MASTER PLAN FOR CAMPUS PHYSICAL DEVELOPMENT

CALIFORNIA STATE POLYTECHNIC COLLEGE SAN LUIS OBISPO

CORWIN BOOTH & ASSOCIATED ARCHITECTS SAN FRANCISCO, CALIFORNIA
A LETTER FROM THE PRESIDENT

The Master Plan presented with this booklet, like previous master plan revisions, has been reviewed with appropriate faculty and administrative groups of the California State Polytechnic College, San Luis Obispo. This revised plan provides assurance that the campus will be both attractive and functionally efficient when the target enrollment figure of 12,000 F.T.E. is reached, approximately six years from now. The revisions proposed in this Master Plan are best described as minor alterations to the campus plan previously approved by the Trustees on June 2, 1966. Even though the changes are minor, we believe they are essential and in keeping with the College's latest approved Academic Master Plan. Furthermore we believe the proposed revisions provide flexibility to adjust to changing educational needs.

I endorse the proposed revised Master Plan as a necessary step in improving the physical plant of the California State Polytechnic College, San Luis Obispo.

Robert E. Kennedy
President
AIMS OF THE COLLEGE
California State Polytechnic College provides occupational education at the collegiate level in agriculture, architecture, engineering, and the arts and sciences. Its arts and sciences instruction also emphasizes the preparation of secondary school teachers. General education courses and participation in campus activities are combined with the college’s specialized instruction to prepare graduates for citizenship and leadership.

The basic purpose of California State Polytechnic College is to prepare young men and women for managerial, technical, and teaching occupations by training the hands as well as the head, by adding “know-how” to “know-why.” The training is specific and practical. Each year of study is planned to prepare the student for additional jobs in the training area of his major department. Requirements of the occupation as well as those of professional graduate schools, determine the educational experiences offered to each student. Practical laboratory work under actual conditions is emphasized. Students learn by doing. They may also earn while learning through the enterprise system of instruction in which the college has been a pioneer.

To make maximum use of the student’s interest in his field of specialization as an incentive to study, work in the major department is begun in the freshman year. This plan also ensures job preparation for the student who cannot spend four years at college. The course of study, therefore, is “upside-down” in comparison with the conventional college program which groups general education courses and basic theory into the first two years while deferring the more specialized and practical work until the last two years. Through early contact between the student and the practical phases of his major subject, the college seeks also to make the student aware of the value of sciences related to his major so that he may apply himself more diligently to such courses.

The general education courses and the related courses which support the occupational instruction are offered in each of the four college years. This plan makes it possible to schedule in the later college years those courses with content which requires greater maturity and experience. Students thus have a better opportunity to understand what they are studying and to obtain maximum values in general education.

California State Polytechnic College accepts responsibility not only for the occupational education of its students but also for helping them to obtain the best possible career opportunities. Further, through follow-up visits to the graduate and his employer it provides on-the-job assistance to the Cal Poly graduate during his first years in the field.
HISTORY OF THE COLLEGE
1901 - 1911

The State legislature founded the California Polytechnic School with the express stipulation that it stress agricultural and vocational training. Leroy Anderson, the first director of the school, by emphasizing earning while learning and learning by doing set the basic philosophy. During this first decade the student body of the Polytechnic increased from 16 to 176.

1911 - 1921

World War I affected the institution considerably as military training became compulsory for all men students — a ruling remaining in effect until 1932 — and 147 Polyites joined the armed services. Added to the curriculum were courses in farm machinery and auto mechanics, and a new Academic Department was created.

1921 - 1931

Early in the 1920's the legislature placed the institution under the direct supervision of the State Superintendent of Public Instruction. During the middle years of this decade, enrollment exceeded 400, six additional major buildings appeared, the project system commenced, printing was included in the curriculum, and the Polytechnic became a six-year institution with the addition of a junior college division.

1931 - 1941

The California Polytechnic barely survived the economic depression of the early 1930's. Not content with drastically slashing the school budget, the legislature seriously considered abolishing the institution entirely. Then in 1933, with the enrollment having fallen to fewer than 100 students, Julian A. McPhee, Chief of the California Bureau of Agricultural Education, agreed to take over the presidency of the Polytechnic, now reorganized along vocational lines as a two-year technical institute.

1941 - 1951

By 1942 the Polytechnic had become a four-year college granting bachelor of science degrees in agriculture and in engineering. During World War II the campus was the site of a Naval Flight Preparatory School from which more than 3600 naval aviation cadets were graduated. The first five postwar years saw tremendous gains for the college in curricular offerings, physical plant and enrollment. Creation of a new Science and Humanities Division considerably widened the curriculum. Enrollment reached the 2,900 mark.

1951 - 1961

Expansion and change were the keynotes of the decade 1951 - 1961. Highlights included addition of numerous academic buildings and of residence halls, doubling of the staff, admittance once again after a lapse of some thirty years of co-eds, a Master of Arts program in education, new majors, and a four-year ROTC program.
On the San Luis Obispo campus prior to 1952 an estimated $1,632,700 had been spent for permanent improvements. This amount had grown to $29,267,500 for construction and equipment by the end of the decade. This total does not take into consideration $8,012,500 for the five buildings completed during 1962 nor $11,623,700 invested in minor service areas, streets, landscaping and utilities.

Before 1952 permanent buildings included only Heron, Jesperson and Chase Residence Halls, Crandall Gymnasium, the Natatorium, Air Conditioning and Administration Buildings, Machine Shops, Farm Shops, Stadium and Library.

The five Mountain residence halls were added in 1952 and the Power Plant and Mechanical Engineering Laboratory in 1954. During 1955, the Science Building, the Women's Physical Education Annex, and the Horseshoeing Laboratory were completed. Aeronautical and Agricultural Engineering buildings were added in 1956, Engineering East and the relocated welding shops in 1957, the Erhart Agricultural Building and the Health Center in 1959. Campus construction had its peak in 1960 with expenditures of $9,008,200 resulting in the completion of six residence halls, the Mathematics, Home Economics, Men's Physical Education Building and the outdoor playing fields. In 1961 almost $7,000,000 more was invested in completion of the College Dining Hall, Corporation Yard, the English and Speech wing, the Graphic Arts, and Music, Speech and Drama Buildings.

Master plans that were developed prior to World War II were based primarily on the expectation of a small technical institute situation. Approval to offer the bachelor of science degree in 1940 and the subsequent changes in enrollment expectation caused the master plans of the 1930's to be quickly outdated.

One of the results of the Survey of Higher Education in California by Dr. George Strayer was the recommendation that each of the State Colleges be planned for an "ultimate" enrollment, depending upon location, type of curricula, etc. It was recommended that Cal Poly — San Luis Obispo Campus plan for 3,600 individuals and a gross F.T.E. target of 4,080. The firm of Allison and Rible of Los Angeles was selected by the State Department of Education, the State Department of Finance and the State Division of Architecture to prepare a master building plan for Cal Poly for that target figure.

The date of the consummation of this plan was December 1949. Subsequently Allison and Rible was given the contract to design the Science Building and the building was constructed in accordance with the master plan.

In the spring of 1954 the late President, Julian A. McPhee, approved the long-range step by step implementation program for the master plan. All of this was based on the target of 4,080 F.T.E.

In August of 1954 the entire basis for master planning was changed by the Departments of Education and Finance. It had become apparent that the previous ultimate figures recommended by the Strayer report would not be adequate for the State Colleges in
California. There was no agreement, however, as to what an ultimate figure should be, so a moving five year target was attempted. Buildings requested in the 1955-56 budget were to be based on an enrollment target of 4,500 F.T.E. By 1956 this target had increased to 6,000 F.T.E. By 1958 it became apparent that the moving five year target concept was inadequate. The decision was made to master plan the non-metropolitan State Colleges at 12,000.

Even though the master plan target was in an unstable condition, several of the buildings that were requested in 1956-57-58 were designed for possible expansion.

The Los Angeles office of the State Office of Architecture and Construction, under the direction of Mr. James Gillem was responsible for master planning the San Luis Obispo campus. The architect specifically assigned to coordinate the planning was Mr. Joseph Kitchaven under the supervision of Carlton Camp and Mac Cason. Many conferences were held with the college staff in making the transition from the master plan of Allison and Rible to the one that was in effect at the time the Trustees became responsible for the State Colleges.
THE ASSIGNMENT
To prepare a long range master plan for the development of the California State Polytechnic College, San Luis Obispo, planning for an orderly growth and expansion to 12,000 full time equivalent enrollment by 1974.

To aid in lending distinction and a feeling of continuity and unity to the campus.

To establish a vocabulary of construction and planting to develop this continuity.

To coordinate the planning of the campus with the planning of the surrounding area, taking into account local problems of zoning, peripheral development and circulation of traffic. To work with architects and engineers assigned to individual projects on the campus and to coordinate their efforts into the orderly development of the campus.
DESIGN CRITERIA
1. The campus is to be planned for 12,000 F.T.E.
2. Access to the campus must be considered with regard to future plans for the surrounding area.
3. Building expansion must occur in areas adjacent to similar facilities. This will apply to expansion of the following:

   Applied Sciences
   Applied Art
   Engineering
   Agriculture
   Architecture
   College Union
   Residence Halls
   Physical Education

   Building expansion is based on enrollment projections and analysis of capacity requirements.

4. Maximum separation between vehicular and pedestrian traffic must be provided.
5. Service access to individual buildings must be adequate.
6. Consideration must be given to the problems of handicapped persons using the campus.
7. It is anticipated that 15% of the students will be married and that housing will have to be provided for 25% of the remainder, approximately 3,000 students. (Several suitable sites are available for married student housing.)
8. Parking is to be supplied for 50% of the ultimate F.T.E. or 6,000 cars.
9. Parking must be located adjacent to the main entrance of the campus and outside the academic center.
10. Parking areas must be designed so that they do not destroy the appearance of the campus.
11. Implementation of the master plan must be possible without disruption of the academic function of the college and must allow for any sequence of construction.
THE SOLUTION
The California State Polytechnic College at San Luis Obispo is already largely developed. Any master plan for its future growth must accept what exists and allow for a growth whose physical elements and time schedule are not fixed.

Therefore, this master plan intends to set a flexible framework within which the college can grow so that when the ultimate expansion has taken place, a physical entity will exist which will have its own special character, unity and beauty.

In reviewing the Master Plan it should be noted, as evidenced by a suitably marked copy of the Master Plan, enclosed herewith, that the various academic areas of the campus are fairly cohesive. The Agriculture portion of the campus is concentrated on the north edge, Engineering generally on the south, with the supporting courses in Arts and Sciences in the center. In addition, the Residence Halls and Dining Complex are concentrated along the east side and the student activities and Physical Education program along the south.

The 1968 revision of the Master Plan, a copy of which is enclosed in this brochure, is more in the nature of adjustments and refinements to the master plan than major revisions. The existing and funded buildings are in the darker brown shade and the programmed buildings in yellow. The master-planned instructional capacity of the campus is provided entirely by the brown and yellow buildings. In addition, however, there are four building sites adjacent to or within the Perimeter Road that will permit other construction to take place if at any time it is determined advisable to exceed the present 12,000 F.T.E. limitation.

It is immediately apparent to a visitor that the campus at San Luis Obispo is dominated by the automobile; when both the student and automobile population increases, the campus could have the appearance of an enormous parking lot with buildings rising at random from the sea of multi-colored vehicles. Apart from the inhuman ugliness of this scene, such a campus would ill serve the purpose of the college which is to prepare young people for the future. Noise, traffic hazards, and the continual irritation of finding parking space would not help create an atmosphere of dignity and calm beauty.

Therefore the basis of the master plan is that California State Polytechnic College at San Luis Obispo become a “walking campus.” The master plan shows the cars removed from the academic campus and plans for the parking area to be so graded and landscaped that the automobiles become concealed as much as possible.

Large parking areas are placed next to the entrance gates to serve both students and faculty. The new Dormitories, as well as the old, are served by parking lots adjacent thereto, some of which have already been developed. A small special parking lot is located within the Perimeter Road for the use of visitors.

The landscaped perimeter boulevard enclosing the academic campus would be used as a thoroughfare only by visitors and others with special permission. It could be used for parking on special occasions such as visitors’ day.
Within the perimeter boulevard, existing roads would become malls; trees, benches and surface treatments would create the "walking campus."

The design of the groundscape will allow for service vehicles to have necessary access to the buildings and would allow use by vehicles for handicapped persons.

Several courtyards have been planned within the "academic campus." These quiet, sheltered inviting areas where students will study, talk, eat and relax would encourage the social and intellectual interchange which is a vital part of college life. Provision should be made within the design of these courts for works of art donated to the college by alumnae and student groups; works by students themselves would stimulate feelings of pride in the college and would help to create a "Cal Poly" character.

It will be noted that a large court area will now be formed between Engineering West and the Library and the new Architecture Building. This open space offers tremendous potential for the developing of an attractive central mall for the campus.

These refinements in the plan were essentially required by the restructuring of the former Engineering South complex into an Engineering-Architecture facility, the Architecture portion of which is located adjacent to the present Library which will also be occupied by Architecture upon its abandonment at the completion of the new Library. The new Library is shown in the same site as on the original plan, except that it is now programmed for a full 12,000 F.T.E. and not as an addition to the present Library building. Classroom Building No. 4, adjacent to the Biological Sciences Building, has been shifted from directly east of the Science Building to north of the Science Building, thereby creating a better instructional relationship in the integration of these two facilities.

An addition has been planned to the present Administration Building to raise its F.T.E. capacity from 10,300 to 12,000. Classroom Buildings Nos. 3 and 5 have been slightly changed in location as a result of further and more refined studies of the programs to be contained in them.

At the California Boulevard entrance to the campus, the original large parking lot has been reduced in size to provide for additional Engineering building construction sites and to retain much of the mature specimen planting in this area. The capacity of the lot so reduced by this move has been added to the major parking lot at the northwest corner of the academic center so that the total space available for on-campus parking in permanently surfaced lots is approximately 6,000 spaces.

The California Boulevard entrance has been realigned slightly at its northerly end to skirt Poly Grove, an attractive park area, and the intersection of California Boulevard as extended with the new entrance road has been restudied and redesigned.
ARCHITECTURAL VOCABULARY
AND
LANDSCAPING
Over the years, as the various buildings were added to the San Luis Obispo campus, many different architectural styles were used. In order to tie the campus together into a cohesive whole, and inasmuch as additional buildings will be added from time to time, a color and material palette has been developed, incorporating a tan brick which has been used on all of the recent construction and will be used in varying amounts and in various ways on all future construction. This will be the dominant building material. In addition, a master “color scheme” was initiated approximately six years ago and has already been applied to a number of the buildings on the campus and will be applied to other buildings as the need for repainting arises. This procedure is only partially successful and does not integrate the varying styles of architecture to the extent which we would like. Additional architectural unity of the campus, we believe, can be accomplished through the use of appropriate landscaping and groundscape treatment. A plan which illustrates how this might be accomplished is enclosed herewith. It will be noted that the internal streets have been converted to pedestrian malls, attractive courtyards created where we believe it is appropriate, and the present mature trees throughout the campus retained and used as a basis for further development in their areas. Mr. Anthony M. Guzzardo, the Consulting Landscape Architect for the campus, has assisted in this and is developing a palette of planting materials for use throughout the campus.

By developing this consistency of landscaping, including trees, shrubs, ground textures, benches, drinking fountains, litter containers, signs, light standards, notice boards, etc., combined with the repetition of building materials and colors, we will achieve a feeling of continuity and unity previously lacking.
CAMPUS PROPERTY DISTRIBUTION
TOTAL AREA OF COLLEGE OWNED PROPERTY
ACQUIRED PROPERTY FROM CAMP SAN LUIS OBISPO

AREA OF PRESENT SITE

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<td>ACADEMIC AREA (374 ACRES INCL. CORP. YD.)</td>
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<td>OUTLYING AREAS AND PHYSICAL IMPROVEMENTS</td>
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<tr>
<td>IRRIGATED FIELD AND TRUCK CROPS</td>
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<td>IRRIGATED ORCHARDS</td>
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<td>NON-IRRIGATED FIELD CROPS</td>
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<td>GRAZING AND SUBMARGINAL LAND</td>
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ACADEMIC AREA (INCL. CORP. YD.) 374 ACRES

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<tr>
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<td>PARKING 6000 CARS 48 ACRES</td>
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<td>OUTDOOR PHYSICAL EDUCATION 30 ACRES</td>
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<td>HOUSING 4000 28.9 ACRES</td>
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<tr>
<td>CORPORATION YARD 10 ACRES</td>
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<tr>
<td>REMAINDER</td>
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EXISTING AND FUNDED PERMANENT INSTRUCTIONAL CAPACITY FACILITIES

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<td>08</td>
<td>AGRICULTURAL ENGINEERING</td>
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<td>AGRICULTURE</td>
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<td>COMPUTER SCIENCE</td>
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<td>20</td>
<td>ENGINEERING EAST</td>
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<td>ENGLISH</td>
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<td>FOOD PROCESSING</td>
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<td>GRAPHIC ARTS</td>
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<td>MACHINE SHOP</td>
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<td>MATHEMATICS &amp; HOME ECONOMICS</td>
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<td>MEN'S PHYSICAL EDUCATION</td>
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<td>52</td>
<td>SCIENCE</td>
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<td>58</td>
<td>WELDING</td>
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TOTALS | 835,876 | 7336 |

PROGRAMMED INSTRUCTION CAPACITY FACILITIES

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<td>1971</td>
<td>LIFE SCIENCES (NO. 4)</td>
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<td>1971</td>
<td>REMODEL LIBRARY</td>
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<td>CLASSROOM BUILDING (NO. 5)</td>
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<td>1972</td>
<td>WOMEN'S PHYSICAL EDUCATION</td>
<td>42,805</td>
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GRAND TOTALS | 478,191 | 4152 |
During the preparation of the master plan help was received from both the staff of California State Polytechnic College and the Chancellor's Office. We are particularly grateful to:

Robert E. Kennedy  President, California State Polytechnic College
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