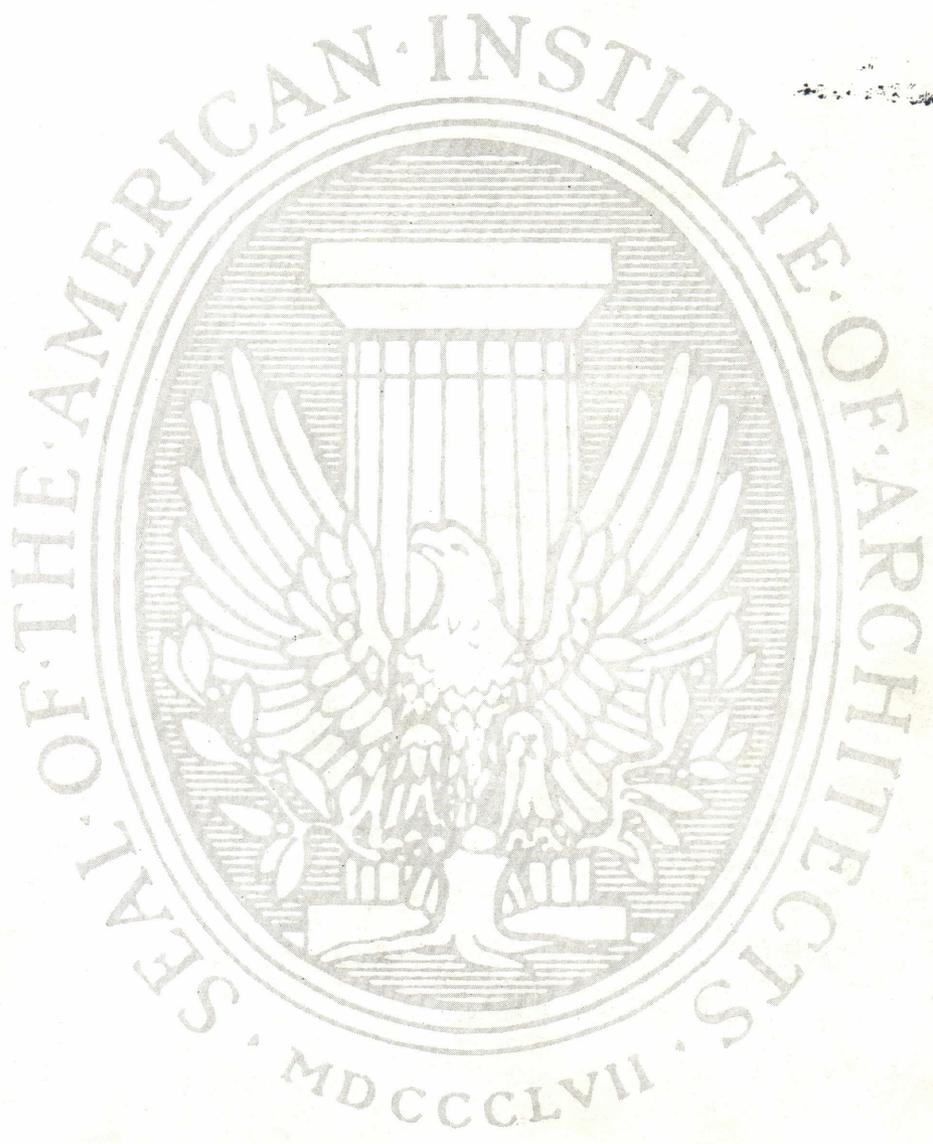


# SOUTHERN ARCHITECT



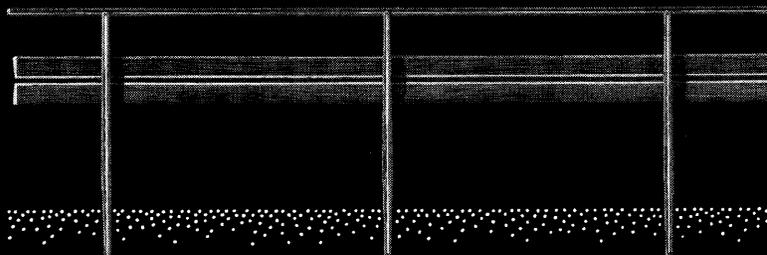
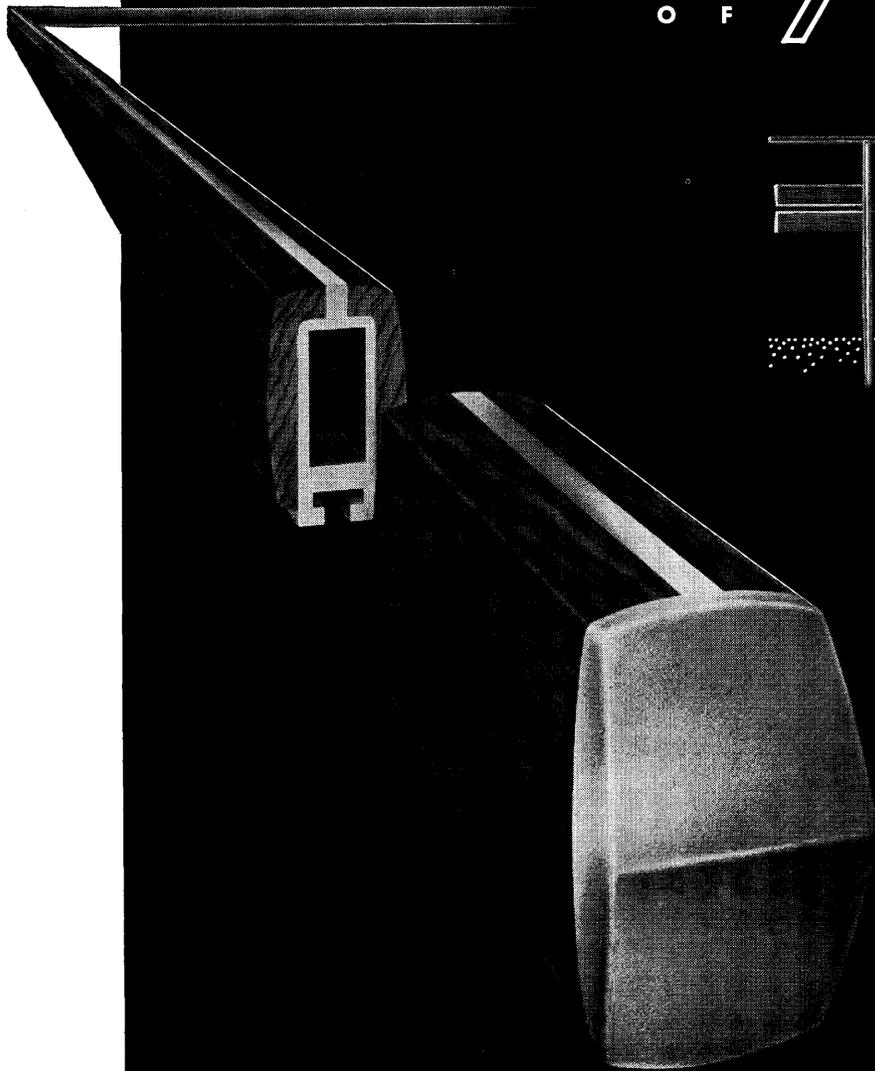
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NOVEMBER 1964  
 VOLUME 11  
 NUMBER 11

COMING NEXT MONTH  
 NORTH CAROLINA ARCHITECT

# SOUTHERN ARCHITECT



## CONTENTS

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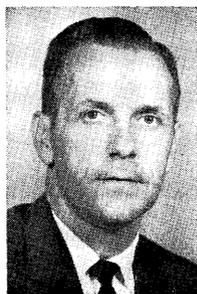
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President's Message .....	4
New Officers and Directors Elected at Fall Meeting .....	6 & 7
Fine Arts Building, A & T College, Greensboro .....	8 & 9
Northern Nash County High School.....	10 & 11
North Johnston County Consolidated High School .....	12 & 13
The Quantity Surveyor by Terence J. A. Ash .....	15
Honor Awards Jury Named .....	17
Design Foundation News .....	18
Metal Sculpture .....	19
3 N. C. Architectural Firms Win Regional Awards .....	20
Directory of Salesmen's Products .....	21
Calendar of Events .....	22



In the September issue, I wrote urging that all of the architects of the state attend the South Atlantic Regional Conference of the AIA to be held at Greenville during the last three days of October. I assured you that the program would be well worth the time and cost of making this trip. Thirty-six members of our Chapter registered for the conference, which is more than we have ever had attend a regional conference outside of our state. Our participation, incidentally, was somewhat larger than that of the four Georgia chapters.

Those who attended were unanimous in agreeing that this was one of the finest professional programs that they had ever attended. Listening to the architects on the program, all of whom have highly successful practices, again convinced me that the most important element of success in any architectural organization is its service to its clients. It was obvious that each went beyond the normal requirements to see that their clients received what they were paying for. I was also impressed with the presentation of Mr. D'Orsey Hurst, a management consultant who has worked with a number of architectural firms. He gave information on organization, overhead and profit for a well run practice that was of particular interest.

There was one idea that re-occurred throughout the conference and which was driven home particularly by Mr. Perkins, Mr. Parkin, Mr. Ketchum, and Mr. Swin-

burne. This was that the practice of architecture today is a team effort. The day of the one man office with an architect in smock and beret who knows all about all phases of design and construction is past. To meet the challenges of today's urban growth and complex building design, successful architectural firms are becoming team organizations made up of men of many complementary talents. These include architects with differing specialties, engineers, interior designers, landscape architects and others. Mr. Perkins said that the most important thing that we have is each other. This is true now and will become more and more true in the years ahead.

The South Atlantic Regional Conference again pointed out the need of continued professional education. Those who were there learned a great deal that will assist them in their practices, contribute to the growth of their firms and aid them in giving better service to their clients. My biggest regret was that all of our members could not be present. There will be other opportunities however, and I urge that you all attend our Chapter meeting in Durham in January. It will be a good idea to make reservations now if you have not already done so. I hope too, that you will consider attending the Institute convention in Washington in June. This will be the convention presided over by A. G. Odell, Jr., President of the Institute and member of our Chapter. Advance information indicates that it will be an outstanding meeting.

*A. Scott Tucker, Jr.*

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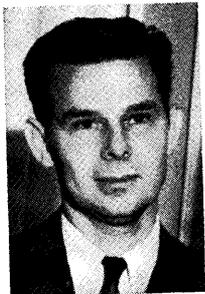
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# OFFICERS AND DIRECTORS OF NCAIA ELECTED FOR 1965

At the Fall Meeting of the Chapter held in Southern Pines on October 10, a slate of officers and directors of the North Carolina Chapter AIA was elected to serve for 1965, to take office January 1.



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 asheville



**J. Hyatt Hammond**  
 asheboro



At the Fall Meeting of the North Carolina Chapter AIA, Mrs. Arthur C. Jenkins, Jr., widow of the Chapter's late president, was presented a silver bowl in appreciation for her husband's service to the Chapter. Seated at the head table above with Mrs. Jenkins are members of the Executive Committee and their wives, l to r: Mrs. B. Atwood Skinner, Jr., Mr. Skinner, Secretary; Mrs. Jenkins, S. Scott Ferebee, Jr., President; Mrs. Macon S. Smith, Mr. Smith, Treasurer; Mrs. Leslie N. Boney, Jr., Mr. Boney, Vice President. Pictured below are members of NCAIA and their wives, enjoying luncheon at the Mid Pines Club, Southern Pines, at the Fall Meeting of NCAIA.



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**ROBERT E. L. PETERSON**

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general contractor:

Joslin Construction Co.

greensboro

structural engineer:

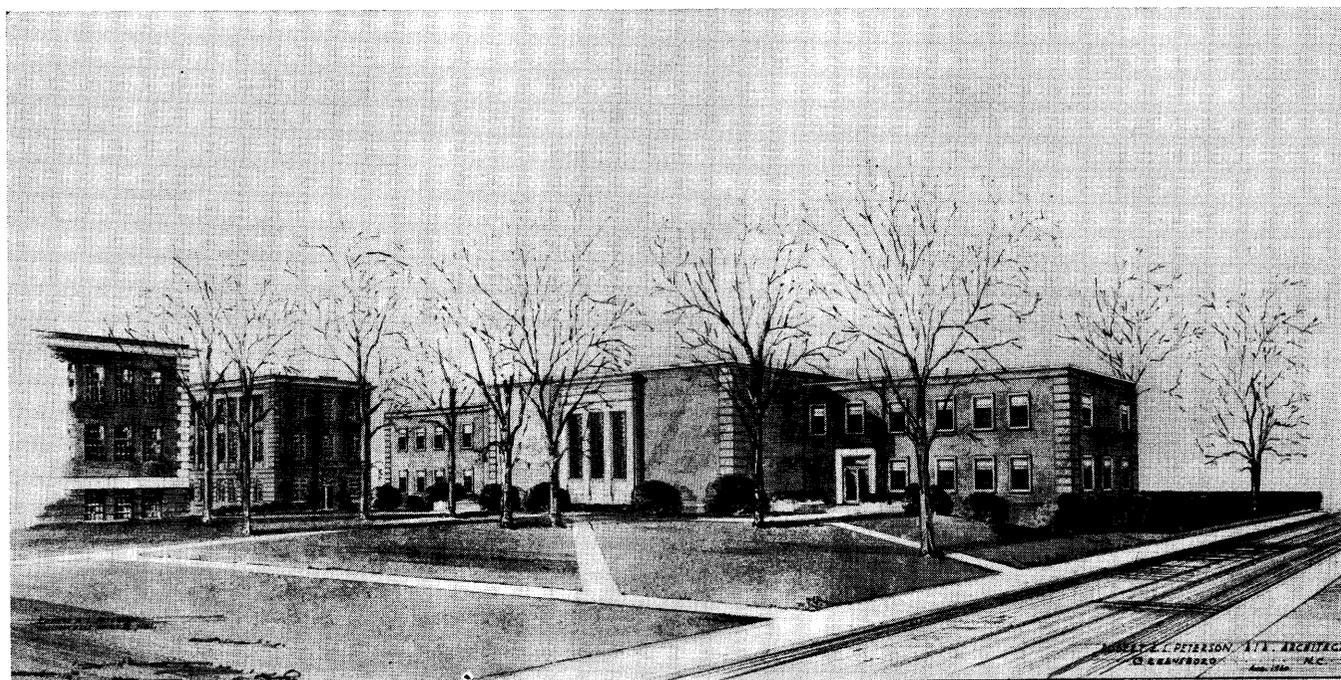
John V. Sutton

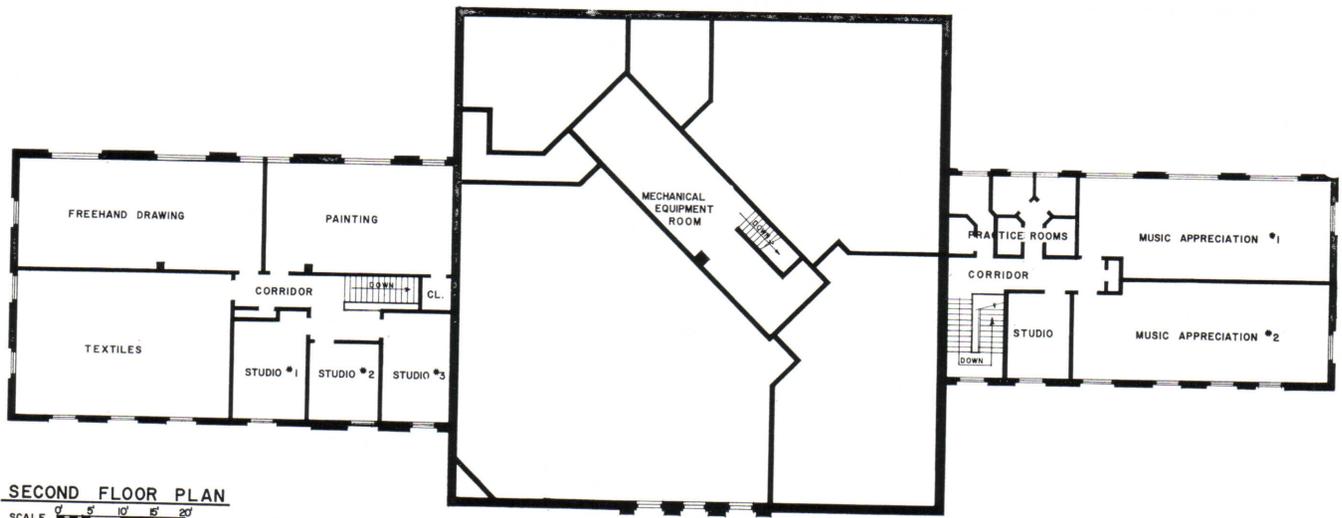
greensboro

mechanical engineer:

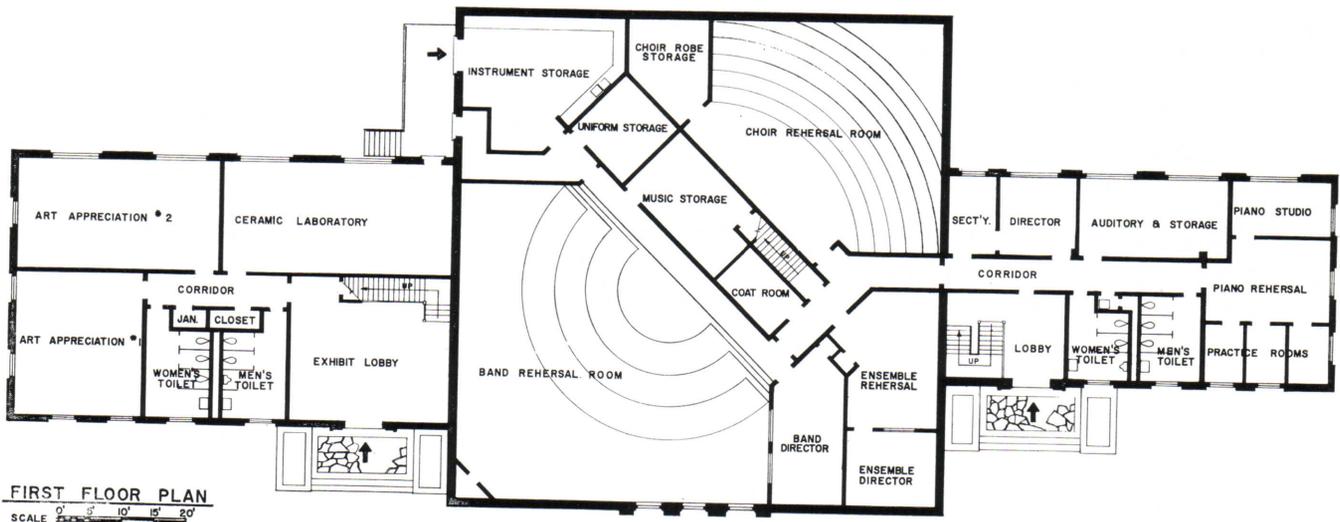
Cofer, Rouse & Jeglinski

greensboro





SECOND FLOOR PLAN  
SCALE 0' 5' 10' 15' 20'



FIRST FLOOR PLAN  
SCALE 0' 5' 10' 15' 20'

The site for the Music and Art Building at A & T College is located on the Old South Campus facing the quadrangle, thus controlling the design to blend with existing structures on the campus. The exterior walls are red sand faced brick with planters in the center section of Indiana Limestone.

The building is rectangular in shape with a clerestory type center core and a wing on either side. The center core contains band rehearsal and choir rehearsal rooms with tiered floors. Separating the band rehearsal from choir rehearsal is storage area on lower level and equipment room on upper level. Center section also consists of office space for band director, ensemble director, ensemble re-

hearsal, choir robe storage, music storage, uniform storage, instrument storage and loading platform.

The two story music wing has offices, auditory and storage rooms, piano studio, piano rehearsal, practice rooms and toilet facilities on the first floor; practice rooms, two large classrooms and one studio on the second floor.

On the opposite side of the center core, the arts department wing contains an exhibit lobby, ceramic laboratory, two large classrooms and toilet facilities on the first floor. Three studios and three large classrooms for textiles, freehand drawing and painting compose the second story of the arts wing.



## **NORTHERN NASH COUNTY HIGH SCHOOL**

associated architects:

**JOHN L. THOMPSON, AIA**  
rocky mount

**JESSE M. PAGE & ASSOCIATES**  
raleigh

project designed by:  
Jesse M. Page & Associates

educational specifications:  
C. H. Fries, Jr., Supt., Nash County Schools

structural engineer:  
Walter Preimats, P. E.  
asheboro

mechanical engineer:  
H. L. Buffaloe, P. E.  
raleigh

The Northern Nash High School will be centrally located between Nashville, Benvenue, and Red Oak communities of Nash County. It is one of three new comprehensive high schools that will be under construction during 1964-65-66.

This facility represents the second stage in the complete reorganization of Nash County schools, and is the outgrowth of a two year curriculum study carried out by the superintendent's central staff, the teachers, and lay advisory groups.

The school will be constructed on a 52 acre site and will serve approximately 1100 pupils in grades 9 through 12.

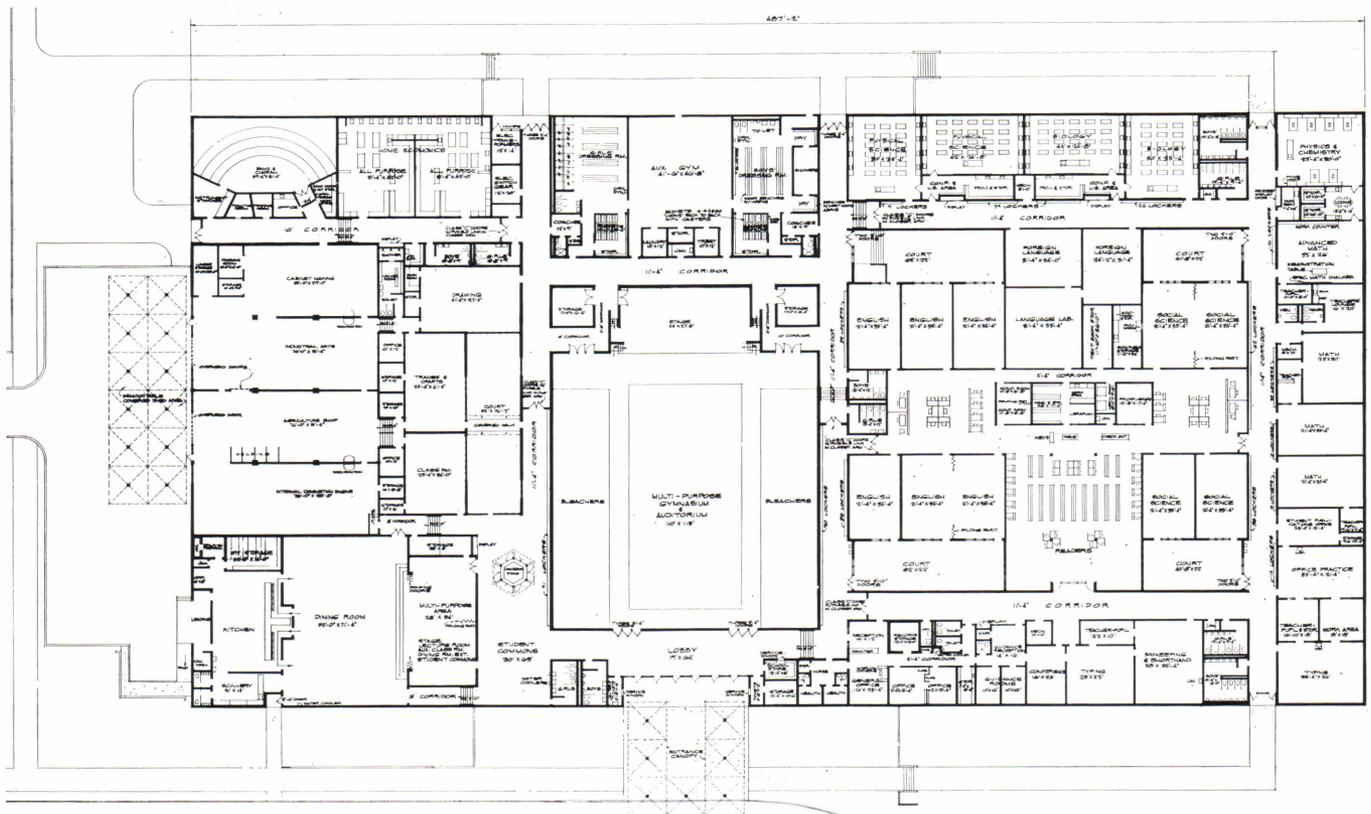
Throughout each planning stage emphasis has been placed upon flexibility and aesthetic quality, and the prevailing philosophy has been to "develop the facility around a sound educational program instead of developing a program around the fa-

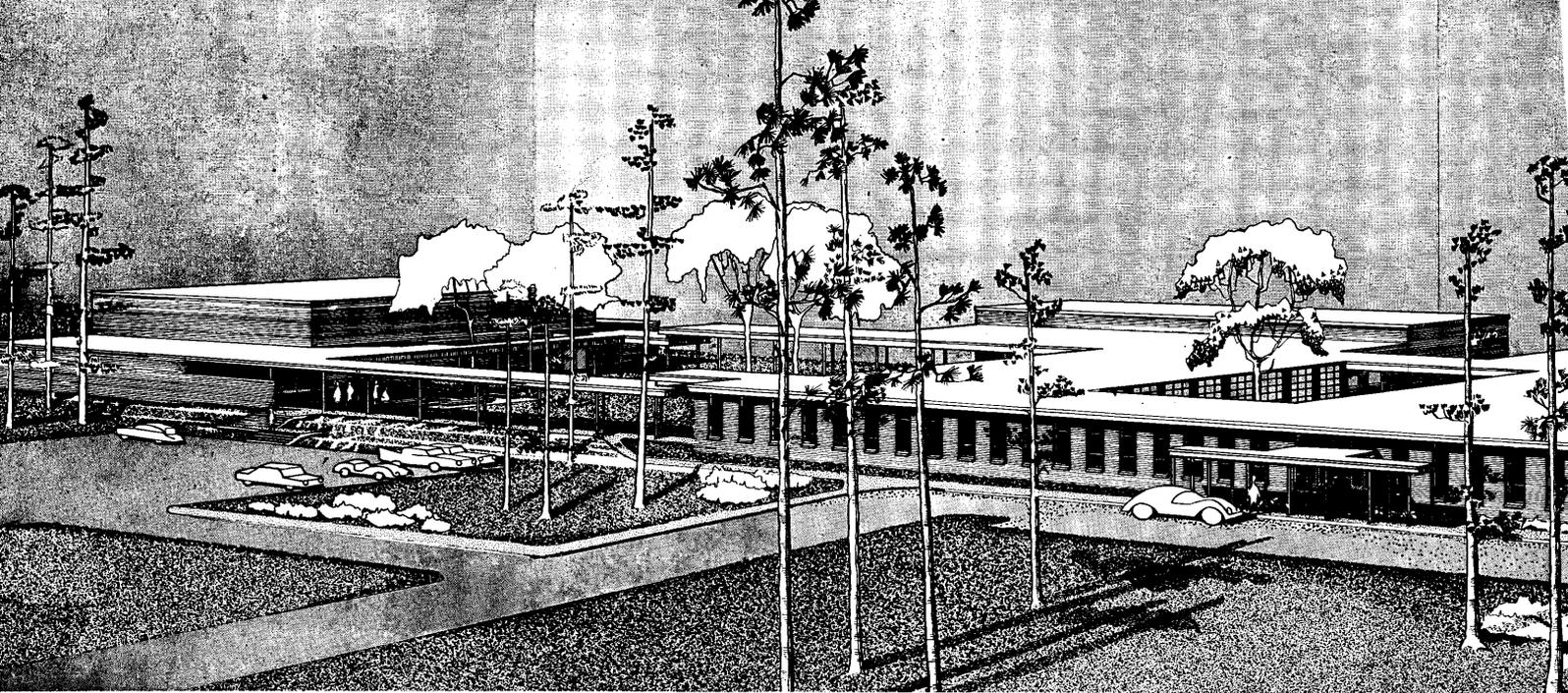
city." Special attention has been focused on the implications of an expanded curriculum to meet the needs of all pupils at all levels of ability.

The building will encompass 42 instructional areas including adequate provisions for eight separate vocational education programs. Compact design has been used in preference to the campus type design in order to better coordinate the total educational program. Provisions in construction provide for large group, small group, and individualized instruction.

The library and "materials resource center" is centrally located and serves as the heart of all instructional areas.

Electric heat with a mechanical ventilating system is another of several special features in this facility, and zone air conditioning can be added as desired at a nominal cost.





## NORTH JOHNSTON COUNTY CONSOLIDATED HIGH SCHOOL

micro township

architect:

**GUY E. CRAMPTON & ASSOCIATES**  
raleigh

general contractor — phase I  
L. P. Cox Company  
sanford

general contractor — phase II  
Dawson Construction Company  
kinston

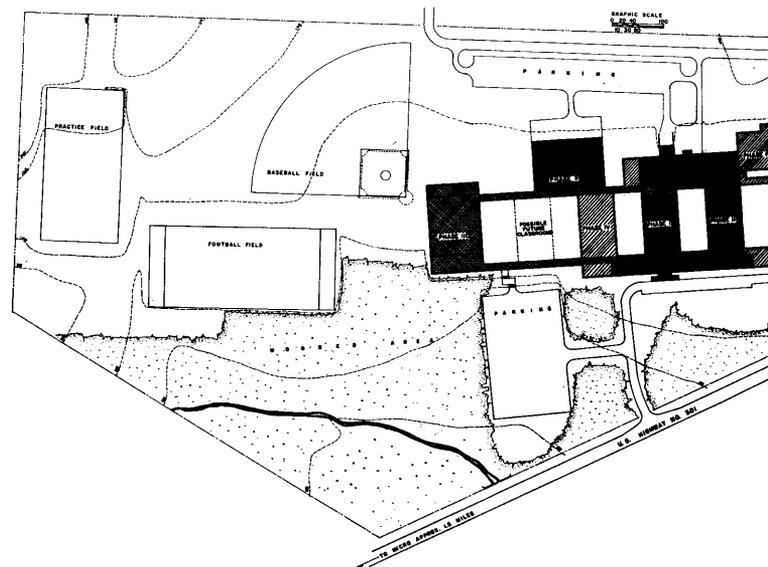
consulting engineers  
P. H. Brown and Associates  
raleigh

This school is located on Highway 301 between Micro and Kenly Townships in Johnston County. The property was cleared farmland except along the highway, and slopes gently from the back to the highway. There is a secondary road just beyond the North property line.

Ingress and egress will be from both the highway and the secondary road. Access roads, parking, and service road were located to serve the various facilities with the greatest possible separation from pedestrian traffic.

Budgetary reasons made it necessary to build in four phases. Phase I was the Science and Administrative areas, one classroom wing, Library, and Cafeteria completed this year. Phase II consists of a classroom wing and a shop wing, which are under construction. Phase III will be the Physical Education wing and will be built in the near future. The modified finger-type plan was chosen because it lends itself to development in stages.

Science and Homemaking rooms, which require the greatest amount of mechanical work under the floors, are located in the South Wing where existing grades allow the use of a crawl space



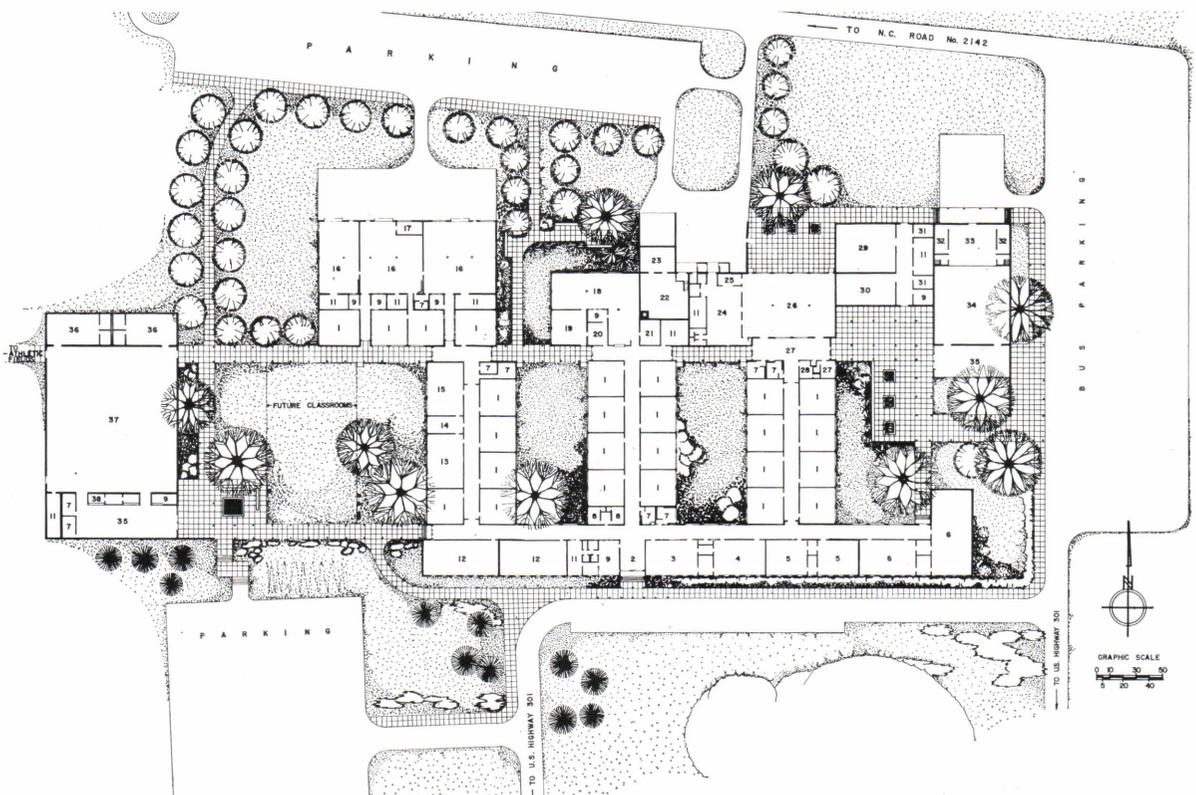
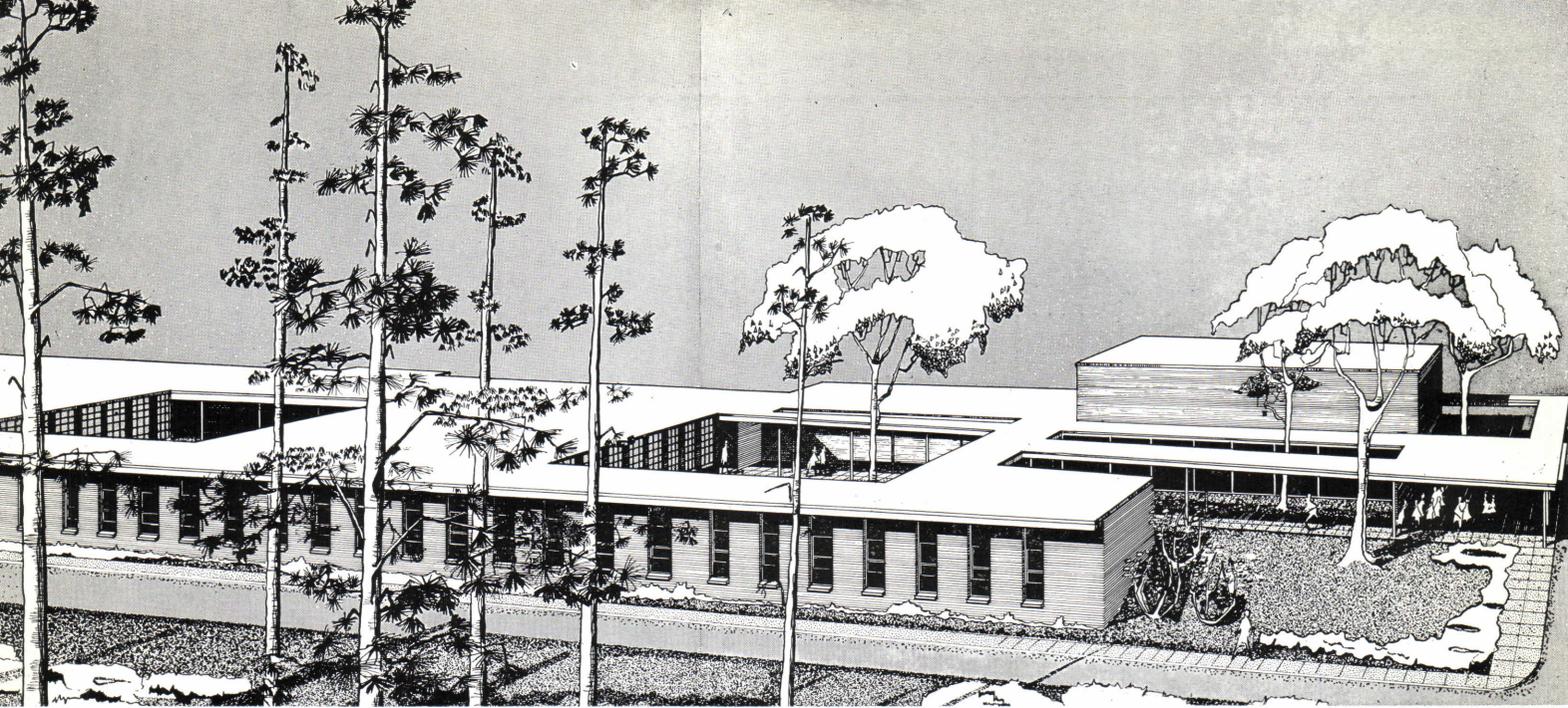
without excavation. Classrooms, Library and Cafeteria are slab on grade and required a minimum amount of grading.

Phases I and II will accommodate enrollment of 600 and the addition of the future Classroom Wing, Phase IV, will allow an enrollment of 900 students, which is considered to be the ultimate expansion.

Construction consists generally of masonry bearing walls, steel joists and lightweight, insulating concrete roof deck on corrugated steel forms.

Finish floors are generally resilient tile, with terrazzo in lobbies and corridors, and quarry tile in toilets and kitchen. Walls and partitions are generally painted concrete block. Ceilings are acoustical lay-in tile.

Heating is provided by a forced hot water system using wallvectors and convectors. Positive ventilation is provided by a mechanical exhaust system. Lighting is generally supplied by fluorescent fixtures.



**LEGEND:**

- |                    |                       |                   |
|--------------------|-----------------------|-------------------|
| 1. Classroom       | 13. Bookkeeping       | 26. Cafeteria     |
| 2. Foyer           | 14. Business Machines | 27. Lounge        |
| 3. Physics         | 15. Typing            | 28. Health Room   |
| 4. Chemistry       | 16. Shop              | 29. Band          |
| 5. Biology         | 17. Paint             | 30. Choral        |
| 6. Science         | 18. Library           | 31. Practice      |
| 7. Toilets         | 19. Visual Aids       | 32. Dressing Room |
| 8. Guidance        | 20. Workroom          | 33. Stage         |
| 9. Office          | 21. Conference        | 34. Auditorium    |
| 10. Principal      | 22. Boiler Room       | 35. Lobby         |
| 11. Storage        | 23. Coal              | 36. Lockers       |
| 12. Home Economics | 24. Kitchen           | 37. Gymnasium     |
|                    | 25. Dishwashing       | 38. Concession    |

# Delph

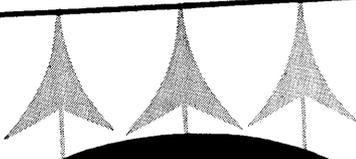
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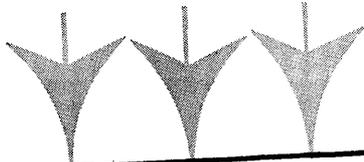
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# THE QUANTITY SURVEYOR

by Terence J. A. Ash, A.R.I.C.S.

*(Mr. Ash, of London, England, is a graduate of The Polytechnic School of Architecture and Surveying, held a Fulbright Scholarship to the Department of Architecture, Yale University, and is a Professional Associate of the Royal Institution of Chartered Surveyors. Previous articles have been published in Progressive Architecture, August 1960 and June 1961.)*

The term Quantity Surveyor conjures up many different images to members of the construction industry in this country. In many western European countries, and in England in particular, the quantity surveyor is firmly established as an independent professional adviser and very much a part of the consultant team.

A brief article of this nature can do no more than give an outline of the functions he performs. Necessarily the roles explained here are those fulfilled by the quantity surveyor in England, but it is anticipated that the reader will interpret these in conjunction with his experience of construction procedure in this country.

The role of the professional quantity surveyor in the construction industry is that of financial controller and adviser. He is commissioned and paid by the owner on a set scale of fees not unlike that used by the architectural profession. The amount of the fee, of course, depending on the amount and complexity of the operations that he is required to perform. As contact between the building owner and the quantity surveyor is usually remote, the appointment is often made by the owner on the recommendation of his architect. A quantity surveyor therefore may work with several architects and conversely an architect may have several quantity surveyors with whom he works. The quantity surveyor, however, is not in the employ of the architect and is thus able to retain an impartial position on matters relating to cost when dealing with the contractor.

As the professional cost adviser to the construction industry the functions of the quantity surveyor fall into three divisions:

1. Cost advice to the architect and owner during the design stage.
2. The preparation of a standard Bill of Quantities for uniform bidding purposes.
3. The preparation of monthly valuations of work completed and adjustment of variations during the contract.

In the last few years the first function of the quantity surveyor has been increasingly becoming the most important. This is due to an increasing awareness of the amount of time and money being spent by architects on schemes that do not fit the budgetary pattern outlined by the owner, with the obvious recriminations and costly alterations. It is the responsibility of the quantity surveyor to advise the architect in the early stages what he can and what he cannot do on the budget available including giving advice from the cost aspect on alternative types of frame, cladding, finishes, etc. that he may be considering. With a background of experience and cost data on which to base his judgment, the quantity surveyor can advise without becoming too

closely involved with the functions and aesthetics of a structure which are entirely the architect's responsibility. At this stage of the scheme the quantity surveyor is working with the architect and structural and mechanical engineers to produce a scheme that is feasible within the client's budget.

When the initial layouts are agreed and the working drawings well underway the second part of the quantity surveyor's function starts. This is the preparation of a Bill of Quantities, an identical copy of which is priced by all the bidding contractors for the purpose of building up their bid. During the preparation of this document the quantity surveyor becomes increasingly involved in the detail of the building. At this stage it is his responsibility to make more accurate cost checks on the final scheme to ascertain that the original estimates he has given to the architect are still feasible and that the project is still within the bounds of the budget.

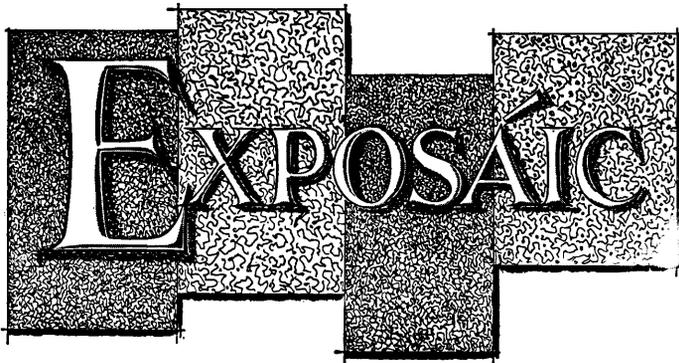
The responsibility for the accuracy of the quantities on which the bids are based rests entirely with the quantity surveyor. It is an important aspect of the system that the contractor is paid for what is actually constructed. Therefore any variations that occur between the quantities in the bidding document and those actually on site will be adjusted and will appear either as an addition or a deduction from the original contract sum.

Alterations can of course occur for many reasons and it is the measurement of these that forms the third function of the quantity surveyor's work. Also some items, like foundations or drainage, may be provisional at the bidding stage and these would be remeasured during the course of the contract. The basis for all measurement, whether for the original bill of quantities or for variations, is the Standard Method of Measurement, a document agreed between the representative bodies of architects, surveyors and contractors. The variations are priced with reference to the unit prices contained in the original bill of quantities. Likewise the prices contained in the bill of quantities are used by the surveyor to compute the value of work completed each month so that he can make a recommendation to the architect of the amount to be paid to the contractor.

The value of the quantity surveyor as cost adviser to the architect and the cost control that he carries out in the early stages of the project are very clear, but it is necessary to discuss further the nature of the bill of quantities itself. In practice the document also incorporates the specification and in the items contained therein the materials and workmanship are fully specified together with the quantity. The details of the specification, where they are not shown on drawings, are agreed with the architect. It is not the duty of the docu-

(Continued on page 16)

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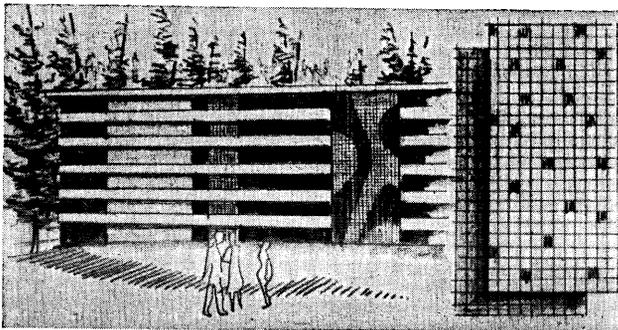
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ment to tell the contractor how to construct the building, but rather to tell him what is required of him in the way of materials and functions. The quantities therefore are set out in terms of square yards or cubic feet, etc. and not in terms of hours of labor and amount of material. In this way the unit prices that the contractor sets against each item will reflect the efficiency and methods of the contractor. As all the contractors are bidding on the same quantities it is solely on these unit prices that the competition occurs.

The origin of the bill of quantities is fairly simple. It had long been felt that it was a considerable waste of the resources of the industry for each contractor to prepare his own quantities for each job, especially as his ratio of successful bids was probably in the order of one in ten. The present system not only cuts down on the contractors, and hence suppliers and sub-contractors, overheads which are inevitably reflected in the cost of construction, but assures the owners that the bids they are receiving have all been prepared on the same basis.

It is the practice in England for a copy of the priced bill of quantities prepared by the successful contractor to be incorporated as a contract document, together with the contract drawings and the form of agreement. After the signing of the contract all price negotiations concerning the contract are based on this document.

The professional quantity surveyor has now been established in England for many years. Although his original task of preparing a bill of quantities still occupies much of his time, with the construction industry and owners becoming more cost conscious, so his role as cost adviser has grown more important. He is more concerned with pre-contract cost planning and cost control than ever before and the indications are that this field will continue to grow, as owners want more building for their money and are prepared to allow less time for the preparation of their schemes.

To give more than a glimpse of the scope and implications of the professional quantity surveyor's work will be an achievement in an article of this length. However it was the primary intention to explain briefly the quantity surveying system in England. It is hoped that this has been achieved and that sufficient background, deliberately unclouded by detail, has been given to enable the reader to grasp the essential role that the quantity surveyor and his work plays in the construction industry there.

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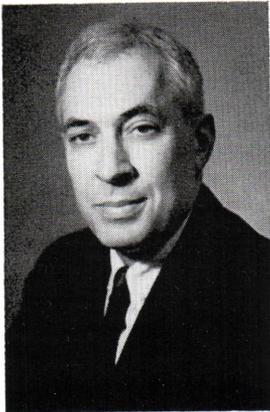
## 11TH HONOR AWARDS JURY NAMED

The Exhibitions Committee of NCAIA, Arthur R. Cogswell, Jr., AIA, Chairman, is pleased to announce the following have accepted invitations to serve as jurors for the eleventh annual Honor Awards program. The entries will be judged at the Chapter's annual Winter meeting to be held at the Jack Tar Hotel, Durham, January 21, 22, 23, with announcement of winners taking place at the banquet on Friday evening, January 22.



**PETER BLAKE, AIA**

PETER BLAKE, AIA, former Managing Editor, **Architectural Forum**, New York City. Educated in England and America, graduated B.Arch. Pratt Institute. Curator, Dept. of Architecture and Industrial Design, Museum of Modern Art, N. Y. Visiting critic and lecturer at colleges including Yale, Cornell, Pratt Institute and Cooper Union. Participant in conferences at Architectural League and elsewhere. Work published in many well-known architectural magazines in the U. S., England, Germany, Italy, Japan, Switzerland and Latin America. Among books credited to Mr. Blake is "The Master Builders" published in U. S., Germany, Japan and Argentina. He has won a number of awards for design as well as architectural journalism.



**CHARLES R. COLBERT, FAIA**

CHARLES R. COLBERT, FAIA, New Orleans, Louisiana, private practitioner, Architect-Planner. Graduate of University of Texas, B. Architecture; University of Michigan, post graduate in Naval Architecture; Columbia University, M.S. in Architecture; Loyola University, courses in College of Law. Assistant Professor of Architecture, Tulane University, 1947-49; Supervising Architect and Director, Office of Planning and Construction, Orleans Parish School Board, 1949-52; Private practice and visiting lecturer in City Planning, Tulane University, Director of A. & M. College of Texas for reorganization, 1952-1960; Architect-City Planner, New York and New Orleans, Dean, School of Architecture, Columbia University, 1960-63. Published works in numerous American and European magazines. Member American Planning and Civic Association, Affiliate of American Institute of Planners, Fellow, Royal Society of Arts.



**OLINDO GROSSI, FAIA**

OLINDO GROSSI, FAIA, Dean, School of Architecture, Pratt Institute, Brooklyn, N. Y. B.A., Bach. of Arch., M.S. in Arch., Columbia University. Winner of Rome Prize in Architecture, Fellowship of American Academy in Rome 1933-36. Consultant to City Planning Commission of New York City. Author of articles and architectural designs published in professional magazines. Awards for residential design. Recipient of the 1954 Memorial Award given by N. Y. State Association of Architects "for outstanding achievement for the benefit of the architectural profession during the preceding year." Awarded AIA grant in 1949 to execute a study of "Architecture and Planning" which is now touring N. Y. City high schools. Past President, The Architectural League of New York.

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# DESIGN FOUNDATION NEWS

The main function of the Design Foundation is to provide funds for salary supplement purposes at the North Carolina State School of Design. These funds materially aid the School in attracting and holding high-caliber faculty members and to remain competitive with other institutions. The Architectural

Profession wishes to thank the patrons listed below and to encourage other business and industrial firms to support the Foundation program. Interested persons may write Box 5067, State College Station, Raleigh, North Carolina. The list below does not include the many architects who also contribute to the foundation.

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## METAL SCULPTURE

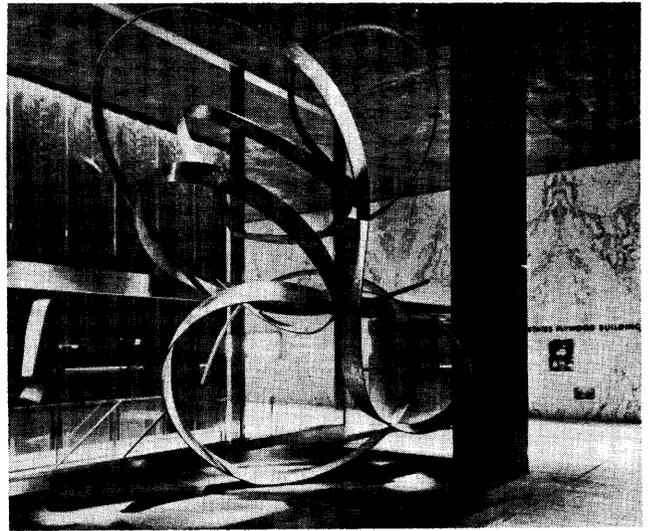
Many sculptors have turned away from traditional forms of sculpture and begun to create strange metallic shapes — gleaming solids, ribbonlike swirls and loops, sparkling masses of wire.

Are these artists laughing up their sleeves at buyers who don't know what they're getting — or are they producing truly great art?

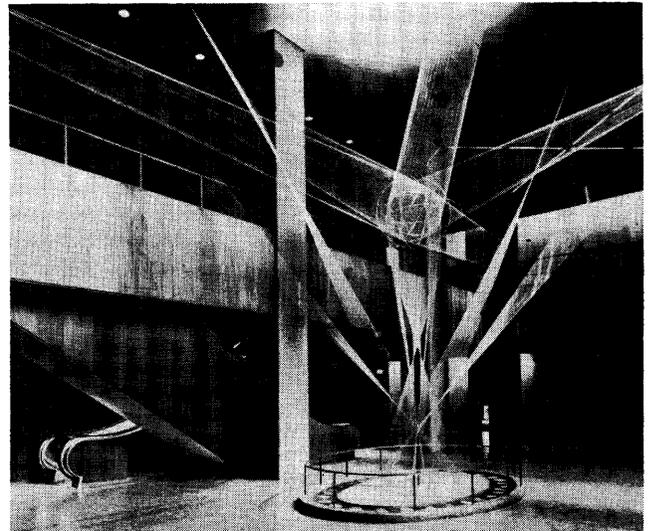
The prices of metal sculpture, relative to the cost of the materials used, are often fabulously high — yet big companies purchase these sculptures, and the highly placed executives who buy them are hard men to fool.

Many leading art critics, contrary to calling metal sculpture "an inside joke," have termed it a new art form: It is the business of the artist, argue such experts, to reinterpret the world for his fellowmen, so that the ordinary stuff of life emerges fresh and exciting. For our own time, they continue, metal sculptors with their new forms and methods of expression have assumed this "wizard" role. They have adapted the tools, materials and techniques of our industrial age and developed a particularly up-to-date "art language."

Some sculptors have gone beyond old materials — such as bronze casting and marble — and adopted stainless steel and other metals. In this machine age of speed and change, many metal abstracts are already considered "classical" and occupy an important place in galleries, museums and private collections.



Sculptress Beverly Pepper created a huge 17 foot high sculpture for the U. S. Plywood Building in New York. Twisted metal sheets form a pattern which delight the architect, William Lescaze, because its free-curving swirls enhance the straight lines of the building entrance.



Richard Lippold's "Flight," suspended in the lobby of the Pan American Building in New York, appeared to illustrate the performance and shape of modern aircraft. A total of 24,521 feet of individually stretched and tied gold and stainless steel wire represent the precise design and whirlwind speed of airplanes and air travel.



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Awards of Merit were presented to three North Carolina architectural firms at the South Atlantic Regional Conference of The American Institute of Architects held in Greenville, South Carolina, October 29-31. Clemmer & Horton Associates of Hickory, for their renovation of the student center at Lenoir Rhyne College; J. Hyatt Hammond & Associates of Asheboro, for their design of The Faculty Club at North Carolina State; and Haskins and Rice of Raleigh for the renovation of the Memorial Auditorium in Raleigh, were the firms honored.

More than five hundred architects, their wives, suppliers and guests attended the three day conference. The Region comprises North Carolina, South Carolina and Georgia. W. E. Freeman, Jr. of Greenville, S. C., is Regional Director and Bernard B. Rothschild of Atlanta, Georgia was named as the Region's nominee for Director to be voted on at the next Institute convention.

Dean Harlan McClure of the School of Architecture at Clemson University served as moderator. "Equation for Excellence" was the theme of the Conference, which had as its principal speaker A. G. Odell, Jr., FAIA, of Charlotte, President and Morris Ketchum, FAIA, of New York City, Vice President of The American Institute of Architects. The keynote speech was delivered by Lawrence B. Perkins, FAIA, partner in the firm of Perkins & Will, Chicago. Herbert Swinburne, FAIA, of Philadelphia addressed the Conference on "Marketing the Services of Architects", with graphic illustrations. Other speakers developing the theme of the Conference were John B. Parkin, Hon. FAIA, of Toronto, Canada, Ulrich Franzen, FAIA, of New York City. D'Orsey H. president of a management consultant firm in New York, discussed improving management technique in professional service firms, and Samuel Spen senior partner of the law firm which represents Institute, explored architects legal liability. G. L. White, Executive Vice President of Control Engineering Corporation discussed the relationship between the electronic age and the architect. concluding speaker for the Conference was B. L. Pickens, AIA, Professor of Architecture and consultant in Campus Planning at Washington University, St. Louis, who summarized the total cost of the conference.

COMING NEXT MONTH

NORTH CAROLINA ARCHITECT

With this issue we end the publication of SOUTHERN ARCHITECT and beginning with your December issue we will be a new name

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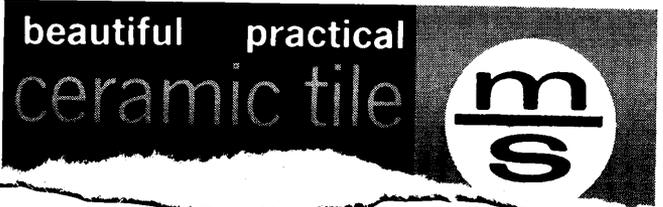
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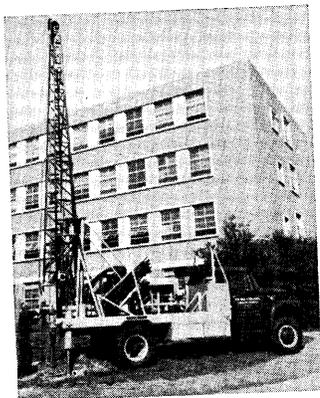
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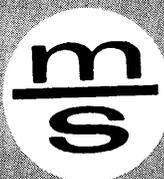
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## CALENDAR OF EVENTS

DECEMBER 1, 8, 15: Architect's Guild of High Point,  
Marguerite's Restaurant  
George C. Connor, Jr., AIA, President

DECEMBER 2: Charlotte Section of N. C.  
Chapter, AIA,  
Stork Restaurant No. 2  
Charles H. Wheatley, AIA, President

DECEMBER 2: Durham Council of Architects,  
Harvey's  
James A. Ward, President

DECEMBER 3: Raleigh Council of Architects,  
YMCA, 12:15-1:30  
Ralph B. Reeves, Jr., AIA, President

DECEMBER 4: Producers' Council Christmas Party  
Charlotte Merchandise Mart

DECEMBER 6-31: Print Show by five Winston-Salem  
Printmakers, Richard C. Bell Garden  
Gallery, Raleigh-Durham Highway

DECEMBER 14: Winston-Salem Council of Architects,  
Reynolds Building Restaurant  
Kenneth B. Jennings, AIA, President

DECEMBER 15: Deadline for material for January  
issue

DECEMBER 17: Greensboro Registered Architects,  
Ivanhoe's Restaurant  
Walter E. Blue, Jr., AIA, President

N. C. CHAPTER AIA WINTER MEETING  
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# No. 12

# exposed aggregates

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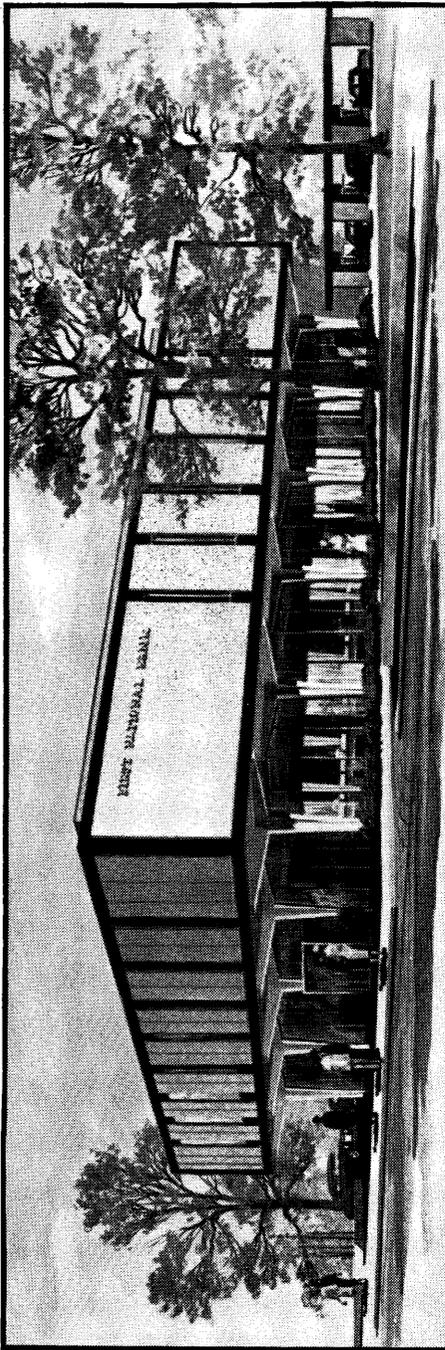
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### VISIBILITY SCALE

aggregate size	distance at which texture is visible
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1/2" - 1"	30 - 75 feet
1" - 2"	75 - 125 feet
2" - 3"	125 - 175 feet



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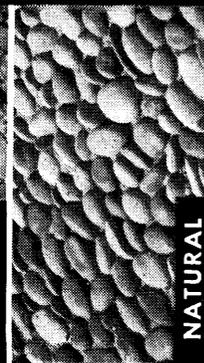
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SAND		fine to coarse	plain or sculptured panels	all areas	white-buff-yellow
PEBBLES		1/4" - 6"	fill-up walls, panels, walkways	west & southeast	white-red-orange-buff-black
MARBLE		1/2" - 2"	curtain wall panels	all areas	white-red-buff-yellow-black
GRANITE		3/4" - 2 1/2"	fill-up walls, panels, walkways	midwest & west	red-gray-buff-dark blue-black
QUARTZ	MINERALS	1/2" - 2"	curtain wall panels	east, west, south & midwest	white-pink-gray-clear

\*Reactivity: some glasses may react with alkalis in the cement to cause expansion. Consult glass manufacturer to determine if glass is reactive.

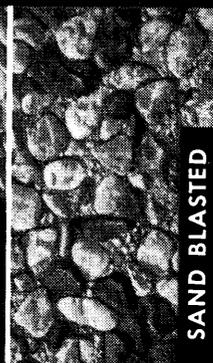
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