

ARCHITECTURAL AND ENGINEERING SERVICES
FOR THE STATE OF HAWAII

by

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PREFACE

This report has been prepared in response to a legislative request to report on the policies and procedures employed by contracting departments in selecting architects, engineers, and related professionals (Part I), and to list the architects, structural engineers, landscape architects, and other related professionals retained by the State or by the primary architects or engineers during the period from statehood (August 21, 1959) to the present (June 30, 1962) (Part II).

Some problems were encountered in compiling the tabulation of contracts which appears in this report especially with respect to determining which contracts to include and which to exclude. Those contracts which are concerned primarily with the development, design, and installation of physical improvements or where the primary emphasis has been on engineering have been included; those that deal primarily with economic development, long-range planning or similar subjects have been excluded.

The Legislative Reference Bureau acknowledges with thanks the cooperation of those architects, engineers, and other professionals who furnished the Bureau with information about the contracts they had entered into with the State and to the State government officials and employees who completed Bureau questionnaires, made themselves available for interviews, and offered helpful suggestions and recommendations during the course of the study.

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PART I

POLICIES AND PROCEDURES FOLLOWED BY STATE AGENCIES IN SELECTING ARCHITECTS AND ENGINEERS

None of the state agencies which retain architects and engineers follows formal or written policies and procedures in selecting such professionals. Therefore, in order to report on the methods employed, questionnaires based on the selection policies and procedures recommended by professional architects and engineers were developed and submitted to the employing agencies. This part of the report is concerned with describing the policies and procedures recommended by the national professional associations and those which the state agencies report they are following.

The Existing Situation

Five agencies in the State government are concerned with contracting with architects, engineers, and related pro-

fessionals: the Department of Accounting and General Services, the Department of Transportation, the Department of Land and Natural Resources, the University of Hawaii, and the Hawaii Housing Authority. None of these agencies has written, formal policies and procedures which govern the selection process nor is there a State-wide policy other than that implicit in the statutory provisions.¹ Some general guidelines, however, are provided for the Hawaii Housing Authority in the Low-Rent Housing Manual published by the United States Public Housing Administration of the Housing and Home Finance Agency. The pertinent sections of the manual appear in Appendix A of this report. Further, the procedures used by the Department of Transportation in evaluating the qualifications of prospective consultants were outlined in a letter from the Department to the federal Bureau of Public Roads. This letter appears in Appendix B.

¹A discussion of the relevant statutory provisions is to be found in University of Hawaii, Legislative Reference Bureau, Governmental Contracting and Purchasing, Request No. 9601 (Honolulu: 1962).

One agency noted that it had formal policies and procedures in that it followed the recommendations set forth in professional publications such as the Manual of Private Practice published by the American Society of Civil Engineers (ASCE) or the Handbook of Architectural Practice published by the American Institute of Architects (AIA). Generally, however, most contracting officials and employees felt that there were informal policies and procedures controlling the selection process which were well understood by those concerned.

Selection Policies and Procedures Recommended by Professional Associations

The selection process for architects and landscape architects differs somewhat from that used in selecting engineers. This may be attributable, in part, to the fact that there is one dominant national professional association for architects--the AIA, while different kinds of engineers such as civil, mechanical, and highway have formed their own organizations. The AIA has developed a single set of procedures governing the selection of architects. Each engineering association, on the other hand, has

produced its own rules and regulations. Although there is considerable similarity among approved selection procedures, there are also some significant variations. Further, the AIA procedures are specific and detailed while the provisions set forth by the engineering associations are broad and general.

Selection of Architects. There are two widely accepted methods for the selection of architects: (1) comparative or direct selection and (2) design competition selection. In comparative or direct selection, which is the method most frequently employed, the prospective employer selects the architect he considers will best serve his purpose from among architects given the opportunity to present evidence of their qualifications. The employer in making his decision may rely on the advice of another architect acting as his professional adviser.

Occasionally, a distinction is made between comparative and direct selection. When the distinction is made, comparative selection retains the definition above, but direct selection is defined as the selection of an architect on the basis of the employer's personal knowledge of the architect's reputation, demonstrated ability, and the recommendation of others for whom the architect has rendered his service.² An example of the use of direct

²American Institute of Architects, Facts About Architecture and Architects (Washington, D. C.: The Institute, n.d.), n.p.

selection would be when an employer, without considering the possibility of hiring other architects, retains an architect, who has successfully completed a job for him, to perform an identical or similar job. The distinction between the two methods is so fine that for the most part direct selection is not considered as a separate method. None of the State agencies employing architects distinguish between the two methods.

If comparative selection is used, the first step is to establish a list of architects. In compiling such a list, it is recommended that consideration be given to include architects who: (1) have performed work which is particularly admired in the community; (2) have rendered satisfactory service in the past; (3) are recommended by other organizations; (4) have experience in a similar type of building; (5) show interest in being considered; and (6) are recommended by other architects. In addition, a public announcement may be issued inviting other architects to submit their qualifications.³

Once the list is compiled, applicants are requested to submit a representative list of completed work, together with photographs, as well as statements of their training, background, experience, and the size of their organization and staff. The employer then reviews the qualifications and experience of each applicant. A personal interview is considered necessary to determine whether architect and owner are compatible. Finally, the architect's work is investigated to ascertain his versatility and ingenuity to solve particular problems. This may involve visits to prior projects he has completed and talks with their owners, and perhaps with the contractors who worked on them.

After completing this procedure the employer selects an architect. They then negotiate contract terms and fees. If the architect and employer are not able to come to agreement concerning the terms of the contract or the fee to be charged, the negotiations are terminated and the employer selects another architect.

The other method of selection approved by the AIA is design competition. As

³American Institute of Architects, Facts About Your Architect and His Work (Washington, D. C.: The Institute, 1959), p. 10.

defined by the AIA, "a competition exists when two or more architects, at substantially the same time, and under substantially the same conditions, and with knowledge, comply with an owner's request to submit designs for his building requirements."⁴ This method is expensive and time consuming and is rarely used except for large or significant public projects.

Competitions limited to citizens of the United States must be approved by the AIA and carried out according to its regulations if AIA members are to participate. International competitions must comply with the regulations of the International Union of Architects (IUA) and, if originating in the United States, must also have AIA approval.

Among the requirements that must be met for AIA and IUA approval are the awarding of cash prizes, appointment of a professional adviser who must be an architect, selection of a jury composed of at least three members a majority of whom must be architects, and an agreement by the employer to engage the winning architect

for the project.

During the time covered in this report, the method of design competition selection was not used by the State. There was at least one project, the state capitol, where use of design competition was considered justified because of the importance and nature of the structure, but because of time limitations, according to the Department of Accounting and General Services, it was not feasible to use this method. In this one situation the State departed from AIA approved methods for architect selection. The Governor appointed an Architects Selection Committee consisting of prominent local citizens to recommend an architect. The committee screened architects considered qualified who had shown interest in the project and made a recommendation.

Whichever selection method is utilized there are several important factors to consider in evaluating architects. The AIA suggests that the prospective employer consider whether or not each architect under consideration:

⁴American Institute of Architects, Handbook of Architectural Practice (Washington, D. C.: The Institute, 1958), Section II, 4.02.

(a) possesses the native ability and has had experience necessary for the work in hand; (b) possesses the technical knowledge needed to control the design of the structure and equipment and to secure the best results economically; (c) maintains an office organization capable of performing the required service within the required time; (d) possesses executive ability and the force to compel the proper performance of contracts; (e) has done work of like character or work from which his ability properly to serve may be inferred; (f) possesses a reputation for integrity; and (g) is actually licensed to practice in the state in which the project is located.⁵

Selection of Engineers. Selection procedures outlined by engineers are similar to the direct or comparative selection method advocated by architects. Design competition selection is not used in the selection of engineers.

The initial step in the selection process is to write out the project requirements including budget obligations, time allowed, and other limitations that may affect the engineering agreement.⁶ A list of engineers to be considered for the job is then prepared. Suggested sources of the names of engineers who should be considered are other organizations which have been confronted with similar problems and engineering societies. An alternative approach is to utilize a pre-qualification procedure such as that recommended by the

⁵Ibid., Section II, 3.02.

⁶Garvin H. Dyer, "Selection of a Consulting Engineer," Journal American Water Works Association, LIV (March, 1962), 249.

American Association of State Highway Officials. It consists of the following steps: (1) a qualification questionnaire is prepared covering professional qualifications, experience, organization, reputation, availability, and financial resources; (2) the questionnaire and an explanation of its purpose and intended use are sent to all engineering consultants who may have the qualifications to do the kinds of work required or who may wish to be retained by the State; (3) the questionnaire is used to compile a general list of consultants who will be capable of performing given classes of engineering work and specific lists of consultants who meet all requirements for the successful and competent performance of engineering work requiring specialized skills, experience and availability.⁷

⁷American Association of State Highway Officials, Administrative Practices Committee, "A Report to the A.A.S.H.O. Executive Committee Concerning Recommended Procedures for Pre-qualifying Engineering Firms," (n.p., n.d.) n.p..

⁸American Society of Civil Engineers, Private Practice of Civil Engineering (New York: The Society, 1959), p. 2.

⁹Dyer, op. cit., p. 250.

From the list of engineers, one or more are selected to be interviewed separately. The purpose of the interview is to determine compatibility and to allow the employer to make personal evaluations. The ASCE recommends that interviews be conducted by the principal engineer of the client or by a small qualified committee selected for the purpose.⁸ Among the factors that should be taken into consideration during the selection process are past experience, availability, reputation, size and quality of staff, and location. Time should be taken to investigate similar projects done by the engineers under consideration.⁹

After taking into account all the pertinent factors, except fee, an engineer is selected for the job. At this time contract negotiation begins between the employer and the engineer on the scope of

services to be performed, time schedules, and fees. If the employer and engineer cannot reach agreement, the negotiations cease and the employer selects another engineer.

Competitive Bidding for Professional Services

The proper expenditure of public funds is a matter of concern to the legislature with its responsibility for levying taxes and making appropriations, to the administration with its responsibility for collecting taxes and overseeing expenditures, to those from whom government purchases goods and services, and to the public which pays the taxes and receives governmental services. Hawaii law governing the expenditure of public money states, in part:

No expenditure of public money...
where the sum to be expended shall be

\$4,000 or more, shall be made, except under contract let after public advertisement for sealed tenders, in the manner provided by law....¹⁰

The reasons for such laws have been explained by the Hawaii Supreme Court:

Such statutory provisions are based upon motives of public economy and originate in some degree of distrust of the officers to whom the duty to make contracts for the public service is committed. Their object is 'to prevent favoritism, corruption, extravagance and improvidence in the awarding of all public contracts'... 'to secure to the state the benefit and advantage of fair and just competition between bidders and at the same time close, as far as possible, every avenue to favoritism and fraud in its varied forms...and to insure the accomplishment of the work at the lowest price by subjecting the contract for it to public competition'.¹¹

¹⁰Hawaii, Revised Laws (1955), Sec. 9-21.

¹¹Wilson v. Lord-Young Engineering Co., 21 Hawaii 97 (1912).

Bidding requirements are not applicable to expenditures of money in Hawaii when: (1) their purposes "do not admit of competition", and (2) "the work to be done is of such a nature that its extent and character can not be known or specified beforehand with reasonable certainty".¹² These particular exceptions form the legal basis for not using bidding procedures set forth by law when employing architects, engineers and related professionals.

Arguments used by professional associations and their members for exemption from competitive bidding employ the same assumptions basic to the legal exceptions. The following statements are indicative of the general tenor of professional discussions on the subject:

There is a quite definite answer to the question as to why

there should not be competitive bids for professional engineering services, in the manner that construction contractors are required to bid for jobs. Materials of construction are subject to measurement and testing for quality and workmanship. Structures are built according to carefully prescribed specifications. They can be measured and examined. By adequate inspection during construction defective workmanship can be detected and the excellence of a structure can be substantially guaranteed.

On the contrary, professional engineering services are the result of intellectual ability. It is not reasonable to expect that an engineer of mediocre ability will provide an end result that will be of equal quality with that furnished by a highly competent one, even though there may be no immediate evidence to demonstrate the difference.¹³

¹²Hawaii, Revised Laws (1955), Sec. 9-21, 9-22.

¹³"Thoughts on Hiring of Consultants," Roads and Streets, CI (August, 1958), p. 75.

...we can note that the courts have based their opinions on the concept that bids are required only when a definite specification can be written to cover the material or service under consideration. Surely it is next to impossible to write a specification governing the quality or quantity of thought, creativity, mental skill or judgment required of an engineer in the design of a project.¹⁴

Exclusion of architects, engineers, and related professionals from competitive bidding processes is the accepted situation in Hawaii as it appears to be throughout the United States. So far as could be determined no governmental jurisdiction in this country requires

professionals in these fields to bid for jobs. The AIA and professional engineering associations, it should be noted, have incorporated in their codes of ethics provisions forbidding members to compete for jobs on the basis of fee. Provision 3 of the mandatory standards of the AIA reads:

An architect shall not knowingly compete with other architects on a basis of professional charges, nor use donation as a device for obtaining competitive advantage.¹⁵

Representative of engineer associations is provision 3 of the ASCE's Code of Ethics:

It shall be considered unprofessional and inconsistent with honorable and dignified conduct for any member of

¹⁴William G. Murphy, "Competitive Bidding for Professional Work Should Not Be Tolerated," Public Works, LXXXIX (October, 1958), 96.

¹⁵AIA Handbook, op. cit., Section A 2.04.

the American Society of Civil Engineers...to invite or submit priced proposals under conditions that constitute price competition for professional services.¹⁶

The Utility of Selection Policies and Procedures

The objectives of laws governing public expenditures are relevant even to expenditures for contracts between the government and professionals which are excepted from devices such as competitive bidding. Competitive bidding does not per se guarantee that there will not be "favoritism, corruption, extravagance and improvidence" in the awarding of public contracts. It does tend to make the awarding of contracts visible to public scrutiny. The involvement of several interested competitors usually encourages the discovery and announcement of irregularities in the letting of contracts.

Contracts with professionals are a different matter. Discretion over the expenditure of large sums of public money through contracts with professionals may be vested in an appointive department

head or board. In some cases this authority, for all practical purposes, is delegated to a subordinate although the department head or board may formally approve the contract.

Price and measurable specifications provide criteria for judging the relative merits of applicants under the competitive bidding process. There are no such ready guides available when selecting architects or engineers. The selection of a qualified architect or engineer is the result of a value judgment on the part of the responsible individual or group. Lack of objective criteria for measuring the relative merits of applicants for a contract makes it difficult to identify irregularities.

Assuming that it is desirable to prevent "favoritism, corruption, extravagance and improvidence" in the awarding of all contracts regardless of the awarding process employed, the question becomes one of how these objectives may best be realized. One important step is to define clearly the policies and procedures to be used in awarding contracts. These policies and procedures can be informal, as is the present case in this State, or formal. Informality in this situation, however, may be a symptom of lack of system. As pointed

¹⁶American Society of Civil Engineers, Private Practice of Civil Engineering, op. cit., p. v.

out in a prior Bureau study, "if a system functions in an ad hoc fashion, if its various practices vary within or among agencies, and if responsible administrators of the activity rely on their personal interpretation for the establishment of policy, confusion and inefficiency are bound to result".¹⁷

The Questionnaires and Present Selection Policies and Procedures

Questionnaires were employed in eliciting specific information about the informal policies and procedures followed by the contracting agencies. The questionnaires were based largely on material gathered from publications of professional associations, articles by architects and engineers, and interviews with members of those professions in the community. The replies to the questionnaires are useful in indicating the policies and procedures which the agencies report they are following and in identifying similarities and differences in these policies and procedures among the various state agencies.

Two separate questionnaires were prepared because of differences between the accepted selection procedures applicable to architects and those relating

to engineers. Table 1 records the responses of state agencies to the questionnaire on the selection of architects; table 2 the data on the selection of engineers. In many instances the information required was the same for architects as for engineers and identical questions appear in both questionnaires. Some of the responses are summarized below.

Use of Recommended Methods. Responses to question 1 on both questionnaires indicate that agencies always use the methods recommended by the AIA when selecting architects or a professional association when selecting engineers, except for Accounting and General Services which occasionally does not use the methods suggested by professional associations when retaining engineers.

Compilation of Lists. In preparing lists of architects and engineers to be considered for projects, none of the agencies makes a public announcement inviting applicants to submit their qualifications. The lists are informally maintained and not readily available. It is probable that no qualified architect or engineer interested in working for the State is excluded from these lists.

¹⁷University of Hawaii, Legislative Reference Bureau,
Governmental Contracting and Purchasing, op. cit., p. 30.

Table 1

RESPONSE TO QUESTIONNAIRE CONCERNING POLICIES AND PROCEDURES
USED BY STATE AGENCIES IN SELECTING ARCHITECTS
STATE OF HAWAII
AUGUST 1962^a

| Questions | Always | Fre- quently | Some- times | Never | Qualifying Comments |
|--|------------------------|-----------------|----------------|------------------------|--|
| 1. Do you use the methods recommended by the American Institute of Architects when retaining an architect? | A&GS; HHA; T; UH | | | | We use the direct selection method, except for the State Capitol Project when the architect was selected by the Architects Selection Committee appointed by the Governor (A&GS). |
| 2. Are project requirements including budget obligations, the time allowed, and other limitations completed before the selection process begins? | A&GS | T; UH | | HHA | Because of the time required for the Public Housing Administration to review and approve different stages of a project (HHA). |
| 3. Are the following methods utilized in retaining architects: ^b | | | | | |
| a. Direct selection? | T | | UH | HHA | See comment to Question 1 (A&GS). |
| b. Comparative selection? | HHA | UH | T | A&GS | Only as it relates to making decision on direct selection (T). |
| c. Design competition selection? | | | | A&GS; HHA; T; UH | |

Table 1 (continued)

| Questions | Always | Fre- quently | Some- times | Never | Qualifying Comments |
|---|------------------------|-----------------|-----------------|------------|--|
| 4. When architects are chosen by direct selection, are the following criteria used: | | | | | |
| a. Prior knowledge or demonstrated ability? | A&GS; HHA; T; UH | | | | |
| b. Reputation? | A&GS; HHA; T; UH | | | | |
| c. Recommendations of past clients? | | UH | A&GS; HHA; T | | |
| d. Selection from a prepared list? | A&GS; HHA | | UH | T | A list of architects is on file (T). |
| 5. When architects are to be chosen by the comparative selection method is a list of architects used? ^b | HHA; UH | | | A&GS; T | This method is not used (A&GS). |
| 6. When architects are chosen by design competition selection, are the procedures of the American Institute of Architects followed? | | | | | This method is not used (A&GS; HHA; T; UH). |

Table 1 (continued)

| Questions | Always | Fre- quently | Some- times | Never | Qualifying Comments |
|--|------------------------|-----------------|----------------|-------|--|
| 7. Do you maintain a list of architects to be considered for jobs? | A&GS; HHA; T; UH | | | | We maintain a brochure file of qualified firms (UH). |
| 8. Are names for the list drawn from the following sources: | | | | | |
| a. Architects whose work is particularly admired in the community? | HHA; T | UH | A&GS | | |
| b. Architects who have rendered satisfactory service in the past? | A&GS; HHA; T | UH | | | |
| c. Architects recommended by other organizations? | T | | A&GS; UH | HHA | |
| d. Architects experienced in similar types of work? | A&GS; HHA; T | UH | | | |
| e. Architects who express interest in being considered? | A&GS; HHA; T | UH | | | |
| f. Architects recommended by other architects? | T | | HHA; UH | A&GS | |

Table 1 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|--|------------------------|------------|-------------|------------------------|---|
| 9. Is a public announcement made inviting other architects to submit their qualifications? | | | | A&GS; HHA; T; UH | Each architect submits his qualifications with his application (A&GS). We wrote to the local chapter of the AIA stating we were compiling a list of architects and would consider all interested applicants (HHA). |
| 10. Must applicants for work submit: | | | | | |
| a. Representative list of work completed together with photographs? | A&GS; HHA; T | UH | | | Photographs accepted (HHA). Generally, those who ask to be considered for state jobs submit complete brochure on organization and experiences (T). |
| b. Statements of training, background, and experience? | A&GS; HHA; T | UH | | | |
| c. Information on the size and organization of their staff? | A&GS; HHA; T | UH | | | |
| 11. Are the qualifications and experience of each applicant reviewed by: | | | | | |
| a. An individual in the agency? | A&GS; HHA; T; UH | | | | The Director and/or Deputy Director reviews applications (T). |
| b. A committee? | | | A&GS; UH | HHA; T | Only in the case of the State Capitol Project (A&GS). |

Table 1 (continued)

| Questions | Always | Fre- quently | Some- times | Never | Qualifying Comments |
|---|-----------------|-----------------|----------------|-------|---|
| 12. If a committee is used does it include: | | | | | |
| a. An architect? | | | | | The Architects Selection Committee for the State Capitol included architects, engineers, non-professionals and agency members (A&GS). No committees are used (HHA; T). The University has not had architectural services available on its staff (UH). |
| b. An engineer? | UH | | | | The office of the University with responsibility for capital improvements has been administered in recent years by professional engineers (UH). |
| c. Non-professionals? | | | UH | | |
| d. Agency members only? | UH | | | | |
| 13. Are interviews held with only the selected architect? | A&GS; HHA; T | | UH | | Exception: Interviews are sometimes held with prospective architects when they are located on the mainland (T). |

Table 1 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|---|------------------------|------------|-----------|------------|--|
| 14. Are the following methods used in investigating an architect's work: | | | | | |
| a. Visits to buildings he has done? | A&GS | UH | T | HHA | |
| b. Talks with their owners? | | A&GS | T; UH | HHA | |
| c. Talks with contractors who worked on them? | | A&GS | T; UH | HHA | |
| 15. Is the architect selected before fees are discussed? | A&GS; HHA; T; UH | | | | |
| 16. Are the following factors significant in determining how the agency will go about retaining the services of an architect for a specified job: | | | | | |
| a. Formal agency policy? | | A&GS | | HHA; UH | We have no formal policy (T). We have an unwritten working policy (A&GS). |
| b. Size of project? | A&GS; HHA; T; UH | | | | |

Table 1 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|---|------------------------|------------|-----------|------------|---|
| 16. (continued) | | | | | |
| c. Past experience of the architect with similar jobs? | A&GS; HHA; T; UH | | | | |
| d. Type of project? | A&GS; HHA; T; UH | | | | |
| e. Other? (please note) | | UH | | | Past assignments for the University (UH). |
| 17. Do you reserve the right to approve selection of sub-contractors? | A&GS; T | UH | | HHA | |
| 18. If you do reserve the right to veto selection have you exercised it? | | | UH | A&GS; T | Not applicable (HHA). |
| 19. Does the agency enter into a formal, legal consultant's contract with the architect before proceeding with the job? | A&GS; HHA; T | UH | | | Scope of service, conditions, and terms of contract are understood and agreed before proceeding with the work (UH). |
| 20. Is the final selection of the architect made by the board? (Applicable to HHA and UH only). | HHA | UH | | | Contracts are approved by the Board of Regents, including contracts for professional services (UH). |

Table 1 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|--|--------|------------|-----------|-------|--|
| 21. Has the board accepted and approved the recommendations of the professional staff? (Applicable to HHA and UH only). | | HHA; UH | | | |
| 22. Is the user agency consulted in the selection of architects? (Applicable to A&GS only). | | | A&GS | | Only in the case of the University of Hawaii where Act 30, SLH 1962 (CIP) mandates consultation (A&GS). |
| 23. May the user agency recommend the architects it desires; may it veto the choice of the architect selected by the Department of Accounting and General Services? (Applicable to A&GS only). | | | A&GS | | The user agency may recommend names it desires; however, final selection is the Comptroller's decision (A&GS). |

Table 1 (continued)

| Questions | Major | Minor | Qualifying Comments |
|---|---------|---------|--|
| 24. Please discuss in the adjacent space which of the following factors are most important to you when selecting an architect and which are least important. Please add other significant factors that enter into your decision. ^c | | | |
| a. Experience of architect. | A&GS; T | | |
| b. Recommendation of agency staff. | A&GS; T | | |
| c. Recommendation of professional associations. | | A&GS; T | |
| d. Recommendation of other architects. | | A&GS; T | |
| e. Recommendation of past clients. | T | A&GS | |
| f. Results of interview. | A&GS | T | Applies only to mainland consultants; otherwise would not be considered essential (T). |
| g. Location of architect. | | A&GS; T | |
| h. Size and organization of staff. | A&GS; T | | |
| i. Prior relations with the architect. | A&GS; T | | |
| j. Reputation of architect. | A&GS; T | | |
| k. Local residency. | A&GS | T | |
| l. Expressed interest of architect. | A&GS; T | | |
| m. Potential fees. | | A&GS; T | |

Table 1 (continued)

^aCode:

A&GS - Department of Accounting and General Services

HHA - Hawaii Housing Authority

T - Department of Transportation

UH - University of Hawaii

The Department of Land and Natural Resources does not hire architects and therefore is not included.

^bAgencies in answering questions 3 and 5 did not make a distinction between comparative and direct selection. All agencies actually use the comparative or direct selection method which is defined as selection by the prospective employer of the architect he considers will best serve his purpose from a group of architects given the opportunity to present evidence of their qualifications.

^cThe most important factor is the architect's ability to meet needs peculiar to housing projects. The project should be an attractive living area not just a shell. We want imaginative thinking from the architect. Past performance and experience are important. Another factor we consider is the architect's knowledge of local conditions (HHA). The factors that receive greatest emphasis are the experience of the architect, results of interviews, an evaluation of the ability of the architect to provide the professional service required, and an evaluation of the architect's approach to alternative solutions, philosophy, and ability to work within budget limitations (UH).

Table 2

RESPONSE TO QUESTIONNAIRE CONCERNING POLICIES AND PROCEDURES USED BY
STATE AGENCIES IN SELECTING ENGINEERS AND RELATED PROFESSIONALS
STATE OF HAWAII
AUGUST 1962^a

| Questions | Always | Fre- quently | Some- times | Never | Qualifying Comments |
|--|-------------------------|-----------------|---------------------|----------------|---|
| 1. Do you use the methods suggested by some professional association when retaining an engineer? | L&NR; T; UH | A&GS | | | ASCE (L&NR). |
| 2. Are project requirements including budget obligations, the time allowed, and other limitations completed before the selection process begins? | A&GS; L&NR | T; UH | | | However, always for budget obligations (T). |
| 3. Is there a formal, written set of policies and procedures governing the selection process? | L&NR | | | A&GS; T; UH | We use the procedures outlined by ASCE and Garvin Dyer's article (L&NR). ^b |
| 4. Do you maintain a list of engineers to be considered for jobs? | A&GS; L&NR; T; UH | | | | We use the list from <u>Hawaii Civil Engineer</u> (local ASCE publication) (L&NR). |
| 5. If so, are names for the list drawn from the following sources: | | | | | |
| a. Engineering societies? | L&NR | A&GS | T; UH | | |
| b. Other agencies with similar work requirements? | | UH | A&GS; L&NR; T | | |

Table 2 (continued)

| Questions | Always | Fre- quently | Some- times | Never | Qualifying Comments |
|---|----------------|-----------------|----------------|-------------------------|---|
| 5. (continued) c. Other engineers? | | | L&NR; T; UH | A&GS | |
| d. Those who have performed satis- factorily in the past? | A&GS; T; UH | L&NR | | | |
| e. Engineers experienced in similar types of work? | A&GS; T; UH | L&NR | | | |
| f. Engineers who express interest in being considered? | A&GS; T | L&NR; UH | | | |
| g. Public announcement inviting engineers to submit their qualifications? | | | | A&GS; L&NR; T; UH | |
| 6. Is a prequalification procedure used to compile a list of engineers qualified for specific types of work? | T | | | A&GS; L&NR; UH | By brochure submitted by engineer (T). |
| 7. Must applicants for work submit: | | | | | |
| a. Representative list of work completed together with photo- graphs? | A&GS; T | L&NR; UH | | | Brochures cover all these questions (T; UH). |
| b. Statements of training, back- ground, and experience? | A&GS; T | L&NR; UH | | | |
| c. Information on the size and organization of their staff? | A&GS; T | L&NR; UH | | | |

Table 2 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|---|-------------------------|------------|----------------|------------|---|
| 8. Are the qualifications and experience of each applicant reviewed by: | | | | | |
| a. An individual in the agency? | A&GS; T; UH | | L&NR | | |
| b. A committee? | | L&NR | UH | A&GS; T | |
| 9. Are interviews held only with the selected engineer? | A&GS; T | | L&NR; UH | | Interviews are sometimes held with prospective engineers when they are located on the mainland (T). |
| 10. Are the following methods used in investigating an engineer's work: | | | | | |
| a. Visits to facilities he has worked on? | A&GS | UH | L&NR; T | | |
| b. Talks with their owners? | | A&GS | L&NR; T; UH | | |
| c. Talks with contractors who worked on them? | | A&GS | L&NR; T; UH | | |
| 11. Is the engineer selected before fees are discussed? | A&GS; L&NR; T; UH | | | | |

Table 2 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|---|----------------|------------|-----------|-------------|---|
| 12. Are the following factors significant in determining how the agency will go about retaining the services of an engineer for a specific job: | | | | | |
| a. Formal agency policy? | | | A&GS | L&NR; UH | Because there is no formal agency policy. There is an informal policy (L&NR). We have no specific policy (T). We have an unwritten working policy (A&GS). |
| b. Size of project? | A&GS; T; UH | L&NR | | | |
| c. Past experience of the engineer with similar jobs? | A&GS; T; UH | L&NR | | | |
| d. Type of project? | A&GS; T; UH | L&NR | | | |
| e. Other? (please note) | | | | | |
| 13. Do you reserve the right to approve selection of sub-contractors? | A&GS; T | UH | | L&NR | Sometimes exercise the right to approve selection of subcontractor (T). |
| 14. If you do reserve the right to veto selection have you exercised it? | | | UH | A&GS; T | Not applicable (L&NR). |

Table 2 (continued)

| Questions | Always | Frequently | Sometimes | Never | Qualifying Comments |
|--|---------------------|-------------|-----------|-------|---|
| 15. Does the agency enter into a formal, legal consultant's contract with the engineer before proceeding with the job? | A&GS; L&NR; T | | UH | | This is true now, but has not always been the case in this Department in the past (L&NR). Except for small jobs where a letter of agreement is utilized (A&GS). Scope of work, conditions and terms of contract are understood and agreed to before proceeding with work (UH). |
| 16. Is the final selection of the engineer made by the board? (Applicable to L&NR and UH only). | | L&NR; UH | | | Contracts are approved by the Board of Regents, including contracts for professional services (UH). |
| 17. Has the board accepted and approved the recommendations of the professional staff? (Applicable to L&NR and UH only). | L&NR | UH | | | |
| 18. Is the user agency consulted in the selection of engineers? (Applicable to A&GS only). | | | A&GS | | Only in the case of the University of Hawaii where Act 30, SLH 1962 (CIP) mandates consultation (A&GS). |
| 19. May the user agency recommend the engineers it desires; may it veto the choice of the engineer selected by the Department of Accounting and General Services? (Applicable to A&GS only). | | | A&GS | | The user agency may recommend names it desires; however, final selection is the Comptroller's decision (A&GS). |

Table 2 (continued)

| Questions | Major | Minor | Qualifying Comments |
|--|-------------|-------------|---|
| 20. Please discuss in the adjacent space which of the following factors are most important to you when selecting an engineer and which are least important. Please add other significant factors that enter into your decision. ^c | | | |
| a. Experience of engineer. | A&GS; T; UH | | |
| b. Recommendation of agency staff. | A&GS; T; UH | | |
| c. Recommendation of professional associations. | | A&GS; T; UH | |
| d. Recommendation of other engineers. | | A&GS; T; UH | |
| e. Recommendation of past clients. | T; UH | A&GS | |
| f. Results of interview. | A&GS; UH | T | Applies only to mainland consultants with whom we have had no experience (T). |
| g. Location of engineer. | | A&GS; T; UH | |
| h. Size and organization of staff. | A&GS; T; UH | | |
| i. Prior relations with the engineer. | A&GS; T; UH | | |
| j. Reputation of engineer. | A&GS; T; UH | | |
| k. Local residency. | A&GS | T; UH | |
| l. Expressed interest of engineer. | A&GS; T | UH | |
| m. Potential fees. | | A&GS; T | Fees are considered after the selection (UH). |

Table 2 (continued)

^aCode:

A&GS - Department of Accounting and General Services
L&NR - Department of Land and Natural Resources
T - Department of Transportation
UH - University of Hawaii

The Hawaii Housing Authority does not hire engineers and therefore is not included.

^bGarvin H. Dyer, "Selection of a Consulting Engineer," Journal American Water Works Association, LIV (March, 1962), pp. 247-252.

^cExperience in the phase of engineering relating to the project is one of the most important factors. The size and composition of the engineer's staff is important in relation to the demands of the job being considered. Compatibility between the consultant and the professional agency staff is essential. The engineer should have the ability to get along with others including those who might be associated with him on a project. It is helpful if the consultant's office is located where close contact with the professional agency staff is possible. The interest of the engineer in a specific project is significant because the greater his interest the more likely he is to not only fulfill the minimum requirements of the job but to go well beyond this when necessary. Another factor is prior relations with the engineer. Potential fees are rarely, if ever, of any importance in selecting an engineer (L&NR).

Choice of Architect or Engineer. The Department of Land and Natural Resources and the University of Hawaii are the only agencies which use a committee system in reviewing the qualifications and experience of applicants. Other departments rely on an individual to perform this task; i.e., one person decides, in most cases, that a specific architect or engineer is to be employed.

Discussion of Fees. All agencies select the architect or engineer before discussing fees. This is in keeping with the codes of ethics of the AIA and the various engineering associations.

Most architects and engineers strictly observe these standards and refuse to compete on the basis of price. However, there are well defined and accepted guidelines for negotiating fees. For example, the method most widely used by state agencies for determining fees is a percentage of the total construction cost. The percentage decreases as the net construction cost increases and may be adjusted to suit special conditions. Other methods such as cost plus a fixed fee and direct salary are occasionally used.

Approval of Subcontractors. The variation that may occur when a formal policy does not exist is evident in the different policies concerning agency approval of subcontractors employed by the prime contractor. The Departments of Accounting and General Services and Transportation always reserve the right to approve selection of subcontractors, the University of Hawaii frequently does so, and the Department of Land

and Natural Resources and the Hawaii Housing Authority never do so. The University of Hawaii is the only agency which has exercised the right to veto the selection of subcontractors.

Existence and Use of Policies. The most significant conclusion which may be drawn from the responses to the questionnaires which appear in tables 1 and 2 and discussions with departmental officials and employees is that the lack of formal policies governing the selection of architects and engineers appears to be accompanied by a fair degree of flexibility in determining the methods or steps to be followed in the case of particular contracts or, more importantly, the steps to be left out.

It may be maintained that the development of a formal written set of policies and procedures for the selection of architects, engineers and related professionals would help in providing: (1) useful information to government officials and employees, persons interested in contracting with the State, and the general public; (2) some general standards to be referred to in evaluating professionals and explaining selections; (3) a choice of alternative selection procedures; (4) checks against irregularities in awarding of contracts; (5) greater uniformity among agencies where desirable; and (6) an examination of existing policies and procedures.

If clarification of selection policies and procedures would enhance the likelihood of selecting the most qualified professionals for the job, then it would be worth taking the time and trouble to formulate and administer such clarified policies, for the success of a construction project is in large measure the result of selecting the right architect or engineer for the job.

PART II

LIST OF ARCHITECTURAL AND ENGINEERING CONTRACTS

Collection and Arrangement of Data

The list of contractors includes data from two sources. First, the five State agencies employing architects and engineers (Accounting and General Services, Hawaii Housing Authority, Land and Natural Resources, Transportation, and University of Hawaii) listed the jobs performed for them, the names of the prime contractors performing the jobs, contract dates, and the applicable fees. Second, the prime contractors furnished the names of subcontractors they had employed and, where necessary, provided additional information.

Arrangement of the list is by prime contractors in alphabetical order. Jobs performed as joint ventures, involving two or more firms, are listed only once under the name of the joint venture. They are not listed again under the names of the individual participating firms. Under the name of each prime contractor appear the jobs he has done for the State during the time covered by the study, the initials of the contracting State agency, the date of the contract, the fee, and the names of subcontractors employed on the project. Fees paid

subcontractors are not included because they are not a matter of public record but rather a private arrangement between contractor and subcontractor.

Space limitations have necessitated the use of footnotes to indicate subcontractors employed to do specialized work which could not be readily categorized under one of the column headings. It should be pointed out that prime contractors, in addition to being listed as such, appear again in the subcontractor columns or footnotes on jobs they have performed to indicate the nature of their work.

The code for agency initials is:

| | |
|-------|---|
| A&GS | - Department of Accounting and General Services |
| HHA | - Hawaii Housing Authority |
| L&NR | - Department of Land and Natural Resources |
| Trans | - Department of Transportation |
| UH | - University of Hawaii |

An asterisk (*) has been placed after the title of jobs which are limited to the design of equipment installations

(electrical, air conditioning, food service), modification of existing facilities, surveys, or similarly restricted work when the limitation is applicable but not implicit in the brief job description included in the table.

On some projects the contracting State agency has served as the prime contractor and, in turn, has employed subcontractors for special work. Subcontractors, in such cases, for purposes of clarity, have been listed in Table 3 as the prime contractors. Two asterisks (**) follow the initials of the department on projects in which the department acted as the prime contractor.

Table 3

CONTRACTS FOR ARCHITECTURAL AND ENGINEERING SERVICES ENTERED
INTO BY STATE OF HAWAII, FEES PAID, AND SUBCONTRACTORS EMPLOYED
LISTED BY PRIME CONTRACTORS, AUGUST 21, 1959 THROUGH JUNE 30, 1962

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|--|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|
| TAKASHI ANBE & ASSOCIATES, INC.; HOGAN & CHAPMAN ARCHITECTS - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | Dual Purpose Cafeteria & Hotel- Restaurant Training Building (Kapiolani Technical School) (June 23, 1961) \$32,800 - Fee | Hogan & Chapman; Anbe | Taniyama | Kohloss & Associates | | Nakamura |
| TAKASHI ANBE & ASSOCIATES, INC.; LAW & WILSON, LTD. - PRIME CONTRACTORS | | | | | | |
| 1. Trans | Overseas Passenger & Freight Terminal, Honolulu ¹ (January 5, 1961) \$143,432 - Fee | Rothwell, Lester & Phillips; Anbe & Associates | Rothwell, Lester & Phillips | Montgomery & Associates | Tongg | Nakamura |
| TAKASHI ANBE & ASSOCIATES, INC.; ROTHWELL, LESTER & PHILLIPS, LTD. - PRIME CONTRACTORS | | | | | | |
| 1. Trans | Modernization of Piers 8-9-10-11, Passenger Terminal at Honolulu ² (October 5, 1961) \$228,375 - Fee | Rothwell, Lester & Phillips; Anbe & Associates | Rothwell | Montgomery & Associates | Tongg | Nakamura |

¹Specialized work: K. B. Hirashima & Associates (soils engineer); Law & Wilson, Ltd.
(consulting architects & engineers).

²Specialized work: Steve A. Harper (traffic consultant).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| TAKASHI ANBE & ASSOCIATES, INC.; JACK TANIYAMA ¹ - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | Classroom Building No. 2 & Health Research Institute (UH) (July 30, 1960) \$75,393 - Fee | Anbe | Taniyama | Carleton | Walters | Nakamura |
| 2. A&GS | Classroom Building No. 3 (UH) (May 31, 1962) \$21,300 - Fee | Anbe | Taniyama | Chee | | Nakamura |
| EDWARD AOTANI ² - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Aina Haina Library ³ (August 8, 1960) \$15,500 - Fee | Aotani | Taniyama | | | Nakamura |
| H.A.R. AUSTIN & ASSOCIATES, LTD.; LAW & WILSON, LTD. - PRIME CONTRACTORS | | | | | | |
| 1. L&NR | Magic Island ⁴ (August 1959) \$108,445 - Fee | | | | | |

¹Information was not available from Jack Taniyama. The above data were furnished by Takashi Anbe & Associates, Inc., and the Department of Accounting and General Services.

²Information was not available from Edward Aotani. The above data were furnished by the Department of Accounting and General Services.

³Specialized work: Nat Whiton (borings).

⁴Specialized work: H.A.R. Austin & Associates, Ltd.; Law & Wilson, Ltd. (civil engineers); K. B. Hirashima & Associates (soils engineer); Nat Whiton (borings); R. M. Towill Corporation (surveyors).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| HARLAND BARTHOLOMEW & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. L&NR | Development Studies, Waimanalo ¹ (August 1959) \$12,000 - Fee | | | | | |
| 2. L&NR | Planning Studies, Waimanalo ¹ (October 1959) \$16,900 - Fee | | | | | |
| 3. L&NR | Lalamilo Farm Lots ² (October 1959) \$4,719 - Fee | | | | | |
| 4. L&NR | Sand Island ² (January 1962) \$52,458 - Fee | | | | | |
| HARLAND BARTHOLOMEW & ASSOCIATES; BELT, COLLINS & ASSOCIATES, LTD. - PRIME CONTRACTORS | | | | | | |
| 1. L&NR | Ala Moana, Magic Island ³ (August 1959) \$151,000 - Fee | | | | | |

¹Specialized work: Harland Bartholomew & Associates (planning & preliminary engineering).

²Specialized work: Harland Bartholomew & Associates (civil engineers).

³Specialized work: Harland Bartholomew & Associates; Belt, Collins & Associates, Ltd.
(engineering & economic feasibility studies & planning).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| HARLAND BARTHOLOMEW & ASSOCIATES; TUDOR ENGINEERING CO. - PRIME CONTRACTORS | | | | | | |
| 1. Trans | Development Plan for Honolulu Harbor ¹ (August 8, 1960) \$47,000 - Fee | | | | | |
| BELT, COLLINS & ASSOCIATES, LTD. - PRIME CONTRACTOR | | | | | | |
| 1. L&NR | Engineering Studies, Hapuna Beach ² (December 1959) \$8,194 - Fee | | | | | |
| 2. L&NR | Development Plans, Lalamilo ² (June 1960) \$9,200 - Fee | | | | | |
| 3. L&NR | Studies, Waiakea Business Lots ² (September 1960) \$9,000 - Fee | | | | | |
| 4. L&NR | Plans, Magic Island ³ (January 1962) \$18,900 - Fee | | | | | |

¹Specialized work: Harland Bartholomew & Associates (planners);
Tudor Engineering Co. (civil engineers).

²Specialized work: Belt, Collins & Associates, Ltd. (civil engineers).

³Specialized work: Belt, Collins & Associates, Ltd. (civil engineers); Professor Joe Johnson
(University of California-Oceanography).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| BELT, COLLINS & ASSOCIATES, LTD. (cont.) | | | | | | |
| 5. Trans | Feasibility Study for Small Boat Harbor at Kaiaka Bay, Waialua, Oahu ¹ (January 13, 1961) \$22,500 - Fee | | | | | |
| 6. Trans | Pollution Study, Haleiwa, Oahu ² (September 19, 1961) \$3,150 - Fee | | | | | |
| 7. Trans | Feasibility Study for Small Boat Harbor on the Honolulu Side of Kaneilio Point, Waianae, Oahu ³ (October 13, 1961) \$22,500 - Fee | | | | | Nakamura |
| 8. UH | Landscaping Plans for the Music Hall Complex (January 8, 1962) \$760 - Fee | | | | | |

Belt, Collins

¹Specialized work: Belt, Collins & Associates, Ltd. (civil engineers); Kailua Surveyor; Nat Whiton (borings); Professor Joe Johnson (University of California-Oceanography).

²Specialized work: Belt, Collins & Associates, Ltd. (civil engineers); Professor Harry Zeitlin, UH Chemist.

³Specialized work: Belt, Collins & Associates, Ltd. (civil engineers); Nat Whiton (borings); Professor Harry Zeitlin, UH Chemist; Professor Joe Johnson (University of California-Oceanography).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|--|----------------------------|----------------------------|----------------------------------|----------------------------|
| BELT, LEMMON & LO ¹ - PRIME CONTRACTOR | | | | | | |
| 1. A&GS & Trans | Honolulu International Airport Maintenance Buildings - Stage 18 ² (November 7, 1961) \$75,000 - Fee | Lemmon, Freeth, Haines & Jones | Lo | Montgomery & Associates | Belt, Collins & Associates | Nakamura |
| 2. A&GS & Trans | Honolulu International Airport Inter-Island Cargo Facilities - Stage 19 ² (June 1, 1962) \$10,400 - Fee | Lemmon, Freeth, Haines & Jones | Lo | Montgomery & Associates | Belt, Collins & Associates | Nakamura |
| 3. HHA | Kuhio Park Terrace, Honolulu ² (July 7, 1960) \$160,336 - Fee | Lemmon, Freeth, Haines & Jones | Lo | Montgomery & Associates | Belt, Collins & Associates | Nakamura |
| BELT, LEMMON & LO; JOHN CARL WARNECKE & ASSOCIATES - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | State Capitol Building, Preliminary Design ³ March 2, 1961 \$80,000 | Lemmon, Freeth, Haines & Jones; Warnecke | Lo | Montgomery & Associates | Belt, Collins & Associates | Nakamura |

¹All of the listed firms are partners in Belt, Lemmon & Lo.

²Specialized work: Belt, Collins & Associates, Ltd. (site & utilities).

³Specialized work: Belt, Collins & Associates, Ltd. (civil engineers).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|------------------|--------------------------------|--|--------------------------------|--------------------------------|
| ROGER BENEZET, DONALD T. LO, BELT, COLLINS & ASSOCIATES, LTD. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Honolulu Technical School, Aircraft Training Building ¹ (April 27, 1960 - June 18, 1962) \$21,260 - Fee | Benezet | Lo | Howlett (plumbing) Carleton (air condi- tioning) | | Ward; Ralston |
| 2. A&GS | Honolulu Technical School, Classroom Building ² (June 22, 1961) Supplement (February 6, 1962) \$39,700 - Total Fee | Benezet | Lo | Howlett (plumbing) Carleton (air condi- tioning) | | Ward; Ralston |
| FORREST D. BENNETT - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Pahala Branch Library, Electrical System (December 5, 1961) \$510 - Fee | | | | | Bennett |
| 2. A&GS** | Fort Ruger, Three-Unit Armory* (April 10, 1962) \$2,250 - Fee | | | | | Bennett |
| 3. A&GS** | Iolani Palace, Fire Alarm System (May 14, 1962) \$356 - Fee | | | | | Bennett |

¹Specialized work: Belt, Collins & Associates, Ltd. (site engineers).

²Specialized work: Nat Whiton (borings); Belt, Collins & Associates, Ltd. (site engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| BRADLEY & WONG - PRIME CONTRACTOR | | | | | | |
| 1. L&NR | Report on State Park Cabin Facilities at Waialeale Beach, Oahu (January 1962) \$5,800 - Fee | Bradley & Wong | | | Walters | |
| KENNETH BROWN; ERNEST H. HARA & ASSOCIATES, INC. - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | State Hospital, Medical-Surgical Building (July 26, 1960) \$41,000 - Fee | Brown; Hara | Taniyama | Carleton | | Nakamura |
| ROBERT I. BUSH, PLANNER - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Hanapepe Salt Pond, Site Development ¹ (June 23, 1961) \$7,195 - Fee | | | | | |
| 2. A&GS | Kanaha Pond Development ¹ (April 10, 1962) \$2,000 - Fee | | | | | |
| 3. L&NR | Parks Structures & Facilities ¹ (August 1961) \$1,400 - Fee | | | | | |

¹Specialized work: Robert I. Bush (site planning).

| <u>Depart-</u> <u>ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural</u> <u>Engineer</u> | <u>Mechanical</u> <u>Engineer</u> | <u>Landscape</u> <u>Architect</u> | <u>Electrical</u> <u>Engineer</u> |
|--|--|------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| ROBERT I. BUSH; ANDREW GERAkas; SUNN, LOW, TOM & HARA, INC. - PRIME CONTRACTORS | | | | | | |
| 1. L&NR | Hilo Industrial Lands, Studies ¹ (December 1961) \$16,372 - Fee | | | | | |
| JOHN J. CARLETON - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Air conditioning, Band Room, Fort Ruger Armory (March 7, 1960) \$105 - Fee | | | Carleton | | |
| 2. A&GS** | New Department of Health Building* (April 17, 1960) \$215 - Fee | | | Carleton | | |
| 3. A&GS** | Air conditioning, Lt. Governor's Office (August 17, 1960) \$125 - Fee | | | Carleton | | |
| 4. A&GS** | State Office Building, Addi- tion to Mezzanine Floor* (February 28, 1962) \$650 - Fee | | | Carleton | | |

¹Specialized work: Robert I. Bush (land planning); Andrew Gerakas (economic research);
Sunn, Low, Tom & Hara, Inc. (civil engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|-------------------------------|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| CHING & HO - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Liliuokalani Building, Renovation of Basement* (November 2, 1961) Supplement (January 12, 1962) \$2,150 - Total Fee | | | | | Ching & Ho |
| 2. A&GS** | State Hospital, Central Warehouse & Shop Building* (November 16, 1961) \$825 - Fee | | | | | Ching & Ho |
| 3. A&GS** | Gilmore Hall, University of Hawaii, Electrical Renovation (November 28, 1961) \$4,000 - Fee | | | | | Ching & Ho |
| 4. A&GS** | State Hospital, Renovation of Ward Building* (May 23, 1962) \$1,600 - Fee | | | | | Ching & Ho |
| 5. Trans | Highway Lighting System on Farrington Highway (March 8, 1962) \$2,625 - Fee | | | | | Ching & Ho |

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| COMMUNITY PLANNING, INC. - PRIME CONTRACTOR | | | | | | |
| 1. L&NR | Ala Moana, Magic Island ¹ (August 1959) \$50,500 - Fee | | | | | |
| 2. L&NR | Research Studies, Waianae-Kai ² (March 1960) \$6,308 - Fee | | | | | |
| 3. Trans | Tourist Destination Complex, Honokahau, Kona ³ (1962) \$31,970 - Fee | | | | | |
| DESIGN ASSOCIATES, LTD. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Honolulu Technical School, Electronics Building (December 21, 1960) \$11,550 - Fee | Slavsky | Taniyama | Carleton | | Nakamura |
| 2. A&GS | Honolulu Technical School, Automotive Shops & Classroom Building (December 21, 1960) \$14,000 - Fee | Slavsky | Taniyama | Carleton | | Nakamura |

¹Specialized work: Eugene Maier (traffic engineer); Community Planning, Inc. (engineering studies).

²Specialized work: Community Planning, Inc. (preliminary feasibility & land use).

³Specialized work: Wilbur McCann (economic analyst); Community Planning, Inc. (master planning).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|-----------------------------------|---|----------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| DESIGN ASSOCIATES, LTD. (cont.) | | | | | | |
| 3. A&GS | Government Building, Kona ¹ (June 22, 1961) \$5,700 - Fee | Slavsky | | | | |
| 4. UH | Food Processing Center, University of Hawaii ² (January 10, 1962) \$37,400 - Fee | Slavsky | Taniyama | Kohloss | | Nakamura |
| 5. UH | Snack Bar No. 1, University of Hawaii (May 18, 1962) \$13,977 - Fee | Slavsky | Taniyama | Kohloss | | Nakamura |
| DYNAMICS, LTD. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Iolani Palace, Addition & Alterations to Second Floor (January 13, 1960) \$5,750 - Fee | McAuliffe; Tagawa | Lo | Kohloss | | MacMahon |
| 2. A&GS & Trans | General Aviation Area at Honolulu International Airport, Stage 23 ³ (March 21, 1962) Supplement (June 1, 1962) \$16,800 - Total Fee | McAuliffe; Tagawa | Taniyama; Lo | Kohloss | | MacMahon |

¹Specialized work: Sunn, Low, Tom & Hara, Inc. (civil engineers).

²Specialized work: Walter Lum (civil engineer).

³Specialized work: Y. Arakaki (civil engineer).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| FLAMBERT AND FLAMBERT - PRIME CONTRACTOR | | | | | | |
| 1. UH | General Consulting Services ¹ (January 31, 1961) \$7,840 - Fee | | | | | |
| 2. UH | Centralized Food Service System (Warehouse & Processing Center, New Snack Bar & Second Snack Bar to Replace Existing Snack Bar) ¹ (January 31, 1961) \$7,420 - Estimated Fee | | | | | |
| 3. UH | Warehouse & Processing Center, New Snack Bar & Second Snack Bar to Replace Existing Snack Bar ^{1*} (July 31, 1961) \$14,919 - Estimated Fee | | | | | |
| WILFRED K. FUCHINO - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Kaneohe Branch Library (June 22, 1961) Supplement (December 8, 1961) \$21,518 - Total Fee | Fuchino | Taniyama | Carleton | | Nakamura |
| ERNEST H. HARA & ASSOCIATES, INC. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Kapaa Beach Natatorium, Kauai (May 5, 1959) Supplements (February 25, 1960 & June 16, 1961) \$13,880 - Total Fee | Hara & Associates | Tanimura | Nakashima | | MacMahon |

¹Specialized work: Flambert and Flambert (food service consultants & designers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| BRUCE P. HARDEN - PRIME CONTRACTOR | | | | | | |
| 1. HHA | Addition to Lanakila Homes, Project 1-13 in Hilo ¹ (June 17, 1960) \$15,753 - Fee | Harden | Niwao | Howlett | Belt, Collins | Caires; Niwao |
| 2. HHA | Second Addition to Lanakila Homes, Project HA 1-14, in Hilo ¹ (January 25, 1961) \$10,739 - Fee | Harden | Niwao | Howlett | Belt, Collins | Caires; Niwao |
| 3. HHA | Lokahi Homes in Hilo ¹ (February 2, 1961) \$20,000 - Fee | Harden | Niwao | Howlett | Belt, Collins | Niwao |
| HOGAN & CHAPMAN (ARCHITECTS) - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | New Library, Hilo Campus, University of Hawaii (November 29, 1960) \$10,300 - Fee | Hogan & Chapman | Taniyama | Howlett | | MacMahon |

¹Specialized work: Belt, Collins & Associates, Ltd. (civil engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|---|--|----------------------------|----------------------------|----------------------------|----------------------------|
| SHOSO KAGAWA - PRIME CONTRACTOR | | | | | | |
| 1. A&GS & Trans | Office & Laboratory Building, Hilo Baseyard (August 31, 1960) \$10,200 - Fee | Kagawa | Taniyama | Nakashima | | Nakamura |
| 2. A&GS | Architectural Design Services Necessary for the Construction of Maintenance Buildings at Hilo (December 28, 1960) \$8,100 - Fee | Kagawa | Taniyama | Nakashima | | Nakamura |
| 3. A&GS | Dormitory, Hilo Campus, University of Hawaii ¹ (October 12, 1961) \$17,252 - Fee | Kagawa | Taniyama | Howlett | | Bennett |
| ROBERT T. KATSUYOSHI; FUJIO MATSUDA - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | Waimano Home, Classroom & Hobby Shop (October 4, 1960) \$10,900 - Fee | Katsuyoshi | Matsuda | Katayama | | Nakamura |
| C. J. KIM & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Cafetorium, University High School ¹ (October 6, 1961) Supplement (December 19, 1961) \$11,640 - Total Fee | Kim & Associates; Miller; Karnuth | Kim | Kim | | Anderson |

¹Specialized work: Nat Whiton (borings).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| NOBORU KOBAYASHI - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Kula Sanatorium, Renovation to Second Floor (August 16, 1960) \$900 - Fee | Kobayashi | | | | |
| 2. A&GS | Renovation to Second Circuit Court, Maui (September 10, 1960) \$12,800 - Fee | Kobayashi | Taniyama | Carleton | | Nakamura |
| 3. A&GS | Kahului Library (May 31, 1961) Supplement (February 2, 1962) \$18,600 - Total Fee | Kobayashi | Taniyama | Carleton | | Nakamura |
| FREDERICK H. KOHLOSS & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Kapuaiwa Building* (October 13, 1961) \$2,250 - Fee | | | Kohloss | | |
| LAW & WILSON, LTD.- PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Fallout Protection for Birkheimer Tunnel ¹ (October 12, 1961) \$17,000 - Fee | | | | | |

¹Specialized work: K. B. Hirashima & Associates (soils engineer);
Nat Whiton (borings); Law & Wilson, Ltd. (consulting engineers).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|---|---|--------------------------------|--------------------------------|----------------------------------|--------------------------------|
| LAW & WILSON, LTD.; TUDOR ENGINEERING CO. - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | Territorial Transportation & General Plan ¹ (October 9, 1959) \$110,000 - Fee | | | | | |
| GEORGE K. C. LEE & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Diamond Head School, Classroom "A" & "B" (June 22, 1961) \$6,800 - Fee | Lee & Associates | Taniyama | | | Ching & Ho |
| LEMMON, FREETH, HAINES & JONES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Employment Security Building ² (June 17, 1960) \$22,048 - Fee | Lemmon, Freeth, Haines & Jones | Lo | Montgomery & Associates | Belt, Collins & Associates | Nakamura |
| DONALD T. LO - PRIME CONTRACTOR | | | | | | |
| 1. Trans | Pedestrian Overpass on Kam IV Road (November 2, 1960) \$4,800 - Fee | Luke | Lo | | | |

¹Specialized work: Law & Wilson, Ltd.; Tudor Engineering Co. (consulting architects & engineers); B. A. Hiroshima (soils consultant).

²Specialized work: Belt, Collins & Associates (site & utilities).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| LUBLIN, McGAUGHY & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. Trans | Sampan Harbor on the Lower Wailoa River, Hilo, Hawaii ¹ (September 29, 1961) \$5,000 - Fee | | | | | |
| 2. Trans | Small Boat Harbor, Hana, Maui ² (September 29, 1961) \$10,000 - Fee | | | | | |
| 3. Trans | Drydock in the Vicinity of Hilo, Hawaii ¹ (January 19, 1962) \$2,000 - Fee | | | | | |
| 4. UH | Hawaii Institute of Geophysics ³ (January 27, 1961) \$187,000 - Fee | | | Faus Engineering | | |

¹Specialized work: Lublin, McGaughy & Associates (preliminary engineering).

²Specialized work: Lublin, McGaughy & Associates (preliminary engineering);
Marine Advisers, Inc. (wave refraction studies).

³Specialized work: Lublin, McGaughy & Associates (preliminary engineering);
R. M. Towill Corp. (civil engineers & site survey).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| HERBERT K. C. LUKE; EDWARD AOTANI ¹ - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | Women's Dormitory ² (October 12, 1961) \$11,400 - Fee | Aotani; Luke | Taniyama | Carleton | | Nakamura |
| WALTER LUM ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Waiakea-Uka District Flood Control ³ (June 30, 1961) \$24,000 - Fee | | | | | |
| MARINE ADVISERS, INC. - PRIME CONTRACTOR | | | | | | |
| 1. Trans | Compilation of Deep Water Wave Statistics ⁴ (June 22, 1961) \$16,800 - Fee | | | | | |

¹Information was not available from Edward Aotani. The above data were furnished by Herbert K. C. Luke and the Department of Accounting and General Services.

²Specialized work: Sunn, Low, Tom & Hara, Inc. (topographic work).

³Specialized work: Walter Lum Associates (consulting engineers).

⁴Specialized work: Marine Advisers, Inc. (wave statistics).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| HERBERT Y. MATSUMURA - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Dispensary, University of Hawaii ¹ (October 12, 1961) \$2,475 - Fee | Matsumura | Taniyama | Hee | | Ching & Ho |
| 2. A&GS | Maintenance Building, University of Hawaii (February 23, 1962) \$16,000 - Fee | Matsumura | Taniyama | | | Nakamura |
| ROBERT M. MATSUSHITA & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Waipahu Health Center ² (May 22, 1962) \$7,000 - Fee | Matsushita & Associates | Nakamura | Hamilton | | Oberhausen |
| McAULIFFE, YOUNG & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Iolani Palace, Addition & Alteration to Second Floor (April 12, 1960) \$10,170 - Fee | McAuliffe; Tagawa | | Montgomery & Kohloss | | MacMahon |
| 2. A&GS | Women's Dormitory "A", University of Hawaii (May 29, 1962) \$19,500 - Fee | McAuliffe, Young | Lo | Nakashima | Walters | Nakamura |

¹Specialized work: Walter Lum Associates (civil engineer); Nat Whiton (borings).

²Specialized work: Ernest Park (civil engineer).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|---|--------------------------------|----------------------------|----------------------------|----------------------------|
| McAULIFFE, YOUNG & ASSOCIATES (cont.) | | | | | | |
| 3. A&GS & Trans | Kona Airport, Expansion of Parking Area & Waiting Room (October 19, 1960) \$5,100 - Fee | McAuliffe, Young | Lo | | | MacMahon |
| McAULIFFE, YOUNG & ASSOCIATES AND I. M. PEI & ASSOCIATES, JOINT VENTURE dba/ EAST-WEST CENTER ASSOCIATES | | | | | | |
| 1. A&GS & UH | Preliminary studies of International Center ¹ (February 1, 1960) \$46,988 - Fee | McAuliffe, Young; Pei | | | | |
| 2. UH | East-West Center, Stage I, University of Hawaii ² (December 29, 1960) \$481,695 - Fee | Phillips; Design Asso.; Anderson- Kubala McAuliffe, Young; Pei | Park Associates; Lo; Yee | Forbes | Walters | Nakamura; Curley |
| GEORGE McLAUGHLIN - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Waikiki-Kapahulu Extension Branch Library for the Blind (September 23, 1959) Supplement (March 8, 1961) \$11,080 - Total Fee | McLaughlin | Taniyama | Carleton | | MacMahon |

¹Specialized work: Harland Bartholomew & Associates (campus master plan development).

²Specialized work: Flambert and Flambert (food service); Donald Swinney (theatrical); Iwao Miyake (acoustical); Law & Wilson, Ltd. (civil engineering & engineering review).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| MERRILL, ROEHRIG, ONODERA & KINDER, INC. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | International Gateway House, University of Hawaii ¹ (January 20, 1961) \$61,725 - Fee | Merrill, Roehrig, Onodera & Kinder | Taniyama | Carleton | | Drane |
| MERRILL, SIMMS, ROEHRIG - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | New Department of Health Building, Supplements (November 3, 1959 & January 18, 1960) \$1,450 - Total Fee | Merrill, Simms, Roehrig | Morgan | Winch | | Winch |
| MONTGOMERY & KOHLOSS - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | State Hospital, Central Boiler Plan* (June 1, 1961) \$1,900 - Fee | | | Montgomery & Kohloss | | |
| NORMAN G. MOORE - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Rehabilitation Center for Blind & Physically Handicapped, Supplement ² * (September 14, 1959) \$500 - Fee | | | | | |

¹Specialized work: Flambert and Flambert (food service consultants & designers).

²Specialized work: Norman G. Moore (hospital architectural consultant).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| NAKAHATA, KANESHIGE, IMATA & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Waiakea Homestead Flood Control ¹ (June 22, 1961) \$8,475 - Fee | | | | | |
| 2. A&GS | Dormitory, Hilo Campus (Survey), University of Hawaii ¹ (November 20, 1961) \$1,500 - Fee | | | | | |
| WYNN NAKAMURA, LTD. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Keller Hall, University of Hawaii* (September 2, 1959) \$285 - Fee | | | | | Nakamura |
| 2. A&GS** | Keaiwa Park, Aiea* (June 30, 1960) \$265 - Fee | | | | | Nakamura |
| 3. A&GS** | State Hospital, Maintenance Shops* (July 19, 1960) \$350 - Fee | | | | | Nakamura |
| 4. A&GS** | Tilapia Livebait Rearing Pond* (December 19, 1961) \$350 - Fee | | | | | Nakamura |

¹Specialized work: Nakahata, Kaneshige, Imata & Associates (civil engineers).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| WYNN NAKAMURA, LTD. (cont.) | | | | | | |
| 5. A&GS** | McCarthy Mall, University of Hawaii* (December 19, 1961) \$710 - Fee | | | | | Nakamura |
| 6. Trans | Highway Lights (May 18, 1962) \$1,680 - Fee | | | | | Nakamura |
| CLARENCE I. NAKASHIMA - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Liliuokalani Building, Renovation of Basement* (September 20, 1961) \$1,500 - Fee | | | | Nakashima | |
| 2. A&GS** | Three-Unit Armory, Fort Ruger* (March 6, 1962) \$575 - Fee | | | | Nakashima | |
| THOMAS NISHIDA ; DONALD LO - PRIME CONTRACTORS | | | | | | |
| 1. A&GS | Waimano Home Dormitory (July 27, 1959) Supplement (April 13, 1960) \$26,400 - Total Fee | Nishida | Lo | | Montgomery & Kohloss | Nakamura |
| 2. A&GS | Waimano Home, Male Treatment Building (October 12, 1961) \$23,940 - Fee | Nishida | Lo | | Kohloss | Nakamura |

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| JAMES J. OBERHAUSEN - PRIME CONTRACTOR | | | | | | |
| 1. A&GS** | Insectary & Plant Quarantine Station* (March 24, 1960) \$290 - Fee | | | | | Oberhausen |
| 2. A&GS** | Kealakekua Armory, Electrical Renovation (April 4, 1960) Supplement (May 5, 1960) \$760 - Total Fee | | | | | Oberhausen |
| 3. A&GS** | Maintenance Shed, Hilo, University of Hawaii* (June 30, 1960) \$77 - Fee | | | | | Oberhausen |
| 4. A&GS** | Ualakaa Water System* (September 28, 1960) \$75 - Fee | | | | | Oberhausen |
| 5. A&GS** | Poultry Farm, Waialeale, University of Hawaii* (October 5, 1960) \$1,487 - Fee | | | | | Oberhausen |
| 6. A&GS** | Hawaii Agricultural Experiment Station, Hilo, University of Hawaii* (February 27, 1961) \$382 - Fee | | | | | Oberhausen |

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|-----------------------------|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| JAMES J. OBERHAUSEN (cont.) | | | | | | |
| 7. A&GS** | Hawaii Agricultural Experiment Station, Kula, University of Hawaii* (May 15, 1961) Supplement (June 19, 1961) \$256 - Total Fee | | | | | Oberhausen |
| 8. A&GS** | Office Building, Hilo* (May 15, 1961) Supplements (November 7, 1961 & December 26, 1961) \$384 - Total Fee | | | | | Oberhausen |
| 9. A&GS** | Waiakea Health Center* (June 19, 1961) \$232 - Fee | | | | | Oberhausen |
| 10. A&GS** | Surplus Property, Addition to Warehouse Building* (June 29, 1961) \$150 - Fee | | | | | Oberhausen |
| 11. A&GS** | Hawaii Agricultural Experiment Station, Kauai Branch, University of Hawaii* (August 29, 1961) Supplements (May 15, 1961 & June 19, 1961) \$769 - Total Fee | | | | | Oberhausen |
| 12. A&GS** | Kapuaiwa Building* (October 26, 1961) \$2,560 - Fee | | | | | Oberhausen |

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|-----------------------------|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| JAMES J. OBERHAUSEN (cont.) | | | | | | |
| | 13. A&GS** Honolulu International Airport, Paging System, Stage 14 (October 30, 1961) \$4,500 - Fee | | | | | Oberhausen |
| | 14. A&GS** Kawaiiloa Girls' Home, Hookipa Cottage* (November 7, 1961) \$285 - Fee | | | | | Oberhausen |
| | 15. A&GS** Kapaa Branch Library, Electrical System (December 5, 1961) \$90 - Fee | | | | | Oberhausen |
| | 16. A&GS** State Office Building, Addition to Mezzanine Floor* (February 19, 1962) \$1,110 - Fee | | | | | Oberhausen |
| | 17. A&GS** Kalaupapa, Electrical Distribution System (February 23, 1962) Supplement (May 28, 1962) \$3,900 - Total Fee | | | | | Oberhausen |
| | 18. A&GS** Honolulu International Airport, & Stage 20* Trans (March 19, 1962) \$518 - Fee | | | | | Oberhausen |

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|------------------------------------|--|------------------|---|----------------------------|----------------------------|----------------------------|
| JAMES J. OBERHAUSEN (cont.) | | | | | | |
| 19. Trans | Overhead Highway Lights, Kam Highway (May 4, 1962) \$6,435 - Fee | | | | | Oberhausen |
| KENJI ONODERA - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Addition to Agriculture & Forestry Building (September 22, 1959) \$12,500 - Fee | Onodera | Lo | | | Nakamura |
| WAYNE F. OWENS - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | New Swimming Pool, University of Hawaii ¹ (October 12, 1961) \$5,000 - Fee | Owens | Shimazu, Matsuda, Shimabukuro & Associates | Nakashima | | Bennett |
| STEPHEN OYAKAWA - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Aiea Branch Library ² (June 30, 1961) \$6,000 - Fee | Oyakawa | Yee & Associates | | Walters | Nakamura |

¹Specialized work: Nat Whiton (borings); Sunn, Low, Tom & Hara, Inc. (topographic work).

²Specialized work: Kay Oyakawa (decorator); Walter Lum (civil engineer).

| <u>Depart- ment</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| L. FREDERICK PACK ASSOCIATES OF HAWAII, LTD. - PRIME CONTRACTOR | | | | | | |
| 1. Trans | Honokaa-Waipio Road ¹ (January 25, 1962) \$13,875 - Fee | | | | | |
| 2. Trans | General Aviation Airfield, Oahu ¹ (May 18, 1962) \$4,140 - Fee | | | | | |
| PARSONS, BRINCKERHOFF, QUADE & DOUGLAS ENGINEERS - PRIME CONTRACTOR | | | | | | |
| 1. Trans | State Ferry System ² (January 15, 1962) \$59,000 - Fee | | | | | |
| HAYDN PHILLIPS - PRIME CONTRACTOR | | | | | | |
| 1. UH | Mae Zenke Orvis Auditorium (March 25, 1962) \$12,800 - Estimated Fee | Phillips | Lo | | | Caires |
| KENNETH W. ROEHRIG - PRIME CONTRACTOR | | | | | | |
| 1. HHA | Alterations, Kalihi Valley Homes, Supplement (May 25, 1962) \$285 - Fee | Merrill, Roehrig, Onodera & Kinder, Inc. | Awaya | Howlett | | Drane |

¹Specialized work: Pack Associates (civil engineers).

²Specialized work: Parsons, Brinckerhoff, Quade & Douglas Engineers (consulting engineers);
R. Dixon Speas Associates (aviation consultants); George G. Sharp, Inc. (naval architects &
engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| SAMSON & SMOCK CO., LTD. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | State Hospital, Medical-Surgical Building ^{1*} (May 31, 1960) \$875 - Fee | | | | | |
| SAMSON & ZERBE - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Classroom Building No. 2 & Health Research Institute, University of Hawaii* (January 4, 1961) \$1,885 - Fee | | | | | |
| 2. A&GS | Proposed Ordnance Company, Fort Ruger ^{2*} (March 14, 1961) \$1,618 - Fee | | | | | |
| 3. A&GS | Honolulu International Airport, Pavement Design ² (February 1, 1962) \$980 - Fee | | | | | |

¹Specialized work: Samson & Smock Co., Ltd. (borings).

²Specialized work: Samson & Zerbe (borings).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| JOHN N. SMITH - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Waiakea Mill Pond ^{1*} (April 20, 1961) \$750 - Fee | | Chun | | | |
| 2. L&NR | Waiakea Houselots ^{1*} (October 1959) \$5,250 - Fee | | Chun | | | |
| W. T. SPALDING ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Rehabilitation Center for Blind & Physically Handicapped ² (January 13, 1960) Supplements (May 9, 1960 & November 1, 1960) \$20,812 - Total Fee | | | | | |
| SUNN, LOW, TOM & HARA, INC. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Government Building, Kona ^{3*} (October 12, 1961) \$575 - Fee | | | | | |
| 2. L&NR | Wailua Resort Area ^{4*} (February 1961) \$13,650 - Fee | | | | | Shak |

¹Specialized work: John N. Smith (surveys).

²Information on subcontractors unavailable.

³Specialized work: Sunn, Low, Tom & Hara, Inc. (topographic work).

⁴Specialized work: Sunn, Low, Tom & Hara, Inc. (civil engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|------------------|--|----------------------------|----------------------------|----------------------------|
| WALTER P. THOMPSON - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Dispensary, University of Hawaii ¹ (February 16, 1962) \$400 - Fee | | | | | |
| RICHARD TONGG - PRIME CONTRACTOR | | | | | | |
| 1. Trans | New Terminal Overseas Area, Honolulu International Airport (April 18, 1962) \$34,220 - Fee | Chang | Shimazu, Matsuda, Shimabukuro & Associates, Inc. | | Tongg | Bennett |
| R. M. TOWILL CORPORATION - PRIME CONTRACTOR | | | | | | |
| 1. A&GS & Trans | General Lyman Field ² (May 5, 1961) \$34,073 - Fee | | | | | |
| 2. L&NR | Ala Moana, Magic Island ² (August 1959) \$40,400 - Fee | | | | | |

¹Specialized work: Walter P. Thompson (survey).

²Specialized work: R. M. Towill Corporation (civil engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|----------------------------------|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| R. M. TOWILL CORPORATION (cont.) | | | | | | |
| 3. L&NR | Surveys, Construction Design, Waimanalo ¹ (November 1961) \$47,816 - Fee | | | | | |
| 4. Trans | Relocation of Kona Airport, Study ² (October 14, 1960) \$47,200 - Fee | | | | | |
| 5. Trans | Small Boat Harbor, Kona ³ (October 14, 1960) \$47,100 - Fee | | | | | |
| 6. Trans | Realignment of Kawaihae-Puako Road ⁴ (December 12, 1960) \$6,160 - Fee | | | | | |

¹Specialized work: R. M. Towill Corporation (civil engineers); Walter Lum Associates (soils engineers); Marine Advisers, Inc.; Robert Q. Palmer (oceanographic engineers); Austin, Smith & Associates (sanitary engineers).

²Specialized work: R. M. Towill Corporation (civil engineers).

³Specialized work: R. M. Towill Corporation (consulting engineers); Robert Q. Palmer (oceanographic engineer).

⁴Specialized work: R. M. Towill Corporation (topographic work).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|----------------------------------|---|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| R. M. TOWILL CORPORATION (cont.) | | | | | | |
| 7. Trans | General Lyman Field ¹ (January 16, 1961) \$46,800 - Fee | | | | | |
| 8. Trans | Realignment of Kawaihae- Puako Road ¹ (January 9, 1962) \$36,410 - Fee | | | | | |
| 9. Trans | Interstate Highway from Barbers Point to Kunia Intersection ² (February 1, 1962) \$21,114 - Fee | | | | | |
| 10. Trans | Farrington Highway from near Barbers Point Road to Piliokoi Gulch ² (February 13, 1962) \$16,974 - Fee | | | | | |
| 11. Trans | Kawaihae-Mahukona Road ² (March 13, 1962) \$53,112 - Fee | | | | | |

¹Specialized work: R. M. Towill Corporation (civil engineers).

²Specialized work: R. M. Towill Corporation (topographic work).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|---|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| TUDOR ENGINEERING CO. - PRIME CONTRACTOR | | | | | | |
| 1. Trans | Master Plan for Port of Kahului, Maui ¹ (October 20, 1960) \$14,000 - Fee | | | | | |
| 2. Trans | Master Plans for Hilo, Kawaihae, Nawiliwili & Port Allen ¹ (April 10, 1961) \$48,000 - Fee | | | | | |
| THEODORE A. VIERRA - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Honolulu International Airport, Passenger Terminal (May 20, 1960) Supplement (December 29, 1961) \$144,201 - Total Fee | Vierra | Lo | Hamilton | | Oberhausen |
| 2. Trans | Master Plan of All Buildings for Jet Terminal, General Lyman Field (September 27, 1961) \$17,942 - Fee | Vierra | Lo | Hamilton | | Oberhausen |
| 3. Trans | "Raised Concourse," "Furniture Overseas Area," & "Master Plan for Navy Area," Honolulu International Airport (December 29, 1961) \$51,890 - Fee | Vierra | Lo | Hamilton | | Oberhausen |
| 4. Trans | Passenger Terminal Building, Kahului Airport (March 13, 1962) \$43,400 - Fee | Vierra; Kobayashi | Lo | Hamilton | | Oberhausen |

¹Specialized work: Tudor Engineering Co. (consulting engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|--|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| GEORGE S. WALTERS - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Campus Roads, Drainage & Utilities, University of Hawaii (March 30, 1961) \$2,500 - Fee | | | | Walters | |
| 2. UH | Landscaping of Area Around Classroom Building 1, Classroom Building 2, Health Research Building, and Proposed Laboratory Classroom Building, University of Hawaii ¹ (March 30, 1961) \$624 - Fee | | | | Walters | |
| NAT WHITON - PRIME CONTRACTOR | | | | | | |
| 1. Trans | General Lyman Field ^{2*} (May 5, 1961) \$7,146 - Fee | | | | | |
| WILSON ASSOCIATES, INC. - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | Honolulu International Airport, Stage 20 ³ (January 31, 1962) \$22,000 - Fee | | | | | |
| 2. Trans | Honolulu International Airport, Stages 21-22 ³ (March 21, 1962) \$22,000 - Fee | | | | | Oberhausen |

¹Specialized work: Gene Granich (cost estimator).

²Specialized work: Nat Whiton (borings).

³Specialized work: Wilson Associates, Inc. (civil engineers).

| <u>Department</u> | <u>Job</u> | <u>Architect</u> | <u>Structural Engineer</u> | <u>Mechanical Engineer</u> | <u>Landscape Architect</u> | <u>Electrical Engineer</u> |
|---|--|------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| WRIGHT, HARVEY, WRIGHT - PRIME CONTRACTOR | | | | | | |
| 1. A&GS | McCarthy Mall, University of Hawaii ^{1*} (October 27, 1960) \$450 - Fee | | | | | |
| JAMES O. YAPP - PRIME CONTRACTOR | | | | | | |
| 1. Trans | Subsidence Areas at Piers 1 & 2, Hilo ² (February 1, 1961) \$14,200 - Fee | | | | | |
| PHILLIP K. H. YEE & ASSOCIATES - PRIME CONTRACTOR | | | | | | |
| 1. L&NR | Pahoa Water System ³ (October 1961) \$4,635 - Fee | | | | | |

¹Specialized work: Wright, Harvey, Wright (civil engineers & land surveyors).

²Specialized work: James O. Yapp (consulting engineer).

³Specialized work: Phillip K. H. Yee & Associates (civil engineers).

*Job limited to design of equipment installations, modification of existing facilities, surveys, or similarly restricted work. Asterisk used only when the limitation is applicable but not implicit in the job description.

**For this project the contracting State agency served as the prime contractor and, in turn, employed the listed prime contractor as a subcontractor.

Appendix A

PUBLIC HOUSING ADMINISTRATION

HHFA

PHA

4-11-55

LOW-RENT HOUSING MANUAL: BASIS

FOR SELECTING THE ARCHITECT

206.1

Selection of Architects, Engineers, and Landscape Architects

* * *

3. Basis for Selecting the Architect

a. It is the policy of the PHA not to suggest names of architects for consideration by the Local Authority. But the PHA cannot too strongly urge that this important decision be made only after a most careful investigation of the professional and technical capacities of each individual or firm under consideration; few if any decisions in the development of a project can have such material and far-reaching effects upon the project's success.

b. The "architect" may be (1) a single firm or individual, (2) a small group (preferably not more than two firms), or (3) a large group. The employment of a large group serves

to distribute the professional work and may bring a diversity of talent into the organization but these advantages are generally outweighed by the difficulty of centering responsibility and by delays. In general, it is considered advantageous to employ local professional services, both architectural and engineering, when such services are competent and available.

c. Architects shall be selected solely on the basis of professional and technical competence, experience, knowledge of local conditions, and adequacy of organization. It is recommended that each architect considered for selection be asked to submit a statement containing information regarding his qualifications, as follows:

- (1) Date practice established;
- (2) Registration and professional status;
- (3) General educational background;
- (4) General character of normal practice (commercial, residential, etc.);
- (5) Experience in low-rent housing;
- (6) Organization and facilities;
- (7) Recent typical commissions;
- (8) Commissions on hand.

The Local Authority should give close attention to the last-mentioned consideration. No individual or firm should be selected as architect if "commissions on hand," or any other situations within the architectural organization, make it appear doubtful that the individual, or one principal member of the firm, can devote ample time to guiding and directing the development of the project design and of the working drawings and specifications.

HHFA-PHA, Wash. D.C.

Appendix B

LETTER FROM STATE DEPARTMENT OF TRANSPORTATION
TO BUREAU OF PUBLIC ROADS

Letter No. 2.9336

October 6, 1961

Mr. Frank R. Carlson
Division Engineer
Bureau of Public Roads
340 Federal Building
Honolulu, Hawaii

Dear Mr. Carlson:

This letter concerning procedures used by this office in evaluating the qualifications of prospective consultants is being furnished you in accordance with the requirements of Section 3 of PPM 40-6.

The prospective consultant's experience and qualifications for the service he is to provide is determined on the basis of (1) personal knowledge or review of qualification statements prepared by the consultant which may be available or requested from the consultant, (2) an evaluation of prior performance as a consultant for the department, or (3) by interview with the consultant or principals of the consulting firm to be engaged.

Mr. Frank R. Carlson

-2-

October 6, 1961
2.0336

Further, evidence on the consultant's qualifications is obtained by inquiry of other clients of the consultant when such is deemed advisable. We also require that the consultant, or the principals of the firm to be responsible for the work, be registered as a professional engineer in the State of Hawaii for services of a professional engineering, architectural, or land surveying nature.

The consultant's ability to perform the proposed services within the time to be specified in the agreement is evaluated on the basis of past experience and knowledge of the consultant's capabilities in light of his current organization and work load as determined by interviews with the consultant.

We do not permit consultants to engage other consultants, subcontractors or otherwise employ the services of anyone not in his direct employ to assist, at a professional level, in the work he has been engaged to perform without our prior approval in writing. Such approval is given only after a review of the qualifications of the person or persons to be so employed.

Please advise us if you need any further information as a prerequisite to the employment of consultants on federal aid highway projects in addition to your approval of the actual agreements.

Very truly yours,

J. C. MYATT
Chief Engineer

MEL:jt