Gentlemen:

COUNTY ARCHITECTURAL SERVICES

In December, 1966, on the recommendation of the Chief Administrative Officer, your Board referred a report by the 1966 Grand Jury on County architectural services to the Economy and Efficiency Committee for study and report back to your Board. The Grand Jury report criticized the County's method of awarding architectural contracts, stating, "There is no competition of ideas or encouragement of economy in the method now followed in the initial selection of architects." The Grand Jury also raised the question whether the County should expand its own architectural staff or continue to depend principally for its architectural services on outside architects.

Our committee accordingly began a study of the subject early in 1967. Due to the press of other matters, we were forced to set the study aside after several months work. We resumed the study in August last year and herewith submit our report.

In the course of our study we conducted over 70 interviews with practicing architects, administrators of capital projects programs in other public agencies, and County officials. At this time we wish to thank the many individuals who assisted us in preparing this report. In particular,
we would like to express our appreciation to Mr. Carl Maston, 1968 President and Mr. Robert Bolling, 1969 President of the Southern California Chapter, AIA; Mr. Marion J. Varner, 1968 National President of the Society of American Registered Architects; Dean Sam Hurst, Dean of the School of Architecture, USC; Dean Harvey S. Perloff and Professor Thomas R. Vreeland, Jr., of the School of Architecture and Urban Planning, UCIA; Mr. Harry Harmon, Assistant Vice Chancellor, Physical Planning and Development for the California State Colleges; and Mr. Virgil Volla, Associate Superintendent in Charge of Building, Los Angeles City Board of Education.

Very truly yours,

ROBERT MITCHELL, CHAIRMAN

RM:ml
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>I. Summary and Recommendations</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of Contract Architects</td>
<td>1</td>
</tr>
<tr>
<td>Administration and Control of the County Construction Program</td>
<td>7</td>
</tr>
<tr>
<td>Use of the County vs. Outside Architectural Services</td>
<td>9</td>
</tr>
<tr>
<td>Conclusion</td>
<td>11</td>
</tr>
<tr>
<td>II. Selection of Contract Architects</td>
<td>13</td>
</tr>
<tr>
<td>Criticism of the Present Selection System</td>
<td>13</td>
</tr>
<tr>
<td>The System Ten Years Ago</td>
<td>15</td>
</tr>
<tr>
<td>Still No Professional Selection System</td>
<td>17</td>
</tr>
<tr>
<td>Professional Evaluation</td>
<td>19</td>
</tr>
<tr>
<td>Final Responsibility of the Board of Supervisors</td>
<td>20</td>
</tr>
<tr>
<td>Recommendations</td>
<td>21</td>
</tr>
<tr>
<td>1. The Architectural Evaluation Board</td>
<td>21</td>
</tr>
<tr>
<td>2. Policies and Procedures of the Architectural Evaluation Board</td>
<td>23</td>
</tr>
<tr>
<td>III. Administration and Control of the County Construction Program</td>
<td>29</td>
</tr>
<tr>
<td>Complaints by Architects and County Officials</td>
<td>29</td>
</tr>
<tr>
<td>Responsibilities Not Clearly Defined</td>
<td>30</td>
</tr>
<tr>
<td>Recommendation</td>
<td>32</td>
</tr>
<tr>
<td>IV. Use of the County vs. Outside Architectural Services</td>
<td>33</td>
</tr>
<tr>
<td>Charter Provisions</td>
<td>33</td>
</tr>
<tr>
<td>Current Balance of Architectural Work</td>
<td>34</td>
</tr>
<tr>
<td>Master Planning, Standard Plans and Written Standards</td>
<td>37</td>
</tr>
<tr>
<td>Recommendations</td>
<td>40</td>
</tr>
</tbody>
</table>

### I. SUMMARY AND RECOMMENDATIONS
Our study of architectural services covers three major areas:

(1) The method of selecting contract architects.
(2) The administration and control of the County construction program.
(3) The proper balance between the use of inside and outside architectural services.

This section of the report presents a summary of the committee's major findings and recommendations. Sections II, III and IV repeat the material included in this summary and add further details covering the findings and recommendations in each area.

SELECTION OF CONTRACT ARCHITECTS

In its report to the Board of Supervisors the Grand Jury expressed the greatest concern over the need to correct deficiencies in the County's present method of awarding architectural contracts. The present system, the report points out, allows the individual board member to take unto himself the sole responsibility for selecting the contract architect simply because the project is in his district.

Our findings support the Grand Jury's criticism. In the present County system no provision is made for the professional evaluation of architects, and no report is required after completion of the project on the architect's performance. Consequently, there is no consistent procedure of any kind to insure that the architect's past performance - his ability to meet schedules, to stay within budget, and to avoid costly supplemental changes - is taken into consideration in awarding new contracts. While it is true that each board member uses some type of evaluation method, the process is neither uniform nor systematic. Consequently, it lacks the proper safeguards for insuring that the most qualified architects are appointed.
It is not surprising, therefore, that this method of selecting architects has been criticized by professionals in the field and by the press, as well as the Grand Jury. According to many architects the County gives the major portion of its work to "a few favored architects." A recent editorial in the Los Angeles Times expressed the same criticism. "While the county hasn't been plagued by too many architectural foul-ups," the editorial stated, "it's also true that a few firms have cornered the inside track on the county's multi-million dollar design business. This creates an unhealthy climate which invites patronage since the favored architects inevitably become indebted to the politicians who name them."

Ten years ago the Los Angeles Examiner published a series of articles criticizing the County in scathing terms for deficiencies in the administration of architectural contracts. In particular, the Examiner took the County to task for such "luxuries and frills" as lining all court rooms in the County court house with rare white oak at a cost of $2,800,000 and installing 118 drinking fountains in court rooms after the building was half-completed at a cost of $1,200 each.

As a result of the Examiner criticism, the Board of Supervisors took immediate action to improve the administration of the County's construction program. Most significant among the changes which the board initiated was the establishment of two citizens committees - the Citizens Advisory Committee on County Construction to act as a watch dog on construction projects and the Capital Projects Appeals Board to settle disputes between general contractors and the County over the additional cost or time required for supplemental changes. These and other actions by the Board of Supervisors and County officials have contributed substantially toward reducing the "luxuries and frills," the schedule delays, and the wasteful supplemental changes which the Examiner criticized.

Despite the criticism, however, the selection system itself remained unchanged. It is no more professional today than it was then. Our committee is not an investigative agency. We therefore did not
attempt to determine whether contributions or other favors by architectural firms have influenced architectural awards as the editorial in the Los Angeles Times implies. We have, however, examined all the architectural awards made by the County over the past ten years. The evidence is clear that a few firms have captured the majority of County business. Seven firms received $9 million in fees, or 64% of the total fees awarded for the period.

Yet, while it is true that a few firms have received the majority of County business, contract records indicate the performance to be generally satisfactory. Occasionally, however, a poor selection has been made. As a result, serious problems have occurred on the project and costs have gone up.

Contract records also show that on 22 of the larger projects during this period the County appointed two or more architects in a joint venture arrangement to design the facility. Such multiple appointments dilute responsibility and cause delays because of the need to resolve differences in design concepts and to coordinate project assignments among two or more offices. The practice is justified only when it can be clearly established that a need exists to bring together specialized or highly qualified talent not available in a single firm.

Although the County in some cases has benefited from this arrangement, it has resulted in other cases in an unnecessary and uneconomical division of work and additional effort by County personnel in plan checking and securing agreement among client departments. In several instances the firms involved became engaged in continual and often bitter debate over
design concepts and responsibilities. In one unique case the two firms in the joint venture submitted entirely separate sets of plans. Our conclusion is that the joint venture arrangement should never be used unless a careful analysis is made of the project to determine whether a joint approach offers the best means of securing an effective design.

After many discussions with professionals in the field and examining selection systems in other public agencies, we are convinced that an effective professional system can be established in the County. We should emphasize that our proposal does not alter the final responsibility of the Board of Supervisors for the selection of contract architects. The objective of our proposal is to keep ultimate responsibility for selection of architects assigned to the Board of Supervisors, but at the same time assure a prior professional evaluation to assist the board in selecting the architects best qualified for County work.

We are all aware of the troubles besetting the City of Los Angeles in this area. As the Los Angeles Times has pointed out, few public agencies have established professional selection systems. We believe the County of Los Angeles, as the largest local government in California, should take the leadership in establishing such a professional system and thereby provide an example to be followed by other public agencies.

Recommendations

1. **The Architectural Evaluation Board**

We recommend that the Board of Supervisors establish an Architectural Evaluation Board consisting of five members serving for two-year, overlapping terms. We recommend that two members be nominated by the Southern California Chapter of the American Institute of Architects (AIA); two members by the Municipal and County Government Committee of the Los Angeles Area
The fifth member be the Dean of the School of Architecture at USC, rotated each two years with the Head of the Architecture Program at UCLA. In order to insure that the Board is periodically infused with new blood and does not become wedded to one viewpoint, we recommend that each member be limited to three successive terms.

The Architectural Evaluation Board will have two principal functions: (1) It will prepare and maintain a file on architects who have requested consideration for County work; (2) It will submit a recommended list of architects to the Board of Supervisors for each capital project which the County has determined will be contracted to an outside architect. The supervisors will make their final selection from this list.

We have reviewed in detail the operation of this proposed board and the procedures it would use with Mr. Carl Maston, 1968 President, and Mr. Robert Bolling, 1969 President of the Southern California Chapter, AIA; Mr. Frank Stockbridge, Chairman of the Municipal and County Government Committee of the Los Angeles Area Chamber of Commerce; Dean Sam Hurst, Dean of the School of Architecture at USC; Dean Harvey S. Perloff, Dean of the School of Architecture and Urban Planning at UCLA; and Professor Thomas R. Vreeland, Jr., Head of the Architecture Program at UCLA. Mr. Maston, Mr. Bolling and Mr. Stockbridge have assured us that their respective organizations will nominate members to the board who have the qualifications necessary to insure that the board fulfills its assigned function.

2. Policies and Procedures of the Architectural Advisory Board

If such a board is appointed, its first order of business will be to work out with the Board of Supervisors the key policies and procedures under which it will operate. We believe the following policies are particularly important if the proposed board is to function effectively. Additional recommendations and further details are contained in Section II.

(1) **Architect Files** - Any architect registered in California will be considered eligible for County work unless the Board of Supervisors restricts the list to local residents. Architects will indicate their interest
in performing County work by sending in a brochure and by filling out a questionnaire giving detailed information on the firm's capabilities and experience. The file on each architect should also include performance reports on previous County projects, reference memoranda from other clients, and similar documents designed to assist the Architectural Evaluation Board in evaluating the architect's qualifications.

(2) **Capability Categories** - The file on architects should be broken down, as the Architectural Evaluation Board determines, into appropriate categories. One such category might be "Executive Architects" - those architects with the capability of handling any project whatever the size or complexity. A second category could be "Specialists" - those qualified for particular types of buildings. Another category could be "Qualified for Minor Projects." This category would include talented architects who have not previously performed work for the County but who deserve the opportunity to demonstrate their proficiency beginning on smaller jobs.

(3) **Recommendations to the Board of Supervisors** - In submitting its list of recommended architects to the Board of Supervisors for a particular project, the Architectural Evaluation Board may adopt several approaches depending upon the project. On large, complex projects, for example, the submitted list may include only a few firms. On smaller projects, particularly those which require no specialized experience, the list might include a much larger number of firms. Again, the board may wish to submit a list without rating individual firms, stipulating that any firm on the list is qualified to perform the work. Or it may determine in conjunction with the Board of Supervisors that ranking of the firms will assist the supervisors in making their selection.
(4) **Joint Venture Arrangements** - We recommend that the County discontinue the practice of appointing "multiple architects" on large projects. Regardless of the size of the project, one architect should be appointed and assigned supervisory responsibility for the project design. If the appointed architect, after a thorough analysis of project requirements, determines that the project would be benefited by bringing in other architects or specialists in a joint venture or consulting arrangement, it should be his responsibility to make this decision.

(5) **Rotating Appointments** - We recommend that the County make a special effort to spread awards among qualified architects by restricting architects to one County project at a time. The Architectural Evaluation Board, however, should be free to recommend an exception to this policy if it concludes that the firm most qualified for a given project would be disqualified.

(6) **Performance Reports** - Once a project is completed, the Chief Administrative Officer and the County Engineer should jointly prepare a report evaluating the architect's performance. This report should be made a permanent part of the architect's file and should be used by the Architectural Evaluation Board to evaluate his qualifications for new awards.

**ADMINISTRATION AND CONTROL OF THE COUNTY CONSTRUCTION PROGRAM**

During the course of our study, we interviewed a number of architects who have designed major facilities for the County. Invariably we heard complaints over the time consumed by the County in reviewing the architects plans and the multiplicity of such reviews. For their part County officials complain about the delays caused by architects for failure to submit their plans in accordance with the agreed schedule.
Our findings indicate that the County's procedures in this area lack specifics as to each official's role in the decision-making process and provide limited control measures to insure prompt processing.

Examination of the role played by the Capital Projects division and the County Engineer in the administration of County construction projects reveals a difference of opinion over the objectives to be accomplished during each phase of the project, and as a consequence, the degree of administrative and technical control which the County should exercise. A real need exists, therefore, to clarify and document the roles of the Chief Administrative Office and the County Engineer in the administration of the construction program and to develop well defined procedures for effective cost control and phase by phase scheduling.

In 1965, on the recommendation of this committee, the Chief Administrative Officer established a Management Audit section in his office with the express purpose of resolving organizational and procedural problems of this type. We therefore have not pursued our analysis beyond a description of the problems.

Recommendation

We recommend that the Management Audit section in the Chief Administrative Office conduct a study in conjunction with the Capital Projects division and the County Engineer to develop a clear delineation of responsibility and improved control procedures for the administration of construction projects.
In addition to criticizing the selection system, the 1966 Grand Jury raised the question whether the County should expand its own architectural staff "to perform directly the architectural services in connection with the capital projects program."

In considering this question, it is necessary to recognize the restrictions placed on the County's use of outside architects. The Civil Service provisions of the County Charter require that work, capable of being performed adequately and competently by Civil Service employees, cannot legally be contracted to private firms. Where the work is urgent or temporary, however, or requires expert knowledge unobtainable from those in County employ or who could be brought into County employment, it may be performed by an outside firm.

Although these principles must be recognized and supported, the County Counsel emphasizes that this does not mean that the Board of Supervisors is denied the flexibility to conduct the County's business on a reasonable and economic basis. The County is confronted with large fluctuations in its volume of demand for architectural services. The Civil Service provisions of the County Charter do not require the County to staff for peak loads or for what is essentially a transitory need.

In the 1968-69 budget, 36 projects were assigned to contract architects representing a total construction budget of $57.5 million, or an average of $1.5 million per project. The number of projects assigned to the County Engineer was 116, representing a total construction cost of approximately $7.7 million, or an average of $67,000 per project.

In addition to preparing plans for its assigned projects, the County Engineer's architectural division is also responsible for such activities as soils exploration, checking plans of contract architects, development of County design and equipment standards, and contract administration and inspection. To perform this work the architectural
division currently has a staff of 112 people headed by a Chief Architect. The annual budget for the function is $2,258,000.

Our conclusion is that this level of staffing both fulfills the intent of the County Charter and at the same time achieves a generally reasonable and economic balance of inside and outside work.

As we are all aware, government has a well developed capacity to expand, but almost no capacity to contract. Civil servants are rarely laid off, and they do not fade away. Hence, an expansion of staff in a public agency generally initiates a self-perpetuating cycle in which each increase in staff results in an increase in work load. So the bureaucracy grows.

In contrast, private architectural firms are much more flexible and have a much greater ability to expand or contract quickly as work loads fluctuate. They do not maintain intricate examination and classification systems for hiring employees and they are able to discharge or lay off employees at any time they wish unhampered by Civil Service restrictions.

We believe the evidence is clear that using outside architects on larger projects provides an efficient and flexible means of tailoring architectural costs to fluctuating work loads. The Capital Projects division and the County Engineer must take care of planning and budgeting of programs, routine construction, policy decisions, supervision review and co-ordination of plans, maintenance and other overhead work. Thereafter the use of architectural firms is a logical and economic method of processing large construction projects.

However, although we strongly oppose building up a large internal staff, we believe that in the interest of economy and efficiency the work of the County Engineer should be expanded in three areas. These are master planning, standard plans and written standards.
Recommendations

We recommend that the Board of Supervisors:

1. Continue the present policy of assigning large construction projects to contract architects and small or maintenance projects to the County Engineer.

2. Assign master planning projects to the County Engineer unless the project requires talents of a specialized nature not ordinarily available on the County staff. The Chief Administrative Officer and the County Engineer should determine if additional personnel and classifications are required to perform this work internally.

3. Direct the County Engineer to expand the program for the preparation and adaptation of standard plans for repetitive projects.

4. Direct the County Engineer to re-establish and expand the program of written standards covering materials and equipment to be used for County facilities. These standards, prepared by the County Engineer, should be approved by the Chief Administrative Officer and the Citizens Advisory Committee on County Construction prior to promulgation.

CONCLUSION

It should be noted that our recommendations vary somewhat from those of the Grand Jury. Although we believe our recommendations clearly support the Grand Jury's intent, we recommend establishing an Architectural Evaluation Board rather than make use of the Citizens Advisory Committee on County Construction as the Grand Jury advocated, to evaluate the qualifications of architects and recommend their appointment. We believe the Committee on County Construction already has sufficiently heavy responsibilities. For it to become involved in the evaluation and selection of architects would interfere with its principal function of reviewing the preparation of plans for capital projects. In addition, the qualifications
for appointment to the Architectural Evaluation Board are directed exclusively toward the evaluation of architects. This is not the case with the Advisory Committee on County Construction.

The key point, as we believe our report clearly shows, is that the County urgently needs a professional method of selecting architects. It also needs to improve its administrative procedures to keep construction costs and schedules under tighter control. Finally, while the Board of Supervisors has established a generally sound balance between inside and outside architectural services, some improvements can be effected by assigning more responsibility for master planning to the County Engineer and expanding the programs for standard plans and written standards. These are the objectives to which our recommendations are addressed. We respectfully advise that the Board of Supervisors and the concerned County officials take immediate action to put them into effect.

II. SELECTION OF CONTRACT ARCHITECTS

Criticism of the Present Selection System

In its report to the Board of Supervisors the Grand Jury expressed the greatest concern over the need to correct deficiencies in the County's present method of awarding architectural contracts. The present
system, the report points out, allows the individual Board member to take unto himself the sole responsibility for selecting the contract architect simply because the project is in his district.

Our findings support the Grand Jury's criticism. In the present County system no formal provision is made for the professional evaluation of architects, and no report is required after completion of the project on the architect's performance. Consequently, there is no consistent procedure to insure that the architect's past performance - his ability to meet schedules, to stay within budget, and to avoid costly supplemental changes - is taken into consideration in awarding new contracts.

It is true that each board member uses some type of evaluation method. This may include personal interviews with architects and consultation with the Chief Administrative Office or the County Engineer for their views on an architect's past performance. The process, however, is neither uniform nor systematic. The Chief Administrative Office maintains a file of approximately 250 architects' brochures and related experience data which is available to board members. The file, however, does not include a questionnaire to insure that the data is complete, nor is there a systematic routine for keeping the information up to date. Consequently, it can not be used - and is not used - as part of an orderly process of evaluation.
It is not surprising, therefore, that this method of selecting architects has been criticized by professionals in the field and by the press, as well as the Grand Jury. In the course of our study, we conducted over 70 interviews with practicing architects, administrators of a capital projects program with a public agency, and County officials. The overwhelming majority believe that an architect's capability should be evaluated through consideration of demonstrated proficiency in his profession, resources for designing a particular project, and past experience in the design of similar projects.

One prominent architect in the community stated to this committee, "Architects can be classified and rated according to their capability to design particular projects. The County of Los Angeles has a responsibility to its citizens to select the best possible architect for any job in order to achieve the highest degree of quality and economy possible."

The County's present selection system in no way provides for a uniform and systematic evaluation. It therefore lacks the proper safeguards for insuring that the most qualified architects are appointed. As a consequence, according to many architects, the County gives the major portion of its work to "a few favored architects." Last year in an editorial criticizing Los Angeles City for awarding a golf course contract to a firm with no office and no city business license, the Los Angeles Times expressed the same criticism:

"The plain fact is that few governmental agencies have guidelines for choosing the best qualified architects to design facilities financed by tax funds.

"At the Hall of Administration, for instance, each county supervisor personally selects the architects for projects built in his district. While the County hasn't been plagued by too many architectural foul-ups, it's also true that a few firms have cornered the inside track on the County's multi-million dollar design business."
"This creates an unhealthy climate which invites patronage since the favored architects inevitably become indebted to the politicians who name them."

The System Ten Years Ago

Almost ten years ago, in July, 1959, the Los Angeles Examiner published a series of articles which criticized the County in scathing terms for deficiencies in the administration of architectural contracts. In particular, the Examiner took the County to task for the "luxuries and frills" as well as the mistakes involved in the design of the $24 million County Court House and the $27 million Hall of Administration. In the Court House, for example, rift sawn white oak, a rare and extremely expensive material, was used to panel all court rooms at a cost of $2,800,000. Another $131,641 plus $9,720 in architects' fees went for 118 drinking fountains which were installed in the court rooms after the building was half-completed. The County thus paid $1200 for each fountain. In addition, supplemental plan changes amounted to over $1 million.

As a result of the Examiner criticism, the Board of Supervisors took immediate action to improve the administration of the County's construction program. Most significant among the changes which the board initiated was the establishment of two citizens committees - the Citizens Advisory Committee on County Construction to act as a watch dog on construction projects and the Capital Projects Appeals Board to settle disputes between general contractors and the County over the additional cost or time required for supplemental changes.

The Committee on County Construction had some initial operating difficulties but is now active in reviewing major County construction projects during all stages of plan preparation to insure that proper controls
have been administered and unnecessary costs eliminated. The second committee - the Capital Projects
Appeals Board - has been commended by all concerned for its fair and objective approach in settling disputes
between the County and its contractors. In addition to the advantage of providing a systematic method of
settling disputes, the procedure also enables work on the project to continue while the dispute is being settled.

Also, in 1959, the board directed the Chief Administrative Officer to conduct a detailed study of the
County's construction procedures and to make recommendations to improve the entire system. The Chief
Administrative Officer submitted his report in September, 1959. It consisted of a long catalogue of problems
- 22 pages in all - and his proposed solutions. A major result of this study was the creation of the Capital
Projects division in the Chief Administrative Office. Headed by an experienced construction specialist
brought in from a private architectural firm, this new division was assigned the task of developing procedures
for long-range capital projects planning and phase by phase budgetary control on all construction projects. In
addition, the report recommended a number of changes to improve the organization and administration of the
County Engineer's department.

Our findings indicate that these actions by the Board of Supervisors, the Chief Administrative Officer
and the County Engineer have contributed substantially toward reducing the "luxuries and frills," the schedule
delays, and the wasteful supplemental changes in the County's construction program which the Examiner
criticized.

We should note also that in 1959, prior to the Examiner criticism, the County had established a new
fee system for architects based upon a fixed percentage of the estimated construction cost. The percentage
ranges
from 3% to 11% depending upon the size and complexity of the project. The percentage decreases as the cost of the project increases. Thus the usual fee for large construction projects ranges from 4.5% to 6%. This sliding scale system is generally recognized as sound and fair, although some architects complain that the fee schedules are too low, particularly for small projects.

Still No Professional Selection System

Despite the Examiner criticism, however, the selection system itself remained unchanged. It is no more professional today than it was then.

Our committee is not an investigative agency. We therefore did not attempt to determine whether contributions or other favors by architectural firms have influenced architectural awards as the editorial in the Los Angeles Times implies. We have, however, examined all architectural awards made by the County over the past ten years. The evidence is clear that a few firms have captured the majority of County business. Since 1958, the County has awarded 156 separate contracts to 62 different firms. The total fees amounted to $14 million. Seven firms, or 11% of the total, received 35% of the awards. This 35% amounted to $9 million in fees or 64% of the total fees awarded for the period.

Yet, while it is true that a few firms have received the majority of County business, it is not true that the County has consistently employed unqualified architects. On the contrary, contract records indicate the performance to be generally satisfactory. Occasionally, however, a poor selection has been made. As a result, serious problems have occurred on the project and costs have gone up. Incomplete and inadequate plans cause delays in plan checking and excessive changes during construction.
Contractors, moreover, are forced to add high contingency factors in their bidding to compensate for the inadequate plans.

In contrast, a good set of plans attracts the better sub-contractors who know they can depend upon them for an accurate description of the project requirements and specifications.

Contract records also show that on 22 of the larger projects during this period the County appointed two or more architects in a joint venture arrangement to design the facility. Such multiple appointments dilute responsibility and cause delays because of the need to resolve differences in design concepts and to co-ordinate project assignments among two or more offices. The practice is justified only when it can be clearly established that a need exists to bring together specialized or highly qualified talent not available in a single firm. In theory this was the purpose behind these joint venture projects, and it is true that in a number of cases the County benefited from the arrangement.

Unfortunately, however, on some projects the joint venture method has resulted in an unnecessary and uneconomical division of work and additional effort by County personnel in plan checking, project co-ordination, and securing agreement among client departments. In several cases the firms involved became engaged in continual and often bitter debate over design concepts and responsibilities. In one unique case the two firms in the joint venture submitted entirely separate sets of plans. One architect, who has done substantial work for the County, told this committee, "Regardless of how large the project is, only one architect should be appointed. If he can't handle the work, he shouldn't be appointed in the first place. The joint venture, or tandem arrangement, is never efficient. The only reason for it is politics."
Our conclusion is that despite the assignment and co-ordination problems it sometimes creates, the joint venture arrangement, if it is properly used, can provide an effective, even outstanding, architectural effort. The significant point is that it should never be adopted unless a careful analysis is made of the project to determine whether a joint approach offers the best means of securing an effective design. On recent joint venture awards the Board of Supervisors has adopted the practice of designating one architect as a lead architect with supervisory responsibility for the project. This is a step in the right direction, providing the joint venture arrangement is justified in the first place.

**Professional Evaluation**

The 1959 report, which the Board of Supervisors directed the Chief Administrative Officer to prepare on these problems, contained a recommendation to provide professional evaluation in the selection process. It recommended that an "Architectural Review Board" be appointed which would then establish a panel of architects "selected on the basis of professional qualifications and experience on various types of projects." Members of the Review Board were to be the Chief Administrative Officer, the County Engineer and an architectural expert from the educational field. The members, however, concluded that this method using internal staff was not practical, and it was never adopted as standard practice.

In the County system the Board of Supervisors operates as both the legislative and executive head. It is not realistic, therefore, to assign responsibilities to County administrators, who are subordinates to the Board of Supervisors, which require them in effect to tell the board what it can and cannot do.
Nevertheless, despite the failure of this approach, we believe an effective professional system can be established in the County. In conducting our study, we were interested in determining whether other public agencies had developed a selection system which professionals in the field consider to be fair and objective. We were impressed in particular with the systems which have been developed by the California State Colleges and the Los Angeles City Board of Education. Although they differ in some respects, the two systems are similar in providing a systematic and professional method of evaluating the capabilities of contract architects, appointing them to a given project on the basis of this evaluation, and grading them on the quality of their performance after completion of the project.

Our proposed system differs from both these systems, since it is directed toward the County operation. We are convinced, however, that the experience of the two agencies indicates clearly that an effective professional system can be established in any public agency. After exploring a number of alternatives, we believe the system recommended in this report can achieve that objective.

Final Responsibility of the Board of Supervisors

We should emphasize that our proposal does not alter the final responsibility of the Board of Supervisors for the selection of contract architects. The supervisors are held accountable by the public for the conduct of County operations and must assume final responsibility for the selection of architects. However, each supervisor has a responsibility, not only to his district but to the entire County, to assure the best quality of services the County can afford. The key objective of our plan is to keep the ultimate responsibility for selection of architects assigned to the Board of Supervisors, but at the same time assure a prior professional evaluation to assist the board in selecting the architects best qualified for County work.
We are all aware of the troubles besetting the City of Los Angeles in this area. As the Los Angeles Times has pointed out, few public agencies have established professional selection systems. We believe the County of Los Angeles, as the largest local government in California, should take the leadership in establishing such a professional system and thereby provide an example to be followed by other public agencies.

Recommendations

1. The Architectural Evaluation Board

We recommend that the Board of Supervisors establish an Architectural Evaluation Board consisting of five members serving for two-year, overlapping terms. Initially, three members should be drawn by lot for two-year terms and two members for one-year terms. We recommend that two members be nominated by the Southern California Chapter of the American Institute of Architects (AIA), two members by the Municipal and County Government Committee of the Los Angeles Chamber of Commerce, and the fifth member be the Dean of the School of Architecture at USC, rotated each two years with the Head of the Architecture Program at UCLA. In order to insure that the Board is periodically infused with new blood and does not become wedded to one viewpoint, we recommend that each member be limited to three successive terms.

The Architectural Evaluation Board will have two principal functions: (1) it will prepare and maintain a file on architects, broken down into capability categories, who have requested consideration for County work; (2) it will submit a recommended list of architects to the Board of Supervisors for each capital project which the County has determined will be contracted to an outside architect. The supervisors will make their final selection from this list.
The method of appointing members to the Architectural Evaluation Board is patterned after the method which has been used successfully for the Capital Projects Appeals Board. For this board the members are nominated by five different community organizations.

Compensation for board members, if any, should be determined by the Board of Supervisors. The two members nominated by the AIA would be practicing architects. They would be prohibited from doing work for the County during their term of office and for one year thereafter. For the two non-architect members we have in mind persons with a knowledge of construction financing or capital projects administration. They should be people who know how to interpret performance reports on past projects with and experienced insight into the managerial competence displayed by the firm, in particular the ability to stay within budget and meet schedules.

Although we believe the Architectural Evaluation Board should work closely with the County officials concerned with its work, we do not recommend that a County official be a member of the board. As we have indicated, we believe a County official would have difficulty serving effectively in this role.

We have reviewed in detail the operation of this proposed board and the procedures it would use with Mr. Carl Maston, 1968 President, and Mr. Robert Bolling, 1969 President of the Southern California Chapter, AIA; Mr. Frank Stockbridge, Chairman of the Municipal and County Government Committee of the Los Angeles Area Chamber of Commerce; Dean Sam Hurst, Dean of the School of Architecture at USC; Dean Harvey S. Perloff, Dean of the School of Architecture and Urban Planning at UCLA; and Professor Thomas R. Vreeland, Jr., Head of the Architecture Program at UCLA.

They agree that the County can and should establish a professional evaluation and selection system. Mr. Maston, Mr. Bolling and Mr. Stockbridge
have assured us that their respective organizations will nominate members to the Architectural Evaluation Board who have the qualifications necessary to insure that the board fulfills its assigned function. We believe three qualifications in particular are required. The first is knowledge of the field and the architect's role on a construction project. The second is objectivity, that is absence of any association or connection which might involve self-interest. The third is willingness to work, since this will be a working board requiring considerable time and effort by its members. The County awards 15 to 20 architectural contracts a year. The Architectural Evaluation Board will be involved in recommending architects for these awards.

2. Policies and Procedures of the Architectural Evaluation Board

If such a board is appointed, its first order of business will be to work out with the Board of Supervisors the key policies and procedures under which it will operate. We conclude this section of the report with recommendations for certain policies and procedures which we believe are particularly important if the board is to function effectively.

(1) Architect Files - Any architect registered in California will be considered eligible to apply for County work, unless the Board of Supervisors restricts the list to local residents. Architects will indicate their interest in performing County work by sending in a brochure and by filling out a questionnaire giving information on the size and fiscal capability of the firm, the number and type of personnel, details on past and current projects, and so on. The Federal Government Form 251, used by the military services and other public agencies, or the form developed by the California State Colleges can readily be adapted for County use. The file on each architect may also include performance reports on previous County projects,
reference reports from other clients, and similar documents which will help the Architectural Evaluation Board to evaluate the architect's qualifications.

(2) **Capability Categories** - The architect's file should be broken down, as the Architectural Evaluation Board determines, into appropriate categories. One such category might be "Executive Architects" - those architects with the capability of handling any project whatever the size or complexity. A second category could be "Specialists" - those qualified for particular types of buildings such as steam plants, jails, fire stations, golf courses, and so on. Another category could be "Qualified for Minor Projects." This category would include talented architects who have not previously performed work for the County but who deserve the opportunity to demonstrate their proficiency beginning on smaller jobs. By this means the County can develop a pool of architects experienced in the complexities of the County system. It is to the advantage of the County to foster such experience. An architect familiar with the County system and the problems involved in plan checking and coordinating agreement among various client departments can usually save himself and the County considerable time and effort during the course of the project.

(3) **County Staff Assistance** - The work of the Architectural Evaluation Board should be closely supported by clerical, technical and advisory assistance from the County staff - in particular, the Capital Projects division of the Chief Administrative Office and the Architectural and Construction divisions of the County Engineer. We believe the board should consult closely with these officials regarding their views on the past performance of architects, particularly during the early application of the new system when performance reports (discussed below) are not available. In conducting our study we have been impressed with the objectivity.
and sincerity of County officials. Therefore, while the Architectural Evaluation Board should be on the lookout for personal bias, we strongly advise that it consult frequently with County officials for their assistance and advice.

Staff help will also be needed to organize and maintain the necessary files. This is not a complex task. In the California State College system one clerk in the capital projects office handles this assignment.

(4) **Recommendations to the Board of Supervisors** - In submitting its list of recommended architects to the Board of Supervisors for a particular project, the Architectural Evaluation Board may adopt several approaches depending upon the project. On large, complex projects, for example, the submitted list may include only a few firms. On smaller projects, particularly those which require no specialized experience, the list may include a much larger number of firms. Again, the board may wish to submit a list without rating individual firms, stipulating that any firm on the list is qualified to perform the work. Or it may determine in conjunction with the Board of Supervisors that ranking of the firms will assist the supervisors in making a decision.

(5) **Joint Venture Arrangements** - We recommend that the County discontinue the practice of appointing "multiple architects" on large projects. Regardless of the size of the project, one architect should be appointed and assigned supervisory responsibility for the project design. If the appointed architect, after a thorough analysis of project requirements, determines that the project would be benefited by bringing in other architects or specialists in a joint venture or consulting arrangement, it should be his responsibility to make this decision.
(6) **Design Competitions** - The Grand Jury report on architectural services recommended that the County consider the advisability of using design competitions. We have discussed this selection method with a number of well-known architects. All advised against it. It is time consuming and expensive and could not be used except on certain selected projects. It has been used most successfully on projects of a monumental or decorative nature. On more routine projects the method tends to attract young or inexperienced architects who have the time to devote to such projects because they are just getting started in their profession. Experienced architects are usually too busy to spend time on such ventures. Thus, instead of getting the best architect, the agency gets the least experienced. We, therefore, recommend against the use of design competitions for the County.

(7) **Rotating Appointments** - We recommend that the Architectural Evaluation Board and the Board of Supervisors make a special effort to spread awards among qualified architects. To accomplish this architects could be restricted to one project at a time, measured from the date of appointment to the award of the construction contract. The State Colleges have adopted such a policy. We advise a similar policy for the County. The Architectural Evaluation Board then would rotate architects in the recommendation process according to the latest County job received.

However, we recommend against a strict rotation system, since it could automatically disqualify the firm most qualified for a given project. Thus the board should be free to recommend an exception to the policy if circumstances justify it. If an architect has performed with distinction on a project, it is to the County's advantage to reward him with further assignments even though there may be some overlap in project assignments. The prevailing criterion should always be capability for designing a particular type of facility.
Performance Reports - Once a project is completed the Chief Administrative Officer and the County Engineer should jointly prepare a report evaluating the architect's performance. This report should be made a permanent part of the architect's file and should be used by the Architectural Evaluation Board to evaluate his qualifications for new awards.

By virtue of his contract, the architect implies that he possesses the necessary competence and ability to furnish plans and specifications prepared with technical skill and free from major defects. His expertise is sought and relied on, encompassing cost estimates, delivery of plans and specifications on schedule, suitability of materials involved, wisdom and diligence in performing duties of inspection, and responsibility of supplying architectural plans free from structural or other defects. If the architect does not perform in this fashion, then the system should insure that he is not appointed to another contract.

We recognize that the contract architect cannot in all cases be held responsible for defects or additional costs. When these deficiencies occur, the cause may be shared, in many instances, by several parties including County officials. However, whether the architect is solely at fault or shares the blame, these facts should be incorporated in the final performance report. Where the architect has been clearly negligent, it may be in the County's interest to bring suit against him for recovery of damages. We should note, however, that such litigation is rarely successful. In most cases it is simply too difficult to prove that the architect is solely responsible for the additional costs.

The final performance report, in conjunction with a good selection system, is therefore the most practical means of establishing effective control over the quality of architectural services. If the architect expects
to secure future County work, then he must perform in a satisfactory manner. The performance report is thus an extremely useful device not only in the selection process itself but in providing an incentive for the architect to perform as conscientiously as possible.

Under the guidance of the Architectural Evaluation Board, the County staff should be capable of performing this function without undue bias or cover-up of County deficiencies. The Architectural Evaluation Board should establish a detailed format for the report. The report should keep to the facts, discouraging personal opinions. It should seek as objectively as possible to describe the managerial and technical proficiency displayed by the firm, its willingness and ability to resolve problems, and finally, how well it succeeded in staying within budget, meeting schedules, and avoiding oversights and mistakes.
The objective of the County construction program should be to provide housing for County operations consistent with County standards at the least cost within the shortest period of time. In the construction field, time in particular affects over-all cost. Construction costs for the coming year are expected to increase by 10%. Consequently, a year's delay in a $26 million project - for instance, the current project to enlarge the Central Jail - can result in $2 - $3 million of additional cost. A delay in schedule may thus cost the County considerably more than an expensive frill or a mistake in plans or specifications.

Complaints by Architects and County Officials

During the course of our study, we interviewed a number of architects who have designed major facilities for the County. Invariably we heard complaints over the time consumed by the County in reviewing schematics, preliminary drawings and working drawings, the multiplicity of such reviews and plan checking, and consequently the long time it takes to receive approval on each phase of the project. Some architects also complained of the general lack of urgency on the part of County personnel in making the decisions necessary for the architect to continue plan preparation.

Delays in decision making, of course, occur in any organization, particularly in a government environment. Pending legislation, a forthcoming federal or state regulation, court decisions, changes in personnel, and so on, all may cause delays until the issue is settled. Moreover, the decision process in the County is complicated by the involvement of client departments - sometimes as many as 12 or more. Decisions must be made on their requirements and their agreement obtained on plan details as they are developed. This requires an extensive and coordinated effort by all concerned parties.
For their part County officials complain about delays caused by the architects for failure to submit their plans according to the agreed schedule. When this happens, the County staff may have to work overtime at a later date and in turn set back schedules for checking and review on other projects.

Our finding, is that the County' s procedures in this area lack specifics as to each official's role in the decision-making process and provide limited control measures to insure prompt processing. If project costs are to be kept under control, it is imperative that the County develop improved procedures for administration of the construction program.

Responsibilities Not Clearly Defined

The report by the Chief Administrative Officer in 1959 on the County's construction program presented an analysis of the administrative problems at that time and the means required to resolve them. This analysis resulted in the creation of the Capital Projects division in the Chief Administrative office, the development of the long-range capital projects program, and improved delineation of functions and responsibilities in the County Engineer's department. In addition to capital projects planning, the new division was assigned responsibility for establishing improved budgetary procedures over each phase of the project. As we have noted, these changes, together with the changes effected in the County Engineer's department, substantially improved the County's administrative control over project operations.

However, the 1959 report did not define the respective responsibilities of the Capital Projects division and the County Engineer as the project progresses from preparation of schematics through construction. A later directive in 1960 delineated the functions of the two agencies in general terms but left the details largely unsettled. As the two agencies now operate, the Capital Projects division has the primary responsibility for administration of the project through
the schematic plan phase. The responsibility then shifts to the County Engineer who carries on as the principal County contact through the preliminary drawing, final working drawing and construction stages.

Examination of the roles played by the two agencies reveals a difference of opinion over the objectives to be accomplished during each phase of the project, and as a consequence, the degree of administrative and technical control which the County should exercise. For example, the Capital Projects division, motivated by its concern for fiscal responsibility, believes the primary objective of the schematic phase is to establish a tentative estimate of construction costs as a basis for maintaining effective budgetary control. Major design and engineering decisions therefore must be agreed upon in the schematic phase in order to establish a realistic cost estimate. The Board of Supervisors, however, holds the County Engineer responsible for insuring that technical mistakes are not made on the project. He therefore reserves the right during later phases of the project to change decisions made in earlier phases or to postpone them altogether until further development of the design provides a better information base for making a decision.

This difference in philosophy makes it difficult to establish realistic schedules and realistic cost estimates. On too many projects, as a consequence, schedules slip and cost estimates increase during each succeeding phase, in some instances far in excess of the construction cost index.

A real need exists, therefore, to clarify and document the roles of the Chief Administrative Office and the County Engineer and to develop well defined procedures for effective cost control and phase by phase scheduling.
In 1965, on the recommendation of this committee, the Chief Administrative Officer established a Management Audit section in his office with the express purpose of resolving organizational and procedural problems of this type. We therefore have not pursued our analysis beyond a description of the problems. We believe they can be dealt with most effectively through the joint efforts of the Chief Administrative Office and the County Engineer.

Recommendation

We recommend that the Management Audit section in the Chief Administrative Office conduct a study in conjunction with the Capital Projects division and the County Engineer to develop a clear delineation of responsibility and improved control procedures for the administration of construction projects.

IV. USE OF THE COUNTY vs. OUTSIDE ARCHITECTURAL SERVICES

In addition to criticizing the selection system, the 1966 Grand Jury raised the question whether the County should expand its own architectural staff to perform directly the architectural services in connection
with the Capital Projects Program." On this subject the Grand Jury recommended that the Economy and Efficiency Committee conduct an in-depth study.

Charter Provisions

In considering this question it is necessary to recognize the legal restrictions placed on the County's use of outside architects, specifically the Charter limitations imposed on the County by the Civil Service system. In a long series of opinions interpreting these Charter provisions, the County Counsel has concluded:

"...under the Civil Service provisions of the County Charter work which is capable of being performed adequately and competently by persons selected under Civil Service cannot legally be performed by means of contracts with independent private agencies except in certain highly exceptional situations where the work to be performed is urgent, temporary or occasional, or requires expert knowledge or ability of a technical nature and is unobtainable from those in County employ or those who could be brought into such employment under Civil Service."

The foregoing principles must be fully and fairly recognized. The intent of the Charter to establish a "merit system" of employment free from a spoils system should be given full support.

However, the County Counsel, emphasizes that this does not mean that the Board of Supervisors is denied the flexibility to conduct the County's business on a reasonable and economic basis. The County is confronted with large fluctuations in its volume of demand for architectural services. The Civil Service provisions of the County Charter do not compel

the permanent employment of personnel to supply what is essentially a transitory need. They therefore do not require the County to staff for full peak demand periods, recognizing that to employ permanently at the peak level would be highly uneconomical. Peak demands can be supplied through contractual arrangements without violating the merit system of employment.
Therefore, within this framework, and giving full support to a merit system of employment, the County can achieve quality of product, efficiency and economy through selective use of architects employed through contractual arrangements.

**Current Balance of Architectural Work**

In the 1968-69 budget 36 projects were assigned to contract architects, representing a total construction budget of approximately $57,461,000. The average construction cost per project thus amounted to $1.5 million. The number of projects assigned to the County Engineer was 116, representing a total construction cost of approximately $7,772,000, or an average of $67,000 per project.

In addition to preparing plans for its assigned projects, the County Engineer 5 Architectural division is also responsible for such activities as soils exploration, checking plans of contract architects, development of County design and equipment standards, and contract administration and inspection. To perform this work the Architectural division currently has a staff of 112 people headed by a Chief Architect. Total budget for the function is $2,258,000.

Our conclusion is that this level of staffing both fulfills the intent of the County Charter and at the same time achieves a generally reasonable and economic balance of inside and outside work. The projects assigned to the County Engineer are generally small or remodeling projects. They can be accomplished most efficiently using internal staff. The staff can be assigned or re-assigned and schedules readjusted quickly as priorities change. In addition, the use of internal staff on small or remodeling projects eliminates the need for precise predetermining of project requirements and allows a more flexible and less rigid approach than is possible under a formal contract with an outside architect.
As projects grow in size and complexity, however, the use of internal staff becomes increasingly costly and inefficient. We are convinced that building up a large internal staff to handle these projects would result in higher architectural costs.

For example, among the projects currently awarded to outside architects are the Traffic Court ($15 million estimated construction cost), the Civic Center Mall extension ($16 million), the Martin Luther King Hospital ($24 million), and the Criminal Courts Building ($32.8 million). If these jobs were assigned inside, approximately 260 additional architects and technical personnel would have to be added to the Architectural division.

Although hiring this many employees would be a slow and difficult process undoubtedly delaying project schedules, the County could in time recruit this additional staff. The question is, what would happen to this staff when these projects phased out and the work load decreased? As we are all aware, government has a well developed capacity to expand, but almost no capacity to contract. Civil servants are rarely laid off, and they do not fade away. Hence, an expansion of staff in a public agency generally initiates a self-perpetuating cycle in which each increase in staff results in an increase in work load. So the bureaucracy grows.

In contrast to the County and other public agencies, private architectural firms are much more flexible and have a much greater ability to expand or contract quickly as work loads fluctuate. In the first place, they do not have the intricate examination and classification systems which Civil Service regulations require for public agencies. In addition, when an experienced new employee is hired by a private firm, he can usually be put to work almost immediately in a productive capacity. In public agencies like the County the new employee must go through weeks of training and indoctrination in County procedures, as well as state and
federal regulations, before he becomes fully productive. Consequently, private firms can expand to meet new project requirements much more rapidly than is possible with a public agency. When projects phase out and the work load decreases, they can reduce their work force just as quickly. Unlike the County Engineer, they are not restricted by Civil Service rules which require that any decision by management to discharge or lay off an employee may be appealed to the Civil Service Commission. Management must then prepare detailed documentation to support its decision and argue its case in a formal hearing, a procedure which may take weeks and sometimes months.

In the architectural profession, the interim time between projects is called "down time." To reduce the cost of down time, private firms commonly transfer employees between firms, either on a loan or direct employment basis, as work loads fluctuate. The County cannot do this. Therefore, even if the County were to pursue a vigorous hiring and lay off policy directed towards increasing or reducing staff in strict conformance with work load requirements, it could not possibly match the performance of private firms in keeping employee costs during down time to a minimum.

The intent of the County Charter to protect Civil Service employees is clear, but, we are sure, not to the point where no reasonable controls can be applied to an expanding bureaucracy. We believe the evidence is clear that using outside architects on larger projects provides an efficient and flexible means of tailoring architectural costs to fluctuating work loads. The Capital Projects division and the County Engineer must take care of planning and budgeting of programs, routine construction, policy decisions, supervision, review and co-ordination of plans, maintenance and other essential overhead work. Thereafter, the use of outside architectural firms is the logical and economical method of processing large construction projects.
Master Planning, Standard Plans, and Written Standards

Although we strongly oppose building up a large internal staff, we believe there are three areas where in the interest of economy and efficiency the work of the County Engineer should be expanded. These areas are master planning, standard plans and written standards.

**Master Plans** - The County's long range capital projects program includes a number of large facility complexes which require planned and orderly development. During recent years the Board of Supervisors has awarded a number of architectural contracts for master planning the development of such facilities to outside firms. Contracts to master plan the Lux Arboretum, Hancock Park, Wayside Honor Rancho, the Museum of Natural History and the Harbor General Hospital have gone to outside architects. Most recently similar contracts have been awarded for the Los Angeles County-USC Medical Center and the Puddingstone Regional Park.

A master plan is not a one-shot operation. It must be kept up to date or it is useless. Where the project requires talents of a specialized
nature not ordinarily available on the County staff, a contract master plan architect should be appointed on a
continuing basis. It is not economical for the County to enlarge its staff for such specialized requirements.
For projects of a general or routine nature, however, we believe the original planning, as well as the continual
updating, should be performed by personnel in the County Engineer's department. County personnel are more
familiar with the needs, problems, and progress of County development and can work on master plan
assignments as the need arises with much less formality than is required under a contractual arrangement. In
the past the County Engineer has developed master plans for the General Hospital, Rancho Los Amigos, and
John Wesley Hospital.

Standard Plans - We believe more effective use of internal staff can be realized through expansion of
the standard plans program. It should not always be necessary to develop an entire new set of plans each time
projects of a like nature are authorized by the Board of Supervisors. Whether the project is assigned to
County staff or to a contract architect, the use of standard plans on such projects can substantially reduce plan
development costs by eliminating the schematic plan phase of plan preparation. Their use thus shortens the
time from plans to construction.

The Board of Supervisors on more than one occasion has advocated the use of standard plans
whenever practical. However, in a number of cases where standard plans might have been used, no
consideration apparently was given to this approach. Consequently, although some standard plans are now
being used, the program is too limited. We believe it should be expanded.

The program should include specific guidelines for determining when standard plans should be used
and when they should not be used. Projects
for which standard plans should be prepared certainly include swimming pools, bath houses, and restroom facilities. They may include Sheriff's stations, fire stations and similar facilities. Standard plans should be prepared on a prototype basis as the need occurs or on a pre-planned basis depending on whichever is the more efficient approach.

Standard plans, however, should not be used indiscriminately. The standard plan first of all must be applicable to the site of the project. In addition, a standard plan clearly is not practical when extensive modification will be required. Thus standard plans should be approached with caution, for there can be occasions when adaptation of standard plans will result in a costly and wasteful effort. Consequently, no standard plan should be prepared until its use has been reviewed and agreed to by the Chief Administrative Officer, the County Engineer, and the client department. Their recommendations should be presented to the Board of Supervisors for approval on each project.

Written Standards - Under present procedures, the contract architect ordinarily has no written standards furnished to him by the County covering acceptable materials and equipment for use on County projects. It is our understanding that in many cases such written standards exist, but because of lack of manpower, have not been kept up to date. We believe current and comprehensive standards would facilitate the work of the Citizens Advisory Committee on County Construction, cause less confusion and friction between the County and the contract architect, reduce costs for design and construction of facilities and stabilize cost estimates for like facilities. The value of such standards is worth the effort of formulation and updating. Consequently, we believe they represent another area in which more efficient use of the County's architectural staff should be made.
We recommend that the Board of Supervisors:

1. Continue the present policy of assigning large construction projects to contract architects and small or maintenance projects to the County Engineer.

2. Assign master planning projects to the County Engineer unless the project requires talents of a specialized nature not ordinarily available on the County staff. The Chief Administrative Officer and the County Engineer should determine if additional personnel and classifications are required to perform this work internally.

3. Direct the County Engineer to expand the program for the preparation and adaptation of standard plans for repetitive projects.

4. Direct the County Engineer to re-establish and expand the program of written standards covering materials and equipment to be used for County facilities. These standards, prepared by the County Engineer, should be approved by the Citizens Advisory Committee on County Construction and the Chief Administrative Officer prior to promulgation.