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ABSTRACT

THE OVERALL CAMPUS DEVELOPMENT AND DISTRIBUTION OF THE REQUIRED FACILITIES ARE DISCUSSED IN THIS STUDY, WHICH WAS PROMPTED BY THE INADEQUACY OF SEVERAL EXISTING FACILITIES AND AN UNORGANIZED CAMPUS LAYOUT. AN ANALYSIS IS DEVELOPED OF--(1) THE EDUCATIONAL PROGRAM, (2) THE RELATIONSHIP OF THE CAMPUS TO THE CITY AND THE NEIGHBORHOOD, (3) THE CHARACTERISTICS OF THE SITE, AND (4) THE FUTURE PROJECTIONS OF THE JUNIOR COLLEGE, WITH THE AID OF MANY GRAPHS, CHARTS, AND SKETCHES. THE INFORMATION GATHERED IN THE ANALYSIS STAGE IS SYNTHESIZED INTO THE DEVELOPMENT PLAN WHICH SUGGESTS PROPOSALS, PHASING, AND COSTS OF THIS JUNIOR COLLEGE CAMPUS.
(TC)

LAREDO JUNIOR COLLEGE
CAMPUS DEVELOPMENT PLAN

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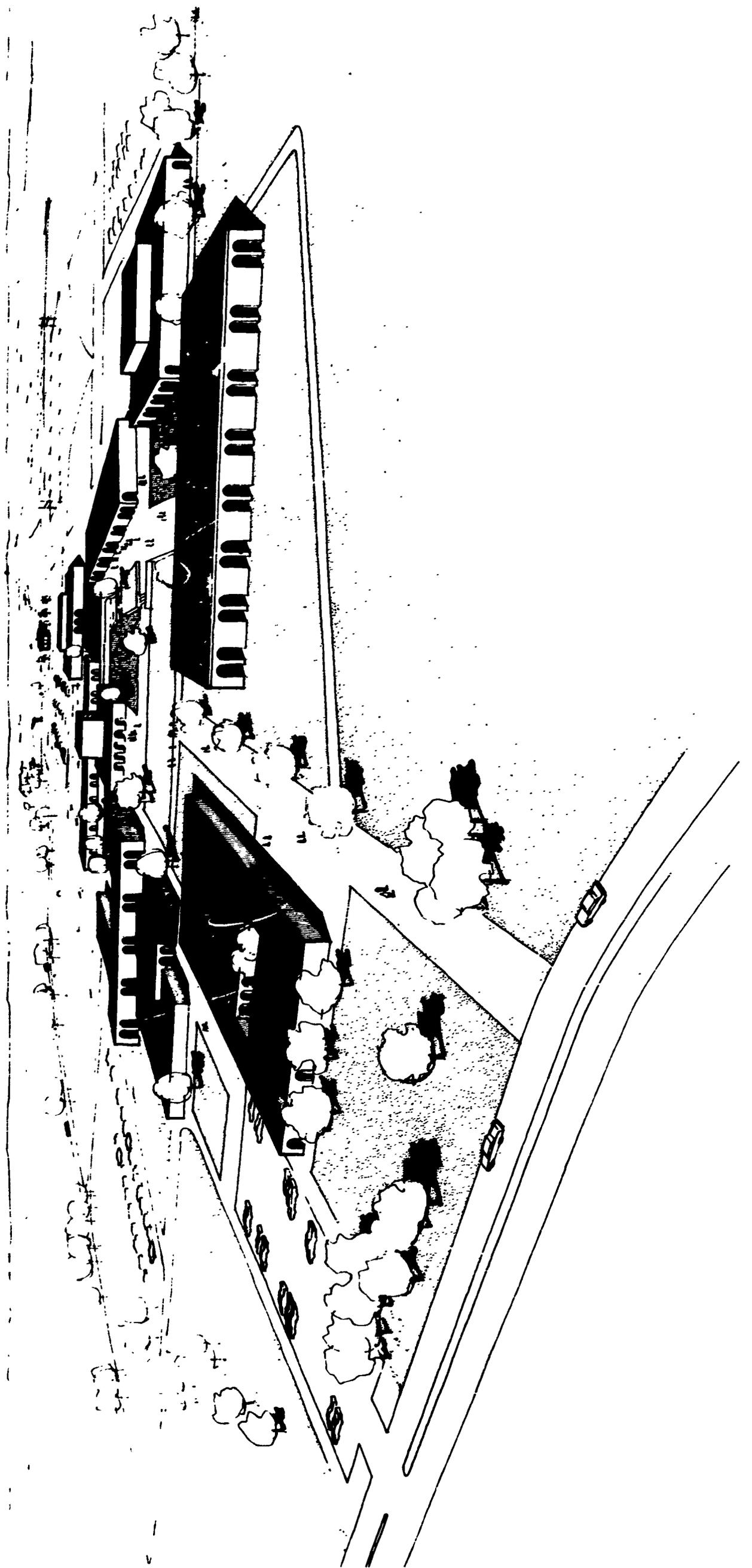
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ACKNOWLEDGMENTS

This campus planning study is the result of cooperative effort. The collection of data, maps and information necessary for the study could not have been accomplished without the contributions of the college administration and non-college officials.

During the planning process much of the analysis and investigations contained in this report was presented to the Board of Education. An evaluation of three alternate locations for the campus core area was presented to the Board with a recommendation for one location, in order to receive direction for further development of the plan. This evaluation is not included in this report in the interest of brevity. We are grateful for the reactions of members of the Board during the process.

We are deeply indebted to Dr. Ray A. Laird, President of the Laredo Junior College, for assistance in collecting and analyzing the data and in formulating and evaluating the schemes leading to the development plan presented in this report.

CAUDILL, ROWLETT and SCOTT

**William M. Peña,
Project Director.**

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THE PROBLEM AND THE NEEDS

The college administration has recognized not only the immediate need for more physical space, but the fact that if the Laredo Junior College is to improve as it grows, future expansion must be planned carefully. The concern is not only for physical space but also for the emotional environment appropriate for higher education.

The basic problems concern overall campus development and the supply of required facilities for enrollments of 1000 and 1500 students. The present linear arrangement of buildings does not promote the feeling of a unified campus, is overextended for the size of the student body, and does not express desirable functional relationships of disciplines and buildings. A real "campus" environment is missing. One need, then, is to arrange future facilities in such a way that a unified campus is promoted progressively with each new building.

Many excellent junior colleges have been established in converted facilities. Such was the case of the Laredo Junior College. The need for additional facilities and for the establishment of the college image has led junior colleges to establish new campuses or to replace existing buildings. The converted army barracks and the "temporary" buildings with their high maintenance costs have served their purpose and they must continue to serve until funds for new buildings are available. However, they are not conducive to the image students have of higher education. In the longrange plan the existing buildings cannot be considered as permanent, with the exception of the former army chapel and guardhouse.

A crowded condition exists at the present time in the library and the science building which can threaten accreditation. Neither building can be expanded in a manner to meet future needs satisfactorily. There is no physical education program at the college because the present gymnasium facilities are inadequate. The need for new buildings is imperative to relieve crowded conditions, to create a college image and to stimulate enrollment.

ENROLLMENTS AND PROGRAMS

We can only be sure of one thing, constant change, both in enrollment and in educational program. Nevertheless, a detailed study was made leading to the space requirements for enrollments of 1000 and 1500 students based on a program slightly adjusted to anticipate reasonable changes. The study was presented to the Board of Education in the form of statistical calculations and charts. While the process of determining the number and size of teaching stations and service areas is omitted here in the interest of brevity, the resulting gross areas are discussed in the next two pages.

The study considered the possibility of change from a junior college to a senior college. For a given enrollment of 1000 or 1500 students, the new facilities would serve equally well for junior and senior college programs with minor modifications. A senior college program might have a greater emphasis on science and a lesser emphasis on vocational-technical education. The science facilities would not necessarily increase in size but changes in laboratory equipment would be expected. The vocational shops could be converted to industrial arts or engineering shops, but some converted senior colleges have retained their vocational-technical programs. The planned library with its built-in expansion would be adequate for a four-year college.

PRIORITIES AND SPACE NEEDS

The data on the opposite page lists the buildings in their priority for construction. It also tabulates the gross areas contained in each building as the space requirements for 1000 and 1500 students. These gross areas are adequate for their intended use -- that of blocking out rough building areas for long range campus planning.

The library-classroom building initially would contain classrooms for language, English and social studies. With enrollment reaching 1500 students, English and social studies classrooms would be relocated in a general classroom building (Priority No. 7) together with education-psychology classrooms. The library and the language department would expand in place.

A better plan would be to build the library (with only the language department) and the separate general classroom building for English and social studies, both under the same priority. Both buildings would be planned for expansion -- the addition to the general classroom building would come under Priority No. 7.

Science, mathematics and mechanical drawing would expand in place after the relocation of education-psychology classrooms.

All other buildings except the business administration building would be sized adequately for both enrollment levels. The expansion for business administration would appear to be so slight that this could be included in the initial construction.

While faculty offices are listed separately and without priority here, they would be included in the appropriate buildings.

| <u>BUILDING PRIORITIES</u> | <u>1000 Students Gross Area</u> | <u>1500 Students Gross Area</u> |
|--------------------------------|-------------------------------------|-------------------------------------|
| 1. LIBRARY-CLASSROOM BUILDING | | |
| Library | 17,325 | 26,820 |
| Language + Lab | 2,325 | 3,450 |
| <u>English + Soc. Stud.*</u> | <u>10,625</u> | <u>15,000</u> |
| | 30,270 | 30,270 |
| 2. MATH-SCIENCE | | |
| Science | 26,400 | 26,400 |
| Math | 3,375 | 4,500 |
| Mech. Drwg. <u>Ed.-Psych.*</u> | <u>2,625</u> | <u>1,500</u> |
| | 32,400 | 32,400 |
| 3. PHYSICAL EDUCATION | 25,066 | 25,066 |
| 4. STUDENT CENTER-CAFETERIA | 11,687 | 11,687 |
| 5. LITTLE THEATER | 9,592 | 9,592 |
| 6. BUSINESS ADMINISTRATION | 12,000 | 13,500 |
| 7. GENERAL CLASSROOM BUILDING | | |
| * English + Soc. Studies | | 13,500 |
| * Education-Psychology | | <u>2,250</u> |
| | | 15,750 |
| 8. FINE AND APPLIED ARTS | | |
| Art | 2,250 | |
| Music | 2,250 | |
| Speech | 3,900 | |
| Home Ec. | <u>5,625</u> | |
| | 14,025 | 14,025 |
| 9. VOCATIONAL-TECHNICAL | 13,333 | 13,333 |
| 10. ADMINISTRATION | 11,660 | 11,660 |
| FACULTY OFFICES | <u>6,400</u> | <u>9,600</u> |
| | 166,433 sq. ft. | 186,883 sq. ft. |

CAMPUS-CITY RELATIONSHIP

To some extent the future campus development will be influenced by the system of streets and arterial highways which will serve the student generation area -- bringing students to the campus from Laredo and the surrounding communities.

The map on the opposite page shows the proposed plan under consideration by the City Planning Commission for expressways and major streets. Note the location of the campus on the western edge of the city. The proposed Rio Grande Parkway running north-south would cross the western portion of the campus and then turn at the bend of the river to join a proposed east-west freeway. This would provide the campus with a western entrance, but more importantly it would make the campus more accessible.

As a major east-west street, Washington-Guadalupe Street could bring vehicular traffic directly to the campus.

EXISTING SITE ACCESS

At present access to the site is limited to two eastern entrances. The accompanying map indicates these entrances at Victoria and Hidalgo Streets whose railroad crossings are potential delay and hazard areas. Main Street is shown as a north-south collector street.

Access is restricted on the three other sides of the campus. Other entrances are not desirable unless they would serve large numbers of students with direct access. For example, an entrance on the south would be undesirable now since the student generation area in that direction is very small.

PROPOSED SITE ACCESS

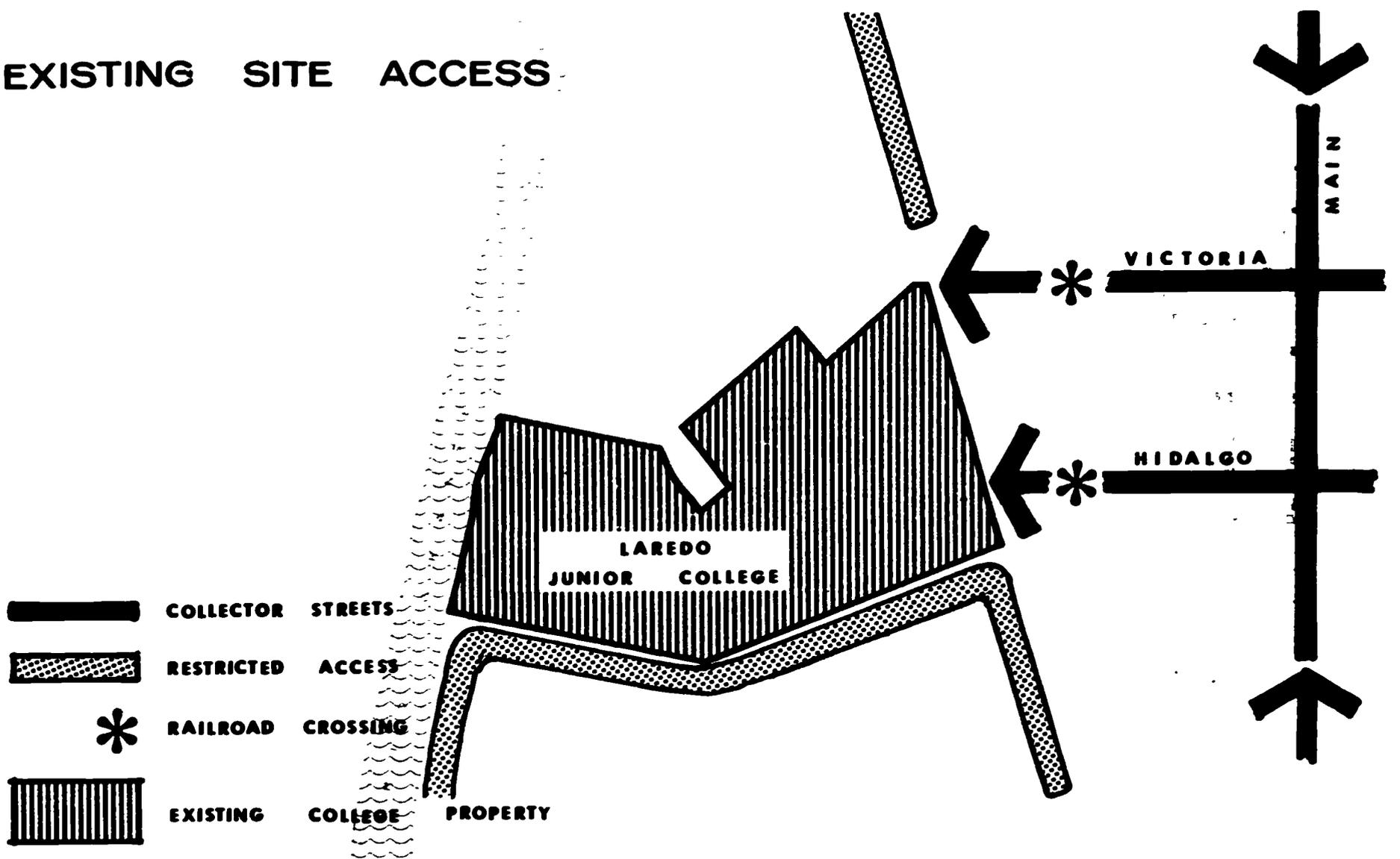
With Washington-Guadalupe Street as a major east-west street proposed to link with the Rio Grande Parkway, it would seem wise to consider a future entrance at Washington Street instead of at Victoria. Eventually an overhead bridge at the railroad crossing might eliminate the delay and hazard problems.

The entrance at Hidalgo would be supplemented by one or two southern entrances for traffic peeling off from the east-west portion of the River Parkway.

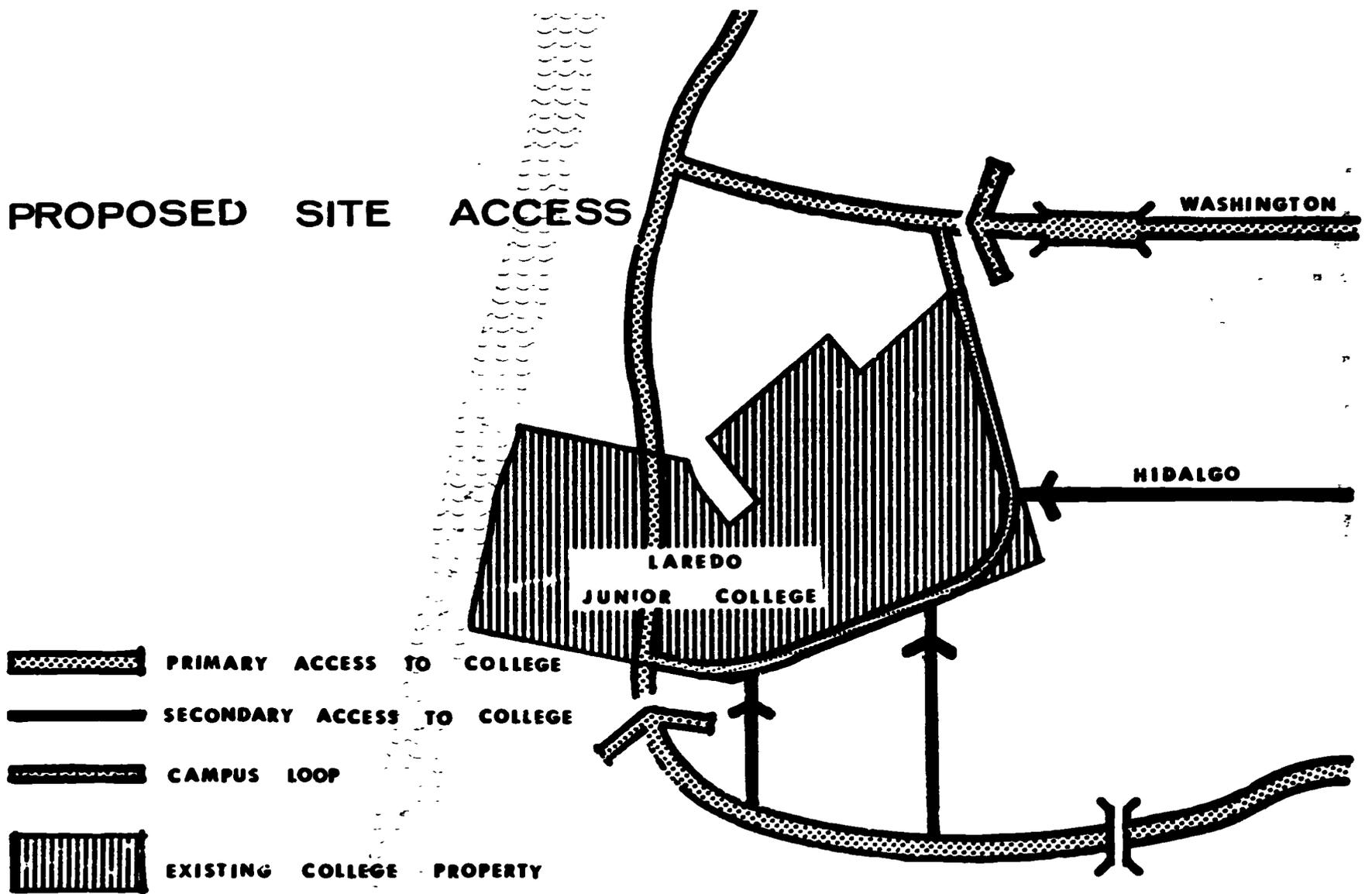
Both the eastern and the southern entrances would be connecting to a 4-lane urban traffic road running along the eastern and southern boundaries of the campus -- which together with the extension of Washington Street and the River Parkway would form an outer campus loop.

The River Parkway would tie the campus more closely to the Central Business District and to more remote areas east and north of the campus.

EXISTING SITE ACCESS



PROPOSED SITE ACCESS



EXISTING COLLEGE NEIGHBORHOOD

The development around the campus, outside the Fort McIntosh boundaries, is a mixture of industry, railroad trackage and housing. Much of the existing development is substandard and deteriorating, and is jumbled together giving the area a cluttered appearance.

Lack of good access roadways has hindered development of the river front

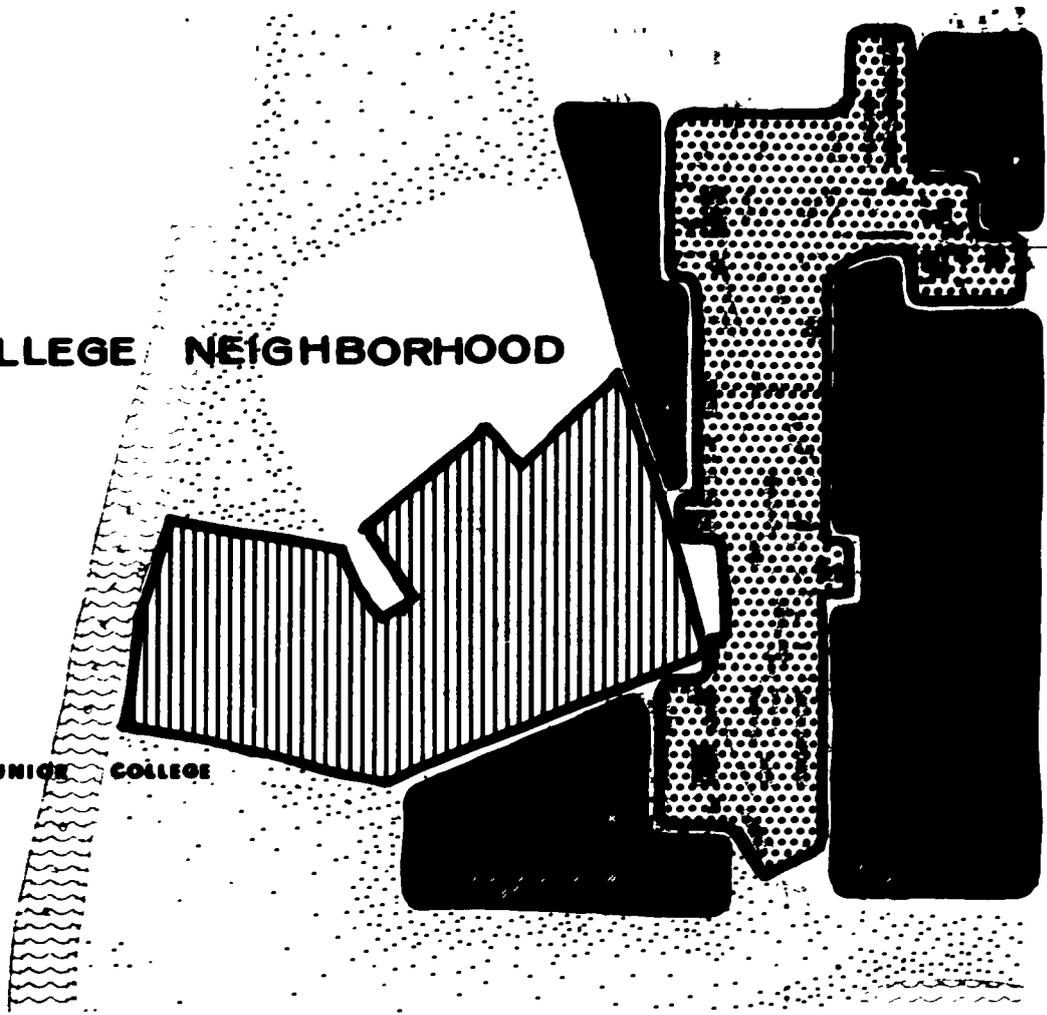
FUTURE COLLEGE NEIGHBORHOOD

It would be helpful to encourage the setting up of controlled land use zones and the designation of renewal and rehabilitation areas in the college neighborhood. The map suggests an orderly pattern of future land use.

The River Parkway would open the way to the river front development as a public park. This setting would be an additional factor in developing the campus to its potential as a real community focal point.

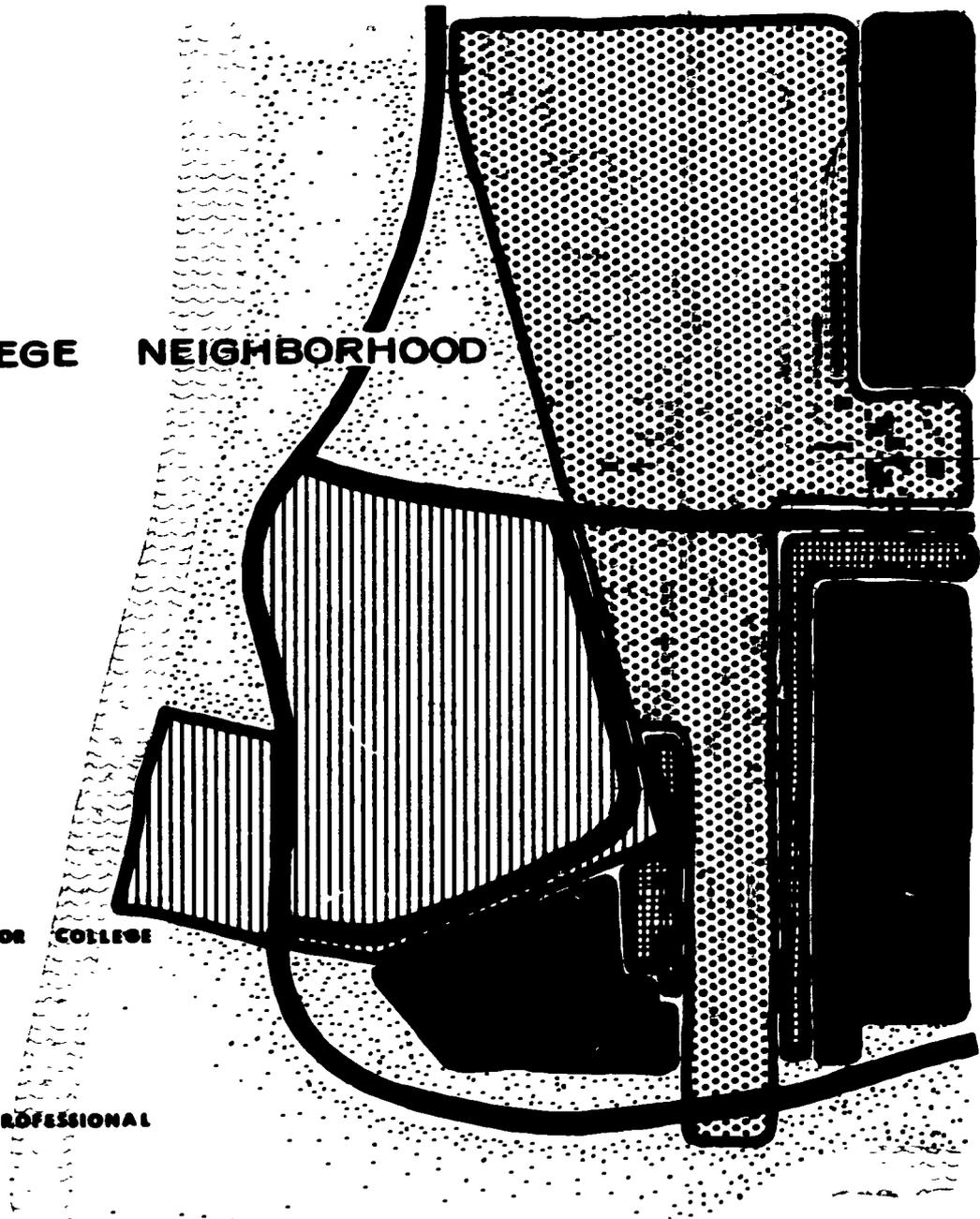
EXISTING COLLEGE NEIGHBORHOOD

-  LAREDO JUNIOR COLLEGE
-  RESIDENTIAL
-  INDUSTRIAL
-  PUBLIC



FUTURE COLLEGE NEIGHBORHOOD

-  LAREDO JUNIOR COLLEGE
-  RESIDENTIAL
-  INDUSTRIAL
-  BUSINESS - PROFESSIONAL
-  PUBLIC



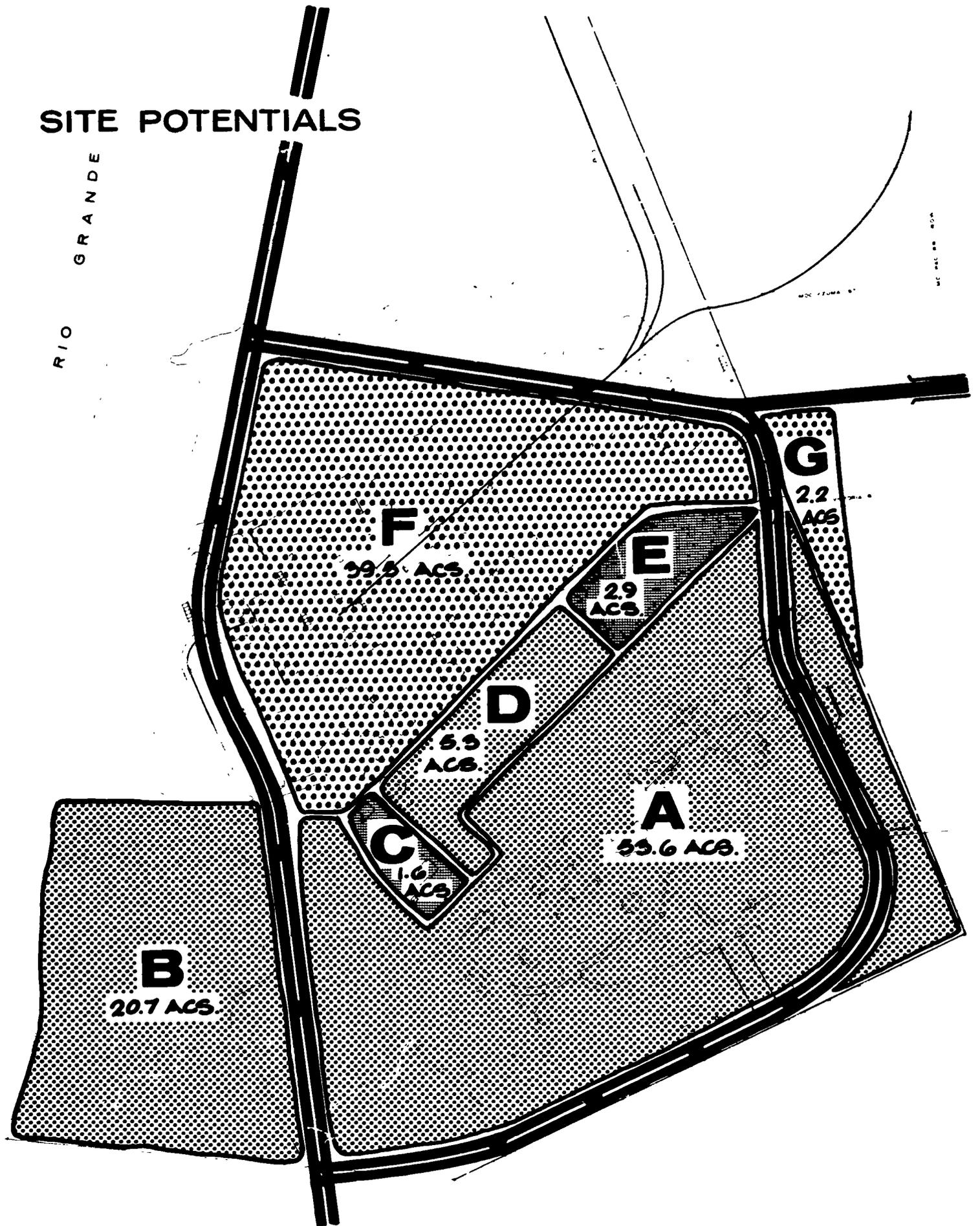
SITE POTENTIALS

At present the college owns a total of 79.6 acres designated on the map as parcels "A", "B" and "D". Of these, the least likely to be utilized effectively for education is parcel "B" with some 20 acres. Parcel "B" is located on the lower bank of the river and could be developed as a recreation area.

Even without parcel "B", the 58.9 remaining acres form an adequate campus site for an enrollment of 1500 students. Nevertheless, there are two parcels which should be acquired at any time they become available. These are parcels "C" and "E". Of these, parcel "E" is the more important, since it could provide expansion space at the best location.

Beyond the first expansion phase of the site, the parcel "F" with 39.5 acres should be acquired -- keeping in mind the protection of investments made on the initial campus site over a period of 20 or 30 years. Junior colleges, particularly those converted to senior colleges, have had to abandon their initial sites because developed land for expansion was too costly to acquire. The land which might be expected to be encircled by the outer loop road totals some 100 acres. The average size of a campus in colleges with enrollments of less than 3000 is about 100 acres.

SITE POTENTIALS



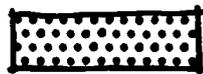
LAREDO JUNIOR COLLEGE
LAREDO TEXAS



CURRENT ZONE



EXPANSION PHASE ONE



FUTURE EXPANSION

CAUDILL
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PLANNERS
ARCHITECTS
LANDSCAPE ARCHITECTS

EXISTING BUILDINGS

The importance of existing buildings in a long range plan should be tested by answering the following questions:

Will age and obsolescence warrant its removal in 20 years? Is it properly located for the implementation of long range development during the next 20 years? Has this building outlived its functional efficiency and economic maintenance? Can it be remodeled, perhaps to house another function? Does this building have values of architectural and historical significance? Does it contribute toward a desirable aesthetic environment for the campus?

When these questions are considered none of the existing buildings, except the former chapel and the guardhouse, can be considered as permanent. Miscellaneous buildings not contributing to the functional operation of the college should be removed as soon as possible.

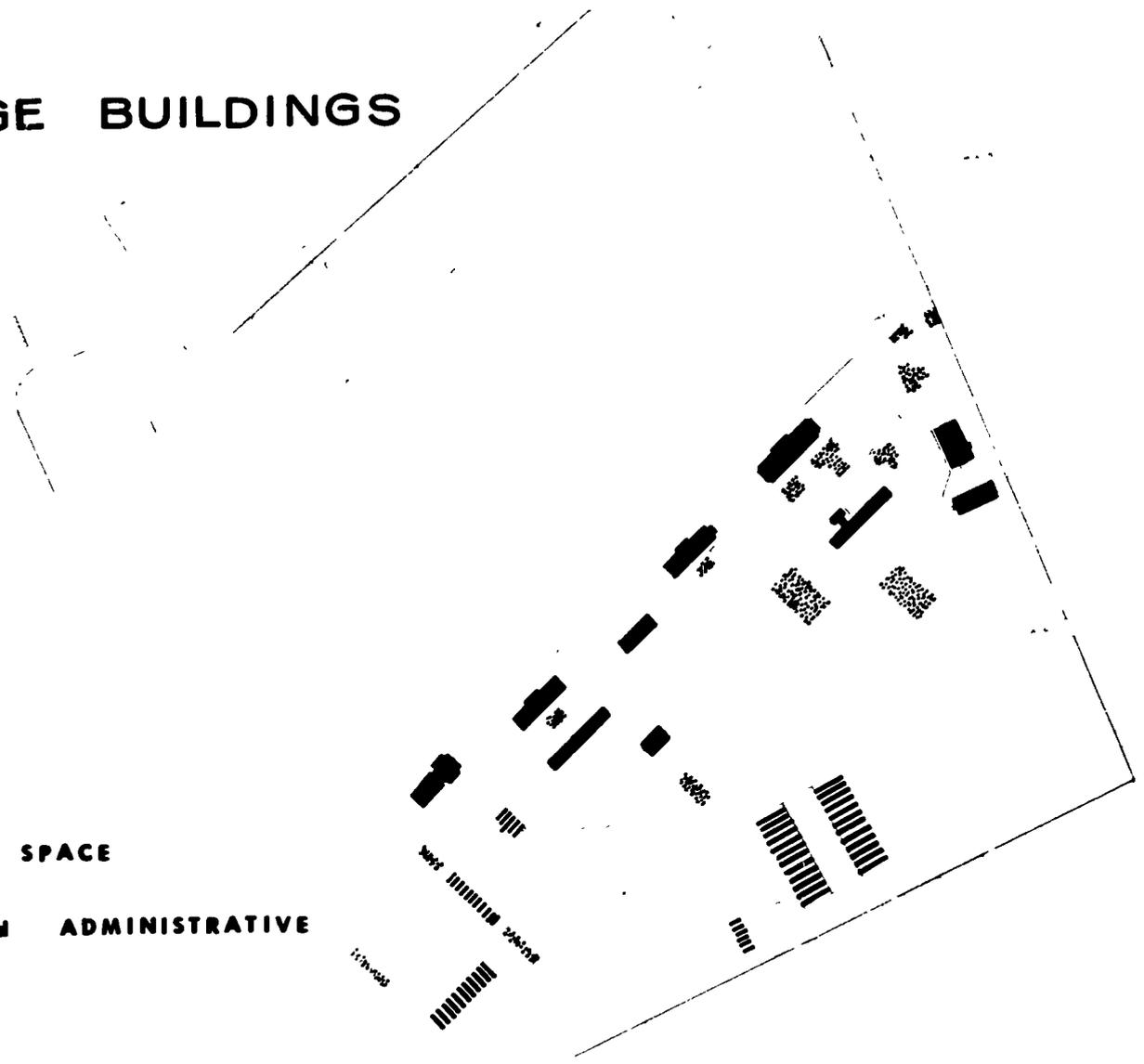
EXISTING TREES

It takes time and money to grow good trees and the aesthetic environment of the campus depends on them to a great extent. It would seem prudent to consider the existing trees, located on the accompanying map, in redesigning the campus. Undoubtedly some trees may have to be removed to accommodate facilities but every effort should be made to retain as many as possible.

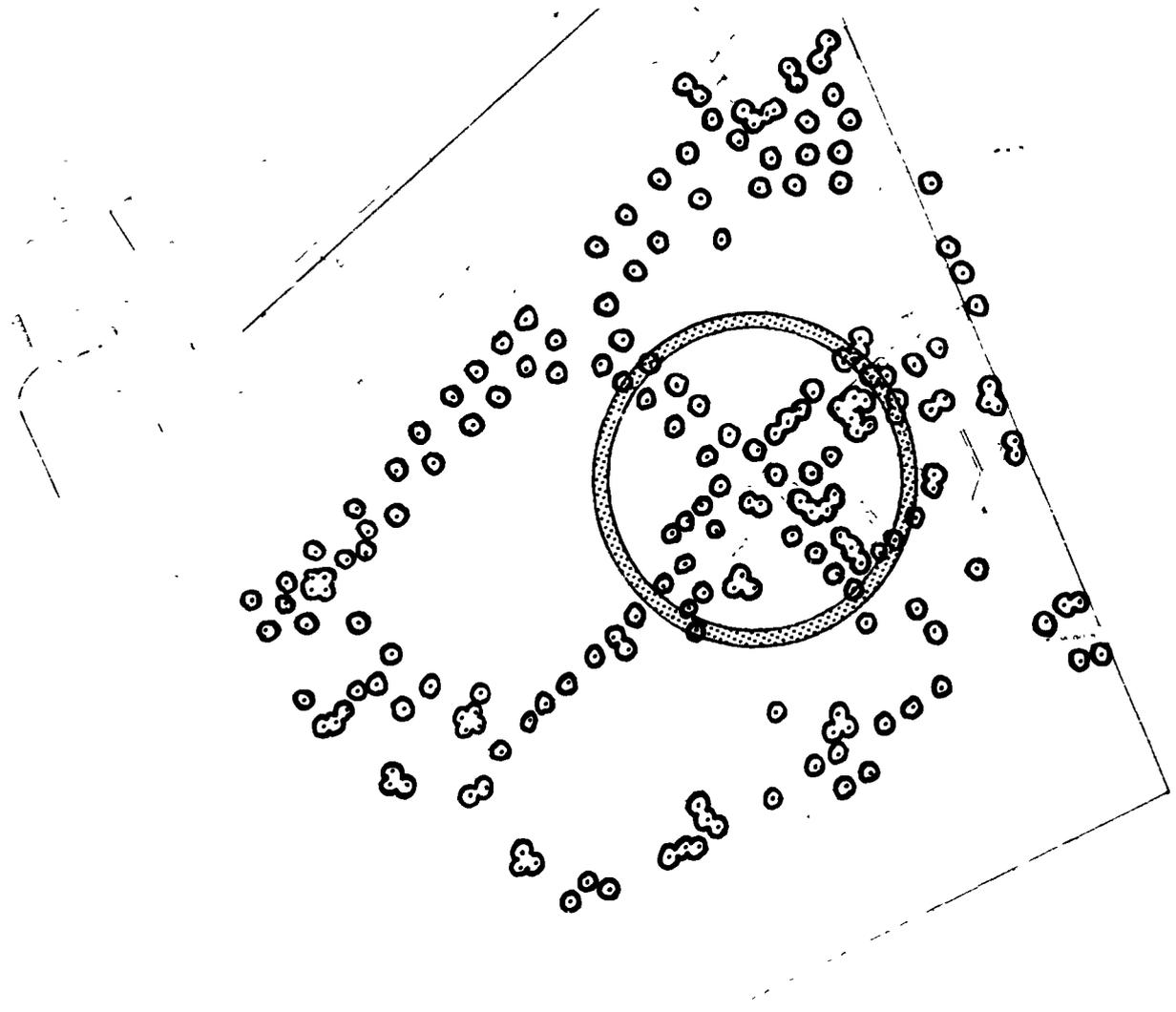
The large number of trees within the circle on the map would indicate that this area would be a very desirable location for the campus core area.

EXISTING COLLEGE BUILDINGS

-  INSTRUCTIONAL SPACE
-  SUPPORTING and ADMINISTRATIVE
-  MISCELLANEOUS



EXISTING TREES



PHYSICAL FEATURES

Topography

The main portion of the site would appear to be fairly flat; however, the map showing the 1954 flood limits indicates an island of higher ground on the southwestern section of the site. Although the area of the administration and liberal arts buildings is lower land between the high water marks, this area is prime land for the center of the future campus. Future buildings here would require some fill and the surface drainage would have to be studied in detail, but the results could mean terraces which would add interest to the spaces between buildings. The new Amistad Dam would preclude future flooding of this area to this extent.

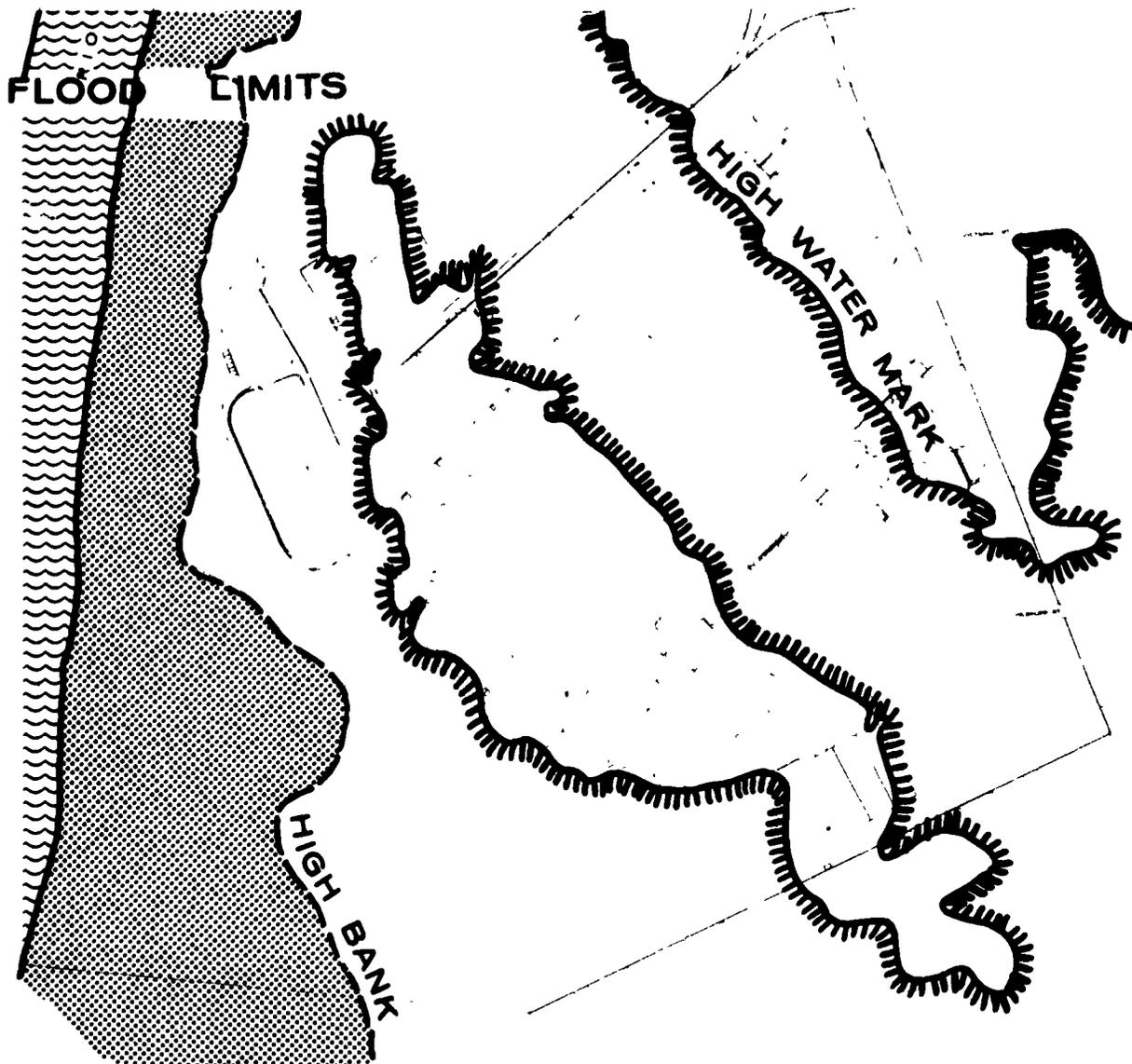
An accurate engineer's survey with one-foot contours will be required before the first buildings are designed.

Drainage

The drainage map shows the storm sewers, their elevations and directions of flow. The drainage line running northwest between the administration and liberal arts buildings to a point near the center of the drill field may have to be rerouted to a lower point. The fill required by new buildings would create new conditions for drainage.

1954

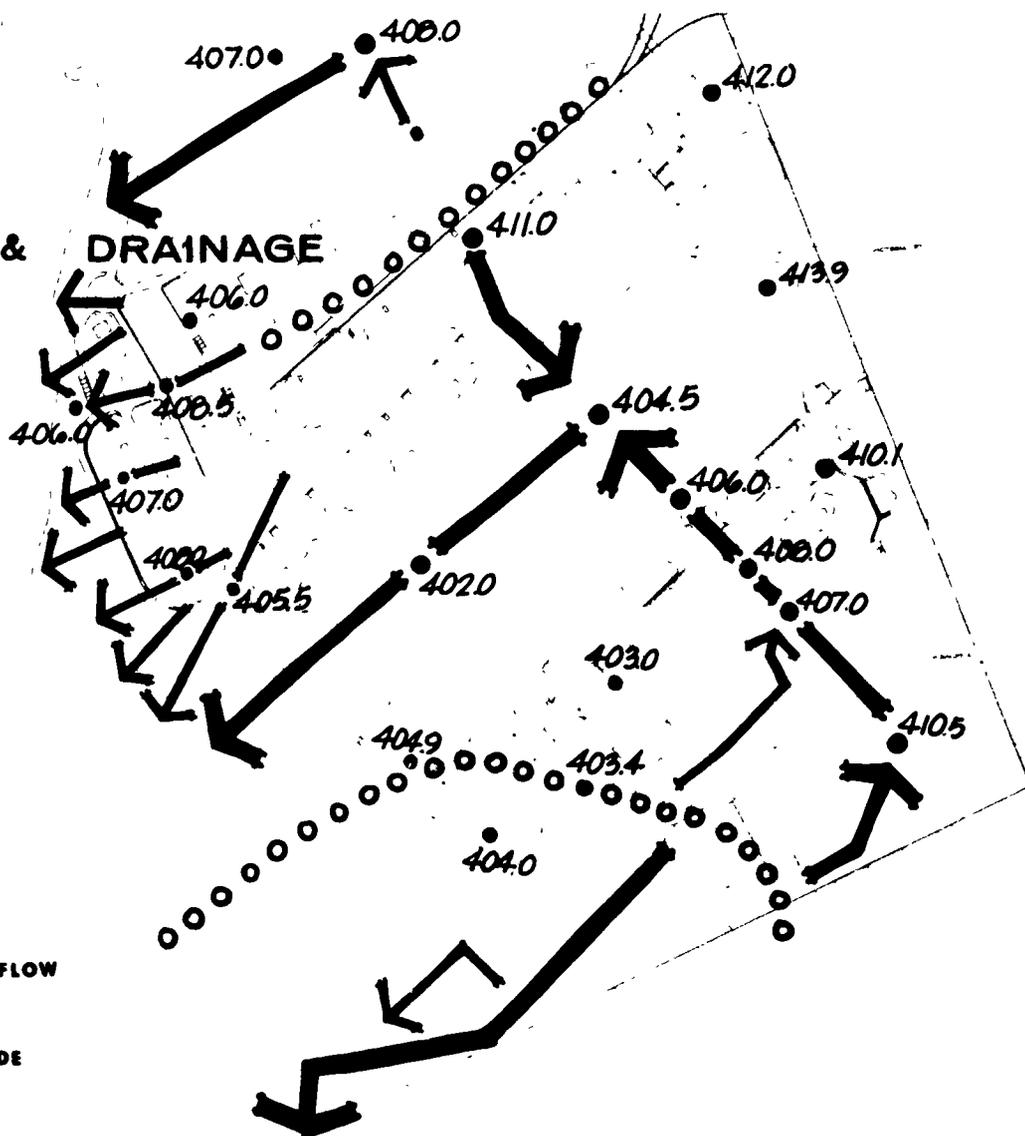
FLOOD LIMITS



TOPOGRAPHY &

DRAINAGE

R10



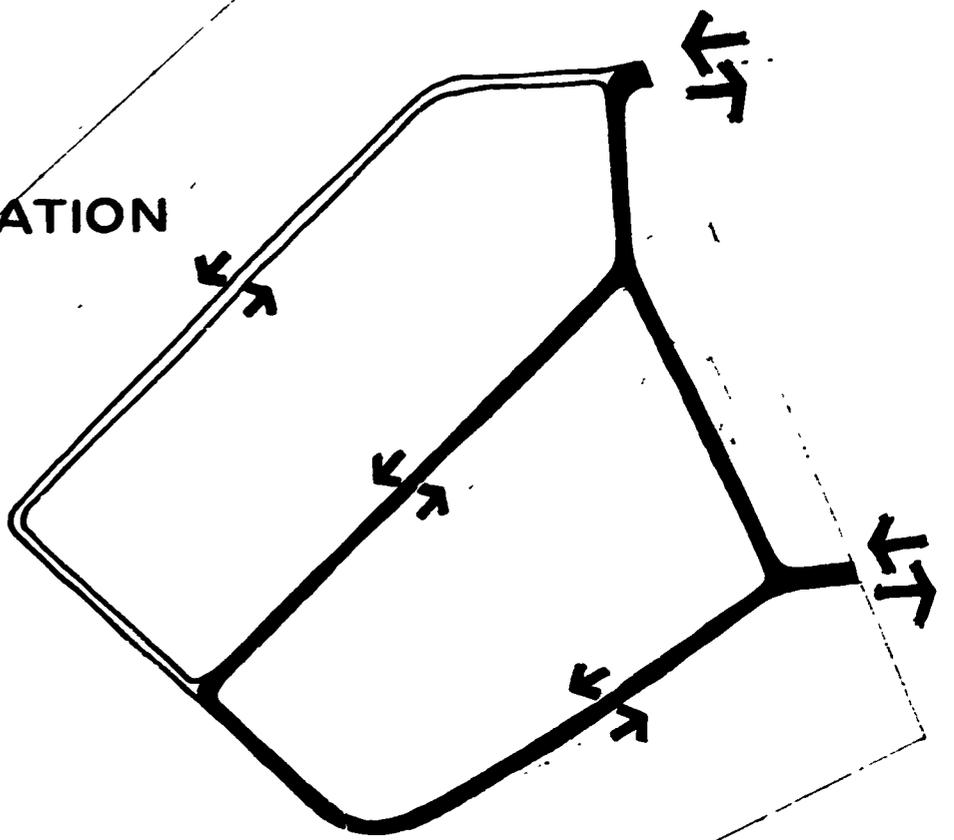
-  STORM SEWERS
-  DIRECTION OF FLOW
-  DRAINAGE DIVIDE
-  ELEVATIONS

CIRCULATION AND PARKING

Vehicles now use a campus loop road which is connected to the two eastern entrances as shown on the accompanying map. This primary circulation serves the buildings in and out of the loop. The road on the north-west boundary of the drill field serving as secondary circulation is used less frequently now because most of the buildings are located on the south-east boundary road, with new buildings on the drill field the present campus loop could be expanded to include the north-west boundary road.

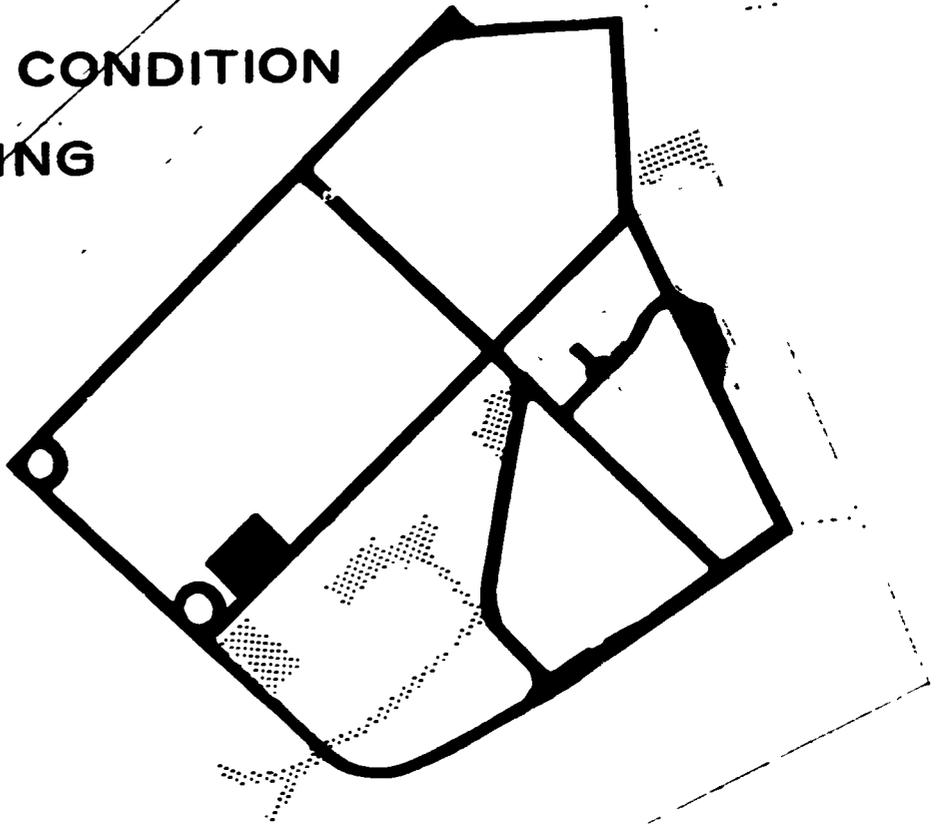
The accompanying map shows the streets and parking areas which are paved or gravel finished. These conditions are recorded here merely to indicate the consideration given to existing streets in the development of the plan -- the idea being to use as many of the existing streets as possible to facilitate the gradual development. However, it must be realized that in campus planning the priority of land use must be established which places educational space first, environmental space second, circulation space third, and parking space fourth. When the validity of this priority is understood, then it must be clear that streets and parking lots may be eliminated or relocated in the plan.

**EXISTING
VEHICULAR CIRCULATION**



PRIMARY
SECONDARY

**EXISTING STREET CONDITION
and PARKING**



PAVED
GRAVEL

PROBLEMS

Conflicts

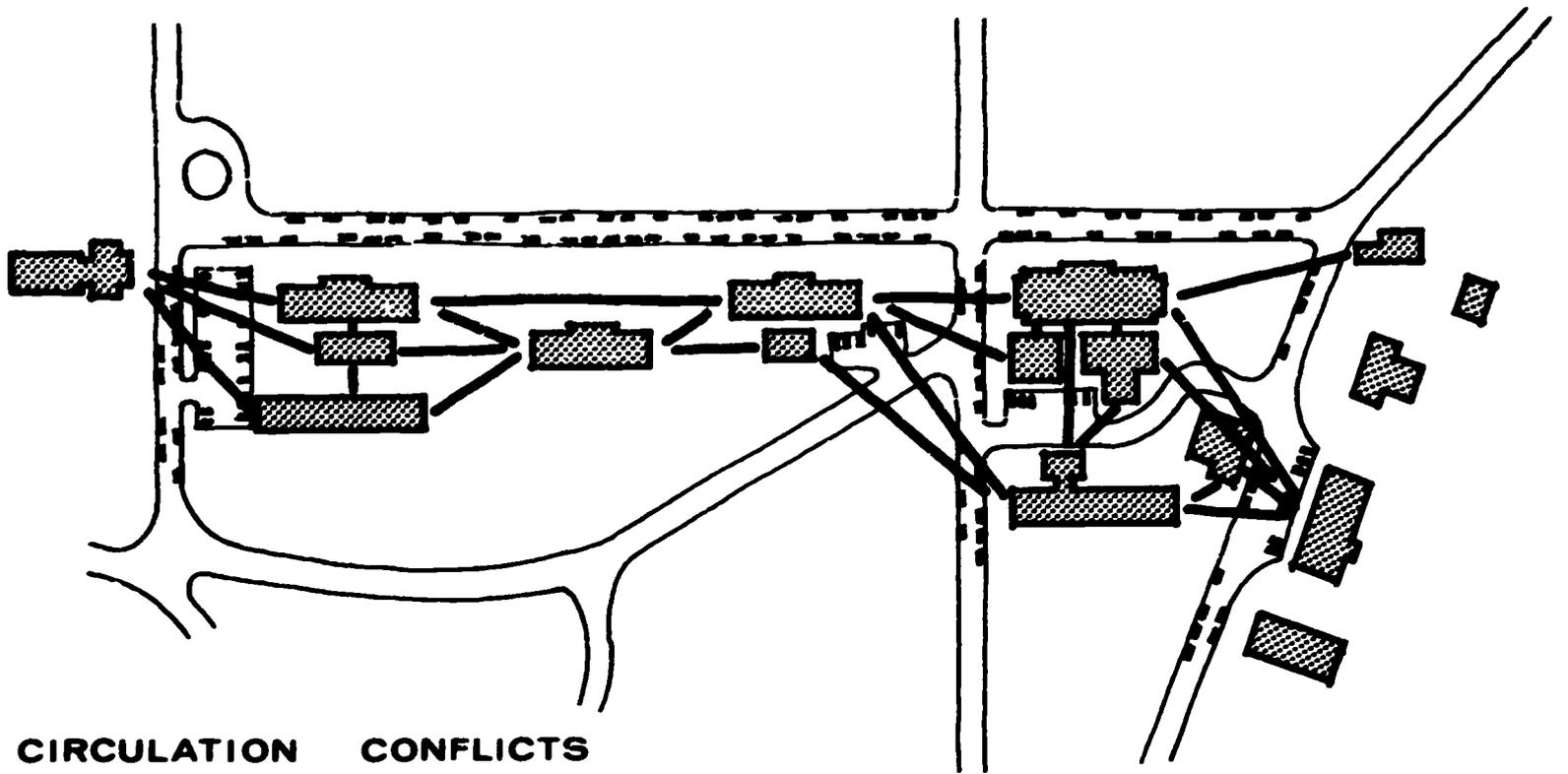
One of the problems to be solved is the conflict on the existing campus between vehicular and pedestrian traffic. The diagrammatic map shows that pedestrian circulation crosses a mixture of streets, parking lots and buildings. The problem will become more acute with increases in enrollment. The separation of pedestrian and vehicular traffic is a common objective for most campus plans.

Existing Grouping

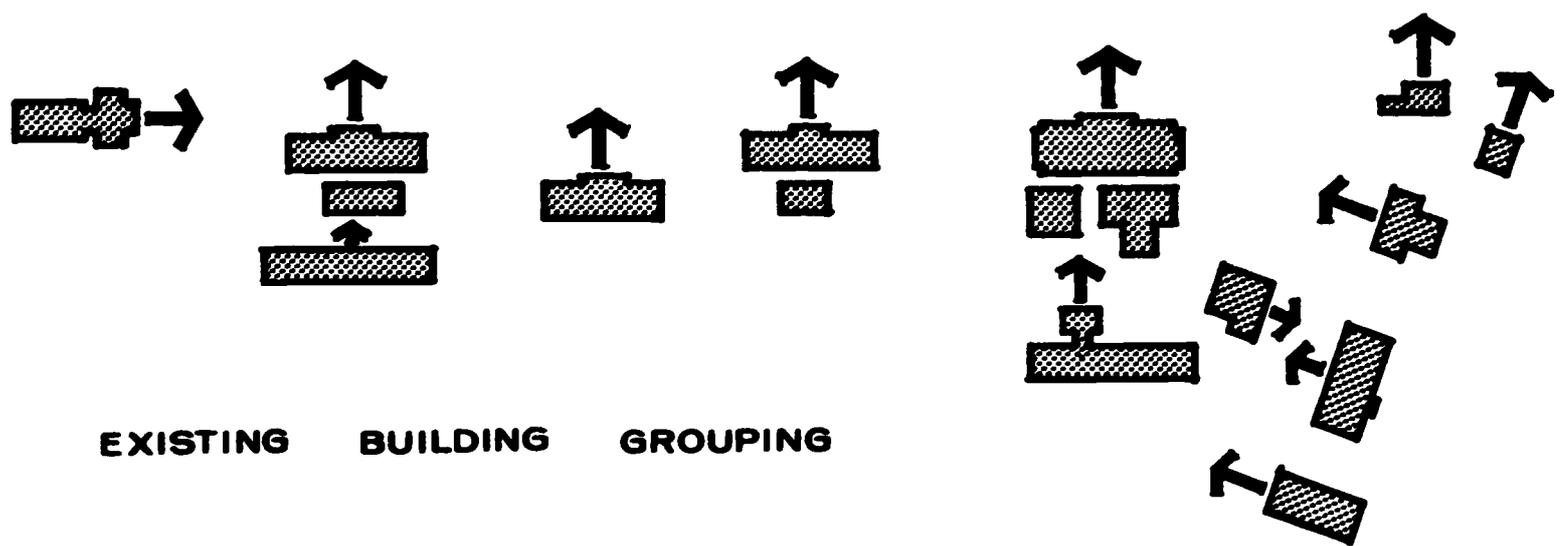
The existing buildings are grouped in a linear pattern, with most of them facing the broad expanse of the drill field -- as indicated by the arrows in the diagrammatic map. The drill field itself is a large inhuman space -- larger than the Oval at Ohio State University, which is considered too large even for an enrollment of over 25,000 students. The linear grouping, considering its great length, is not conducive to a unified campus.

Proposed Grouping

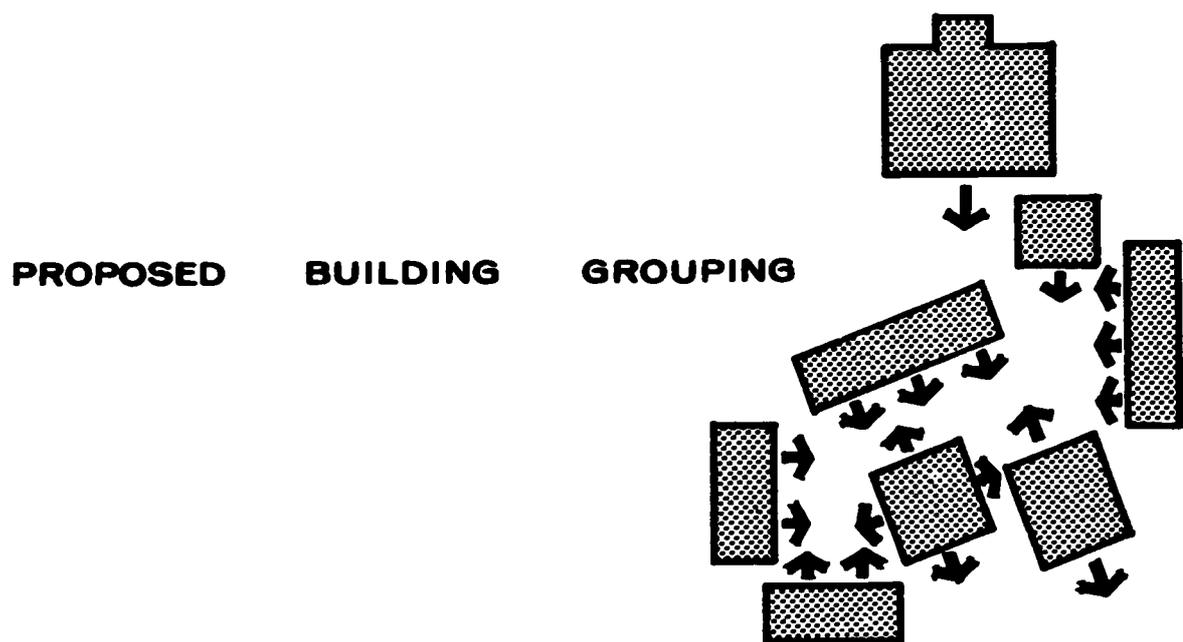
An arrangement in which buildings face more intimate spaces or courts could promote a desirable feeling of unity. The Nixon High School is used as an example because the exterior spaces can be experienced locally. The arrows on the diagrammatic plan show how the buildings face toward exterior spaces formed by the buildings themselves. The spaces between buildings are just as important as the spaces within buildings.



CIRCULATION CONFLICTS



EXISTING BUILDING GROUPING



PROPOSED BUILDING GROUPING

BASIC CONCEPT

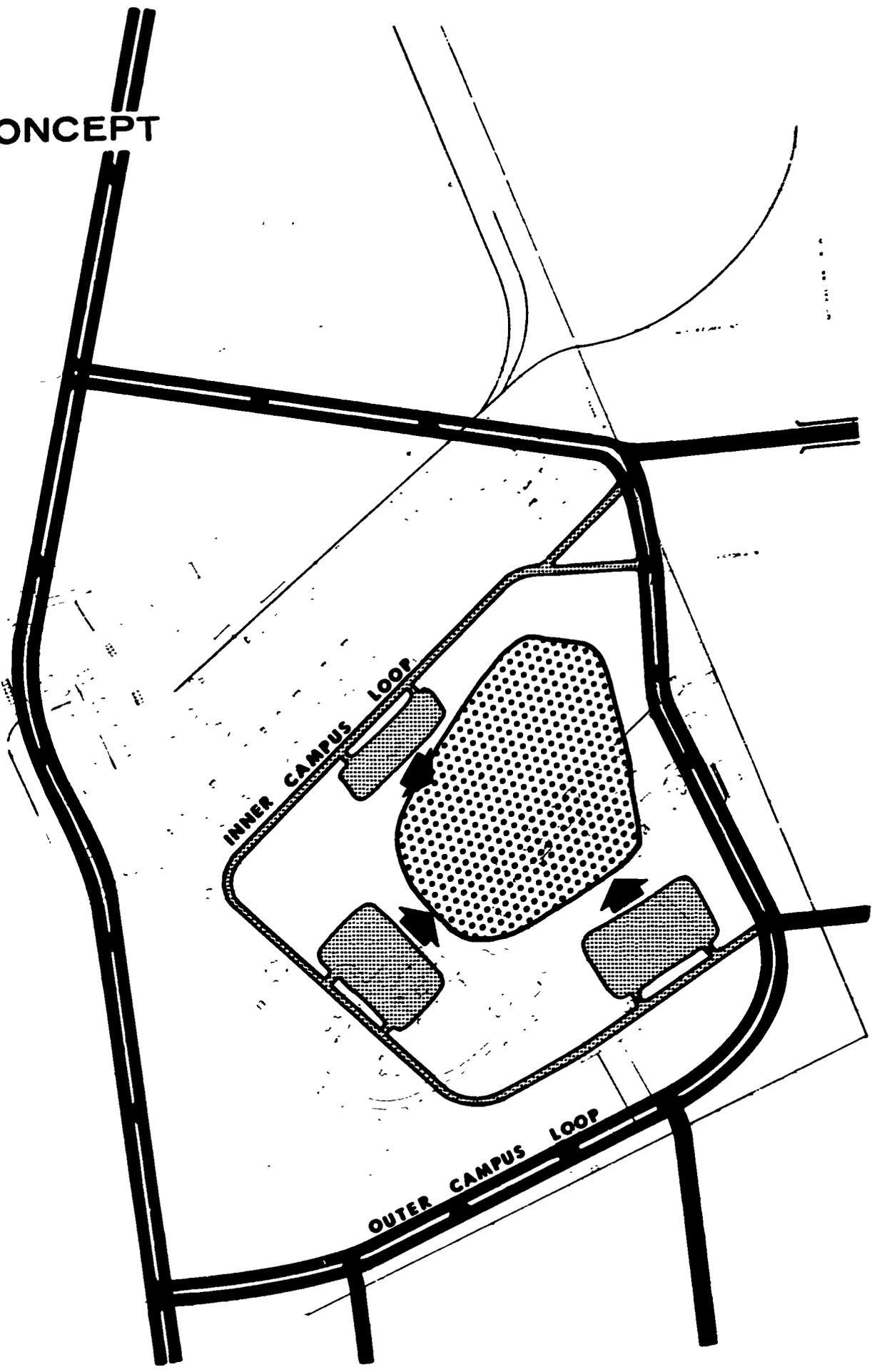
After studying alternate locations for the campus core area it was decided to locate this area, containing the bulk of the buildings, partly in the drill field and partly in the area of existing buildings. The first two buildings then could be built on open land without disrupting the college operation. At the same time these two buildings, the library-classroom building and the math-science building, could begin to form a more compact central core area.

The accompanying map shows diagrammatically the basic concept for the plan.

1. The campus core area would be primarily a pedestrian area in the center -- except for service drives in the form of wide sidewalks. The core area contains the ingredients of a unified campus, including the intimate grouping of buildings.
2. Parking lots would be located on the periphery of the core area -- avoiding the vehicular-pedestrian traffic conflict.
3. Campus vehicular traffic would use an inner campus loop road -- using existing roads linked with the campus entrances. This inner loop road would serve the faculty-student parking lots.
4. Urban vehicular traffic would use the outer campus loop road created by the River Parkway, the extension of Washington Street, and that portion of the loop connecting the eastern and southern entrances. This would separate campus and urban traffic except at the eastern portion of the loop -- from which the visitor parking lot would be served.

BASIC CONCEPT

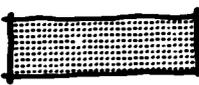
RIO GRANDE



LAREDO JUNIOR COLLEGE
LAREDO TEXAS



CAMPUS CORE



PARKING

CAUDILL
ROWLETT
& SECOY

PROPOSAL

The development plan opposite this page is only one solution drawn from the basic concept discussed in this report. There are many solutions possible. However, for THIS site and THIS college the plan presented solves most functional and environmental problems effectively.

The plan does not dictate the exact shape and location of the separate buildings. What it does express are the relationships of functions, the zoning of pedestrian and vehicular areas, and the utilization of outdoor space as a unifying element.

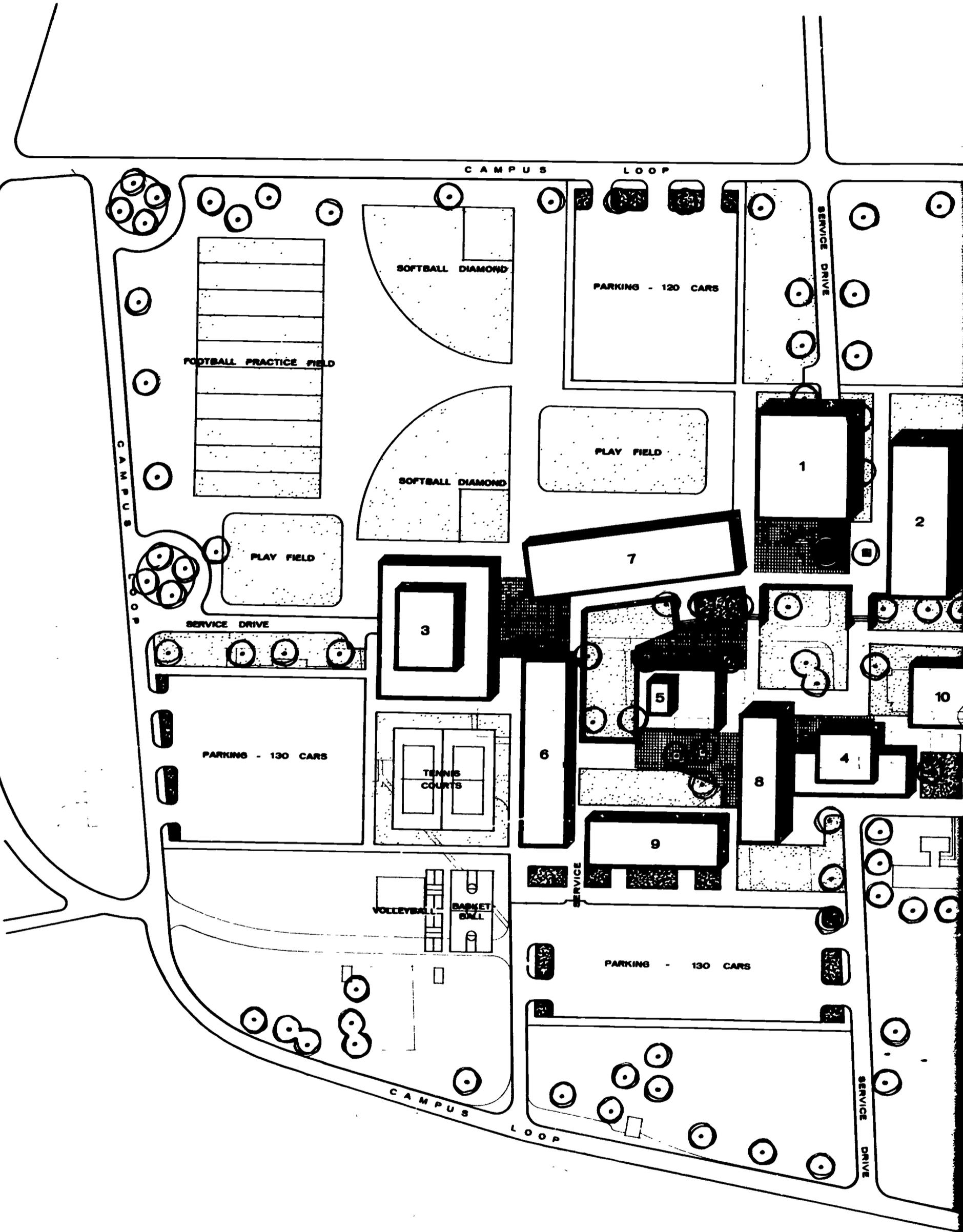
The plan indicates a number of individual buildings. By planning for separate buildings, staging for gradual development over the years is possible. High priority projects are located where sites will be available when needed without the necessity of early demolition of a building which is still needed.

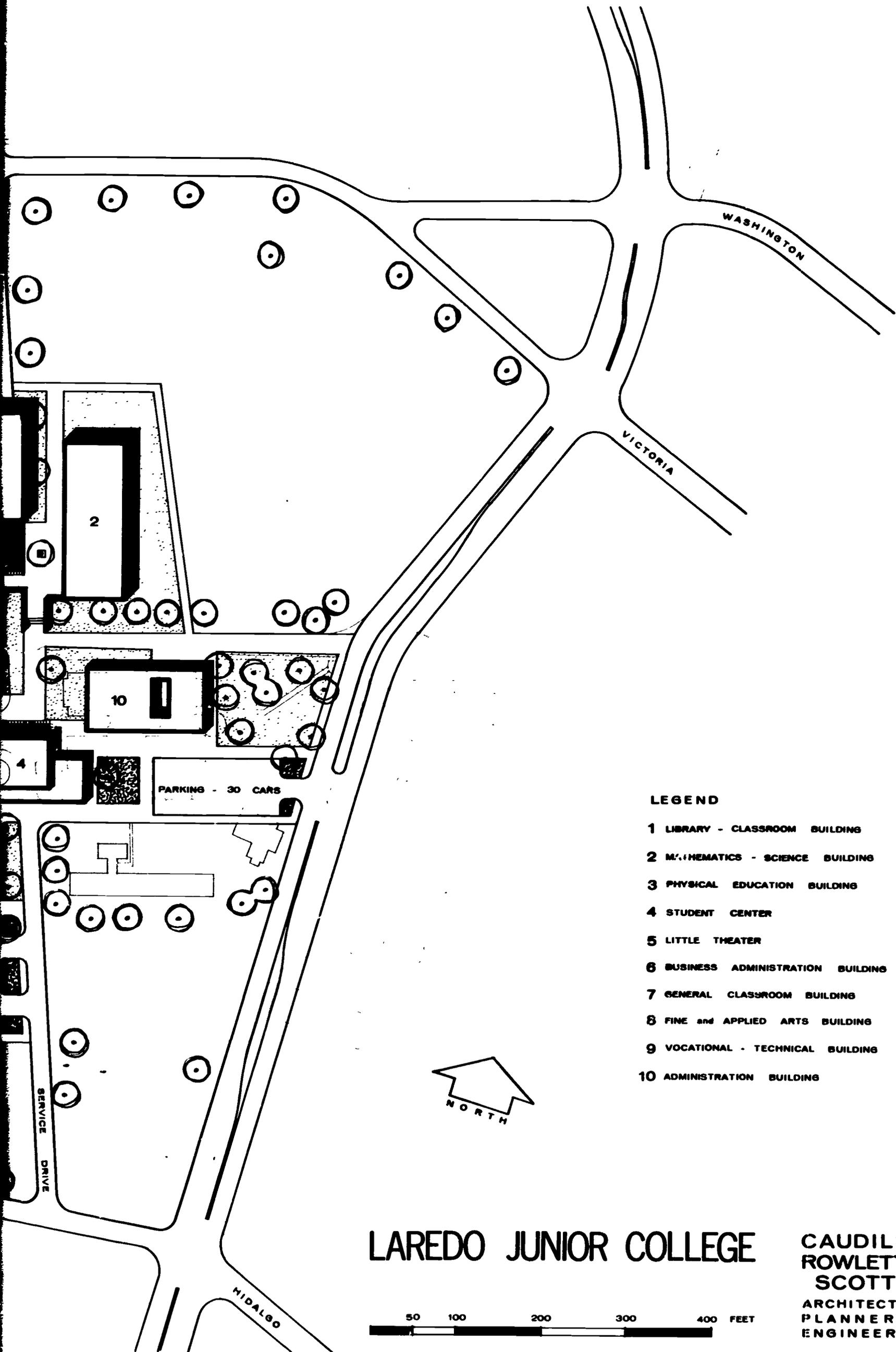
The library (1) begins to establish a new "center of gravity" for the campus. Even with unforeseen buildings to the north, the library would still be in the center.

The plan is to eliminate vehicular traffic gradually with each new building from the pedestrian court. The plan shows the buildings within easy fencing distance from each other. This was done to provide closure of space as well as closure for protection of property.

Unfortunately the plan places the physical education building (with high priority) where it is likely to be isolated from the new center while waiting for buildings 6 and 7. However, this location is necessary as a matter of zoning for P. E. facilities, playfields and parking. The matter could be remedied by retaining the liberal arts building in use until the little theater is built and by accelerating the priority of a portion of the classroom building.

All the buildings indicated are single story buildings except the library, math-science and fine-applied arts buildings which are two story.





LEGEND

- 1 LIBRARY - CLASSROOM BUILDING
- 2 MATHEMATICS - SCIENCE BUILDING
- 3 PHYSICAL EDUCATION BUILDING
- 4 STUDENT CENTER
- 5 LITTLE THEATER
- 6 BUSINESS ADMINISTRATION BUILDING
- 7 GENERAL CLASSROOM BUILDING
- 8 FINE and APPLIED ARTS BUILDING
- 9 VOCATIONAL - TECHNICAL BUILDING
- 10 ADMINISTRATION BUILDING



LAREDO JUNIOR COLLEGE

**CAUDILL
ROWLETT
SCOTT
ARCHITECTS
PLANNERS
ENGINEERS**



PHASING

1. The library-classroom building would release space in the former army chapel and the liberal arts building. The chapel would be used as a museum. The liberal arts building might be removed at this time or wait until its building site would be required by the little theater. The new library building would close the street bisecting the drill field, using the remainder as a service drive. The north parking lot should be built at this time.
2. The math-science building would release space in the present science building, which could be removed anticipating the gymnasium and its parking area. Although the math-science building itself does not close the street in front of the administration building, the street should be closed to create a portion of the pedestrian court.
3. The physical education building would release space in the present gymnasium, which could be removed. The art building and the band hall should be moved south of the commercial building to make room for the western parking lot. The P.E. Building would straddle the road, using the remainder as a service drive. The playfields would be built at this time.
4. The student center-cafeteria building would release space in the chuck wagon and corral buildings which could be removed to create the visitors parking lot. With this building opposite the library, another portion of the pedestrian court could be created.
5. The little theater would occupy the liberal arts building site. Eventually it would be near the center of the court with its stage serviced by a service walkway.
6. The business administration building would require that the homemaking cottage be moved south of the present commercial building if construction of the gymnasium had not already caused its relocation. The commercial building could be retained to house administration temporarily while the new administration building is under construction.

PHASING

7. The general classroom building, located on open land would be a keystone building in the closure of the court. So important is this building in this respect that it is recommended to build a portion of it under the first priority -- planning additions both to the library and the classroom buildings as enrollments reach 1500 students.
8. The fine and applied arts building would release space in the music hall, homemaking cottage and the art building, which could be removed.
9. The vocational-technical building is another keystone building in enclosing the smaller southern court. The south parking lot would be required at this time.
10. The new administration building would occupy the building site of the present building. The administrative offices would have to be moved to the commercial building while the new building is under construction.

The following is a summary of a cost estimate of capital improvements for an enrollment of 1500 students:

| | | |
|---------------------------|----------|-------------|
| Building Construction | | \$2,401,208 |
| Equipment and Furnishings | | 345,445 |
| Site Development | | |
| Playfields | \$25,000 | |
| North Parking Lot | 9,500 | |
| West Parking Lot | 10,500 | |
| South Parking Lot | 10,500 | |
| Visitors Parking Lot | 2,500 | |
| Outdoor Lighting | 30,000 | |
| Turf & Planting | 30,000 | 118,000 |
| Contingency 10% | | 240,120 |
| Fees and Expenses | | 160,000 |
| Grand Total | | \$3,264,773 |

The cost of major street improvements and of demolition is not included in the summary.

The contingency, customarily used in campus planning, amounts to 10% of construction cost. Since the campus will develop gradually, the 10% contingency should be allowed for each building as it comes up as a project to be built, and reduced to 5% when the detailed programming shows no extra burden.

A case in point is the establishment of a central heating and cooling plant which usually overburdens the initial project budget.

Another case concerns extensive relocation of utility lines in anticipation of a series of projects with the result of an overburden on the budget of the first project.

These cases should put the estimates in a true light -- as guides to the establishment of individual project budgets, depending on what needs to be done during a specific phase and what can be postponed to the next.

COST ESTIMATE - BUILDING CONSTRUCTION, EQUIPMENT & FURNISHINGS

| | Gross Area | Cost/ Sq. Ft. | Construction Cost | % for Furn. & Equip. | Furnishings & Equipment | Total |
|----------------------------|---------------|------------------|-------------------|----------------------------|----------------------------|----------------|
| Library-Classroom Building | 30,270 | \$14.00 | \$ 423,780 | 19.5% | \$ 82,637 | \$ 506,417 |
| Math-Science | 34,960 | 13.45 | 470,212 | 18.9 | 89,020 | 559,232 |
| Physical Education | 25,066 | 13.35 | 334,631 | 6.7 | 22,420 | 357,051 |
| Student Center | 11,687 | 13.15 | 153,684 | 17.0 | 26,126 | 179,810 |
| Little Theater | 9,592 | 15.00 | 143,880 | 14.2 | 20,430 | 164,310 |
| Business Administration | 15,280 | 11.85 | 181,068 | 12.8 | 23,176 | 204,244 |
| Classroom Building | 18,310 | 11.85 | 216,973 | 10.0 | 21,697 | 238,670 |
| Fine-Applied Arts | 14,665 | 13.40 | 196,511 | 9.6 | 18,865 | 215,376 |
| Technical Education | 13,973 | 9.85 | 137,634 | 20.4 | 28,077 | 165,711 |
| Administration | <u>11,660</u> | <u>12.25</u> | <u>142,835</u> | <u>9.1</u> | <u>12,997</u> | <u>155,832</u> |
| | 185,463 | \$12.95 | \$2,401,208 | 14.4 | \$345,445 | \$2,746,653 |