner as Borrower and Advance Mortgage Corporation as Lender.

The Contractor further understands that said Building Loan Agreement provides that, in the event of the failure of the Owner to perform its obligations to the Lender thereunder, the Lender may, as attorney-in-fact for the Owner, undertake the completion of the project in accordance with this Contract. In the event the Lender elects not to undertake such completion, the Contractor's obligations under this contract shall terminate.

Article 10 - Certification of Actual Cost

A. The "actual cost of construction", as used in Article 3 above, shall include all items of cost and expense incurred by the Contractor in the performance of this Contract, including costs and expenses of labor, materials for construction, equipment and fixtures, field engineering, sales taxes, workmen's compensation insurance, social security, public liability insurance, job overhead and all other expenses directly connected with construction, and including general overhead expenses, but excluding kick-backs, rebates or discounts received or receivable in connection with the construction of the project; and excluding any return on or cost of the Contractor's working capital, such return on or cost of working capital being a part of or to be paid from the Contractor's fee or profit.

B. The Contractor shall keep accurate records of account of the said actual cost of construction, and shall, upon demand, make such records and invoices, receipts, subcontracts and other information pertaining to the construction of the project available for inspection by the Owner and the Commissioner.

C. With its final application for payment, the Contractor shall furnish to the Owner a completed "Contractor's Certificate of Actual Cost", which shall be accompanied and supported by an independent public accountant's certificate as to actual cost (in form acceptable to the Commissioner).

D. The Contractor shall include in all subcontracts, equipment leases and purchase orders a provision requiring the subcontractor, equipment lessor or supplier to certify its costs incurred in connection with the project, in the event the Commissioner determines there is an identity of interest between either the Owner or the Contractor and any such subcontractor, equipment lessor or supplier.

Article 11 - Subcontracting

The Contractor shall not subcontract more than 50% of the work hereunder to any one subcontractor nor more than 75% of the work hereunder to three or less subcontractors: Provided, That for the purposes of this Article, the term "subcontractor" shall include material suppliers and equipment lessors, and that any two or more subcontractors having an identity of interest or common ownership shall be considered as one subcontractor.

Article 12 - Escrow for Incomplete Items

The Contractor and the Owner understand that when FHA issues its final Project Inspection Report (FHA Form No. 2449) showing that construction is 100% complete, such Report may show certain specific improvements as not yet complete, with an estimate of the cost required to complete each such item. The Contractor and the Owner understand that, in such case, the FHA will

require, as a condition of final loan closing, that the Owner and the Lender enter into an Escrow Deposit Agreement (FHA Form No. 2456) with the deposit called for therein to be a sum equal to twice the FHA estimate of the incomplete items as shown on FHA Form No. 2449, Final Inspection Report.

The Contractor and the Owner understand that the escrow deposit to be made under any such Escrow Deposit Agreement will be made with funds withheld by the Owner from the final payment due to the Contractor.

The Contractor hereby authorizes the Owner to withhold from the final payment to the Contractor a sum equal to twice the estimate of the cost of any incomplete items shown on the FHA Final Inspection Report, and to deposit such sum with the Depositary under said Escrow Deposit Agreement, it being understood and agreed that such monies are monies of the Contractor (and not of the Owner) subject only to the completion by the Contractor of the improvements set forth in the Escrow Deposit Agreement not later than the date specified therefor in said Escrow Deposit Agreement.

The Contractor understands and agrees that no interest will be paid on the funds so deposited under said Escrow Deposit Agreement.

The Contractor forfeits any claim or interest in the funds deposited under said Escrow Deposit Agreement allocable to any item of the incomplete improvements set forth in the Escrow Deposit Agreement which the Contractor fails to complete by the time specified therefore in said Escrow Deposit Agreement.

Article 13 - Equal Employment Opportunity

~~Title 24, Subtitle A, Part 8 (Equal Employment Opportunity under HUD Contracts and HUD Assisted Contracts), 36 F.R. 20688, is incorporated by reference in this Construction Contract-Cost Plus.~~

Title 24, CFR (1972), Subtitle B, Chapter 1, Subchapter B, Part 130, (Equal Employment Opportunity under HUD Contracts and HUD Assisted Contracts), is incorporated by reference in this Construction Contract-Cost Plus.

Article 14 - Effective Date

This Agreement shall become effective on the Initial Endorsement date.

IN TESTIMONY WHEREOF, the parties hereto have caused this Agreement to be executed in their respective names as of the date hereinabove first written.

ATTEST:

Thomas' P. Harkins, Inc.

By

By

Reynolds Associates

By

Benjamin B. Weitz, Managing
General Partner

RIDER I

To be attached to and made a part of the Construction Contract -- Cost Plus, dated as of March 1, 1973 by and between Thomas P. Harkins, Inc. and Reynolds Associates in connection with Project No. 000-44178-LD/SUP

Paragraph 1

not later than ten (10) days from the date (hereinafter referred to as the "Initial Endorsement Date") on which the note of the Owner evidencing its indebtedness to the Lender for the \$4,551,200.00 mortgage loan to assist in financing the development and construction of the project is initially endorsed for insurance by the Federal Housing Commissioner, and shall be completed (as defined herein) not later than 18 months from the Initial Endorsement Date.

Paragraph 2

plus so much of the amount by which the sum of mortgage interest, taxes and property and mortgage insurance premiums itemized in Section 5 of the Building Loan Agreement hereinafter referred to in Paragraph D of Article 9 hereof exceeds the Owner's actual cost of these items as certified by the Owner to, and approved by, HUD as is not required by the Owner to pay any other eligible items of project cost (as certified by the Owner to, and approved by, HUD) which, otherwise, mortgage loan proceeds would not be sufficient to cover.

Paragraph 3

(except for such incomplete items of such work, if any, as may be covered by an Escrow Deposit Agreement and a deposit as referred to in Article 12 hereof)

Paragraph 4

The Contractor shall have fulfilled all of its other obligations hereunder and HUD shall have approved the final Application for Advance of Mortgage Proceeds.

Paragraph 5

A performance bond (FHA Form 2452) and a payment bond (FHA Form 2452-A), each such bond to be in the penal sum of \$1,887,185.00 and to be issued by a company regularly engaged in the issuance of similar undertakings, which company shall be on the current United States Treasury Department Circular 570, with the penal sum for each such bond to be within the indemnity limits specified for such company in said Circular.

Rev. January 1971

FEDERAL HOUSING ADMINISTRATION

Date

December 26, 1972

CONTRACTOR'S and/or MORTGAGOR'S
COST BREAKDOWN
(SCHEDULES OF VALUES)

Project No.

000-44178-LDP/SUP

Building Identification

209 Unit - Hi-Rise - 11

Sponsor

Reynolds Associates

Name of Project

CAMERON OVERLOOK

Location

Alexandria, Virginia

This form represents the Contractor and/or Mortgagor's firm costs and services as a basis for disbursing dollar amounts when insured advance requested. Detailed instructions for completing this form are included on the reverse side.

LINE	TRADE ITEM	COST	TRADE DESCRIPTION
1 3	Concrete	1,190,920	
2 4	Masonry	341,727	
3 5	Metals	7,600	
4 6	Rough Carpentry	33,500	
5 6	Finish Carpentry	76,230	
6 7	Waterproofing	9,660	
7 7	Insulation	11,230	
8 7	Roofing	15,300	
9 7	Sheet Metal		
10 8	Doors	46,525	
11 8	Windows	38,000	
12 8	Glass	6,600	
13 9	Lath & Plaster		
14 9	Drywall	251,203	
15 9	Tile Work	21,000	
16 9	Acoustical		
17 9	Wood Flooring	60,438	
18 9	Resilient Flooring	15,000	
19 9	Painting & Decorating	47,000	
20 10	Specialties	10,000	
21 11	Special Equipment	3,500	
22 11	Cabinets	41,800	
23 11	Appliances	58,209	
24 12	Blinds & Shades, Artwork	5,860	
25 12	Carpets	17,000	
26 13	Special Construction	11,000	
27 14	Elevators	135,000	
28 15	Plumbing & Hot Water	260,800	
29 15	Heat & Ventilation	192,590	
30 15	Air Conditioning		
31 16	Electrical	178,604	
32	Accessory Structures	26,000	
33	TOTAL STRUCTURE(S)	3,112,386	
34 2	Earth Work	76,200	
35 2	Site Utilities	66,857	
36 2	Roads & Walks	20,295	
37 2	Site Improvements	3,800	
38 2	Lawns & Planting	8,360	
39 2	Unusual Site Condition	85,000	
40	TOTAL LAND IMPRVTS.	260,512	
41	TOT. STRUCT.'S LAND IMPRVTS.	3,372,898	
42 1	GENERAL REQUIREMENTS	134,216	
43	SUBTOTAL (Lines 41 and 42)	3,507,114	
44	BUILDER'S OVERHEAD	70,156	
45	BUILDER'S PROFIT		
46	SUBTOTAL (Lines 43 thru 45)	3,577,270	
47	Soil Analysis & Ego	10,000	
48	PERMITS & FEES	2,090	
49	LAND PREMIUM	23,367	
50	Permits and Fees	26,750	
51	TOTAL FOR ALL IMPROVEMENTS	3,640,171	
52	Builder's Profit less by means		
53	TOTAL FOR ALL IMPROVEMENTS LESS LINE 52	3,640,171	
		TOTAL \$	276,000
		TOTAL \$	None

NONRESIDENTIAL AND SPECIAL
EXTERIOR LAND IMPROVEMENT
(costs included in trade item breakdown)

OFFSITE COSTS
(costs not included in trade item breakdown)

DESCRIPTION	EST. COST
Swimming Pool	26,000
Parking Structure	250,000
	10,000
	12,090
	23,367
	26,750
	62,207

DESCRIPTION	EST. COST
Storm & San. Sewer	3,000
Water	1,200
Curb & Gutter	800
TOTAL \$	5,000

DESCRIPTION	EST. COST

Mortgagor: Reynolds Associates

By

December 26, 1972

Contractor: THOMAS P. HARKINS, INC.

By

December 26, 1972

THOMAS P. HARKINS, PRESIDENT

261

12/27/72

FHA

(Date)

(Chief, Cost Evaluation Section or Cost Analyst)

(Date)

CAMERON OVERLOOK APARTMENTS

ALEXANDRIA, VIRGINIA

REMEDIAL REPAIRS

COST ESTIMATE

OCTOBER 9 1978

AMENDED NOVEMBER 26 1978

DEFLATED NOVEMBER 29 1978

Owner

Community Housing & Research Corporation
Suite 127, Cole Spring Plaza
1001 Spring Street
Silver Spring, Maryland 20910

Cost Consultant

Hanscomb Associates Inc.
700 N. Fairfax Street
Alexandria, Virginia 22314

Pl Exh 52
Judge: GK
11/29/78

Project: CAMERON OVERLOOK APARTMENTS
ALEXANDRIA, VIRGINIA

Sheet No:
Date: OCTOBER 9 1978 (AMENDMENTS NOVEMBER 26 1978)

Uniformat Element	Amount \$	Total Cost \$	Rate \$/SF Floor Area	%	Comments
01 - Foundations	-	-			Deferred to June 12 1975 (NOVEMBER 29 1978)
011 - Standard foundations	-				
012 - Special foundation conditions	-				
02 - Substructure	-	-			
021 - Slab on grade	-				
022 - Basement excavation	-				
023 - Basement walls	-				
03 - Superstructure	-	-			
031 - Floor construction	-				
032 - Roof construction	-				
033 - Stair construction	-				
04 - Exterior closure		271,574			
041 - Exterior walls	202,284				
042 - Exterior doors and windows	69,290				
05 - Roofing		50,520			
06 - Interior construction		23,191			
061 - Partitions	-				
062 - Interior finishes	23,191				
063 - Specialties	-				
07 - Conveying systems		-			
08 - Mechanical		44,262			
081 - Plumbing	-				
082 - HVAC	44,262				
083 - Fire protection	-				
084 - Special mechanical systems	-				



Hanscomb
Associates Inc.

Elemental
Cost Summary
Part 1 of 2

COST ESTIMATE

Project: CAMERON OVERLOOK APARTMENTS
ALEXANDRIA, VIRGINIA

Sheet No:

Date: October 9 1978 (AMENDED NOVEMBER 26 1978)

Uniformat Element	Amount \$	Total Cost \$	Rate \$/SF Floor Area	%	Comments
09 - Electrical		869			Deflated to Jan 12 1978 (NOVEMBER 29 1978)
091 - Service and distribution	-				
092 - Lighting and power	-				
093 - Special electrical systems	869				
10 - General conditions and profit		109,014			
Net Building Cost		499,430			
11 - Equipment		-			
111 - Fixed and movable equipment	-				
112 - Furnishings	-				
113 - Special construction	-				
12 - Site work		42,397			
121 - Site preparation	-				
122 - Site improvements	42,397				
123 - Site utilities	-				
124 - Off-site work	-				
13 - Contingencies		-			
131 - Design	-				
132 - Escalation	-				
133 - Construction	-				
TOTAL	\$	541,827			222,625 S.F. (gross floor area)



Hanscomb
Associates Inc.

Elemental
Cost Summary
Part 2 of 2

ELEMENT: 04 EXTERIOR CLOSURE

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>041 Exterior Walls</u>						
Remove existing metal coping and dispose of off-site.	642	L.F.	0.25	--	0.25	167.50 111.10
Repair/replace existing brick rowlock parapet coping and clean off top of cavity wall to receive new metal coping.	642	L.F.	1.80	1.00	2.80	1,797.60 1,243.88
Remove existing metal coping over window panel at roof level and clean off panel to receive new coping.	142	L.F.	0.25	--	0.25	35.50 24.57
Install new metal coping to top of cavity wall of a size wide enough to cover the existing cavity wall and the new Dryvit exterior panel system. Allow for furrings bedded in asphalt and seal edges of the new coping to back of the parapet and the face of the Dryvit panel.	642	L.F.	3.44	3.00	6.44	4,134.48 2,861.89
Install new metal coping over window panel head of a size wide enough to cover the existing panel and support framing and the new Dryvit exterior panel system. Seal both edges of the new coping to back of the parapet and the face of the Dryvit panel.	142	L.F.	3.29	2.60	5.89	836.38 578.94



Project: CAMERON OVERLOOK APARTMENTS
ALEXANDRIA, VIRGINIA

Date: October 9, 1978 Sheet No. 5

ELEMENT: 04 EXTERIOR CLOSURE

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>041 Exterior Walls (con't)</u>						-30.78%
Install a horizontal "soft" joint at the junction of the structural floor perimeter and the exterior wall around the 5th & 10th floor and roof slabs. The joint will be formed as follows; carefully remove three courses of existing brick soaps and clean out all mortar from the face of the structural slab, install a steel shelf angle anchor bolted to the concrete structure with 55# felt flashing above and below caulked with elastic sealant, re-install existing brick soaps (or replace with new soaps where necessary)	2,352	L.F.	3.09	2.57	5.66	9,214.79 13,312.32
Install a vertical expansion joint in the existing brick veneer including saw cutting 4" brick veneer and filling with elastic sealant	36	L.F.	6.70	0.20	6.90	171.94 248.40
Install Dryvit insulated waterproof panel over existing brick and asbestos board panel exterior wall surfaces. Panels will be attached by shimmed furring strips to existing masonry or asbestos panels.	65,630	S.F.	--	--	--	188,076.41 271,708.20 4.14 202,284.18 292,233.38

TO COST ESTIMATE SUMMARY

ELEMENT: 04 EXTERIOR CLOSURE

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>042 Exterior Doors & Windows</u>						
					-30.78%	
Take out existing aluminum windows and remove from site.						2049.60
size 4'0" X 5'6"	423	EA.	7.00	--	7.00	2,961.00
size 7'0" X 5'6"	212	EA.	10.50	--	10.50	2,226.00
						1,540.84
Install new aluminum windows						24,968.14
size 4'0" X 5'6"	423	EA.	34.10	68.25	102.35	43,294.05
size 7'0" X 5'6"	212	EA.	54.56	138.60	193.16	40,949.92
						28,345.53
Caulk with sealant between existing masonry and new aluminum window frames.	13,337	L.F.	0.70	0.10	0.80	7,385.50
						10,669.60

/6

TO COST ESTIMATE SUMMARY 69,289.6
5100,100.5



Project: CAMERON OVERLOOK APARTMENTS
ALEXANDRIA, VIRGINIA

Date: October 9, 1978 Sheet No. 7

ELEMENT: 05 ROOFING

	QUANTITY	UNIT	LABOR COST	MATERIAL COST	TOTAL UNIT COST	Adjusted TOTAL COST
Carefully remove lightning conductors and associated grounding wire and set aside for re-use.		L.F.	132.60	--	132.60	91.79 132.60
Carefully remove existing flashing and set aside for re-use.	784	L.F.	10.74	5.00	15.74	15.74
Clean out masonry joint at rowlock brick coping and prepare to receive cap flashing.	642	L.F.	1.73	--	1.73	768.80 1,110.66
Clean out reglets at head of base flashing and caulk with sealant compound.	784	L.F.	0.87	0.10	0.97	526.40 760.48
Refix cap flashing (and repair/replace flashing where necessary) into joint at rowlock brick coping.	642	L.F.	1.18	0.20	1.38	613.26 885.96
Carefully remove existing base flashing and install cant strip at junction of roof with exterior wall panel; refix base flashing (and repair/replace flashing where necessary) including caulking reglet on completion.	142	L.F.	3.31	1.16	4.47	439.37 634.74



ELEMENT: 05 ROOFING

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
Remove existing roofing and replace with new built up roofing membrane comprising; (320 C Celotex roofing system as follows)						-30.78%
type 1 asphalt						
15 lb. asphalt saturated asbestos felts						
45 lb. asbestos base felt						
Asbestos felt flashing						47,922.74
1" rigid fiberboard insulation	15,385	S.F.	--	--	4.50	69,232.50
Recaulk and seal split housings to roof fans.	12	EA.	17.00	2.00	19.00	157.82
						228.00

\$50,520.18
~~\$72,984.94~~

TO COST ESTIMATE SUMMARY

~~228.00~~

69%



Date: October 9, 1978 Sheet No. 9

Adjusted

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>TOTAL COST</u>
062 Interior Finishes						
Repairs to interior finishes resulting from other remedial repair work.						
Windows						
Remove existing gypsumboard at window reveals, install new casing bead at reveal/wall junctions and install new gypsumboard to window reveals.	13,337	L.F.	0.52	0.52	1.04	9,601.15 13,870.48
Paint with three coats on gypsumboard on completion.	--					
Mechanical						
Form openings in existing gypsumboard in isolated areas to gain access to ductwork and furnish and install new gypsumboard to seal openings on completion.	6,272	S.F.	0.52	0.52	1.04	4,515.14 6,522.88
Paint with three coats on gypsumboard on completion.						

Make good use of the time during the day to do your shopping, ask for help, and get your hair flowing in the wind in operations.

SECRET

RESEARCH

2454

Kelley

2010

1949年10月1日

ELEMENT: 06 INTERIOR CONSTRUCTION

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>062 Interior Finishes</u>						
<u>Repairs (con't)</u>						
<u>Kitchen Cabinets</u>						
Paint with three coats on gypsumboard on completion	--	--	--			-30.78%
				included elsewhere		
<u>General Painting</u>						
Allow for general painting of walls and ceilings following repairs	51,000	S.F.	0.18	0.05	0.23	9,074.74
						13,400.00
						22,500.00

TO COST ESTIMATE SUMMARY

23,190.78
~~33,503.00~~

reduce
to
allow
for no
electrical
work
at
no
kitchen
cabinet
(credits
only)



ELEMENT: 08 MECHANICAL

	QUANTITY	UNIT	LABOR COST	MATERIAL COST	TOTAL UNIT COST	Adjusted TOTAL COST
082 H.V.A.C.						-30.76%
1.A. Furnish and install split sleeves in floor. #26 USSG galvanized metal sleeve (sizes 3/4"--2 1/2" diameter)	700	EA.	15.00	14.18	29.18	14,138.88
Grouting material	20	Bags	--	18.90	18.90	20,426.00
						241.65
						378.00
						14,400.53
2.A. Furnish and install split sleeves in floor. #26 USSG galvanized metal sleeve (sizes 3/4"--2 1/2" diameter)	112	EA.	15.00	14.18	29.18	3,268.96
2.B. Furnish and install split sleeves in floor. #26 USSG galvanized metal sleeve (sizes 3/4"--2 1/2" diameter)	672	EA.	15.00	14.18	29.18	19,551.36
3.A. Furnish and install volume dampers in ducts. Damper (average size 12" X 8")	196	EA.	11.00	11.03	22.03	2,988.84
Cut and patch sheet metal duct	196	EA.	35.00	15.00	50.00	4,317.88
						6,783.56
						9,800.00
						9,772.40
4.A. Furnish and install de-crystallization controller. Trane "positive concentration limit" controller	1	EA.	--	--	2,700.00	1,868.94
						2,700.00
						1,868.94
5.A. Control equipment. Simulate and check operation of freeze stats.	1	EA.	2,400.00	500.00	2,900.00	2,900.00

ELEMENT: 08 MECHANICAL

082 H.V.A.C.

6.A. Isolation of absorption machine

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
						-30.78%
Shut down system	1	EA.	160.00	----	160.00	110.75 160.00
Remove existing 8" butterfly valve	2	EA.	48.00	----	48.00	66.45 96.00
Remove existing 6" and 8" CHS, CHR CS and CR piping		L.S.	384.00	----	384.00	265.80 384.00
Furnish and install new 6" CHS and CHR gate valves at point where valves just clear machine	2	EA.	240.00	385.00	625.00	865.25 1,250.00
Furnish and install 8" CS and CR gate valves	2	EA..	288.00	650.00	938.00	1,298.57 1,876.00
Furnish and install 6" black steel schedule 40 pipe	30	L.F.	27.87	16.38	44.45	918.90 1,327.50
Furnish and install 8" black steel schedule 40 pipe	30	L.F.	28.44	25.20	53.64	1,113.89 1,609.20
					Sub total	4,639.61

6.B. Absorption machine steam supply bypass.

Shut down cooling system and disconnect 8" steam supply		L.S.	272.00	----	272.00	188.28 272.00
---	--	------	--------	------	--------	-----------------------------

continued.



ELEMENT: 08 MECHANICAL

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
082 H.V.A.C.						-30.78%
6.B. Absorption machine steam supply bypass.						464.54
Furnish and install 8" strainer	1	EA.	345.00	325.50	671.10	671.10
Furnish and install 8" gate valve	2	EA.	288.00	650.00	938.00	1,298.57 1,876.00
Furnish and install an 8" backup steam control branch complete with 1 ea strainer and 2 ea gate valves and 40 L.F. of black steel schedule 40 pipe.		L.S.	2,275.20	2,983.50	5,258.70	3,640.07 5,258.70
Furnish and install an 8" steam bypass line complete with 1 ea globe valve		L.S.	570.60	1,449.00	2,019.60	1,397.97 2,019.60
					Subtotal	6,989.43
7.A. Insulate air conditioning riser ducts.						
Demolish 8" concrete block masonry walls and remove debris from site	900	S.F.	1.00	---	1.00	622.98 900.00
Furnish and install 3/4 lb density blanket insulation with aluminum vapor barrier jacket on adhesive and secure with #16 gauge copper wire on 8" centers	800	S.F.	1.00	0.90	1.90	1,052.14 1,520.00

continued.

ELEMENT: 08 MECHANICAL

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>082 H.V.A.C.</u>						
					-30.78%	
7.A. Insulate air conditioning riser ducts. (con't)						
Rebuild wall with new 8" concrete masonry units	900	S.F.	3.80	0.92	4.72	2,940.47 4,248.00
					Sub-total	4,615.59
7.B. Insulate air conditioning supply branch ducts.						
Furnish and install 3/4 lbs. density blanket insulation with aluminum vapor barrier jacket on adhesive and secured with #16 gauge copper wire on 8" center	400	S.F.	1.00	0.90	1.90	526.07 760.00
					Subtotal	526.07
8.A. Expansion loops in domestic hot water line including						
discourte pipe size 1/2" copper tubing and 1/2" x 1/2" x 1/2" copper pipe including elbows and valves	7500					
9.A. Three-way control valve on condenser water line.						
Cut into existing 8" CS & CR pipes in mechanical room	2	EA.	68.00	--	68.00	94.14 736.00
Furnish and install three-way butterfly valve	1	EA.	432.00	178.50	610.50	422.59 610.50

continued.

275



ELEMENT: 08 MECHANICAL

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
082 H.V.A.C.						-30.78%
9.A. Three-way control valve on condenser water line. (con't) Furnish and install 8" black steel schedule 40 pipe (by-pass from CR line to butterfly valve)	25	L.F.	28.44	25.20	53.64	928.24 7,341.00
				Sub-total		1,444.97

\$ 44,261.68
~~\$ 63,943.48~~

TO COST ESTIMATE SUMMARY

Note: Excludes 8A expansion loop
cost included under 808 expansion



ELEMENT: 09 ELECTRICAL

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>093 Special Electrical Systems</u>						
<u>Lightning Protection</u>						- 30.78%
Re-install lightning conductors previously removed including re- laying and refixing conductor wire along parapet wall between con- ductors. Include for splicing new section of copper conductor wire to existing conductor wiring extending from the center of the roof, laying extended conductor wire across roof and up parapet wall and connecting to lighting conductor.		L.S.	1,056.00	200.00	1,256.00	869.40 1,256.00

TO COST ESTIMATE SUMMARY

869.40
~~\$1,256.00~~



ELEMENT: 10 GENERAL CONDITIONS AND PROFIT

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u> -30.78%	<u>Adjusted TOTAL COST</u>
<u>General Conditions, Overhead & Profit</u>						
<u>a. Site Staff</u>						
Project manager/general superintendant (1 ea.)	12	MO.	--	----	2,400.00 2,800.00	19,935.36 28,800.00
Office personnel (1 ea.)	6	MO.	--	----	1,000.00 1,200.00	6,000.00 12,000.00
						4,153.20
<u>b. Temporary Facilities</u>						
Office trailer	12	MO.	--	----	100.00	830.64 1,200.00
Warehouse trailer	12	MO.	--	----	50.00	415.32 600.00
Toilets (2 ea.)	24	MO.	--	----	50.00	830.64 1,200.00
Power, heat & telephone	12	MO.	--	----	100.00	830.64 1,200.00
Office and medical supplies	12	MO.	--	----	50.00	415.32 600.00
Construction power and water	12	MO.	--	----	----	incl.
Scaffolding/ladders		L.S.	--	----	----	553.76 800.00
Safety barricades and lights		L.S.	--	----	----	1,000.00 69.22
Dust screens		L.S.	--	----	----	1,384.40 2,000.00
Fencing to staging area		L.S.	--	----	----	2,000.00
Temporary waterproof membrane over exposed roof areas	15,385	S.F.	--	----	0.03	319.80 462.00



ELEMENT: 10 GENERAL CONDITIONS AND PROFIT

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>General Conditions, Overhead & Profit</u>						
						- 30.78%
<u>b. Temporary Facilities (con't)</u>						
Trash disposal	12	MO.	--	----	50.00	415.32 600.00
Project sign		L.S.	--	----	----	103.83 750.00
<u>c. Equipment</u>						
Mobile hoist (1 ea.)	12	MO.	--	----	----	830.64 incl. 1,200.00
Trucks (1 ea.)	302	MO.	--	----	200.00	2,400.00 415.32
Miscellaneous equipment	12	MO.	--	----	50.00	600.00 415.32
Small tools	12	MO.	--	----	50.00	600.00
<u>d. Miscellaneous</u>						
Shop drawings		L.S.	--	----	----	346.10 500.00 138.44
Photographs etc.		L.S.	--	----	----	200.00 138.44
Sunday expenses		L.S.	--	----	----	200.00 692.20
CPM & scheduling		L.S.	--	----	----	1,000.00 2,768.80 4,000.00
Performance bond		L.S.	--	----	----	5,000.00 2,076.60 3,000.00
Permits and fees		L.S.	--	----	----	4,000.00



Project: CAMERON OVERLOOK APARTMENTS
ALEXANDRIA, VIRGINIA

Date: October 9, 1978 Sheet No. 21

ELEMENT: 10 GENERAL CONDITIONS AND PROFIT

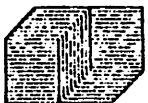
	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>General Conditions, Overhead & Profit</u>						
						-30.78%
<u>d. Miscellaneous</u>						15,148.80
						21,885.00
Insurances (3.50% of construction cost)		L.S.	--	----	----	30,000.00
						346.10
Testing and samples		L.S.	--	----	----	500.00
						346.10
Clean up and protection		L.S.	--	----	----	500.00
						346.10
Close out		L.S.	--	----	----	500.00
						14,612.34
						21,110.00
Main office expense						40,587.00
						40,135.13
Contractors fee						57,982.00
						105,214.00
						109,013.88
						\$157,489.00
						321,674.00

TO COST ESTIMATE SUMMARY

ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>122 Site Improvements</u>						-30.78%
Item 1. Remove 1 Ea 10'0" section of existing curb and gutter and replace with new curb and gutter (at catch basin) including placing gravel bedding if necessary to secure firm foundation		L.S.	91.00	49.00	140.00	96.91 140.00
Item 2. Remove all existing backfill to a depth of 2'0" and replace with sandy consistency bank gravel compacted 98% (where 6'0" wide sidewalk from middle entrance to front corner has separated from building) and lay new section of 6'0" wide sidewalk.	37	L.F.	26.36	9.00	35.36	905.62 1,308.32
Item 3 Break up and remove existing asphalt paving and 12" gravel base in parking lot, provide new bank gravel fill to 98% compaction and resurface with new asphalt paving	2	S.Y.	27.35	5.50	32.85	45.48 65.70
Item 4. Remove undesirable debris including concrete and wood rubble to a depth of 6" and replace with growing soil (comprising either topsoil or loam with fertilizer and lime), all to maintain a 2:1 slope	143	S.Y.	2.00	1.00	3.00	296.95 429.00

181



Project: CAMERON OVERLOOK APARTMENTS
ALEXANDRIA, VIRGINIA

Date: October 9, 1978

Sheet No. 21

ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>122 Site Improvements (con't)</u>					<u>-30.78%</u>	
Item 5. Ditto but to isolated area	25	S.Y.	2.00	1.00	3.00	75.00 51.92
Item 6. Ditto but to isolated area around stairs and including covering with vines or ivy ground cover to steeply sloping bank where stair sides are exposed due to extensive erosion	20	S.Y.	6.00	7.00	13.00	260.00 179.97
Item 7. Construct concrete swales leading to the main swale where overflow pipes protrude from building wall including bank gravel compacted backfill	2	EA.	45.50	22.50	68.00	136.00 94.14
Item 8. Cut foliage from existing weeds, leaving roots in place and cover with 2" of growing soil and plant with Crown Vetch	70	S.Y.	3.50	5.50	9.00	630.00 436.09
Item 9. Break up and remove existing concrete swale and construct new concrete swale including bank gravel compacted fill, reinforcing steel and expansion joints. Swale to be of a minimum thickness of 4"	120	L.F.	8.41	3.75	12.16	1,459.20 1,010.06

282



ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST.</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>122 Site Improvements (con't)</u>						
					-30.78%	
Item 10. Break up and remove existing swale and a strip of backfilled material at least 2'0" wide X 3'0" deep, provide new bank gravel backfill compacted to 98% and construct new concrete swale including reinforcing steel and expansion joints and dowels or nails driven into existing concrete retaining wall to provide bond to retaining wall	40	L.F.	11.03	4.25	15.28	423.07 611.29
Item 11. Remove undesirable debris including concrete and wood and cover eroded area with growing soil and Crown Vetch ground cover	25	S.Y.	6.00	7.00	13.00	224.97 325.00
Item 12. Ditto to bank at side of garage	200	S.Y.	6.00	7.00	13.00	1,799.72 2,600.00
Item 13. Ditto to bank below parking access road	67	S.Y.	6.00	7.00	13.00	602.91 871.00
Item 14. Break up and remove existing curb and gutter and existing backfill material to an approximate depth of 3'0", replace with new bank gravel compacted fill and new curb and gutter	10	L.F.	12.78	5.00	17.78	123.07 177.80

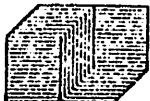
283



ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<i>Adjusted</i> <u>TOTAL COST</u>
<u>122 Site Improvements (con't)</u>						
						-30.78%
Item 15. Break up and remove existing asphalt paving and 80 feet of curbs and gutter including existing backfill material to a depth of at least 2'0". Provide new bank gravel backfill compacted to 98%, provide new curb and gutter and asphalt paving	235	S.Y.	15.00	7.25	22.25	3,619.34 5,228.75
Item 16. Remove rag weeds and dead vegetation, lay 6" of topsoil including lime and fertilizer and plant shrubbery and Crown Vetch to retard movement of subsiding embankment	775	S.Y.	3.50	5.50	9.00	4,828.10 6,975.00
Item 17. Remove 3 sections of curb and gutter, excavate to a depth of 3'0" and consolidate backfill of bank gravel or approved equal to 98% compaction as necessary to provide secure foundation and provide new curb and gutter	40	L.F.	12.78	5.00	17.78	492.29 711.20

284



ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>122 Site Improvements (con't)</u>						
					-30.78%	
Item 18. Fill eroded area with 6" of topsoil, cover with dense shrubbery and Crown Vetch (dense planting with ample growing soil and fertilizer are required to steepness of terrace as sudden change occurs in alignment)	33	S.Y.	4.00	7.00	11.00	251.27 363.00
Item 19. Remove existing backfill material to a depth of 2'0" provide new bank gravel compacted backfill to depths necessary to raise grade on terrace to cover rough concrete foundation and parging, re-sod on completion	10	S.Y.	6.28	6.00	12.28	85.00 122.80
Item 20. Ditto around concrete slab	5	S.Y.	6.28	6.00	12.28	42.50 61.40
<u>Work to Entrance Steps</u>						
Carefully remove handrails to steps and store for re-use		L.S.	40.00	--	40.00	27.69 40.00
Demolish existing concrete steps and remove surplus debris from site		L.S.	250.00	--	250.00	173.05 250.00
Recompact existing bank gravel fill to support new steps	12	C.Y.	8.00	--	8.00	66.45 96.00

continued.



ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>122 Site Improvements (con't)</u>						-30.78%
<u>Work to Entrance Steps (con't)</u>						
Construct new concrete steps including reinforcing steel and formwork, all in accordance with the original drawings and specifications	4.70	C.Y.	250.00	100.00	350.00	1,138.67 1,645.00
Replace existing handrails previously removed		L.S.	140.00	--	140.00	96.91 140.00
<u>Work to Parking Deck</u>					Sub total	1,502.77
Carefully remove existing parking bumpers and set aside for re-use	114	EA.	2.00	--	2.00	157.82 228.00
Carefully remove metal cap plates to base of light standards and set aside for re-use	14	EA.	2.00	--	2.00	19.38 28.00
Remove existing epoxy coatings to patched areas, gouge out all joints and cracks in the existing concrete deck		L.S.	1,840.00	--	1,840.00	1,273.65 1,840.00
Lay 2" concrete (5,000 p.s.i.) topping over existing parking deck including a wet concrete epoxy bonder	4,463	S.Y.	4.00	3.60	7.60	23,478.59 33,918.80
Replace parking bumpers previously removed	114	EA.	3.00	--	3.00	236.73 342.00

ELEMENT: 12 SITEWORKS

	<u>QUANTITY</u>	<u>UNIT</u>	<u>LABOR COST</u>	<u>MATERIAL COST</u>	<u>TOTAL UNIT COST</u>	<u>Adjusted TOTAL COST</u>
<u>122 Site Improvements (con't)</u>						
<u>Work to Parking Deck (con't)</u>						
Replace metal cap plates to light standards previously removed	14	EA.	3.00	--	3.00	29.07 42.00
Paint new line markings on concrete deck	2,149	L.F.	--	--	0.06	89.25 128.94
					sub-total	25284.49

TO COST ESTIMATE SUMMARY 42,396.64
~~\$61,249.11~~

287



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