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JUN 20 1975

The Honorable William Proxmire
Chairman, Subcommittee on Housing
and Urban Development, Space
Science, and Veterans
Committee on Appropriations
United States Senate

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Dear Mr. Chairman:

Your February 5, 1975, letter requested us to determine if the Veterans Administration's (VA's) contracts with architect-engineering firms (1) define if the architect-engineering firm is responsible for the quality of the work and (2) provide for the firms' liability if the work is unacceptable. If such provisions are made in the contracts, you asked us to describe VA's policies and procedures for initiating action against the architect-engineering firms and the extent of VA-initiated action where the firms' documents contain errors.

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VA contracts with architect-engineering firms contain provisions which hold the firms responsible for the quality of services and make them liable to the Government for all damages caused by their negligence. However, VA officials said that only two or three cases have been referred to VA's Office of General Counsel for legal action since the late 1940s.

According to VA officials, its contracts contain a negligence clause; however, it is extremely difficult to establish and prove a firm's negligence.

VA needs to strengthen the procedures for (1) evaluating and documenting a firm's performance and (2) referring appropriate cases for consideration of legal action. Agency officials agreed that such procedures are needed to assist project directors--who serve as contracting officers--to evaluate a firm.

The failure to initiate action against a firm for design deficiencies can be attributed partially to inadequate procedures for evaluating and documenting a firm's performance but can be attributed more to the close working relationship

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between architect-engineering firms and VA. Failure to initiate action against a firm may not be limited to VA; it may be a Government-wide problem. Our report deals only with those actions VA can take, within VA, to better evaluate a firm's contractual performance.

BACKGROUND

The Administrator of Veterans Affairs administers the VA construction program through the Office of Construction, which is responsible for developing working drawings and specifications for constructing and modernizing hospital buildings, awarding and administering the construction contracts, and supervising construction.

VA contracts with private architect-engineering firms to develop working drawings and specifications on some of its construction projects. As of June 30, 1974, VA was designing 99 projects with estimated construction costs of about \$300 million, including 23 projects it contracted to architect-engineering firms with estimated costs of about \$239 million. The VA contracts require firms to furnish drawings and specifications to enable VA to advertise for bids resulting in awarding a construction contract.

CONTRACT PROVISIONS DEFINING ARCHITECT-ENGINEERING FIRM LIABILITY

Under the terms of the standard VA contract, a firm must prepare complete working drawings and specifications based on information furnished by VA. The VA contract's general provisions section includes a clause specifically pertaining to a firm's responsibility. In part, the clause states:

"The Architect-Engineer shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Architect-Engineer under this contract.

"* * * and the Architect-Engineer shall be and remain liable to the Government in accordance with applicable law for all damage to the Government caused by the Architect-Engineer's negligent performance of any of the services furnished under this contract."

PROCEDURES FOR EVALUATING
ARCHITECT-ENGINEERING FIRM PERFORMANCE

VA's four project directors serve as architect-engineering and construction contracting officers for all VA construction projects and gather all information on their assigned projects. When a construction project is completed, project directors determine whether the quality of an architect-engineering firm's work is acceptable according to its contract. If the project director believes that the work quality is unacceptable, he is responsible for referring the case to the Assistant Administrator for Construction who further refers appropriate cases to VA's Office of the General Counsel for an opinion on the merits of taking legal action against the firm.

Project directors monitor the progress of design plans prepared by the firms and review the firms' work at four stages before final approval of firms' documents. However, VA has not established adequate procedures (1) to help the project directors determine and document the degree to which the firms have complied with their contracts and (2) for referring appropriate cases for consideration of developing a legal case to hold the firm responsible for its design deficiencies.

Two important documents--technical service evaluation reports and construction contract change orders--which could help in making such a determination are not consistently used for this purpose by the project directors.

Technical service evaluation reports

VA's various technical services, i.e., mechanical engineering, electrical engineering, and structural engineering, evaluate and report on the adequacy of a firm's work, after a project is completed. These evaluations are used if the firm is considered for future construction projects.

The evaluations of a firm are merely checklists, but they do consider such factors as the professional merit of the end product submitted, whether the structure was designed within the cost ceiling, the quality of the documents and drawings, and whether work schedules were met.

A checklist evaluation form has limitations, but it can be used to indicate the adequacy of a firm's performance. Our discussions with the project directors showed that only one project director regularly receives and reviews these

reports for this purpose. VA procedures do not provide for routinely distributing each evaluation report to the appropriate project director.

Construction contract change orders

Change orders are issued to amend construction contracts to correct any errors or omissions found in the design documents or to make other needed modifications. While design omissions are not included in the base construction cost, all required changes generally increase project costs.

The schedule on page 5 shows, for five major construction projects, the number of change orders related to omissions from contract documents and/or existing conditions conflicting with contract drawings or specifications. The projects completed over the past several years had a total award amount of about \$41 million. Change orders issued because existing conditions conflicted with a firm's contract documents and change orders issued because of omissions from contract documents accounted for 273 (about 44 percent) of the 620 change orders.

As part of their responsibility the four project directors review and approve construction contract change orders. VA should (1) consider whether many change orders are issued to rectify errors and omissions in documents prepared by a firm and (2) evaluate the quality of a firm's work and determine whether the firm has fulfilled its contract. Only one project director routinely analyzes these change orders for this purpose.

Change orders, including those resulting from omissions, may not represent a firm's error. However, when approving change orders the project directors should analyze the changes and document, at that time, whether the construction change was a result of error or omission and who was at fault--VA, the firm, or the construction contractor. While it may not be appropriate or feasible at that time to actively pursue legal action, ascertaining the total changes made and the ratio of changes made due to firm errors and omissions to all changes would help the project director develop data for future use in developing a case. We believe and VA agrees that this information would assist the project director to identify contracts warranting investigation of a firm's work quality.

Change Order Summary for
Five Major Construction Projects
(note a)

Causes for change orders	Project A		Project B		Project C		Project D		Project E		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Existing condi- tions conflict- ing with con- tract drawings and specifica- tions or omis- sions from con- tract documents of provisions for necessary equipment or materials Other, including VA requested, changes and credits	69	c/\$221,079	9	c/\$272,280	17	c/\$166,085	99	c/\$113,520	79	c/\$158,001	273	\$ 930,965
	25	49,789	3	53,919	18	273,349	160	155,577	141	645,740	347	1,178,374
	94	\$270,868	12	\$326,199	35	\$439,434	259	\$269,097	220	\$803,741	620	\$2,109,339
		\$2,369,800		\$2,291,800		\$3,796,500		\$16,469,000		\$16,242,000		\$41,169,100

a/VA defines a "major construction project" as one estimated to cost \$1,000,000 or more.

b/Only VA central office change orders over \$5,000 and field office change orders over \$2,000 were examined.

c/These amounts include not only design omissions, but also costs to correct a firm's design and subsequent construction based on existing hospital conditions conflicting with the firm's design.

EXTENT OF VA ACTION AGAINST
ARCHITECT-ENGINEERING FIRMS

VA's Office of the General Counsel is responsible for advising and representing VA in any legal actions involving a claim against a contractor, including an architect-engineering firm. Officials of that Office said, however, that potential cases against a firm, referred to them from the Office of Construction, were rare. There have been no recent referrals; only two or three cases have been referred since the late 1940s. In one case VA initiated legal action that resulted in a negotiated settlement. In another case, the Federal Government, under a contract managed for VA by the Corps of Engineers, sued both the architect-engineering firm and the construction contractor. This case also resulted in a negotiated settlement.

The VA Contract Appeals Board was established in the Office of the Administrator to act as his representative to hear and decide disputes among VA and its contractors. A Board official said that the majority of the caseload results from construction contractors' allegations of errors and omissions in the contract documents prepared by an architect-engineering firm.

The Board prepares a digest of its decisions every 2 years. Of all 89 Board decisions summarized for the latest two periods ending December 31, 1972, 46 appeared to be related to disputes arising from architect-engineering firm documents used by the construction contractor.

To determine the significance of firm involvement, we selected and reviewed seven Contract Appeals Board cases. Three of these cases were included in the 46 cases cited above; 4 were included in the prior digest prepared by the Board. The adequacy of the firm's documents was an issue in six of the seven cases (VA prepared the documents in the other case), and in all six cases VA was required to make an equitable adjustment to the construction contractor.

Officials of the VA Office of the General Counsel said that Contract Appeals Board cases do not represent material that can be directly used in a claim against a firm but do indicate possible need for considering action against a firm. We found no evidence in VA records that cases were ever pursued against a firm where decisions by the Contract Appeals Board favored a construction contractor and were referred back to the Office of Construction to determine settlement.

CONCLUSIONS

Because VA has a policy of including a responsibility clause in architect-engineering firm contracts and because construction modifications may be due to errors or omissions in documents prepared by the firms, agency procedures need to be strengthened (1) to help the project director determine the degree of a firm's compliance with its contract and (2) for referring appropriate cases for consideration of legal action.

Procedures also need to be established to insure that VA adequately considers a legal case against a firm when the VA Contract Appeals Board rules in favor of a construction contractor on the basis of errors or omissions in documents.

We believe that failure to initiate action against a firm for design deficiencies is not limited to the VA; it may be a Government-wide problem. To this end, we are doing a survey that may lead to a full review to determine whether architect-engineering firms generally are held accountable to the Government for design deficiencies and, if not, to determine what can be done to make them accountable. We suspect that the close working relationship between the firms and the Government--where the Government approves the plans drawn up by the firms--dilutes firms' responsibility for their work as approved and revised by the Government. If this suspicion is well founded, the problem would be better approached, not at the VA level, but at a Government-wide level.

RECOMMENDATIONS TO THE ADMINISTRATOR OF VETERANS AFFAIRS

Pending any Government-wide action on this problem, we recommend that VA strengthen procedures to better determine a firm's responsibility for design deficiencies to include

- a requirement that all evaluations of an architect-engineering firm's performance be considered when determining the degree of a firm's responsibility, including as additional source data the significance of contract change orders that resulted from a firm's errors or omissions and other appropriate documentation prepared and

--a requirement that VA consider developing a legal case against an architect-engineering firm when the VA Contract Appeals Board rules in favor of a construction contractor based on errors or omissions in the documents prepared by an architect-engineering firm.

AGENCY COMMENTS

VA was given the opportunity to review and comment on this report; its views have been incorporated where appropriate. (See enclosure.) VA stated that it generally agreed with our recommendations.

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As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House and Senate Committees on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report. When you agree to release the report, we will make it available to the Administrator and the four Committees to set in motion the requirements of section 236. In addition, we believe that this report will interest other committees and Members of Congress. We will be in touch with your office in the near future to make arrangements for the Administrator and other interested parties to receive copies of the report.

Sincerely yours,

James R. Atchals

Comptroller General
of the United States

Enclosure



VETERANS ADMINISTRATION
OFFICE OF THE ADMINISTRATOR OF VETERANS AFFAIRS
WASHINGTON, D.C. 20420

May 16, 1975

Mr. Gregory J. Ahart
Director
Manpower and Welfare Division
U.S. General Accounting Office
Washington, D. C. 20545

Dear Mr. Ahart:

We appreciate the opportunity to comment on GAO Draft Report on "The Responsibility of Architect-Engineer Firms In Their Contracts With The Veterans Administration".

While we generally agree with the draft recommendations, the narrative portions are potentially misleading and require comment.

The report states that there is a clause in the A-E contract which holds the A-E firm liable for damage to the Government caused by negligent performance. To establish and prove negligence is extremely difficult. Furthermore, if the damage to the Government is defined in terms of the cost of change orders, it must be remembered that design omissions are not included in the base construction cost; thus, the Government still pays only once for the required work. Three of the five examples, Table I, used to support this recommendation, are contracts for air-conditioning installations in existing buildings. Additions or modifications to existing buildings increase the potential for A-E omissions, compared to new construction, as it is extremely difficult for the A-E to know and design for conditions existing in these buildings behind closed walls, floors and ceilings. Even under these conditions, the change orders cited in the examples resulted in a total cost of only 5 percent of the total contracts cost, and those change orders attributable to the A-E amounted to only 2.2 percent of this total cost. This would seem to support the VA's contention that A-E performance is evaluated and controlled to the extent possible short of perfection.

The report gives the impression that the VA has little or no mechanism for evaluating A-E performance. The Project Directors are required to submit monthly evaluations on the A-E's performance and adherence to the contract provisions. In addition, A-E evaluations are prepared by the Resident Engineers and the Project Directors after both the design and construction phases. Although these reports are used to determine the A-E's qualifications to perform additional work, it is inherent in this evaluation process for the Project Directors to determine

Mr. Gregory J. Ahart
Director
Manpower and Welfare Division

whether the quality of the work is acceptable under the terms of the contract. The report refers to the technical service evaluations which are not consistently used by the Project Directors for A-E evaluation. While these evaluations are not routinely distributed to the Project Directors, they are on file within the Office of Construction. To our knowledge there has never been an occasion where the technical service report has revealed that the quality of the A-E work was so unacceptable to warrant General Counsel review.

The report also states that only one Project Director routinely analyzes change orders for the purpose of evaluating the quality of the A-E work and determining if the A-E has fulfilled the terms of his contract. In actuality, change orders are routinely analyzed at the completion of construction as part of the Project Director's second evaluation of the A-E. While adequate documentation, stating the reason for the changes, accompanies each change order, the causes for these changes are not documented in a composite form listing the causes in terms of A-E "error", "omission" or "VA program change". We do agree this documentation could be beneficial to the Project Director for A-E evaluations.

Therefore, contrary to the report impression that the VA has little or no A-E evaluation mechanism, the report is merely recommending additions to the existing mechanisms.

The second part of the report recommendation states that the VA should consider development of legal cases against A-E's in all cases where the VA Contract Appeals Board rules in favor of construction contractors on the basis of errors or omissions in the documents prepared by the A-E's.

The report indicates there is no evidence in the VA records to substantiate that considerations have been made regarding action against A-E's in these cases, or referred to VA General Counsel for appropriate actions.

The report indicates that one reason for not initiating action against an A-E is the Government's approving in minutia the plans drawn up by the A-E. This finding can be misleading; the VA does not check drawings for technical accuracy; it does check the A-E's work for conformance to scope and criteria. While we agree with the intent of the recommendation, the report did not specifically identify cases on which referrals to General Counsel would be appropriate.

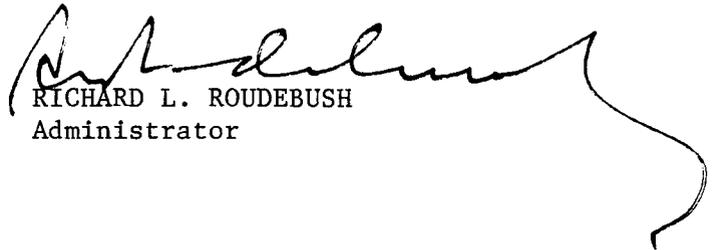
ENCLOSURE I

ENCLOSURE I

Mr. Gregory J. Ahart
Director
Manpower and Welfare Division

Thank you for the opportunity to review this draft, and if you have any questions concerning our comments my staff will be available.

Sincerely,



RICHARD L. ROUDEBUSH
Administrator