

*Board of Trustees
of the
State Colleges of South Carolina*

January 30, 1973

To: Mr. E. J. Bofferding, Vice President and Director of Education Services,
Cresap, McCormick, and Pagett, Inc., 245 Park Avenue, New York, N.Y.

From: James A. Rogers, Chairman, State College Board of Trustees of South
Carolina

Subject: Proposed Study of Higher Education in the Charleston Area

Because the role of the College of Charleston must be responsive to the needs for higher education in the Charleston area and because the proposed merger of Palmer College and the Charleston TEC to form a community college could be expected to have a significant impact on the College of Charleston, the State College Board of Trustees proposes a study of needs in higher education in the Charleston area with special attention directed to the role and mission of the College of Charleston as well as the other four year colleges in the area.

The State College Board of Trustees has taken no position on the proposed plan to develop a community college in Charleston by effecting a merger of the Charleston Technical Education Center and Palmer College under the direction of the State Board for Technical and Comprehensive Education. But its responsibility for the governance of the College of Charleston imposes upon the Board the continued obligation of conducting such studies as are necessary to assist in defining the role and mission of the College and in assessing its performance in relation to those defined goals. Therefore, the Chairman of the State College Board of Trustees has been instructed by the Board to discuss the initiation of such a study with appropriate representatives of the firm of Cresap, McCormick, and Pagett.

It is the Board's wish that:

1. the study be carried out with complete objectivity and without any preconceived conclusions guiding the efforts of those involved.
2. those persons conducting the study be instructed to assess the needs for higher education in the Charleston area as well as to make an

- assessment of the existing institutions and their potentials for meeting those needs.
3. the present role and mission of the College of Charleston be examined with appropriate supporting data provided. Alternatives may be proposed if the evidence suggest alternatives.
 4. any need for a community college in the area be clearly defined and projections made of its growth from 1973-1978.
 5. the impact (1973-1978) of a community college on the College of Charleston and the other institutions in the area (including the Baptist College) be examined, such examination to include enrollment comparisons for the College of Charleston for the 1973-1978 period under the two conditions, With and Without such a community college.
 6. a projection be made of any changes in role and mission of the College of Charleston if such a community college were started in 1973.
 7. those representatives of the firm who make the study confer initially with the Chairman of the State College Board of Trustees and file their written report with him and with the S. C. Commission on Higher Education at the conclusion of the study.
 8. the firm of Cresap, McCormick, and Pagett provide specific information to the Chairman of the State College Board of Trustees regarding the cost and time required to complete the study and an appropriate contract providing full details to be signed by the proper officer of the firm and by the Chairman of the Board.

It must be pointed out that the decision to begin a community college by the merging of Palmer College and the Charleston Technical Education Center is not the responsibility of the State College Board of Trustees. However, the present and future of the College of Charleston is a responsibility it cannot escape. Therefore, the members of the Board are unanimous in feeling that the Board of Trustees must conduct this study in order that their responsibility may be intelligently discharged and that the development of the College of Charleston as a state college can be carried forward in the most effective way for the benefit of the State of South Carolina.

South Carolina Commission
on Higher Education
1429 Senate Street
Columbia, South Carolina 29201

File
"COMAR"
South Carolina Wildlife and
Marine Resources Commission
Post Office Box 167
Columbia, South Carolina 29202

AGREEMENT

1. In order to foster the orderly development of the physical facilities of Fort Johnson thereby enhancing simultaneously the research capabilities of the South Carolina Marine Research Laboratory and the Research and educational capabilities of the State's colleges and universities, the South Carolina Wildlife and Marine Resources Commission and the South Carolina Commission on Higher Education enter into this agreement. It is understood the Division of Marine Resources of the Wildlife and Marine Resources Commission and the public institutions of higher education concerned with marine science support this agreement.
2. The Wildlife and Marine Resources Department will undertake, with the support and endorsement of the public colleges and universities, the financing, construction, provision of fixed equipment and maintenance of scientific, library, storage and dormitory facilities to meet the requirements of the Marine Resources Center and to provide the research and educational needs of the colleges and universities as described in A Report on Projected Needs of Institutions of Higher Education for Teaching and Research Facilities at the Coast submitted to the Commission on Higher Education by the Advisory Committee on Marine Studies in the Institutions of Higher Education (COMAR) on December 1, 1972. A copy of this report (short title COMAR report of December 1) is attached to this agreement.

3. The colleges and universities will be offered significant participation in designing, equipping, and managing those portions of proposed facilities specifically designated for their use.

4. Those specific portions of facilities designated for the primary use of colleges and universities under this agreement will remain available for their utilization until other arrangements are mutually agreed upon; it being understood that such facilities may be used temporarily by the Department of Wildlife and Marine Resources when not in use by the colleges and universities.

5. The educational and research programs conducted by the colleges and universities will remain the responsibility of the colleges and universities, and the South Carolina Wildlife and Marine Resources Commission does not support any proposition of it directing the educational programs of any of the institutions. As previously agreed, those staff members of the Marine Research Laboratory having adjunct faculty status may participate in the graduate programs of the colleges and universities to the degree those institutions deem appropriate.

6. The facilities constructed in accordance with paragraph 2 above are designed primarily to meet the research needs of the Marine Resources Center and the graduate programs of the colleges and universities. Separate facilities for the College of Charleston which may be based on the existing Grice Marine Laboratory will be required for the undergraduate programs of the College; details will be the responsibility of the College.

7. Management of the facilities constructed in accordance with paragraph 2

above, as opposed to management of college and university research and educational programs, will reside with the appropriate officers of the Marine Resources Center, with the approval of Wildlife and Marine Resources Commission.

R. Cathcart Smith

R. Cathcart Smith,
Chairman
S. C. Commission on
Higher Education

February 7, 1973

Joe W. Hudson

Joe W. Hudson,
Chairman
S. C. Wildlife and Marine
Resources Commission

February 16, 1973

A Report on the Projected Needs of Institutions of Higher Education
for Teaching and Research Facilities at the Coast

Submitted to the Commission on Higher Education

by

The Advisory Committee on Marine Studies
in the Institutions of Higher Education (COMAR)

December 1, 1972

Committee Members

Dr. Donald J. Colquhoun
Dr. William J. Dougherty
Dr. Harry W. Freeman
Dr. Rufus K. Guthrie
Dr. Samuel F. Hulbert
Dr. F. John Vernberg, Chairman

The purposes of this report are twofold: 1) to review the current availability of marine science coastal facilities for undergraduate and graduate teaching and research; and 2) to make recommendations to the Commission on Higher Education relevant to future needs over a five-year period of the institutions of higher education for coastal facilities. We have considered coastal facilities to include both land-based laboratories and ships.

I. Current Laboratory Facilities

Presently laboratory facilities are available or are funded and in various stages of construction at the following locations:

A. Charleston Area

- 1) The College of Charleston has operated the Grice Marine Biological Laboratory for the past 16 years. The laboratory building contains 4,950 square feet of research and teaching space and 2,400 square feet of dormitory space which can accommodate 24 people. These facilities are primarily for the use of College of Charleston personnel, but visiting classes and independent investigators are welcomed contingent upon the availability of space. The laboratory facilities are used heavily throughout the year for teaching and research, and no space is available for expansion. Approximately 100 students per year take seven courses at the Laboratory. With advanced planning it is possible that an inter-institutional course could be taught during the summer. Small boats are available.

- 2) The Marine Resources Division of the South Carolina Wildlife Resources Department has an administration building and a research laboratory in proximity to the Grice Laboratory. The administration building contains approximately 17,000 square feet and the research building 20,000 square feet. In addition, existing buildings, some of which can be converted and used for research, will be retained. These facilities are primarily for the use of this State agency. However, limited laboratory space for visiting graduate students and/or faculty would probably be available. The R/V DOLPHIN (approximately 105 feet long) is available to universities and colleges at a fixed cost. Special arrangements can be made to use the various ships operated by this agency.

B. Georgetown Area

- The Belle W. Baruch Foundation and the Belle W. Baruch Coastal Research Institute of the University of South Carolina are constructing a field laboratory on the 17,500 acre property of the Baruch Foundation. This building will have approximately 5,000 square feet and will include research and instructional facilities. In keeping with the philosophy of the Foundation and the Institute in providing support to South Carolina educational institutions, these facilities will be available to investigators and students from throughout the State for research and teaching. This laboratory will be located on the edge of a large unpolluted marsh-estuarine region. Small boats are available.

C. Cherry Grove Area

In the northern part of the State, located on the border of marshlands, is a facility which is owned by and under the immediate jurisdiction of

the State Department of Education, Division of Vocational Education. This unit includes dormitories, which can accommodate 250 persons, a gymnasium, a dining hall, and miscellaneous buildings. Although this facility is used for various functions, it has proved to be an excellent place for marine field studies and with planning field courses could be taught here. It is equipped to handle only small boats.

II. Present Need for Instructional and Research Facilities

A. The Citadel

Present instructional and research needs are met by existing facilities found in a new biology building with the exception that dockside facilities are inadequate. The Citadel plans to participate in undergraduate and graduate programs in marine studies through the Charleston Consortium of Colleges.

B. Clemson University

Clemson University utilizes the facilities of the Belle W. Baruch Institute at Georgetown; and within the past year classes have utilized facilities at Morehead City, North Carolina and Charleston, South Carolina through cooperation with other institutions. Lecture and laboratory spaces in Geology, Zoology, Microbiology, Biochemistry, and Engineering Departments at Clemson University will be used for teaching and research in marine science on the main campus.

C. College of Charleston

Since the College of Charleston is located at the coast and gives undergraduate instruction in marine biology, needs are different than those of inland universities and The Citadel. The recent increase in enrollment

at the College has resulted in crowded laboratory conditions. Thus the College needs not only coastal field facilities, but, also, space for academic year programs. Although a graduate degree is not offered at present, the Commission on Higher Education has approved a request by the Consortium of Charleston Colleges to offer a M.S. in Marine Biology at the College of Charleston.

D. Medical University of South Carolina

The Medical University has no plans for a degree-granting program in Marine Science. Individual faculty members, however, plan to present graduate courses in specific areas of Marine Science in conjunction with the Charleston Consortium of Colleges. Some teaching/laboratory space is needed for conducting these courses and any affiliated research projects.

E. University of South Carolina

An undergraduate (B.S. degree) program and a graduate (M.S. and Ph.D.) program in Marine Science formally began in June 1972. At present 50 graduate students are involved in marine-related studies: 18 in Geology and 32 in Biology. Space for their research is provided on the campus. However, off-campus research facilities which students have used include the following: a) facilities at the Belle W. Baruch Foundation property at Georgetown, South Carolina. These include a boathouse, laboratory space, and field equipment. The boathouse is shared jointly with the College of Charleston and Clemson University; b) Smithsonian Institute, Washington, D. C.; c) Woods Hole Institution, Woods Hole, Massachusetts; d) Lamont Geological Observatory, New York; e) Duke University Marine Laboratory, North Carolina; f) Grice Marine Biological Laboratory; and

g) ship facilities of various agencies including South Carolina Marine Resources Department, the R/V EASTWARD, and the R/V ELTANIN. Approximately 23,100 square feet of laboratory space is available for marine science research at the University (9,100 square feet for biologists and 14,000 for geologists). Teaching facilities are jointly used to offer non-marine oriented courses. Students working on open ocean research projects use the R/V EASTWARD, the R/V ELTANIN, or other ships. These studies are done in various oceans and are not restricted to the Atlantic waters, although staff and students have been on various cruises in the offshore waters of South Carolina. Their studies on the marshes and estuaries of South Carolina include the Port Royal Sound and its tributaries, Charleston Harbor, Winyah Bay, Murrells Inlet, and the North Inlet Estuary. The field studies did not require much laboratory facilities, i.e., one small room in a laboratory trailer was sufficient for the Port Royal Sound study. For more extensive laboratory analyses, the samples were returned to the campus where the necessary complex equipment is found.

In summary, most of the needs for coastal laboratory facilities are now met by those presently available or in the active planning stage.

III. Future Needs

A. The Citadel

No significant increase in needs for teaching or research facilities are anticipated with the exception of the need for improved dockside facilities. See appendix for statement of specific needs.

B. Clemson University

The principal future educational need of biologists and geologists from Clemson University is for a lecture-laboratory room which would be used primarily in the summer. The engineering program does not plan to offer formal courses at the coast. For future research projects, need has been expressed for ocean platforms both fixed and floating, telemetry systems, on line computer capability, coastal testing and measuring sites, and diving capabilities. Research space for graduate students and staff would be needed on an irregular basis. See appendix for statement of specific needs.

C. College of Charleston

In order to meet the space requirements for a projected student body of 4,000 by 1974, the College of Charleston has need for additional facilities. Rather than having these facilities on the campus in Charleston, the College proposes that they be constructed at Fort Johnson in conjunction with the Grice Marine Biological Laboratory and the Marine Resources Center. The College proposes that the undergraduate program in marine-related subjects be housed at the Grice Laboratory and the M.S. program be housed at the Marine Resources Center. Specific needs at these two locations are outlined in a statement found in the appendix.

D. Medical University of South Carolina

Principal needs of the Medical University include laboratory space and facilities for holding and/or culturing marine organisms to be

used in current and planned teaching and research programs. The needs of the Medical University are estimated to be a minimum of 2500 square feet.

E. University of South Carolina

The formal initiation of a marine science curriculum will further stimulate interest in marine-oriented graduate activities at the University of South Carolina. Rather than markedly increasing the number of graduate students, a greater emphasis will be placed on increasing the quality of entering students. The number of students will probably increase from the present enrollment of 50 to 75 within the next five years. To further diversify and strengthen this curriculum, additional courses and research facilities will be needed primarily on the campus.

To accommodate this projected expansion certain improved coastal facilities are needed: 1) additional graduate student research space will be required. For long-range marsh and estuarine studies, the modern field station being built on the Baruch property will satisfy needs required for studies on unpolluted marine environments and the polluted waters of Winyah Bay. In addition other unique marine environments, such as the Santee Delta, are in close approximation. To do meaningful field research, laboratory facilities must be located near the study site. This laboratory which is being built chiefly with private funds on private property does not duplicate existing facilities, but it does significantly add to the total State effort in marine science by providing support not otherwise available. Being located on unpolluted

water, this laboratory has the advantage in that a running sea water system can be utilized for maintaining marine organisms. Artificial sea water systems have a limited capability to sustain many species. For studies in the Charleston area, use of the facilities located at Fort Johnson would be helpful. Although ship facilities are available for training and research, a small vessel equipped for studying the estuarine and coastal waters of South Carolina would be useful. Approximately fifteen days of no-cost ship time could be efficiently used for training cruises. 2) Graduate student teaching space. Most of the courses required to train marine scientists can be best offered on the campus with occasional field trips to the diverse habitats found along the coast. However, certain field-oriented courses are more stimulating and informative to students when taught at the coast. The new laboratory at Georgetown, the facility at Cherry Grove, and the existing and/or planned teaching facilities at Fort Johnson will probably be sufficient for the limited graduate teaching required at the coast. Since the Baruch Foundation has granted funds to support a teaching program at the Baruch Plantation, the University of South Carolina is obligated to fulfill this commitment. See appendix for statement of specific needs.

In summary, needs for graduate laboratory teaching facilities at the coast for the next five years can be met by the University of South Carolina's present program which has been funded and the

proposed teaching laboratories of the College of Charleston.

More ready access to a ship is needed.

F. Summary

The needs of institutions of higher education represented by COMAR can be divided into two categories: 1) the inland universities and 2) the Consortium of Charleston Colleges.

The inland universities need a laboratory-classroom facility of approximately 1600 square feet primarily to be used during the summer. Research space of about 1900 square feet to be used on an irregular basis throughout the year is requested. Some boat and gear storage area is requested. In addition dormitory and dining facilities are needed for about 20 students and staff.

The College of Charleston has requested approximately 12,160 square feet of space for its undergraduate program at the Grice Laboratory and about 7,700 square feet at the Marine Resources Center. The library and auditorium would be jointly used with the Marine Resources Center.

The Medical University estimates its need for research space at a minimum of 2500 square feet.

IV. Recommendations

To meet the projected needs of the various colleges and universities with a minimum duplication of facilities, COMAR makes the recommendations listed below. These recommendations are based on discussions at numerous COMAR meetings at which other faculty members and representatives of the Marine Resources Center were in attendance.

The Marine Resources Center has offered to provide academic educational facilities and capabilities for the Consortium of Charleston Colleges and also to provide field laboratory facilities for other State and private institutions desiring to cooperate in support of graduate marine programs. These facilities would be for the exclusive use of the institutions of higher education. The Marine Resources Division has access to building funds which are not available to educational institutions. These facilities will be provided as a service to the educational institutions since, as stated repeatedly by their representatives, the South Carolina Commission on Wildlife Resources has no intention of becoming an educational institution or directing the educational programs of any institution of higher learning. Because of the proximity of the Grice Laboratory and the Marine Resources Center, the College of Charleston and the Marine Science Center were requested to coordinate their needs for facilities to prevent needless duplication. This was done and the preliminary plans were presented at the November 30 meeting of COMAR.

Although details of construction, maintenance, and the necessary coordinating procedures need to be resolved, COMAR recommends the following: 1) Approval be sought for the Marine Resources Division to construct the scientific (including

library), storage, and dormitory facilities as described by schematic drawings (see appendix) and discussions at the meeting of COMAR on November 30, 1972. These facilities total approximately 32,000 square feet and the estimated cost would be approximately \$1,500,000. COMAR further recommends that arrangements be made between college and university administrations and the Marine Resources Division to establish the coordinated policies necessary to provide utilization of these facilities for graduate programs by the institutions of higher education.

2) The College of Charleston should proceed to seek approval for construction of facilities for the Grice Marine Laboratory as described at the meeting of COMAR on November 30, 1972 to meet the needs for the undergraduate curriculum of the College of Charleston and to meet needs for some teaching spaces which may be required by other institutions. 3) There is no duplication of facilities in the plans as described at the November 30, 1972 COMAR meeting. 4) The educational and research programs conducted by the colleges and universities must remain the responsibility of the colleges and universities. 5) The planning of the educational needs by the Marine Resources Center should be done in consultation with COMAR representing the colleges and universities.

V. Building Plans

Two teaching-research buildings are being proposed (see appendix for preliminary floor plans): 1) an addition to the existing research building at the Marine Science Building. This addition is tentatively to be called the Cooperative Research Laboratory, and 2) a new building at the Grice Marine Laboratory for the primary use of the College of Charleston's undergraduate program.

- 1) In the Cooperative Research Laboratory space will be provided for the Institutions of Higher Education and the Marine Resources Department, with

certain facilities to be jointly used. Three types of institutional needs in this building were identified for which space was provided: 1) inland universities; 2) Marine Resources Center; and 3) the Consortium of Charleston Colleges. However, it should be noted that space provided for educational institutions is not to be rigidly assigned to one institution, but is available to any school based upon need.

- 1) Inland universities. 900 square feet of laboratory space, 800 square feet of lecture-laboratory space, and 432 square feet of office-laboratory space.
- 2) Charleston Consortium. The College of Charleston estimates that it will need 2500 square feet of laboratory space for graduate students and 800 square feet of lecture-laboratory space. The College of Charleston will provide equipment for the two lecture-laboratories. The Medical University estimates its needs for research space at a minimum of 2500 square feet.
- 3) Marine Resources Division. 5826 square feet laboratory and office space.

Some facilities will be jointly used. These include the library, auditorium, wet laboratory, storage, lounge and canteen. The Marine Resources Center will provide maintenance on this building. A procedure for coordinating use of this building is necessary.

- 2) The College of Charleston building will be primarily used by them. However, if scheduling permits, other colleges may use their facilities for undergraduate instruction.

In addition to these buildings, a dormitory is needed (see appendix for proposed floor plan). This facility would be primarily for the use of visiting students and staff. Dr. Timmerman proposed to request funds to provide maintenance on the building. A procedure for management of this facility is necessary.

VI. Oceanographic Vessels

At present there is insufficient demand by the various educational institutions to justify the acquisition and funding of an oceanographic vessel solely for their use. Cooperative arrangements with either the South Carolina Wildlife Resources Department and/or institutions in other southeastern states are actively being considered at this time. With the expected growth in marine studies, the need for a vessel to operate in South Carolina waters will require future reassessment.

Appendix

THE CITADEL

THE MILITARY COLLEGE OF SOUTH CAROLINA
CHARLESTON, S. C. 29409

DEPARTMENT OF BIOLOGY

20 November 1972

Dr. James A. Timmerman, Jr., Director
Marine Resources Center
South Carolina Wildlife and
Marine Resources Department
P. O. #12559
Charleston, South Carolina 29412

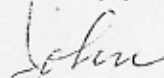
Dear Dr. Timmerman:

I wish to evaluate for you the need that The Citadel may have for space in a proposed new building at Fort Johnson. I am speaking mainly for the Biology Department, but I believe my comments will be applicable to The Citadel as a whole.

When the MS degree in Marine Biology was requested, The Citadel indicated to the Charleston Consortium that only limited space would be available at The Citadel for teaching classes or use of graduate students. As I see it now, we would have space available for use at night, such as lecture rooms and laboratory benches. We do not have the sophisticated equipment necessary for teaching advanced courses in Marine Biology.

I feel that we will need space for the use of graduate students to do research in Marine Biology. This would include research space plus a desk and study area. A reasonable figure now would be for four graduate students. Occasionally we may also want to teach a graduate course in a dockside laboratory. This would be the limit of our needs in this building as I see it at the present time.

Sincerely yours,


John K. Reed, Colonel
Professor and Head

JKR/gm



November 27, 1972

PRELIMINARY PROGRAM FOR FACILITIES AT GRICE MARINE LAB
IN SUPPORT OF
COLLEGE OF CHARLESTON UNDERGRADUATE MARINE PROGRAM

- | | |
|---|--------------|
| 1. Collection room with adjacent prep-room -- and record room | 2000 sq. ft. |
| 2. Faculty Office -- 12 faculty (6 offices) @ 250 sq. ft. ea. | 1500 sq. ft. |
| 3. Undergraduate special problems laboratories - 4 @ 250 sq. ft. ea. | 1000 sq. ft. |
| 4. Undergraduate Marine Geology Lecture Laboratory | 1200 sq. ft. |
| 5. Undergraduate Marine Chemistry-Physiology Lecture Laboratory | 1200 sq. ft. |
| 6. Undergraduate Marine Biology Lecture Laboratory | 1200 sq. ft. |
| 7. Shower, toilet facilities and locker room for students - (two) 1 male, 1 female <i>undergraduate</i> | 500 sq. ft. |
| 8. Seminar room for <i>undergraduate</i> 30 students | 660 sq. ft. |
| 9. Faculty Lounge | 400 sq. ft. |
| 10. Student lounge and vending machine area | 600 sq. ft. |
| 11. Aquarium room | 1000 sq. ft. |
| 12. Chart room | 400 sq. ft. |
| 13. Environmentally controlled space--with anteroom | 500 sq. ft. |

Harry W. Freeman

November 27, 1972

PROPOSED FACILITIES REQUIRED AT MARINE RESOURCES DIVISION
FOR
COLLEGE OF CHARLESTON CONSORTIUM GRADUATE PROGRAM

1. Library, lounge, and reading room with space for current journals and special reference books 2500 sq. ft.
2. Graduate student research laboratory space for 20 students 3000 sq. ft.
3. One graduate laboratory 800 sq. ft.
4. Outside storage for boats and wet and dry storage - seines, etc. 1200 sq. ft.
5. Auditorium with seating capacity for 150 persons
6. x-ray, 200 sq. ft.
7. One (1) cold room to 0°C
8. One (1) cold room to -30°C
9. Dormitory space for 24 students
10. A dock - off boat slip

James W. Newman

CLEMSON UNIVERSITY
CLEMSON, SOUTH CAROLINA 29631

COLLEGE OF ENGINEERING
DEPARTMENT OF
ENGINEERING MECHANICS

TELEPHONE 656-3370
AREA CODE 803

November 17, 1972

Dr. James Timmerman
Marine Resources Center
P. O. Box 12559
Charleston, South Carolina 29412

Dear Dr. Timmerman:

I have been requested by Dr. Hulbert to submit the information requested as stated in the minutes of the last CoMAR meeting.

It is difficult to assess an accurate, realistic estimate for use of the Charleston facilities for our College of Engineering on a long term basis. In view of the proposed Ocean Engineering Program and increasing interest on the part of our faculty in Marine related research, our long term needs certainly will exceed our short term requirements. We anticipate that the needs of the Ocean Engineering program for educational facilities can be coordinated with the requested needs of the estimates submitted by Dr. Guthrie for the College of Physical and Biological Sciences.

Most of our current research involves only a temporary use of Charleston area facilities.

Some of our Sea Grant investigators have indicated a need for the following space requirements for the next three year period.

Laboratory Work Space at the Marine Center--200 square feet (to be used for periods of three weeks in winter and three weeks in summer)

One wet lab for sample preparation on a continuous basis adequate for 15 people, complete with equipment

Instrument Storage--high security required--100 sq. feet (for a three week period in summer)

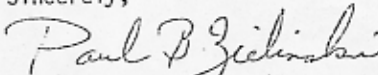
Rough Storage in covered space--low security--500 sq. feet (three week period in winter)

One office of 80-100 sq. feet would be sufficient for a three week period in summer and in winter.

Dorm space for four persons would be adequate for our immediate needs, again for a three week period in winter and one three week period in summer.

If I find it is necessary to add to this list, I will revise my estimates before the November 30 meeting. Dr. Guthrie is submitting a separate report.

Sincerely,

A handwritten signature in cursive script that reads "Paul B. Zielinski". The signature is written in dark ink and is positioned above the typed name.

Paul B. Zielinski
for Dr. Hulbert

PBZ/pe

cc: Dean Edwards
Dean Guthrie

CLEMSON UNIVERSITY

CLEMSON, SOUTH CAROLINA 29631

COLLEGE OF PHYSICAL, MATHEMATICAL
AND BIOLOGICAL SCIENCES

OFFICE OF THE DEAN

November 17, 1972

Dr. James Timmerman
South Carolina Marine Resources Center
Charleston, South Carolina

Dear Dr. Timmerman:

In accordance with the request at the November 9 meeting of COMAR, the future needs of the biological sciences and geology for marine science facilities at Charleston are estimated below.

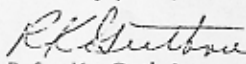
1. Maximum of 2 lecture/laboratory spaces for formal summer course teaching @ 1200 sq. ft. each; capacity of 20 students each.
2. Estimated 12-20 dorm spaces for summer students taking above courses.
3. *Maximum of 6 individual research spaces for short periods of time-possibly 3 months in summer.
4. Boat availability and standard biology - geology laboratory equipment for use in the above.

It is hoped that Clemson students in these areas will be able to utilize courses taught in Summer periods at the Charleston facilities by other institutions, and that occasionally Clemson faculty will be able to teach courses in that location. The biological sciences and geology currently do not have formal degree programs in this specialty, however, some courses are now offered by Clemson faculty which emphasize marine science.

cc: Dr. Zielinski - Eng.
Dean Vogel

RKG/pok

Sincerely yours,


Rufus K. Guthrie
Associate Dean



UNIVERSITY OF SOUTH CAROLINA

COLUMBIA, S. C. 29208

Belle W. Baruch
Coastal Research Institute
803-777-5288

November 13, 1972

MEMORANDUM TO: Drs. Harry Freeman and James Timmerman

FROM: Drs. F. J. Vernberg and D. J. Colquhoun

SUBJECT: Teaching and Research Requirements of the University of South Carolina in the Charleston Region

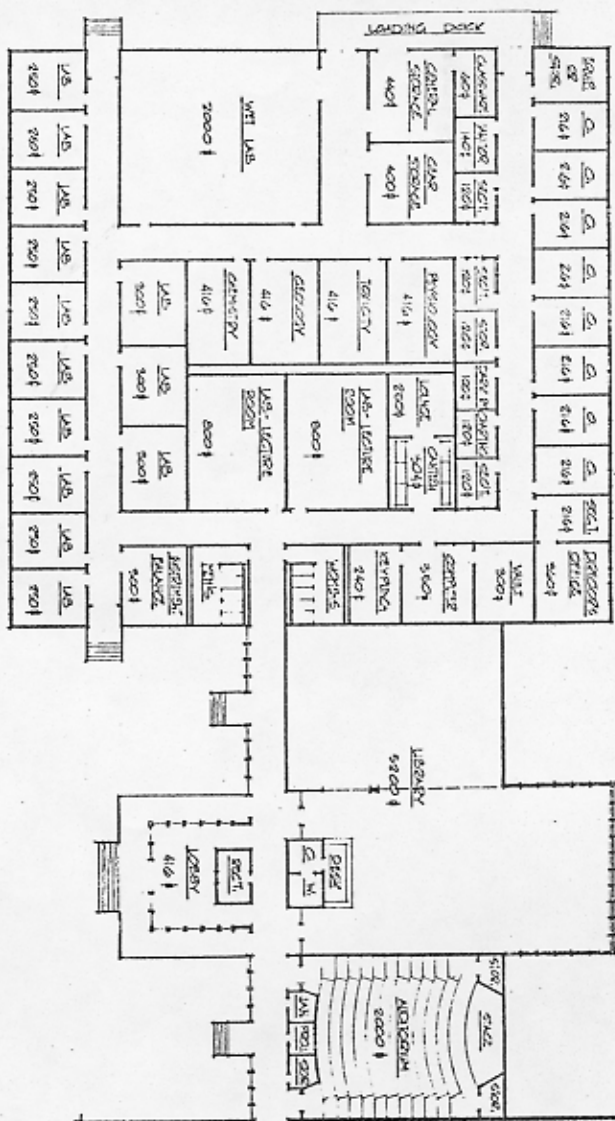
As requested at our recent COMAR Meeting, this memorandum lists our projected needs for teaching and research space in the Charleston region for the next few years. At present the University of South Carolina has an extensive graduate program in marine studies involving approximately 20 faculty members and 50 graduate students. Our needs are essentially the same as stated previously in the COMAR report on facilities.

Teaching. A modest sized classroom-laboratory to accommodate about 30 students could be useful on an irregular basis during the summer. This space is estimated at 800 sq. ft. Since our teaching needs could be coordinated with those of other schools in the state, we could share one general room established for this purpose.

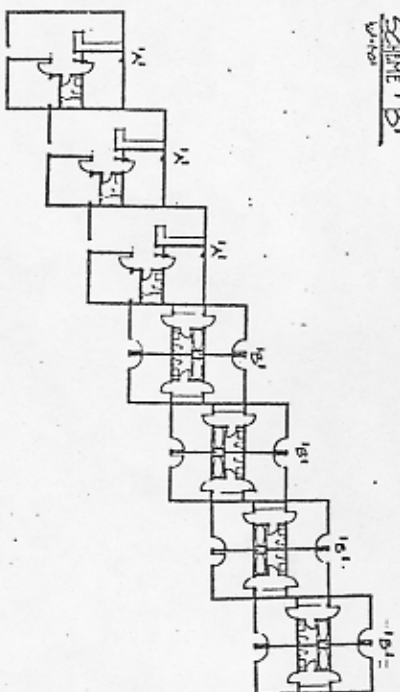
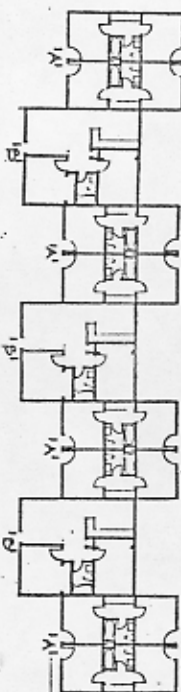
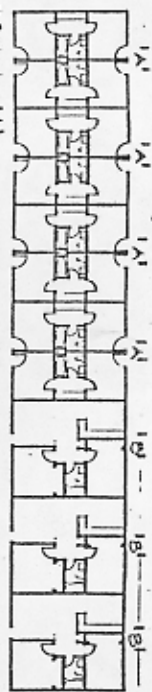
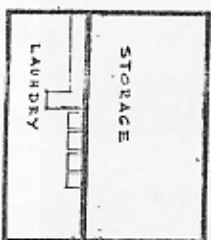
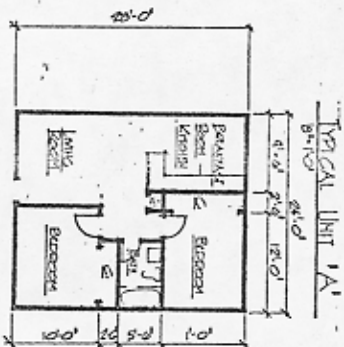
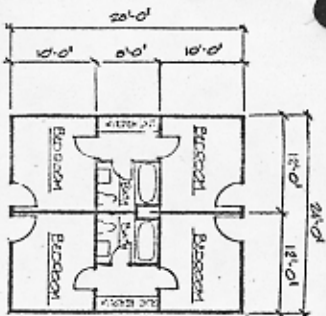
Dormitory Facilities. Dormitory space and dining facilities to house 20 students are requested.

Research. Laboratory space to accommodate approximately ten students could be used on an irregular basis throughout the year. This space would be needed to provide facilities for students and staff to prepare materials before cruises and to process samples and specimens upon returning from cruises throughout the year. We could use the classroom-laboratory for this purpose; hence a separate laboratory room would not be needed. We could coordinate our needs with other institutions of higher education. In addition to classroom-laboratory space, it would be helpful to have a staging area to prepare equipment (dredges, pumps, lines, hoses, etc.) before going aboard ship. It is possible that the classroom-laboratory room could be used for this purpose.

FJV/sc



Preliminary Design for
Cooperative Research Building
(Marine Resources Center)



Primary Design For Deformation