DOCUMENT RESUME

ED 428 531 EF 005 570

TITLE	Schools of Interest 3: A Selection of Building Projects.
INSTITUTION	North Carolina State Dept. of Public Instruction, Raleigh. Div. of School Planning.
PUB DATE	1977-00-00
NOTE	107p.; For other reports in this series, see EF 005 571-574, ED 095 661-662, and ED 159 782.
PUB TYPE	Guides - Non-Classroom (055) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Construction Costs; *Educational Facilities Design; *Educational Facilities Improvement; Educational Facilities Planning; Elementary Secondary Education; *Public Schools; *School Construction
IDENTIFIERS	North Carolina

ABSTRACT

This document presents a complete list of school construction projects, as of 1972, so that designers, educators, and interested citizens can visit or otherwise be aware of particular efforts in their district and elsewhere in North Carolina. Elementary, Middle, and High School buildings are included. Each offering provides the floor plan, photographs or line drawings of the school, and contractor information. A list of New Schools Bid, 1969 to 1976 concludes the document. (GR)

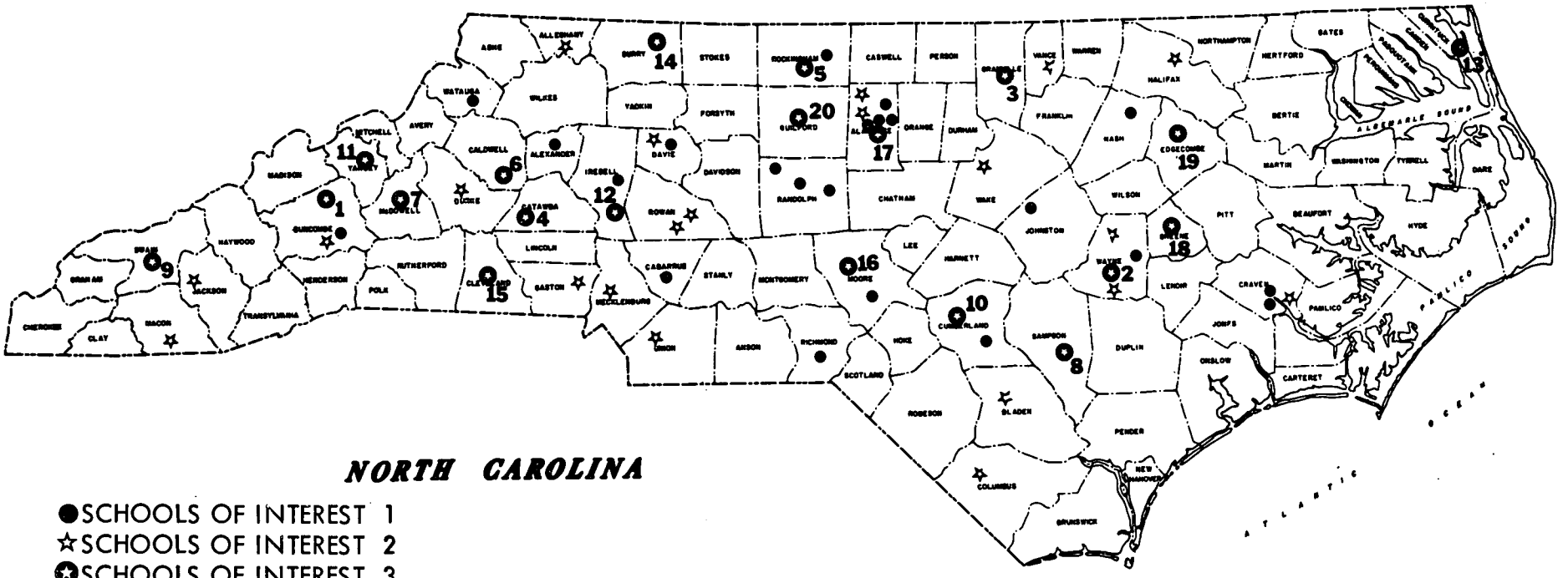
SCHOOLS OF INTEREST 3 A SELECTION OF BUILDING PROJECTS

DIVISION OF SCHOOL PLANNING / NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION

Table of Contents

Location of Schools of Interest in North Carolina

1. Erwin High School
2. North Drive Elementary
3. West Oxford Elementary
4. Charles Tuttle Middle School
5. Rockingham High Swimming Pool
6. South Caldwell High
7. Clinchfield - East Marion Elementary
8. Clinton High
9. Swain County High
10. Fayetteville Kindergartens
11. Mountain Heritage High
12. South Elementary
13. Currituck County High
14. Bruce H. Tharrington Elementary
15. Shelby Senior High Auditorium
16. Westmoore Elementary
17. Southern Middle School
18. Greene County High Music Building
19. North Edgecombe High
20. Greensboro Career Education Center



Introduction

Facilities for public education have come a long way since the days of "the pitcher-pump" and the "pot bellied stove." Yes, we now think in terms of fire-resistive structures, safe, sanitary, well lighted, flexible, ventilated, carpeted, tiled floors, automatically heated and cooled, and colorful buildings, but do we build schools that contribute to the education of children? Not just reading and writing and arithmetic, but to living, communicating with, and enjoying their teachers and their fellow classmates? Do the schools contribute to the richness and fullness of a person's life? Do the students say, "the school helped me to grow and mature, and helped me to set goals and standards, helped me to develop skills and attitudes essential to an interesting, happy, and satisfying life with myself, my family, my friends and my environment?"

Good modern buildings can and should contribute to the above aims and objectives of a good school system. But buildings must be used in an effective manner by people who have knowledge, skills, ability, energy and enthusiasm sufficient to plan, organize and administer a program if these goals and objectives are to be achieved in whole or in part. Modern facilities alone do not guarantee a good school.

Our challenge is to use our modern facilities to house a dynamic program of education and learning that will provide for the needs of each child who enrolls, not 60 percent, not 80 percent but 100 percent. We must find ways and means to meet the needs of each and every child, whether he has one talent or whether she has ten talents. The success of public education during the next decade will depend on the degree to which we meet this challenge.

J. L. Pierce, Former Director
Division of School Planning
Department of Public Instruction

Foreword

The first issue of Schools of Interest was published in 1971. The forward to that issue explained that many people had requested information about which recently constructed educational facilities might be of interest to designers and educators. There was an enthusiastic response to that issue as well as to a second publication in 1973 which was entitled Schools of Interest 2. In both instances, we did not try to illustrate or include each new school building project which might be of special interest. Time and space necessarily limited our choices. Therefore, many exceptional projects were not included. Such is the case with this latest issue of Schools of Interest.

We have included a complete list of school construction projects so that designers, educators, and interested citizens can visit or otherwise be aware of particular efforts in their districts and elsewhere in North Carolina. There are many well designed school facilities listed which are not illustrated. These facilities house educational programs which range from traditional to open education. Illustrated choices are not intended to represent a particular point of view or philosophy of education. Actually, most of these schools have been designed to accommodate a spectrum of local educational philosophies. In each instance we believe the designers have attempted to respond creatively to the educational program or prevailing construction circumstances.

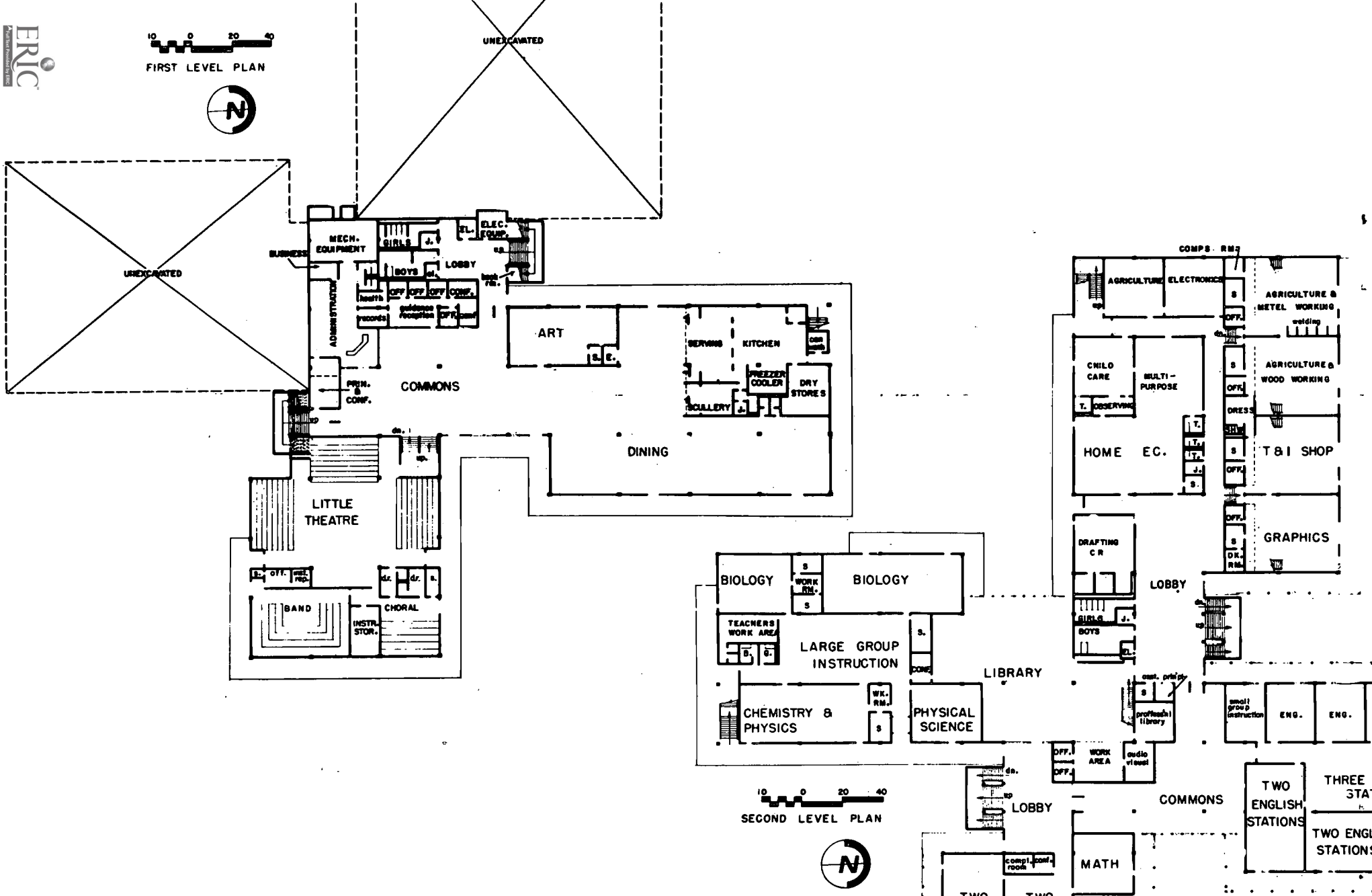
April, 1977

Lacy Presnell

Lacy Presnell, Director
Division of School Planning
Department of Public Instruction

A. Craig Phillips, State Superintendent
North Carolina Department of Public Instruction

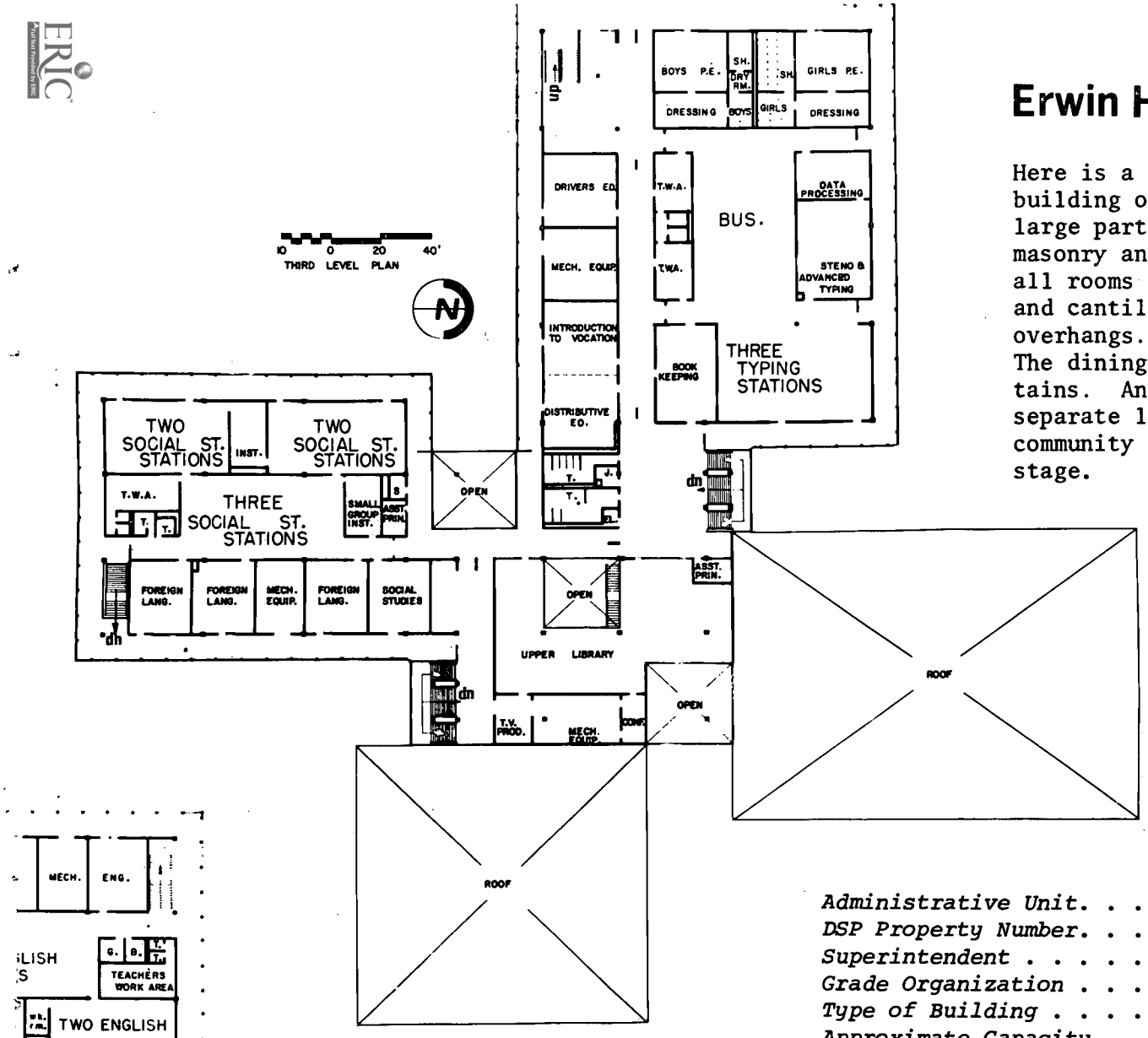
James T. Burch, Assistant Superintendent
Administrative Services Area


10 0 20 40
FIRST LEVEL PLAN
UNEXCAVATED
UNEXCAVATED
MECH. EQUIPMENT
GIRLS
BOYS
LOBBY
ELEC. EQUIP.
BUSINESS
ADMINISTRATION
health
records
guidance reception
OFF.
CONF.
PRIN. & CONF.
COMMONS
ART
SERVING
KITCHEN
FREEZER COOLER
DRY STORES
SCULLERY
DINING
LITTLE THEATRE
BAND
CHORAL
INSTR. STOR.
BIOLOGY
WORK RM.
BIOLOGY
TEACHERS WORK AREA
LARGE GROUP INSTRUCTION
CONF.
LIBRARY
CHEMISTRY & PHYSICS
WK. RM.
PHYSICAL SCIENCE
LOBBY
COMMONS
COMPS. RM.
AGRICULTURE
ELECTRONICS
AGRICULTURE & METEL WORKING
welding
AGRICULTURE & WOOD WORKING
CHILD CARE
MULTI-PURPOSE
OBSERVING
HOME EC.
DRESS
T & I SHOP
DRAFTING CR
GRAPHICS
LOBBY
GIRLS
BOYS
cent. priority
professional library
small group instruction
ENG.
ENG.
OFF.
WORK AREA
audio visual
TWO ENGLISH STATIONS
THREE STA
TWO ENGL STATIONS
10 0 20 40
SECOND LEVEL PLAN
compl. room
conf.
MATH
TWO MATH STATIONS
TWO MATH STATIONS
MECH. EQUIP.
TEACHERS WORK AREA
MATH
TWO MATH STATIONS

12

4

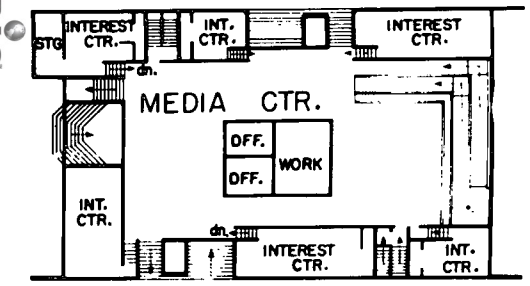
13



Erwin High School

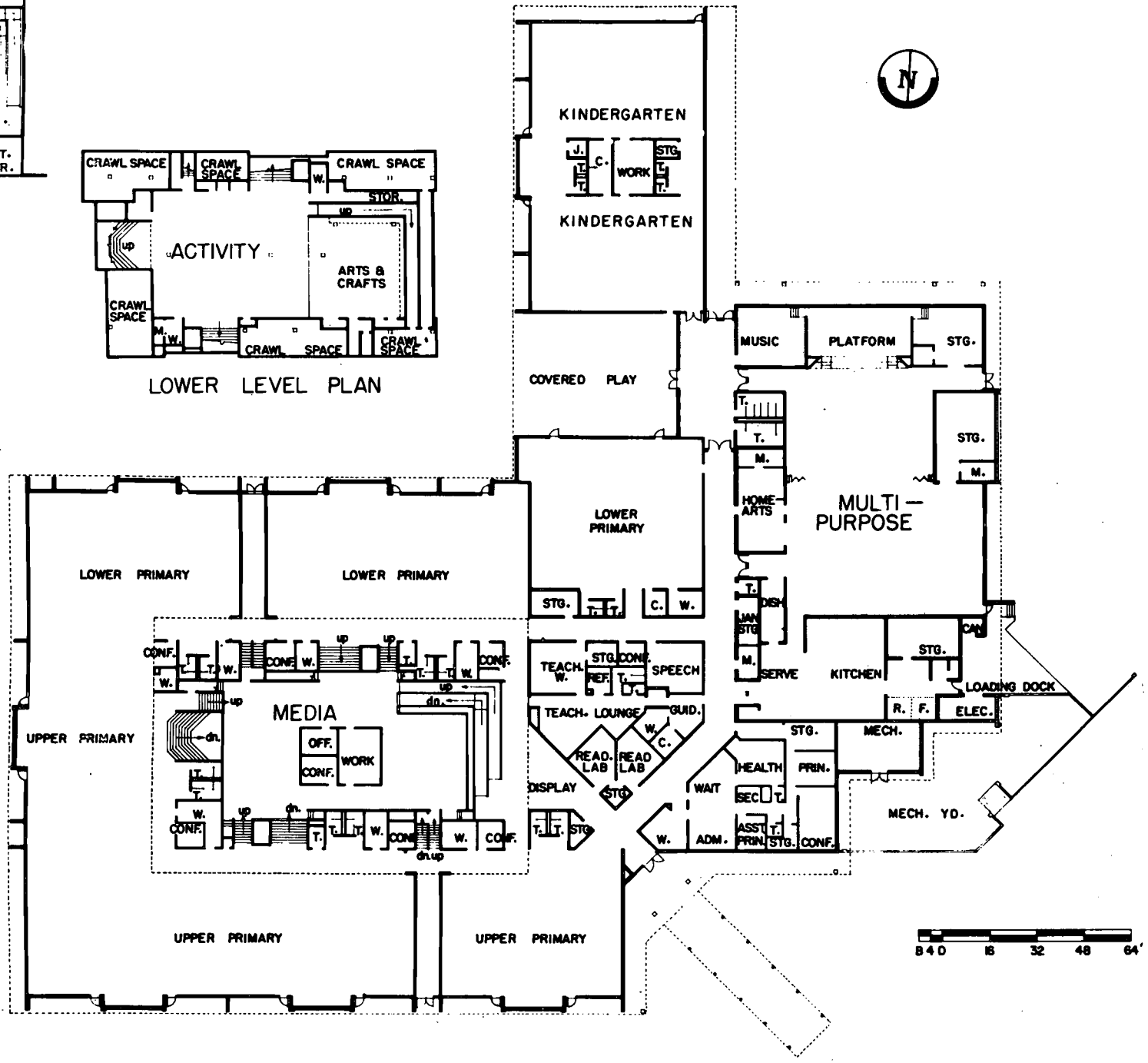
Here is a site in the mountains which suggested a building on more than one level. The result is a large partially three story school constructed of masonry and post tensioned concrete. Just about all rooms are accessible from exterior sidewalks and cantilevered balconies sheltered by wide roof overhangs. The theater is a modified arena type. The dining room has views to surrounding mountains. An elevator serves all levels from a separate lobby. A large gymnasium and indoor community swimming pool are in the planning stage.

Administrative Unit . . . . . .*Buncombe County*
DSP Property Number *110-3596*
Superintendent . . . . . *Fred H. Martin*
Grade Organization *10-12*
Type of Building . . . . . .*New*
Approximate Capacity *1,800*
Square Footage *169,000*
Approval Date . . . . . *January 1974*
Architect . . . . . *Baber, Cort and Wood*
Structural Engineer . . . . . .*Sutton, Kennerly and Associates*
Electrical Engineer . . . . . *K. M. Armstrong and Associates*
Mechanical Engineer . . . . . .*Mechanical Engineers Inc.*



UPPER LEVEL PLAN

LOWER LEVEL PLAN

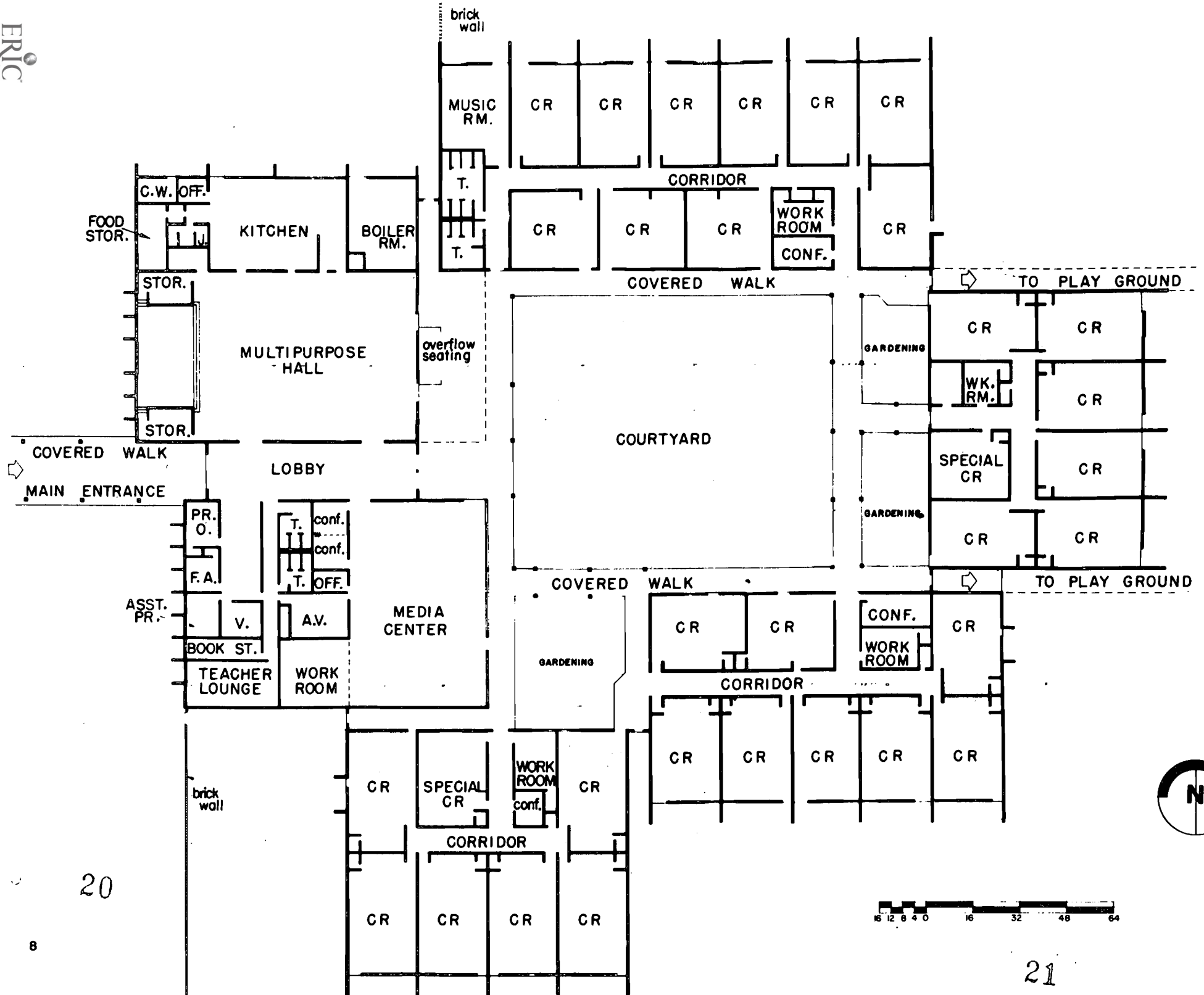


North Drive Elementary

There are several interesting things to be seen at this school. One is the first solar energy collector used to heat the domestic hot water and provide some of the general heating energy. Another is a multi-level media center surrounded by a variety of small workrooms and other support spaces. A third is wall areas made of individually sculptured bricks. Also, the entire plan is arranged so that future interior changes can be made by means of relocating partitions or room dividers.

Landscaping is part of the original design and planning effort.

Administrative Unit	*Goldsboro*
DSP Property Number	*962-3683*
Superintendent	*Dr. James E. Surratt*
Grade Organization	*K-4*
Type of Building	*New*
Approximate Capacity	*1,200*
Square Footage	*60,000*
Approval Date	*July 1975*
Architect	*Griffin-Flynn, Ltd.*
Structural Engineer	*Progressive Design*
Mechanical and Electrical Engineers	*Fenner-Proffitt, Inc.*


brick wall
MUSIC RM.
CR
CR
CR
CR
CR
CR
T.
T.
T.
CORRIDOR
C.W.
OFF.
FOOD STOR.
KITCHEN
BOILER RM.
CR
CR
CR
WORK ROOM
CONF.
CR
STOR.
COVERED WALK
TO PLAY GROUND
MULTIPURPOSE HALL
overflow seating
COURTYARD
GARDENING
CR
CR
WK. RM.
CR
STOR.
SPECIAL CR
CR
COVERED WALK
LOBBY
MAIN ENTRANCE
GARDENING
CR
CR
TO PLAY GROUND
PR. O.
F. A.
T.
conf.
conf.
T.
OFF.
ASST. PR.
V.
A.V.
MEDIA CENTER
BOOK ST.
TEACHER LOUNGE
WORK ROOM
GARDENING
CR
CR
CONF.
WORK ROOM
CR
CORRIDOR
CR
CR
CR
CR
CR
brick wall
CR
SPECIAL CR
WORK ROOM
conf.
CR
CORRIDOR
CR
CR
CR
CR
16 12 8 4 0 16 32 48 64
N

20

8

21

West Oxford Elementary

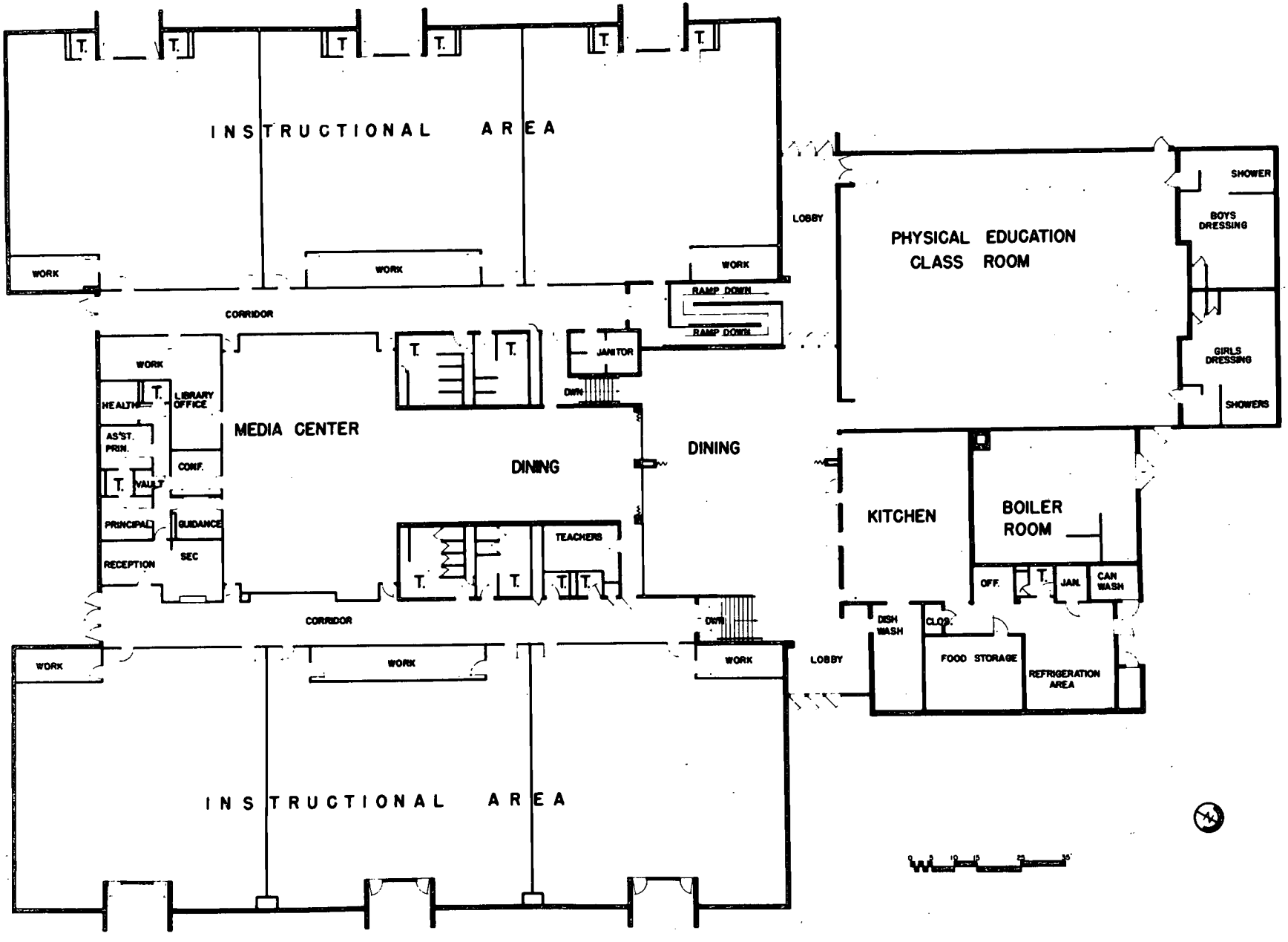
A traditional education program has been translated into a very attractive and economical school complex. Sloping roofs on a concrete frame shelter exterior walls and covered walks. White painted walls have many bright colored graphic images used for signs and direction indicators.

Bus, automobile and pedestrian traffic is well planned. Arrivals and departures are related to a long covered walk penninsular entrance.

The courtyard features a concrete pipe water fountain around which is grouped brick paving, planting bins, and trees.

This building design indicates that "self contained" classrooms and supporting facilities can be composed in a fresh way. The educational program need not be an obstacle to creative effort.

Administrative Unit	*Granville County*
DSP Property Number	*390-3686*
Superintendent	*L. C. Adcock*
Grade Organization	*K-02*
Type of Building	*New*
Approximate Capacity	*900*
Square Footage	*54,500*
Approval Date	*July 1975*
Architect	*Robert W. Hedrick*
Structural Engineer	*Walter Preimats*
Mechanical and Electrical Engineers	*O. P. Hay, Jr.*


INSTRUCTIONAL AREA
WORK
WORK
WORK
CORRIDOR
RAMP DOWN
RAMP DOWN
LOBBY
PHYSICAL EDUCATION CLASS ROOM
SHOWER
BOYS DRESSING
GIRLS DRESSING
SHOWERS
JANITOR
DWN
WORK
HEALTH
LIBRARY OFFICE
MEDIA CENTER
AS'ST. PRIN.
CONF.
VAULT
PRINCIPAL
GUIDANCE
SEC
RECEPTION
DINING
DINING
TEACHERS
KITCHEN
BOILER ROOM
OFF.
JAN.
CAN WASH
CORRIDOR
DWN
DISH WASH
CLOS.
FOOD STORAGE
REFRIGERATION AREA
LOBBY
WORK
WORK
WORK
INSTRUCTIONAL AREA

24

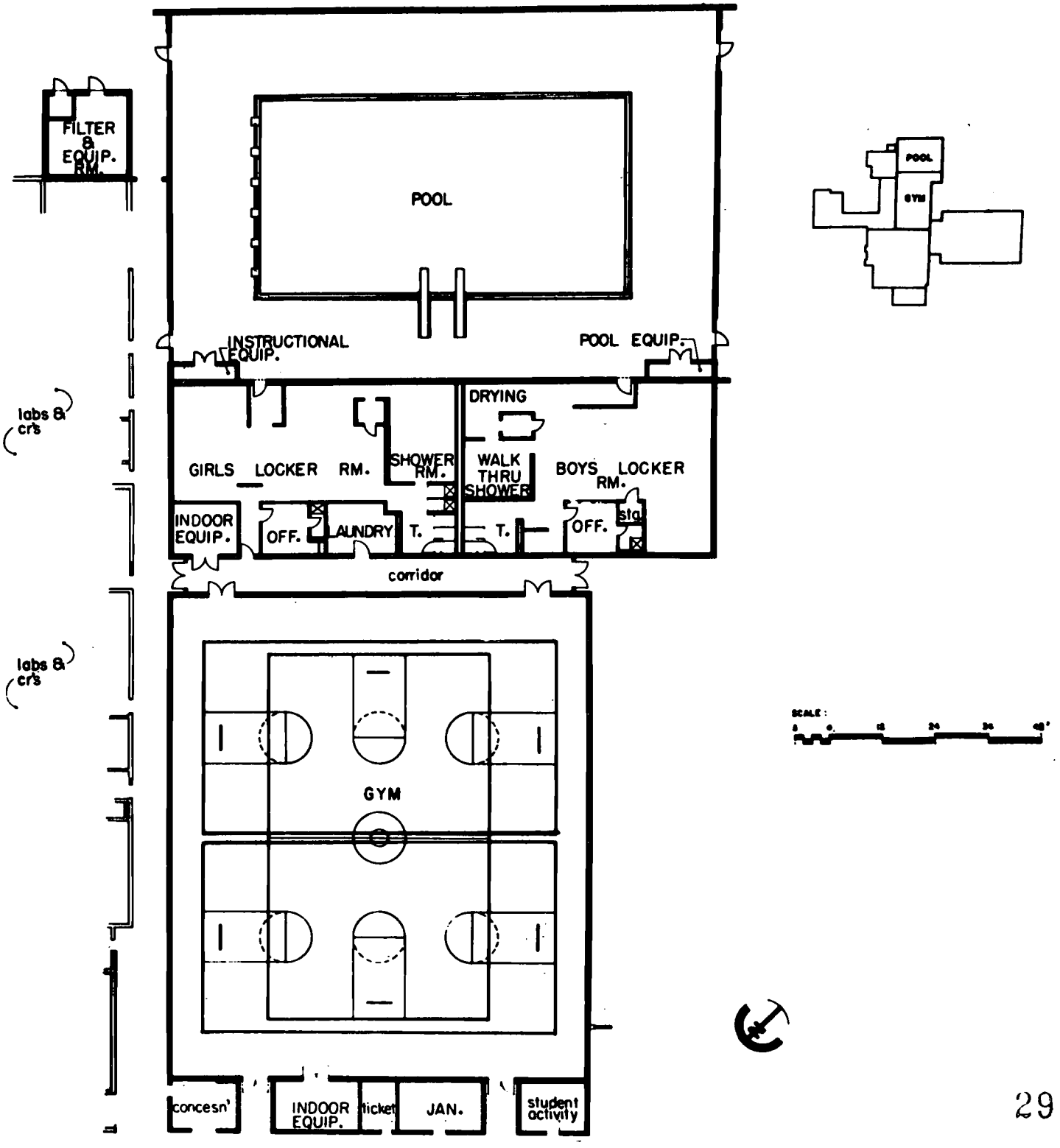
25

Charles Tuttle Middle School

A simple plan and structure allowed sixty foot long span roof joists to be used over all the large rectangles. The resulting interior flexibility and construction economy was worth the thoughtful architectural planning effort. Each of the four teacher pods can be rearranged to suit any educational program or student grouping. Media center and upper level dining can increase or decrease in floor area as need indicates. Lower level of dining can be divided into two spaces. Also, it can be a lobby or student commons.

This plan has been used in Catawba County with minor changes for Webb Murray Elementary School, a K-6 school.

Administrative Unit . . . . . *Catawba County*
DSP Property Number *180-3672*
Superintendent . . . . . *Charles H. Tuttle*
Grade Organization *6-8*
Type of Building . . . . . *New*
Approximate Capacity *650*
Square Footage *57,300*
Approval Date . . . . . *November 1974*
Architect . . . . . *Clemmer, Horton, Bush and Sills, Inc.*
Structural Engineer . . . . . *R. L. Clemmer*
Mechanical and Electrical Engineers . . . . . *Martin E. Burrows*


FILTER & EQUIP. RM.
POOL
INSTRUCTIONAL EQUIP.
POOL EQUIP.
labs & cr's
DRYING
GIRLS LOCKER RM.
SHOWER RM.
WALK THRU SHOWER
BOYS LOCKER RM.
INDOOR EQUIP.
OFF.
LAUNDRY
T.
T.
OFF.
stg
corridor
labs & cr's
GYM
concesn'
INDOOR EQUIP.
ticket
JAN.
student activity
POOL
GYM
SCALE :

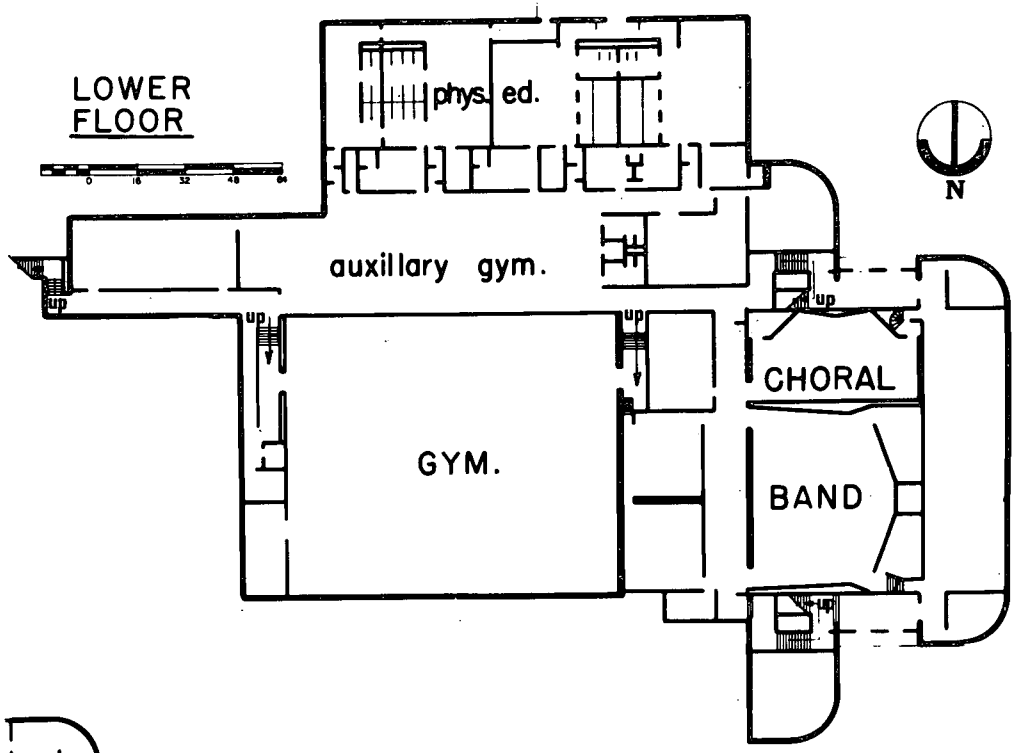
Rockingham High Swimming Pool

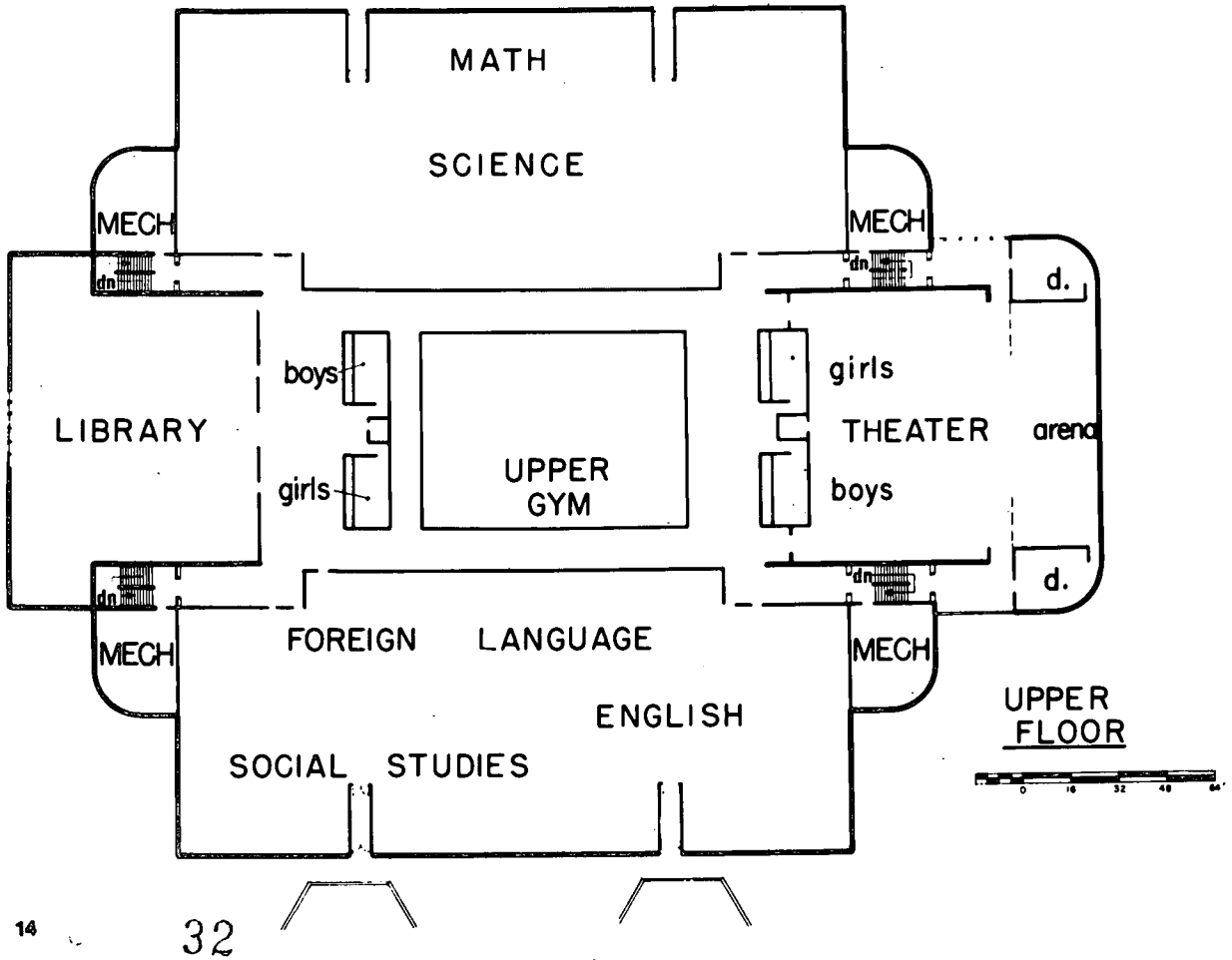
This is the first indoor swimming poôl planned as part of a physical education program since the 1920's. Other pools are being planned or constructed in several administrative units. Swimming offers an opportunity for all students to participate in sports and physical education, whereas basketball and most team sports are limited to the select few who are skilled. Also, water safety and survival techniques are becoming more important as part of many recreation activities. Has anyone died because they couldn't play basketball?

A gymnasium with dressing rooms is the most expensive facility to build and operate at a high school. Its efficiency can be dramatically increased when an all inclusive swimming program is included.

Administrative Unit. . . . . .Rockingham County
DSP Property Number. 790-3670
Superintendent . . . . . Dr. Richard H. Schultz
Grade Organization 9-12
Tupe of Building . . . . . .New
Approximate Capacity of Schoól 1,000
Square Footage 10,800
Approval Date. . . . . .July 1975
Architect. . . . . .Mays & Parks Associates
Structural Engineer. . . . . .Sutton, Kennerly and Associates
Mechanical and Electrical
Engineers. . . . . Ernest G. Myatt and Associates

Administrative Unit. . . . . Caldwell County
DSP Property Number. 140-3635
Superintendent . . . . . Dr. Gerald D. James
Grade Organization 10-12
Type of Building . . . . . New
Capacity 1200-1500
Square Footage 210,000
Approval Date. . . . . .January 1975
Architect. . . . . .Architecture III
Structural Engineer. . . . . .Robert G. Kennerly
Mechanical and Electrical
Engineers. . . . . .Daly & McDermott

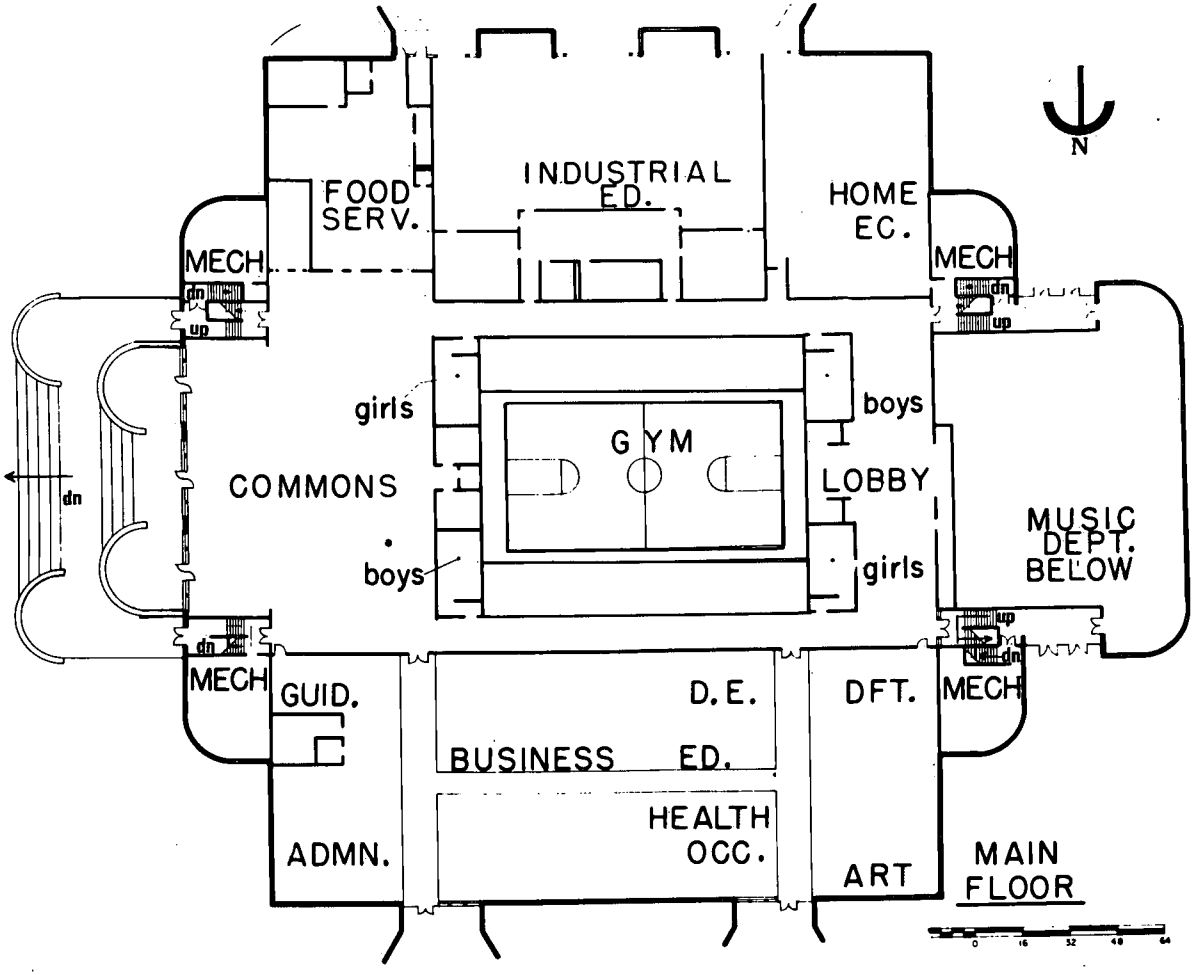


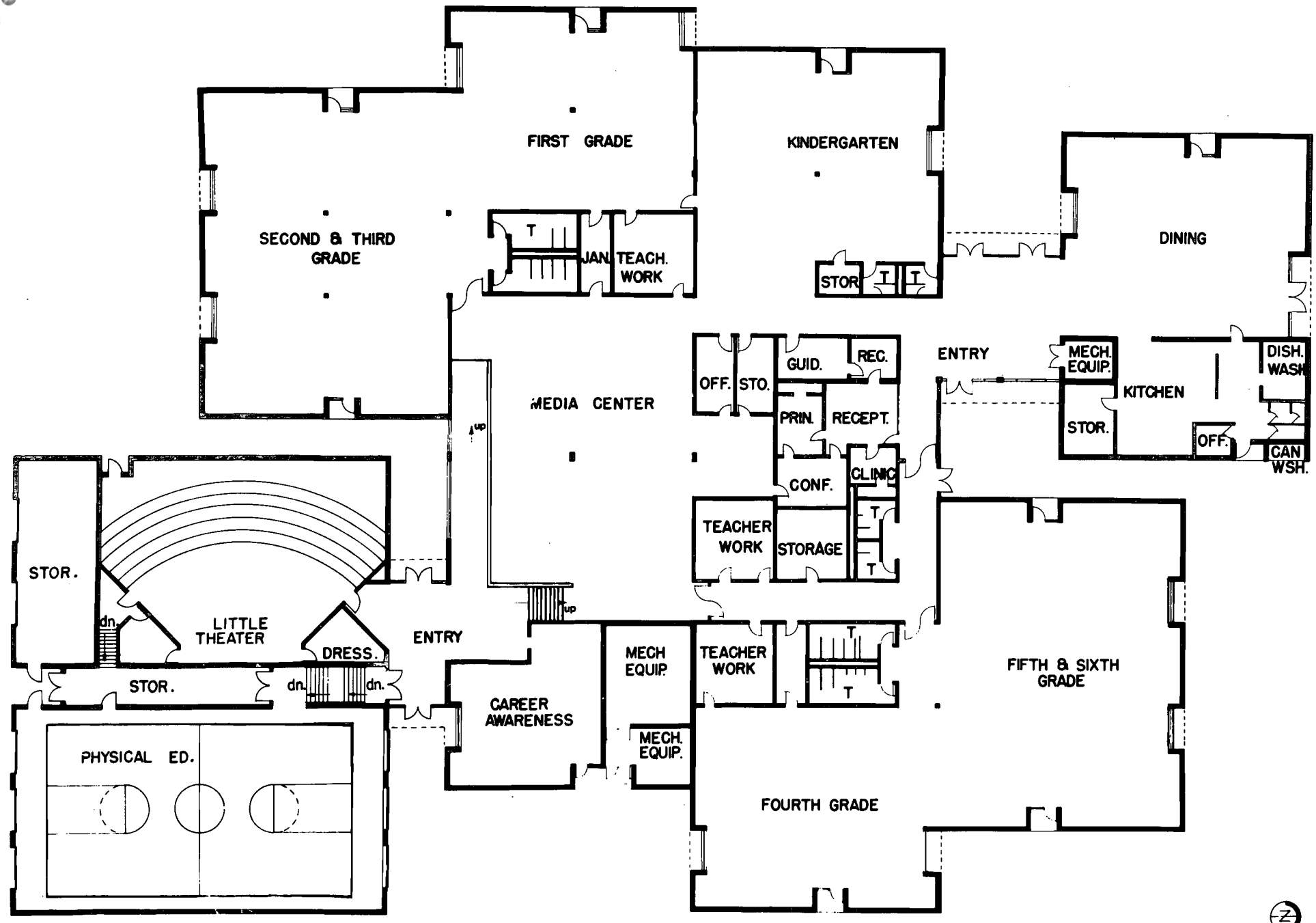


South Caldwell High

Part of this school is three stories. However, the most interesting feature is the berm design. Only the upper floor and the high windows of the main floor are above finished grade. Earth has been banked up to window sill height on all sides of the building. The earth berms continue the totally planned and landscaped site up the reinforced concrete walls of the building.

Interior planning includes about as much partition flexibility as any educational program might require. Even the entrance commons and cafeteria share the same space. West Caldwell High has been built using this plan and berm design.




FIRST GRADE
KINDERGARTEN
SECOND & THIRD GRADE
T
JAN.
TEACH. WORK
STOR
T
T
DINING
MEDIA CENTER
up
OFF.
STO.
GUID.
REC.
PRIN.
RECEPT.
CONF.
CLINIC
TEACHER WORK
STORAGE
T
T
ENTRY
MECH. EQUIP.
KITCHEN
STOR.
OFF.
DISH. WASH
CAN WSH.
STOR.
dn.
LITTLE THEATER
DRESS.
ENTRY
up
STOR.
dn.
dn.
MECH EQUIP
TEACHER WORK
T
T
FIFTH & SIXTH GRADE
CAREER AWARENESS
MECH. EQUIP.
PHYSICAL ED.
FOURTH GRADE
N
5 0 10 20 30 40

36

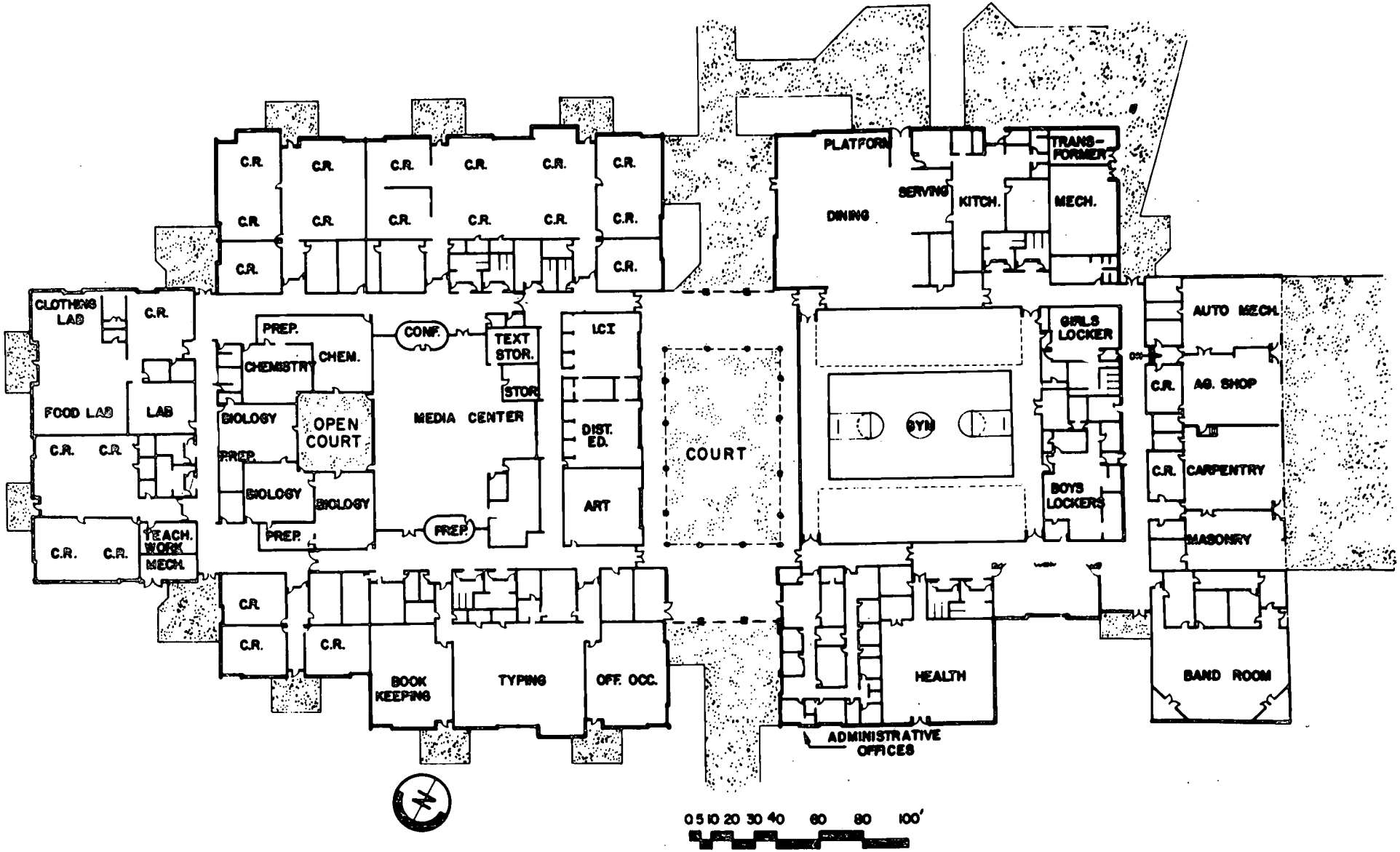
37

Eastfield Elementary

The sloping site suggested a group of classroom pods on two levels. Each pod is structurally open so that interior areas can be subdivided to suit educational methodology or groupings. Each pod has emergency exits directly to the outside. Administration and media center support spaces form the core of the school.

Exterior walls are masonry. Structural frame and roof are steel. Roofs form a sequence of sloping planes which reflect the sloping site.

Administrative Unit . . . . . .*McDowell County*
DSP Property Number *590-3665*
Superintendent . . . . . *James E. Johnson*
Grade Organization *K-6*
Type of Building . . . . . .*New*
Approximate Capacity *500*
Square Footage *50,000*
Approval Date . . . . . .*December 1974*
Architect . . . . . .*Baber, Cort, and Wood*
Structural Engineer . . . . . .*Sutton, Kennerly and Associates*
Mechanical and Electrical Engineers . . . . . .*T. C. Cooke Engineers*


C.R.
CLOTHING LAB
FOOD LAB
LAB
TEACH. WORK
MECH.
PREP.
CHEMISTRY
CHEM.
BIOLOGY
OPEN COURT
CONF.
MEDIA CENTER
TEXT STOR.
STOR.
LCI
DIST. ED.
ART
COURT
PLATFORM
DINING
SERVING
KITCH.
TRANS-FORMER
MECH.
GIRLS LOCKER
BOYS LOCKERS
GYM
AUTO MECH.
AG. SHOP
CARPENTRY
MASONRY
BOOK KEEPING
TYPING
OFF. OCC.
HEALTH
BAND ROOM
ADMINISTRATIVE OFFICES
0 5 10 20 30 40 60 80 100'

40

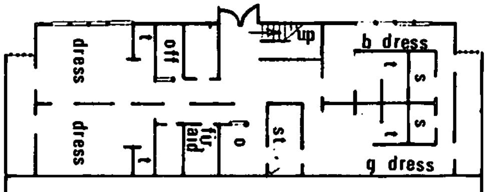
41

Clinton High

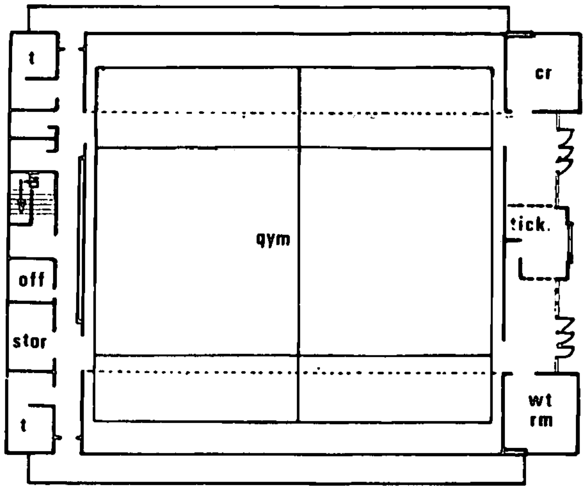
This project was planned and designed for a very limited construction budget. Close cooperation between the architect, the owner, and the Division of School Planning at a critical time in the decision making process resulted in much more than an average school building. It proves that limited funds need not be a limitation to thoughtful educational and architectural planning.

One of the most interesting and inexpensive features of this school consists of a variety of wall graphics and skylights which are located at corridor intersections. This feature plus sensitive color coordination throughout contributes to the feeling of environmental repose.

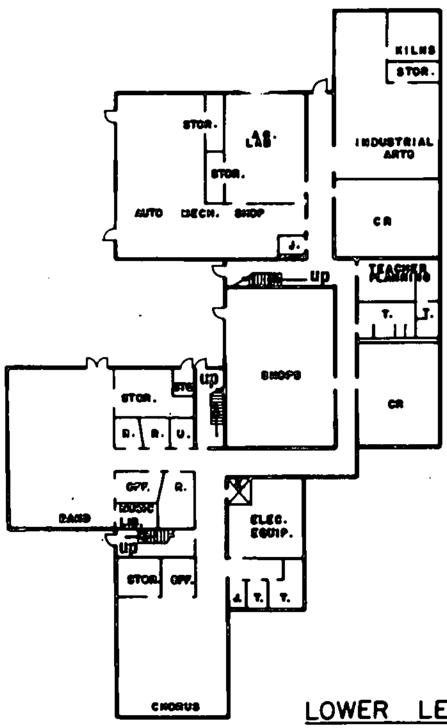
Administrative Unit	*Clinton*
DSP Property Number	*821-3145*
Superintendent	*Robert M. Boggs*
Grade Organization	*9-12*
Type of Building	*New*
Approximate Capacity	*1,500*
Square Footage	*122,000*
Approval Date	*August 1974*
Architect	*Hayes-Howell & Associates*
Structural Engineer	*William H. Gardner*
Mechanical and Electrical Engineers	*H. L. Buffaloe and Associates*



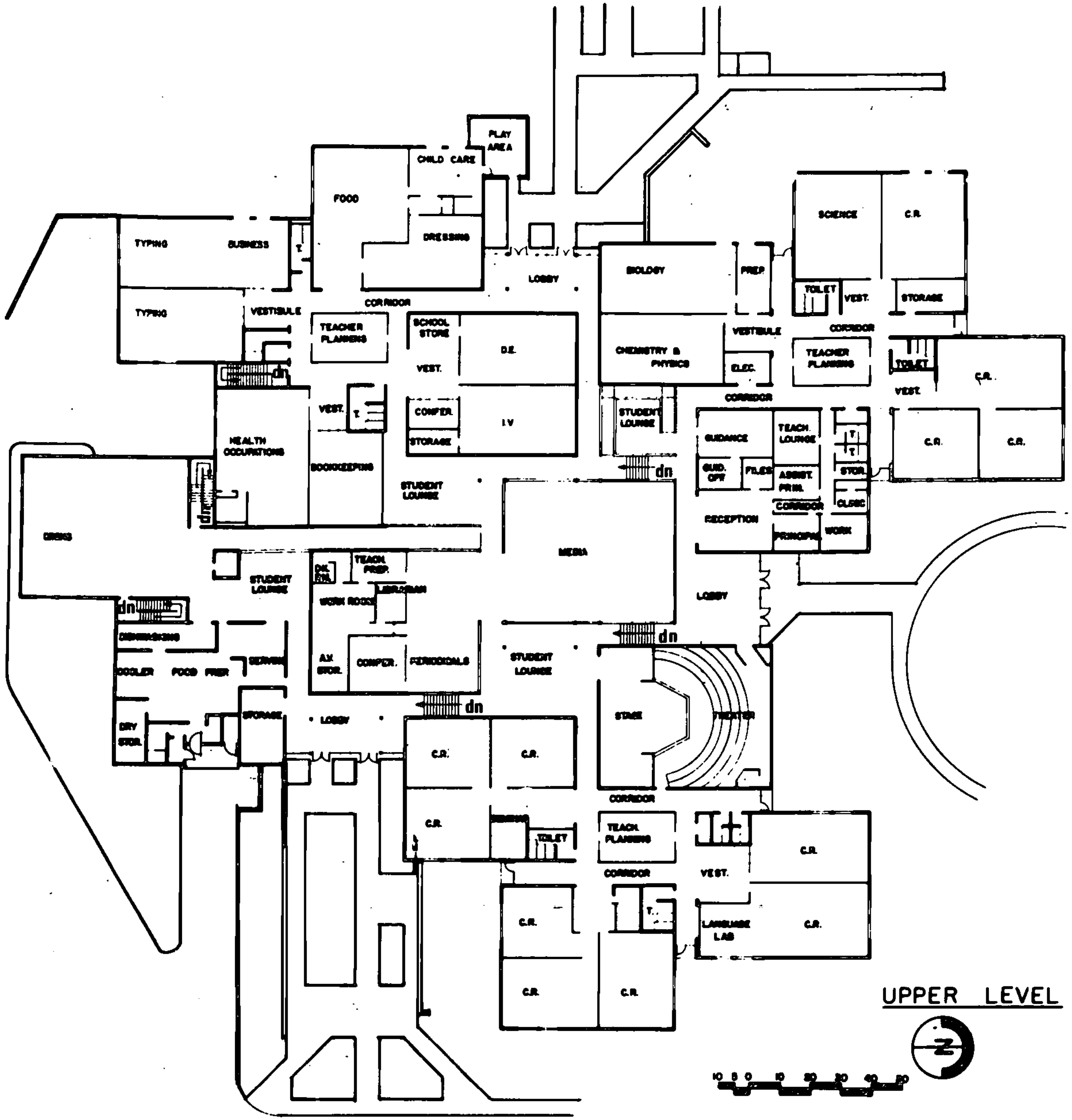
lower floor



upper floor



LOWER LEVEL



UPPER LEVEL

44

45

Swain County High

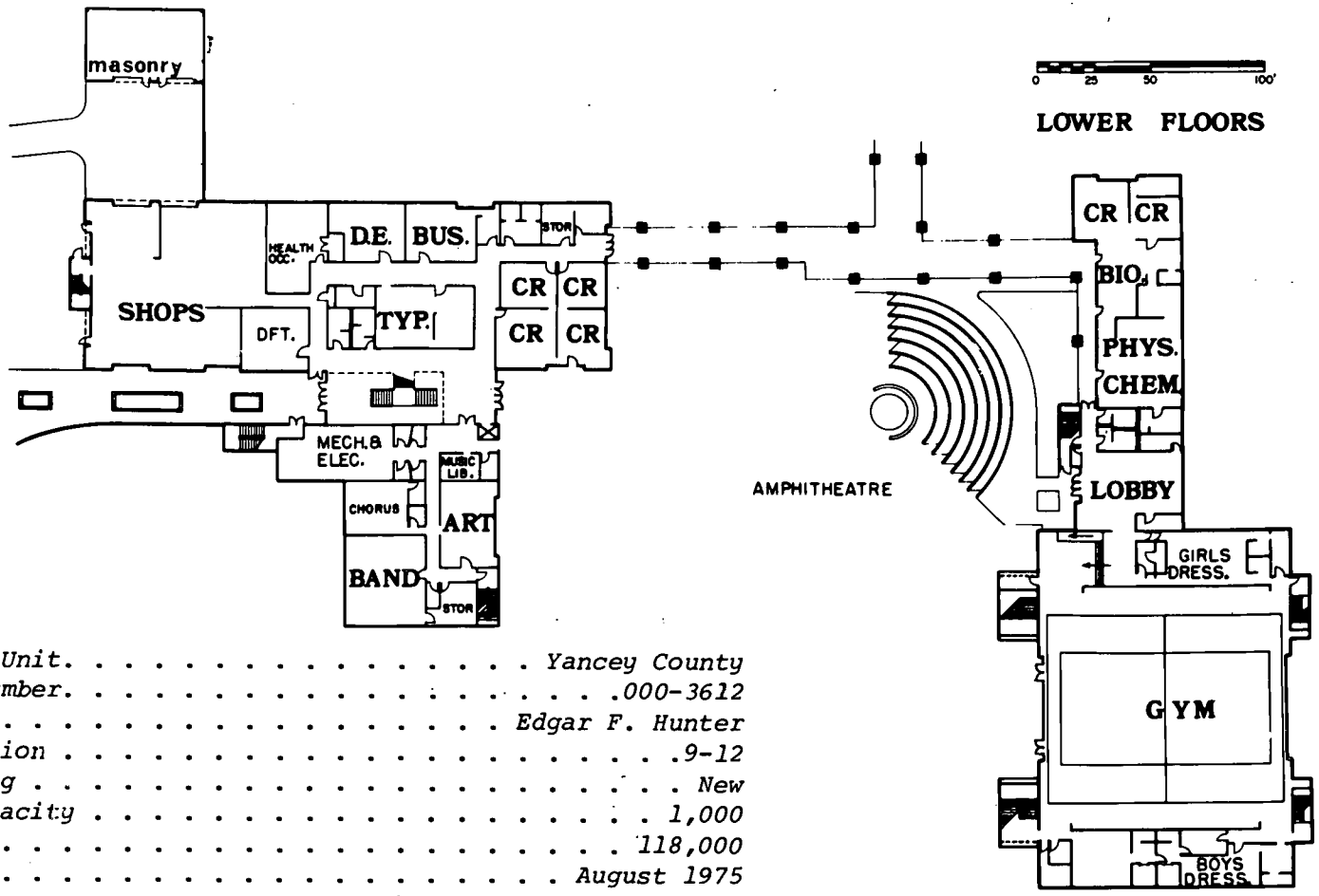
The usual design concept on a site in the mountains begins by bulldozing a flat place for the building. Then the designers plan stock school facilities which would be satisfactory from Murphy to Manteo. This project accepts the site and adapts to it by means of interior and exterior changes of level. The media center is defined by low walls and is visible from many locations. Groups of classrooms are clustered around teacher planning rooms. A small theater with a thrust stage is adjacent to the media center. The exterior building form is very sculptural because of the cluster type floor plan and numerous daylight roof monitors.

Administrative Unit	*Swain County*
DSP Property Number	*870-3522*
Superintendent	*Max S. Skidmore*
Grade Organization	*9-12*
Type of Building	*New*
Approximate Capacity	*850*
Square Footage	*92,000*
Approval Date	*April 1975*
Architect	*Jackson, Padgett and Freeman*
Structural Engineer	*Bernard M. Feinberg*
Electrical Engineer	*K. M. Armstrong and Associates*
Mechanical Engineer	*Mechanical Engineers, Inc.*

Mountain Heritage High

A hilly site in the mountains near Burnsville called for a school on two levels. The educational program suggested partly open classrooms grouped around or near a media center. An auditorium/theater plus an outdoors amphitheater
The two classroom buildings are connected by a covered bridge.

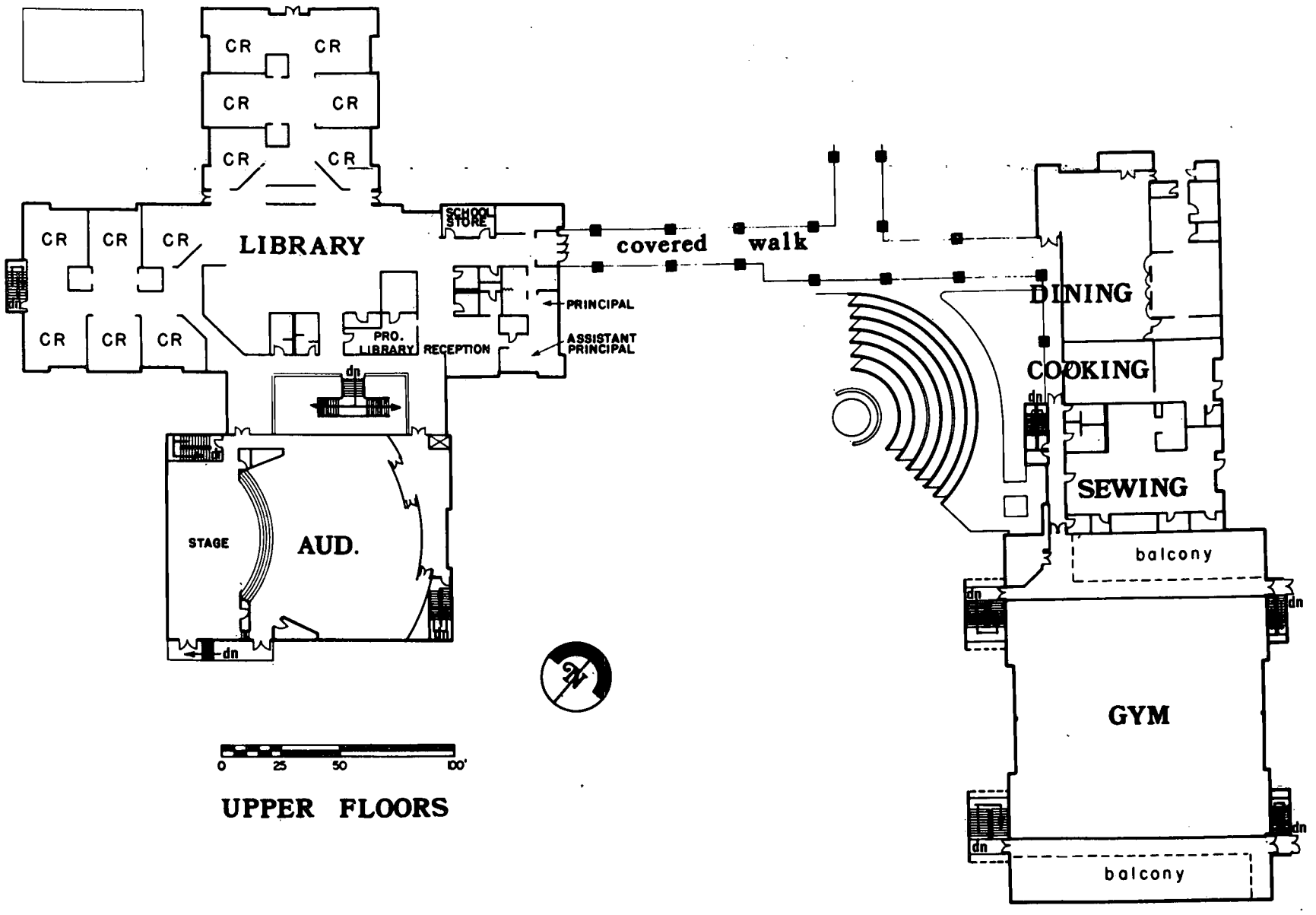
Complete site planning, parking on levels, and thoughtful landscaping have been included as part of the total design concept.



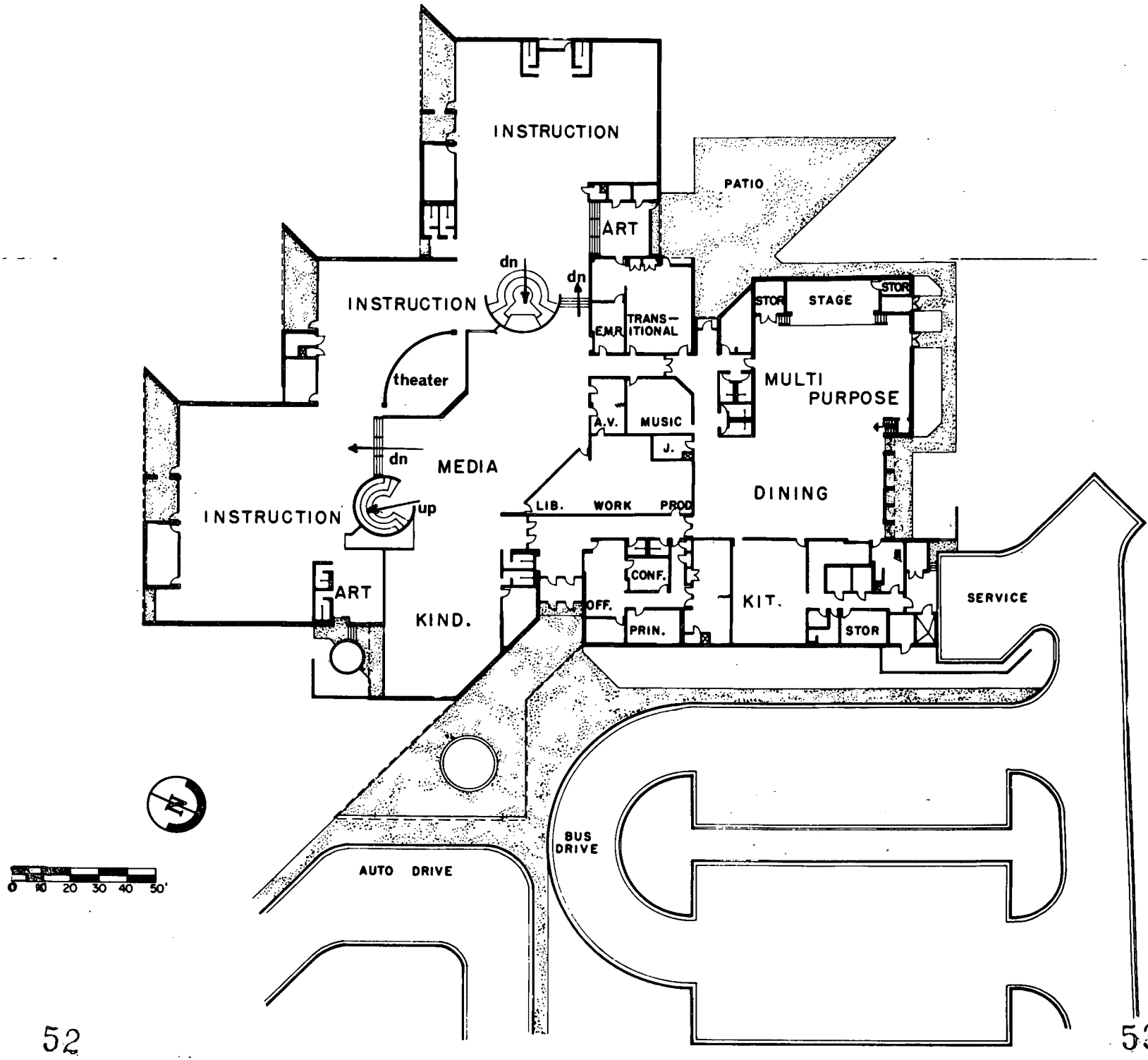
Administrative Unit . . . . . *Yancey County*
DSP Property Number . . . . . *.000-3612*
Superintendent . . . . . *Edgar F. Hunter*
Grade Organization . . . . . *.9-12*
Type of Building . . . . . *New*
Approximate Capacity *1,000*
Square Footage *118,000*
Approval Date . . . . . *August 1975*
Architect . . . . . *Jackson, Padgett & Freeman*
Structural Engineer . . . . . *Bernard M. Feinburg*
Electrical Engineers . . . . . *K. M. Armstrong & Associates*
Mechanical Engineer . . . . . *Mechanical Engineers, Inc.*

48

49



UPPER FLOORS


INSTRUCTION
PATIO
ART
dn
dn
INSTRUCTION
TRANS-
EMR ITIONAL
STOR
STAGE
STOR
theater
MULTI
PURPOSE
A.V.
MUSIC
J.
dn
MEDIA
INSTRUCTION
up
LIB.
WORK
PROD
DINING
CONF.
ART
KIND.
OFF.
PRIN.
KIT.
STOR
SERVICE
BUS
DRIVE
AUTO DRIVE
0 10 20 30 40 50'

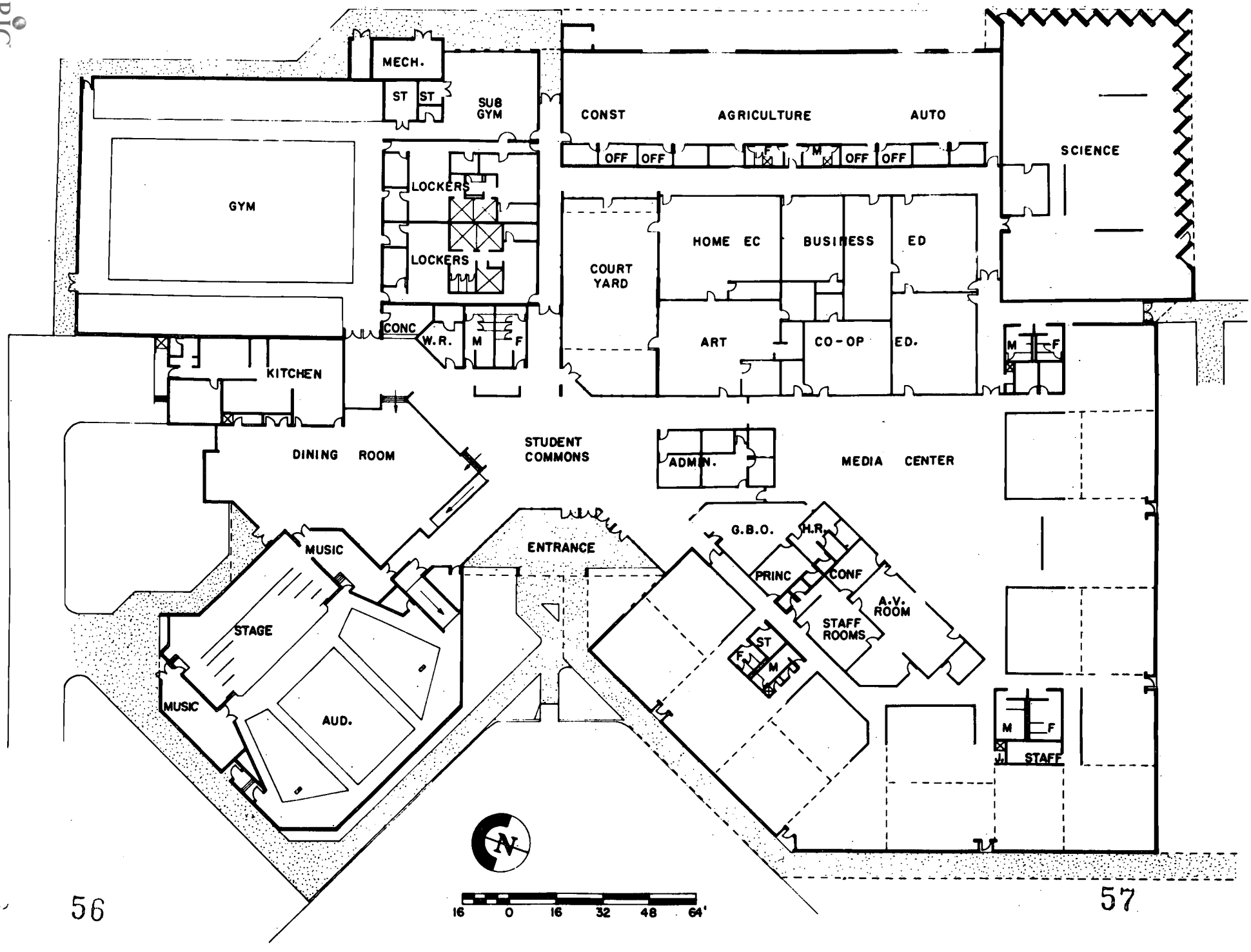
52

53

South Elementary

The interior of this school is visually interesting from any point of view. Colorful graphic images, changes of floor level, and sculptural shapes contribute to the delightful environment. It is an appropriate setting for an open education concept as well as for small children. Teachers and children enjoy using the varieties of open and closed spaces. Included are an enclosed little amphitheater, seating cave under the media center, and two other circular stepped seating areas.

Administrative Unit . . . . . *Mooresville*
DSP Property Number *491-2263*
Superintendent . . . . . *William A. Brown*
Grade Organization *K-4*
Type of Building . . . . . *New*
Approximate Capacity *425*
Square Footage *42,000*
Approval Date . . . . . *February, 1974*
Architect and Engineers . . *Wilbur, Kendrick, Workman, and Warren*


MECH.
ST
ST
SUB GYM
CONST
AGRICULTURE
AUTO
SCIENCE
OFF
OFF
F
M
OFF
OFF
GYM
LOCKERS
LOCKERS
COURT YARD
HOME EC
BUSINESS
ED
CONC
W.R.
M
F
ART
CO-OP
ED.
M
F
KITCHEN
DINING ROOM
STUDENT COMMONS
ADMIN.
MEDIA CENTER
G.B.O.
H.R.
PRINC
CONF
A.V. ROOM
STAFF ROOMS
ENTRANCE
MUSIC
STAGE
MUSIC
AUD.
ST
F
M
M
F
STAFF
N
16 0 16 32 48 64'

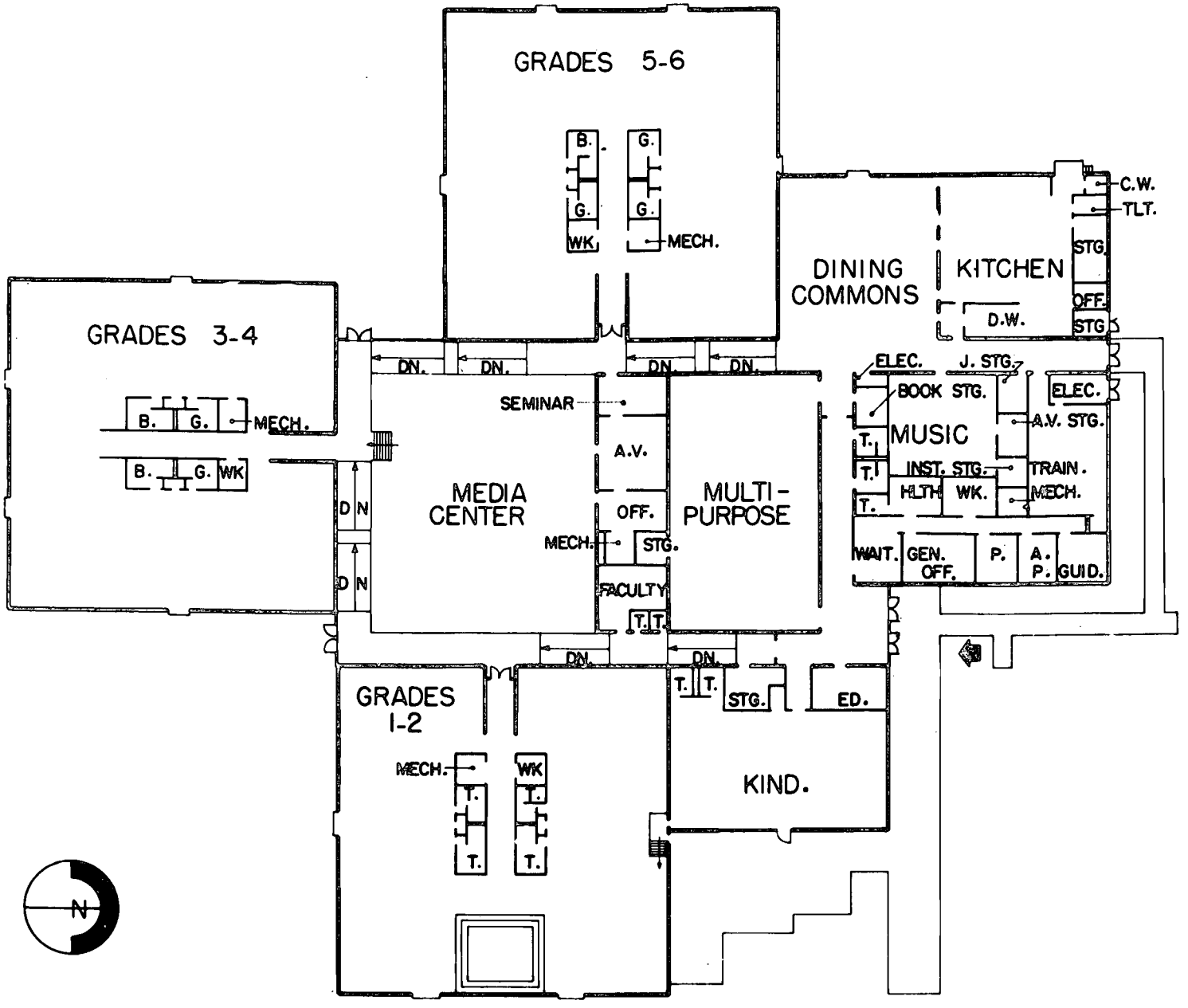
56

57

Currituck County High

The educational specifications suggested a floor plan with a lot of interior flexibility which would adapt to changing patterns of education. So the building is designed to use relocatable and removable partitions. The student commons is planned to serve as a lobby for the gymnasium and auditorium, or as an overflow dining area. The cafeteria is on a lower level. A science suite and vocational shops can be subdivided as needed. Student commons, art lab, home economics open to an inner courtyard.

Administrative Unit . . . . . *Currituck County*
DSP Property Number *270-3677*
Superintendent . . . . . *Lane Presley*
Grade Organization *9-12*
Type of Building . . . . . *New*
Approximate Capacity *900*
Square Footage *90,000*
Approval Date . . . . . *May 1975*
Architect . . . . . *Ferebee, Walters, and Associates*
Structural Engineer . . . . . *Arthur W. Yates*
Mechanical and Electrical Engineers . . . . . *Ferebee, Walters, and Associates*

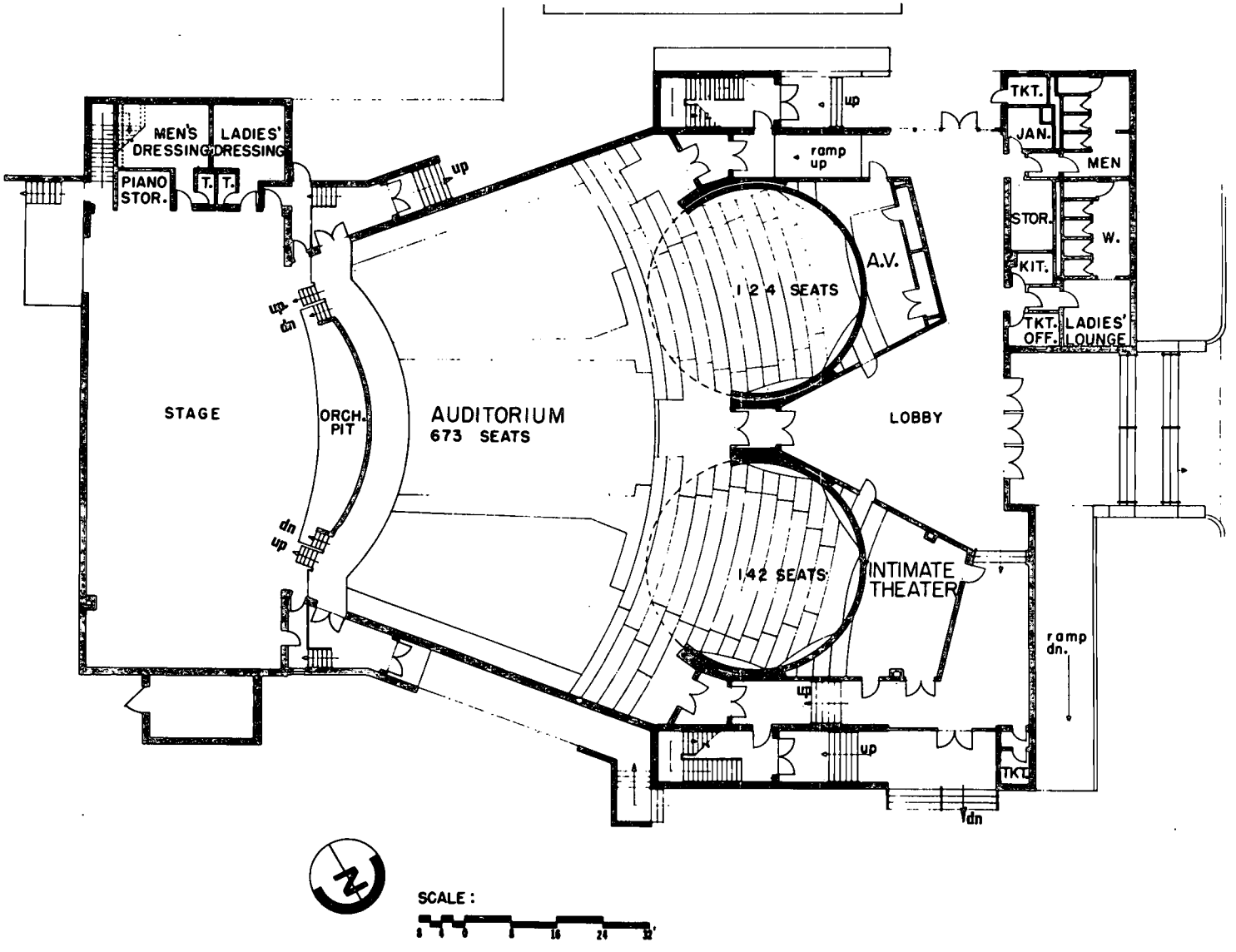

GRADES 5-6
B.
G.
G.
G.
WK.
MECH.
GRADES 3-4
B.
G.
MECH.
B.
G.
WK
DINING COMMONS
KITCHEN
C.W.
TLT.
STG.
OFF.
STG.
D.W.
DN.
DN.
DN.
DN.
SEMINAR
A.V.
MEDIA CENTER
OFF.
MECH.
STG.
FACULTY
T.
T.
MULTI-PURPOSE
ELEC.
J. STG.
BOOK STG.
ELEC.
A.V. STG.
MUSIC
T.
T.
INST. STG.
TRAIN.
HLTH
WK.
MECH.
T.
WAIT.
GEN. OFF.
P.
A. P.
GUID.
D
N
D
N
DN.
DN.
T.
T.
STG.
ED.
GRADES 1-2
MECH.
WK
T.
T.
T.
T.
KIND.
N
15
0
20
40
60
80'

Bruce H. Tharrington Elementary

Here is another cluster plan or house plan. Each self contained house accommodates two grades. Each house has its own toilets, teachers' workroom, mechanical heating and cooling system. All three of the six teacher houses can be divided into conventional classrooms whenever a group of teachers wants separate classrooms or paired teaching stations. The open media center is defined by corridor ramps which allow the building to fit a sloping site. Dining space is walled on three sides. The corridor side is open for maximum flexibility.

The cluster or house plan similar to the one shown here has been used successfully in other parts of North Carolina. Houses of this or similar size and pattern can be easily adapted to many educational programs and trends.

Administrative Unit . . . . . *Mt. Airy*
DSP Property Number *862-3248*
Superintendent . . . . . *Robert E. Chilton*
Grade Organization *K-6*
Type of Building . . . . . *New*
Approximate Capacity *800*
Square Footage *60,000*
Approval Date . . . . . *October 1973*
Architect . . . . . *Fred W. Butner, Jr. Associates*
Structural Engineer . . . . . *Sutton, Kennerly and Associates*
Mechanical and Electrical Engineers . . . . . *Consultant Engineers Service*

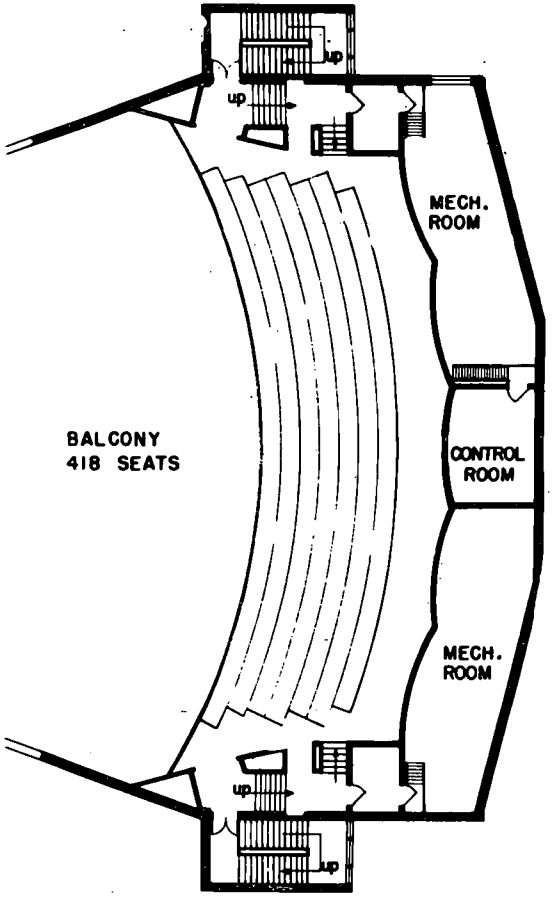

MEN'S DRESSING
LADIES' DRESSING
PIANO STOR.
T.
T.
up
STAGE
ORCH. PIT
up
dn
AUDITORIUM
673 SEATS
up
ramp up
124 SEATS
A.V.
LOBBY
TKT.
JAN.
MEN
STOR.
W.
KIT.
TKT. OFF.
LADIES' LOUNGE
142 SEATS
INTIMATE THEATER
ramp dn.
up
up
TKT.
dn
SCALE :

64

65

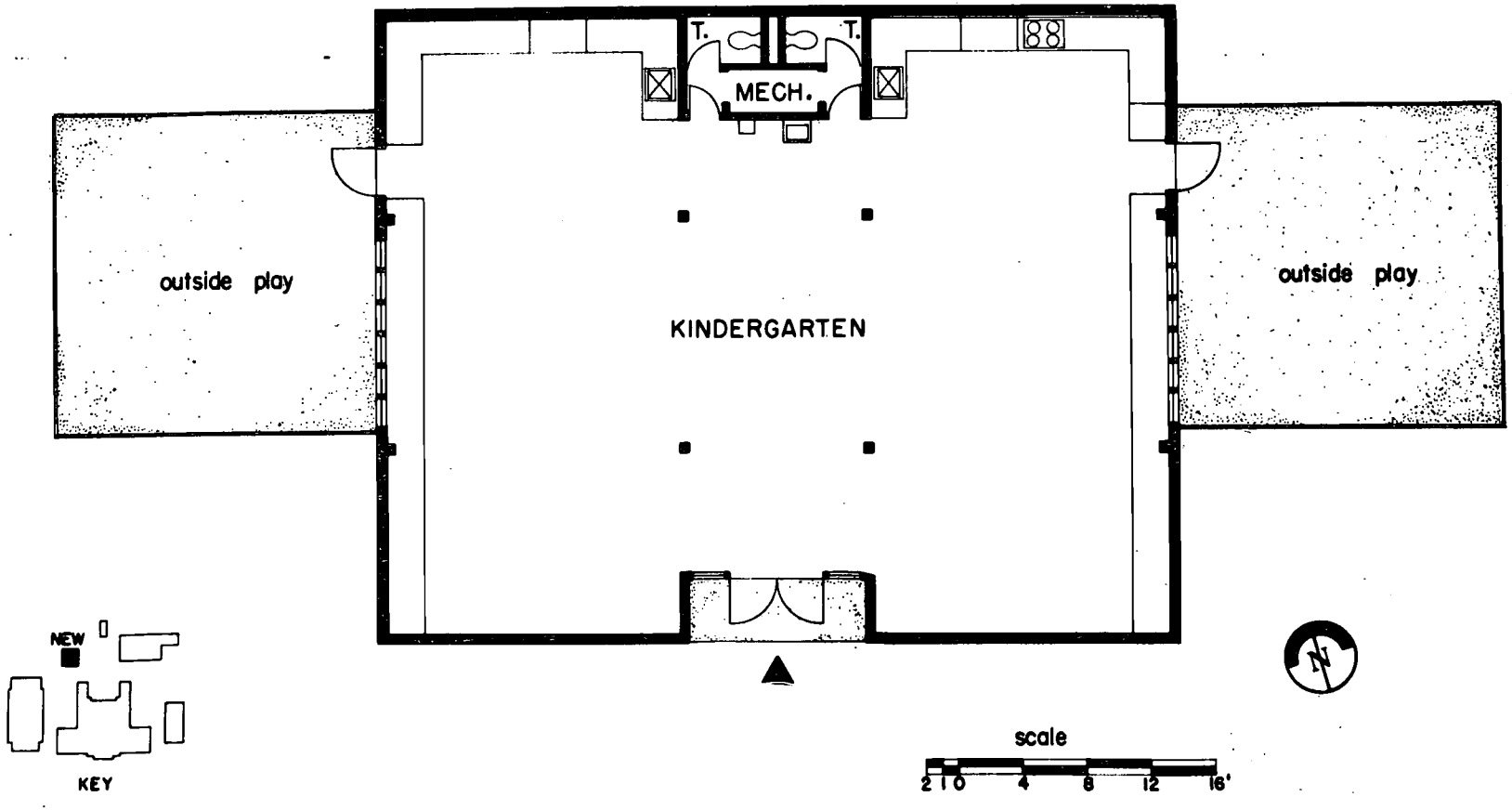
Shelby Senior High Auditorium

The seating capacity is 1357 including a regular balcony and two special seating areas. The two special seating areas make this project unique. Both areas (124 seats and 142 seats) are constructed within circular rotating drums which when closed become acoustically and visually private small theaters. Three separate performances or presentations can be conducted simultaneously without conflicting with each other. All of this was possible within the budget usually assigned to conventional, inflexible, school auditorium projects.



Shelby High

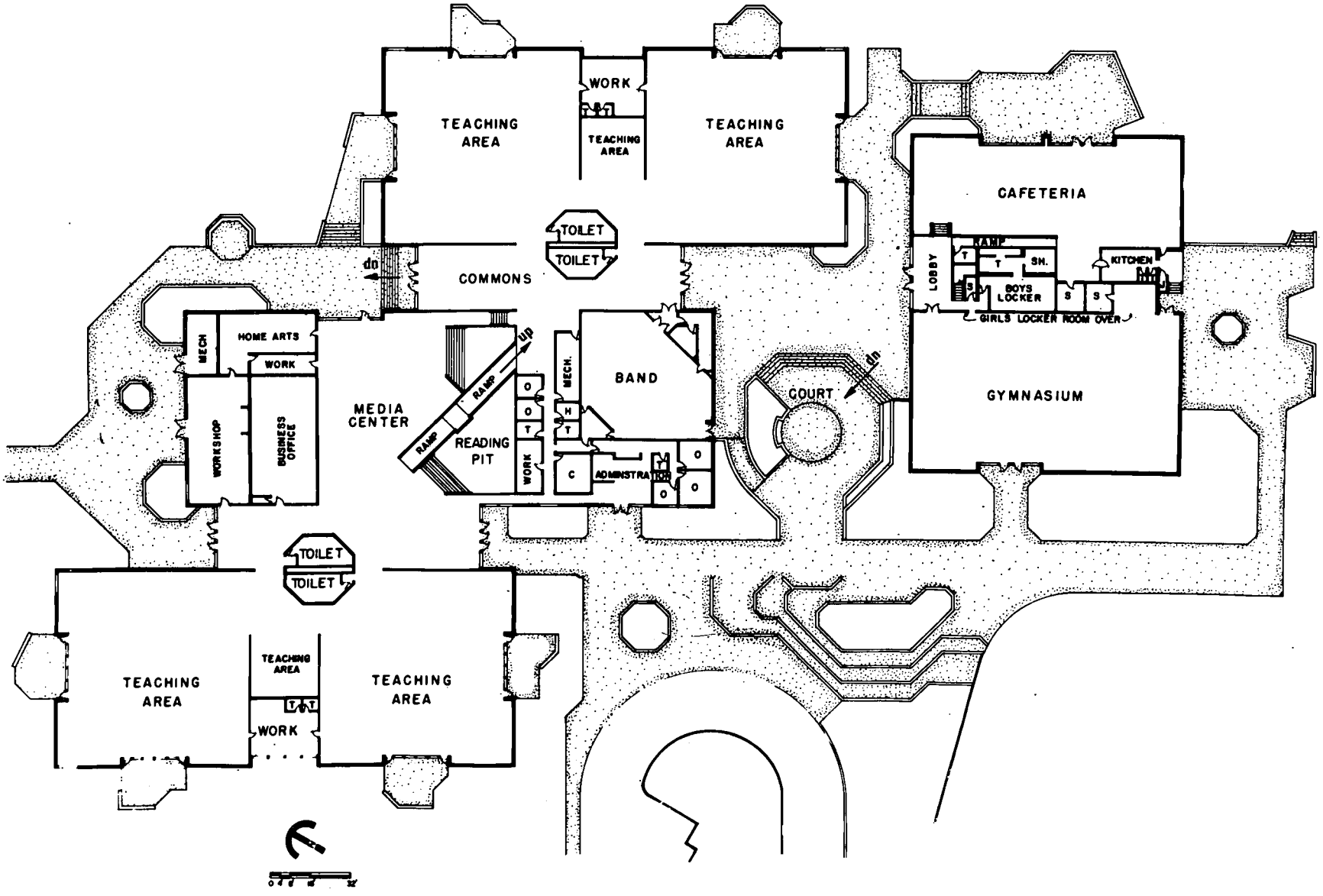
Administrative Unit	*Shelby*
DSP Property Number	*232-1485*
Superintendent	*Malcolm E. Brown*
Grade Organization	*10-12*
Type of Building	*Auditorium*
Approximate Capacity	*1,357*
Square Footage	*22,000*
Approval Date	*March 1974*
Architect	*Holland and Associates, Inc.*
Structural Engineer	*Joseph E. Hunter*
Electrical Engineer	*J. S. Holladay*
Mechanical Engineer	*J. C. Harrison*


T.
T.
MECH.
outside play
KINDERGARTEN
outside play
NEW
KEY
scale
2 1 0 4 8 12 16'

Westmoore Elementary

There have been many specially designed kindergarten buildings and kindergarten additions to regular buildings constructed in North Carolina. Kindergarten facility design has improved considerably since the beginning of the state funded program. The two teacher building shown here is one of several interesting facilities to be seen across the state. It is built of standard wood frame with paneling outside and gypsum wallboard inside. The plane of the sloping roof is expressed inside. The use of economical conventional construction did not limit design possibilities.

Administrative Unit	*Moore County*
DSP Property Number	*.630-2627*
Superintendent	*R. E. Lee*
Grade Organization	*K-08*
Type of Building	*.Kindergarten Addition*
Approximate Capacity	*50*
Square Footage	*.2,000*
Approval Date	*.November 1974*
Architect	*.Austin Associates*
Structural Engineer	*.Austin Associates*
Electrical Engineer	*Armstrong & Associates*
Mechanical Engineer	*.McKnight & Associates*

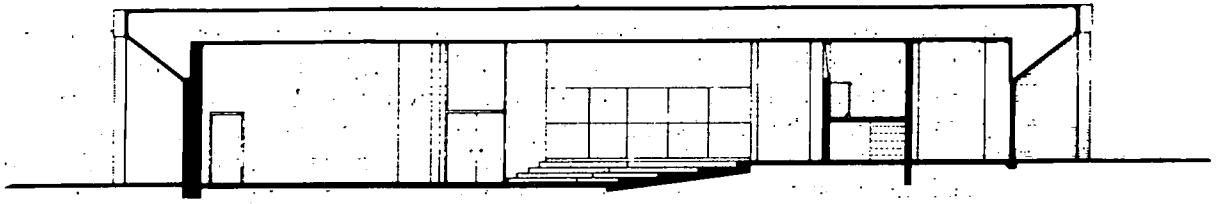

TEACHING AREA
WORK
TEACHING AREA
TEACHING AREA
CAFETERIA
TOILET
TOILET
COMMONS
RAMP
LOBBY
T
T
SH.
KITCHEN
S
BOYS LOCKER
S
S
GIRLS LOCKER ROOM OVER
MECH
HOME ARTS
WORK
UP
RAMP
MECH.
BAND
COURT
GYMNASIUM
MEDIA CENTER
RAMP
READING PIT
O
O
T
WORK
H
T
C
ADMINISTRA
TOR
O
O
WORKSHOP
BUSINESS OFFICE
TOILET
TOILET
TEACHING AREA
TEACHING AREA
TEACHING AREA
T
T
WORK

Southern Middle School

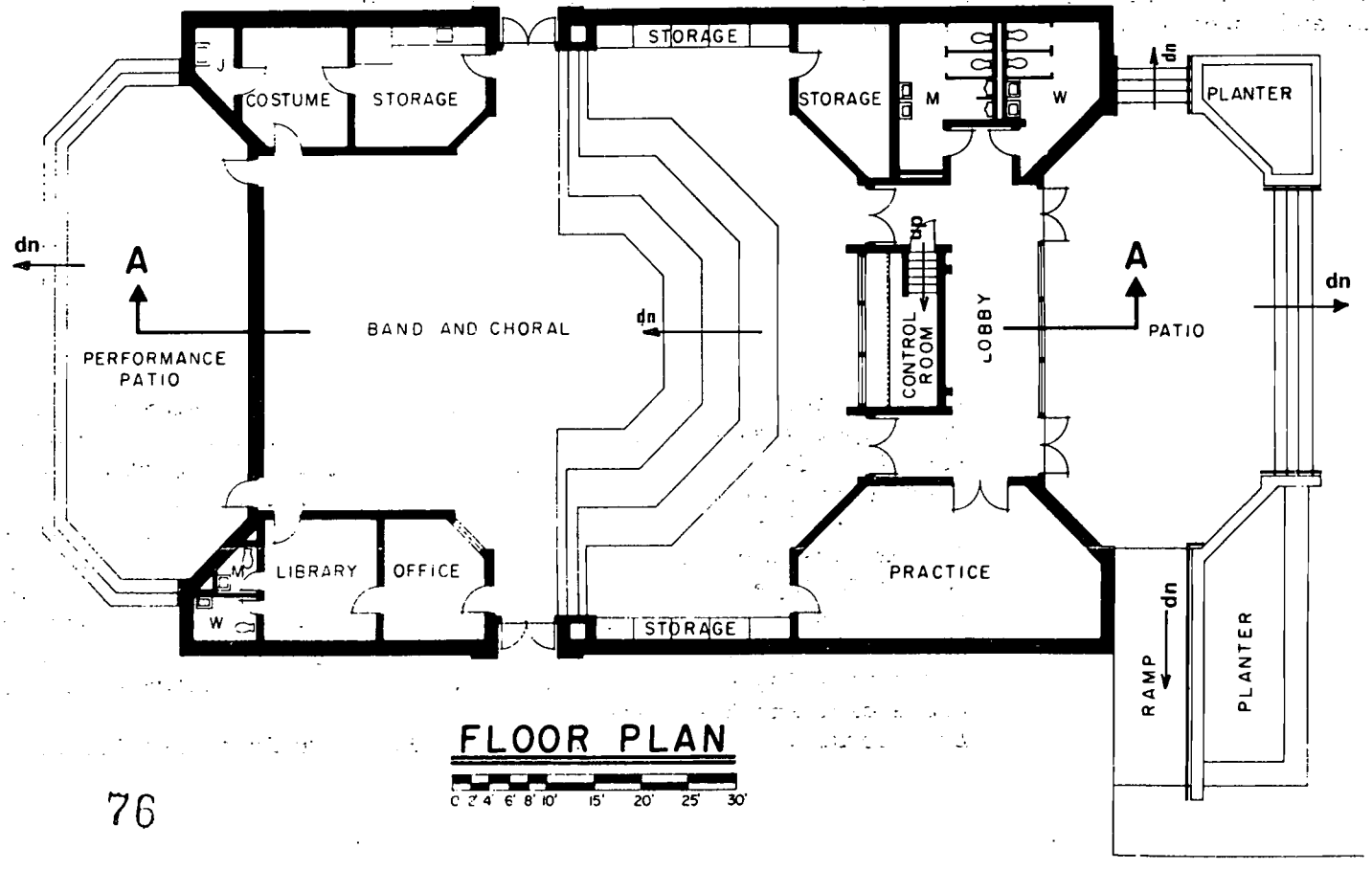
This building plan is one of several in the trend to more flexible interior spaces for middle and junior high schools. Junior high schools, and middle grades schools to a lesser extent, usually have been planned similar to traditional eggcrate elementary or high school plans. Frequently the junior high plan has imitated the high school plan. Maybe this is because it has been difficult for educators to clearly define a suitable educational organization and program for the transescent years of children. Maybe a less rigid plan and environment is a sign that it is better educational planning to recognize the undefinable. This way allows each group of users to pattern and repattern the school plan as needs and circumstances change.

Visitors to Southern Middle School will be interested in the unique indirect lighting system used in all teaching areas, and the bridge in the media center used to connect upper and lower levels of the school.

Administrative Unit . . . . . .Alamance County
DSP Property Number 010-1023
Superintendent . . . . . Dr. Robert A. Nelson
Grade Organization 6-8
Type of Building . . . . . .New
Approximate Capacity 900
Square Footage 73,000
Approval Date . . . . . .June 1973
Architect . . . . . .Hayes-Howell & Associates
Structural Engineer . . . . . William H. Gardner
Mechancial and Electrical Engineers . . . . . .H. L. Buffaloe and Associates



SECTION A-A



FLOOR PLAN

0 2 4 6 8 10 15 20 25 30

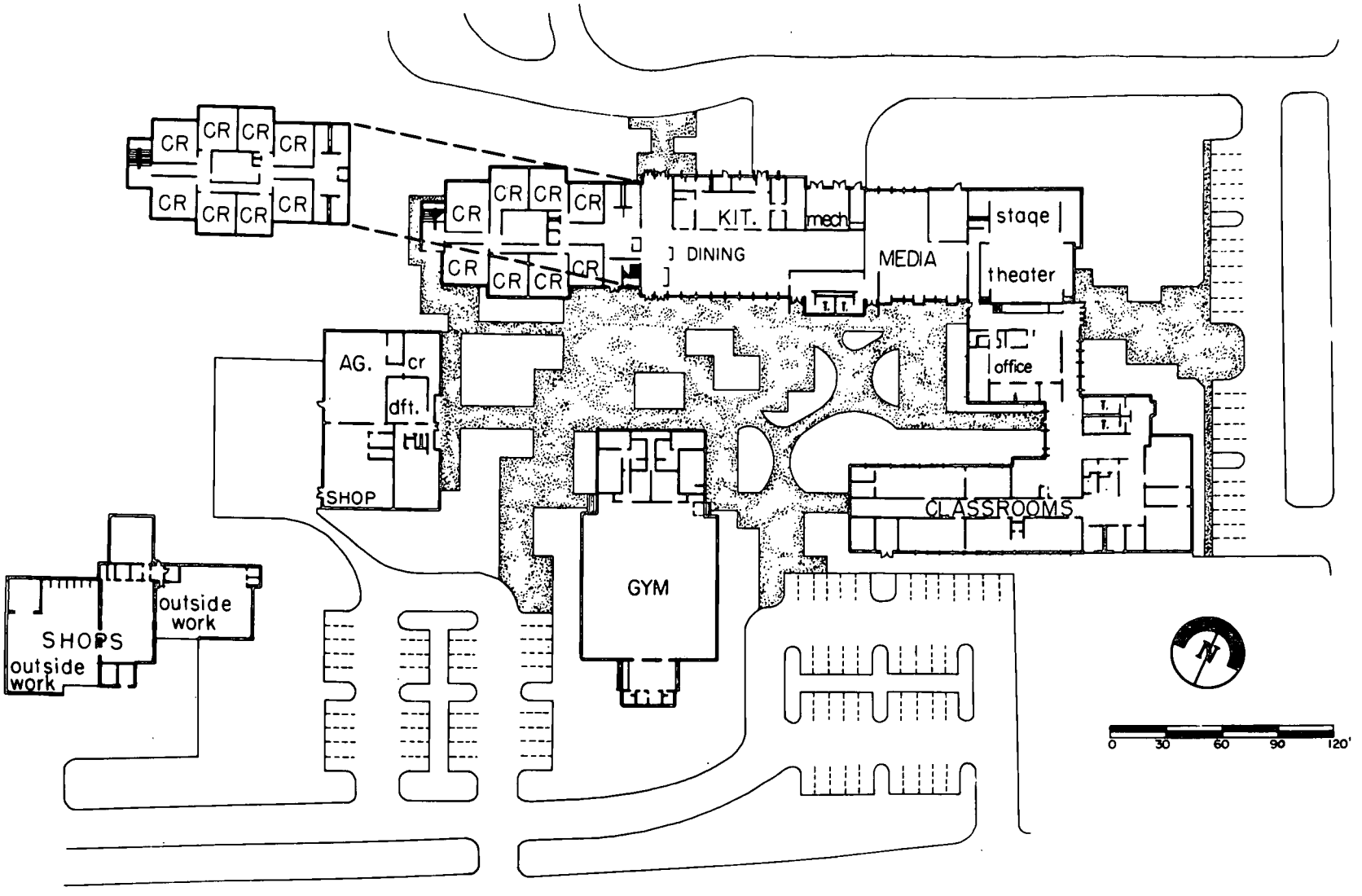
76

77

Greene County High Music Building

A limited budget indicated about 5,000 square feet of construction. The design program called for a building flexible enough to accommodate choral music, instrumental music, and dramatics. The plan which resulted from these requirements has three basic elements. First is a lobby space which can be used as a public entrance. Next is a stepped seating area which is, also, the music rehearsal room. Last is a large flat area which is a performance arena. The flat area can be separated from the rehearsal area by means of folding doors. A plan similar to this could be developed as a standard for any junior high or senior high which has limited funds and would like to have a combination auditorium and music facility.

Administrative Unit . . . . . *Greene County*
DSP Property Number *400-1979*
Superintendent . . . . . *George S. Taylor*
Grade Organization *10-12*
Type of Building . . . . . *Addition*
Approximate Capacity . . . . . *100 to 200*
Square Footage *5,900*
Approval Date . . . . . *October 1975*
Architect . . . . . *Smart, Woodall, Isley and Herring*
Structural Engineer . . . . . *Fikri S. Saleh*
Mechanical and Electrical Engineers . . . . . *Heister C. Cease*


CR
KIT.
mech
DINING
MEDIA
stage
theater
office
AG.
cr
dft.
SHOP
CLASSROOMS
GYM
SHOPS
outside work
outside work
0
30
60
90
120'

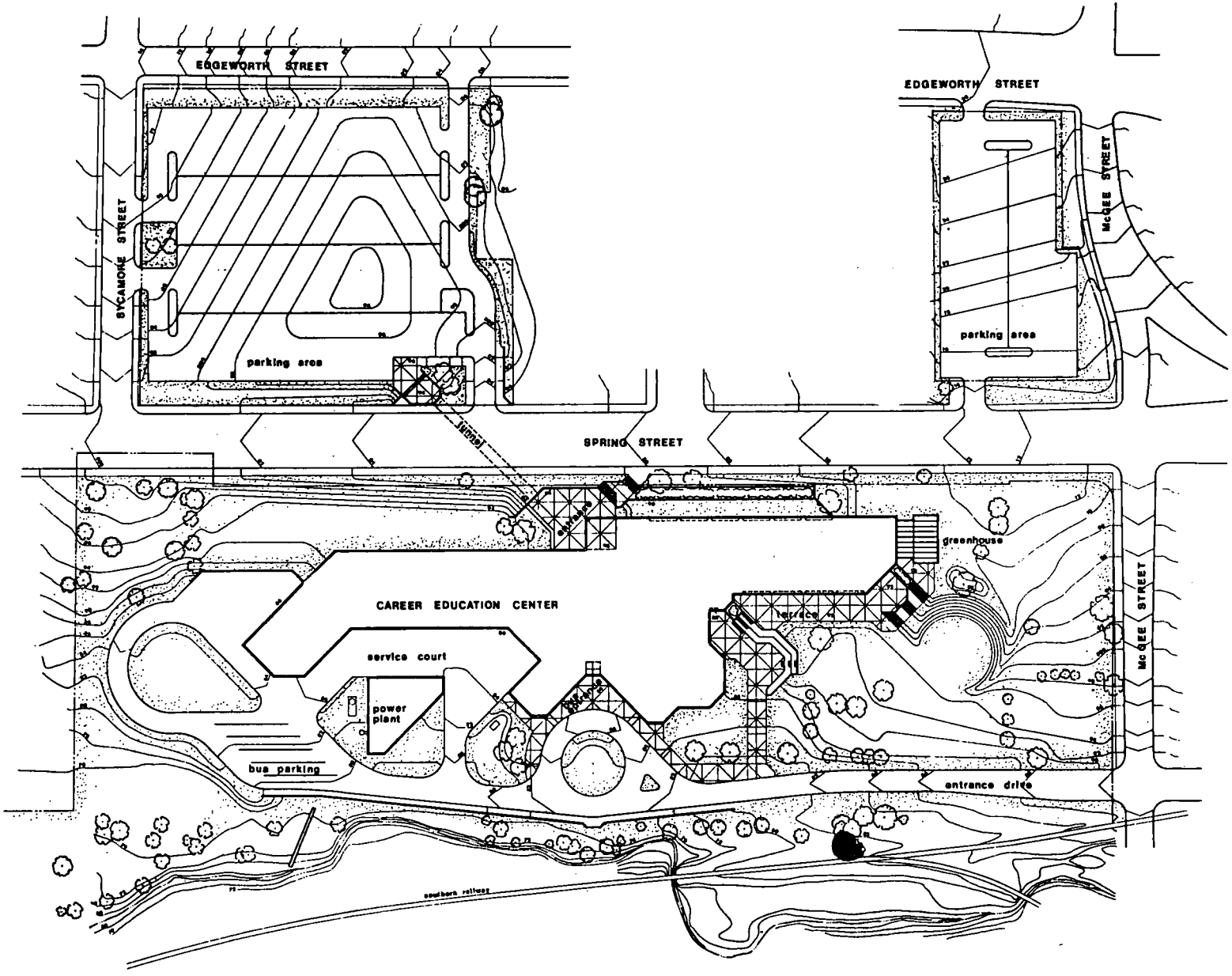
80

81

North Edgecombe High

The owner's construction program suggested that required new facilities such as a cafeteria, library, and classrooms be used to tie together many of the existing rooms and buildings, also that a new administrative suite and theater contributed to upgrading adjacent existing facilities. All of this has produced a visually interesting and useful high school complex. However, many visitors believe that the fully developed courtyard is the most important element of this campus. It is one of the most attractive features. Many otherwise dull and spiritless campuses or school building clusters could come to life with similar design treatment. Design of this quality is good "public relations" as well as a focus for daily school activites.

Administrative Unit . . . . . *Edgecombe County*
DSP Property Number *330-1785*
Superintendent . . . . . *Lee R. Hall*
Grade Organization *9-12*
Type of Building . . . . . *1973 Addition*
Approximate Capacity *700*
Square Footage *50,000*
Approval Date . . . . . *February 1974*
Architect . . . . . *Edwards, Dove, Knight & Associates*
Structural Engineer . . . . . *Craig and Abiouness*
Mechanical and Electrical Engineers . . . . . *Fenner and Proffitt, Inc.*



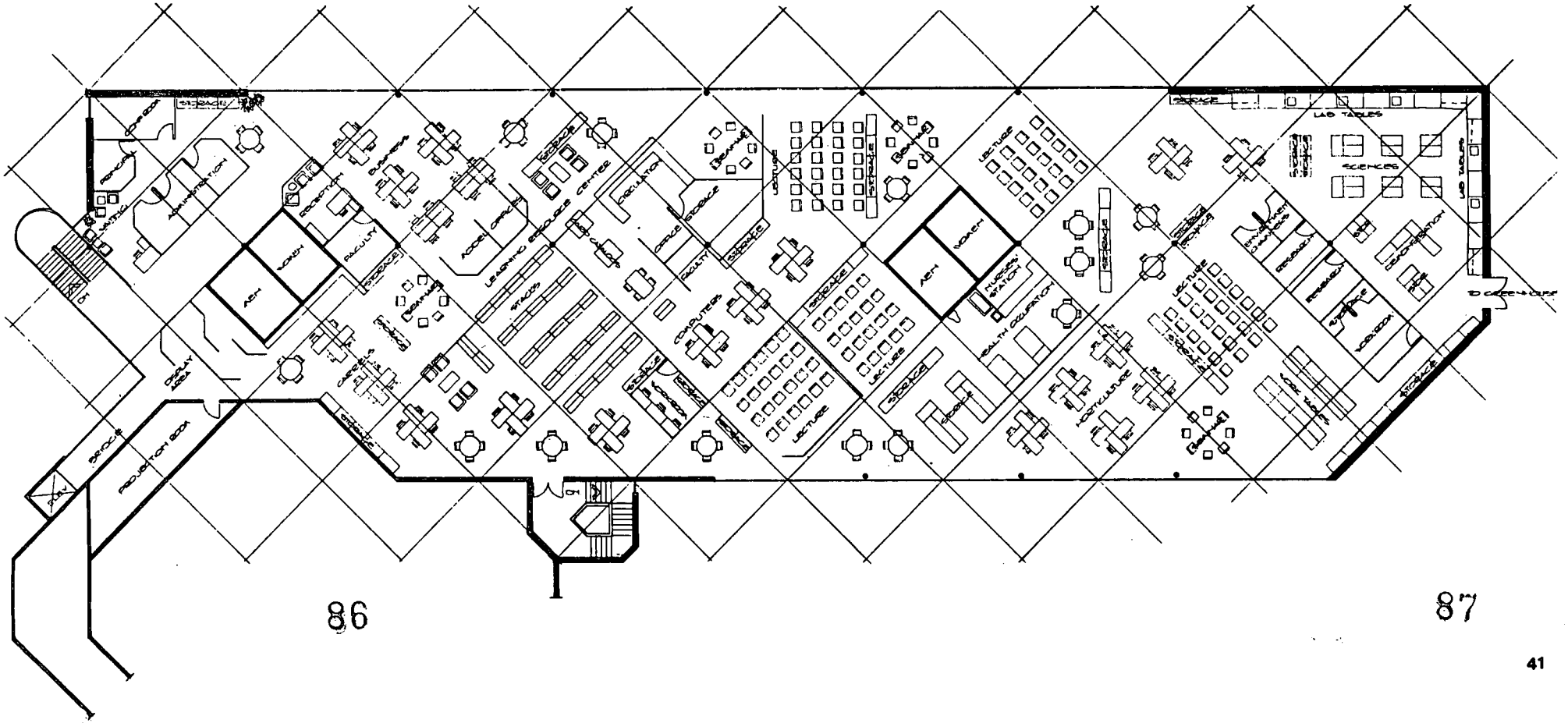
GREENSBORO CAREER EDUCATION CENTER

Greensboro Career Education Center

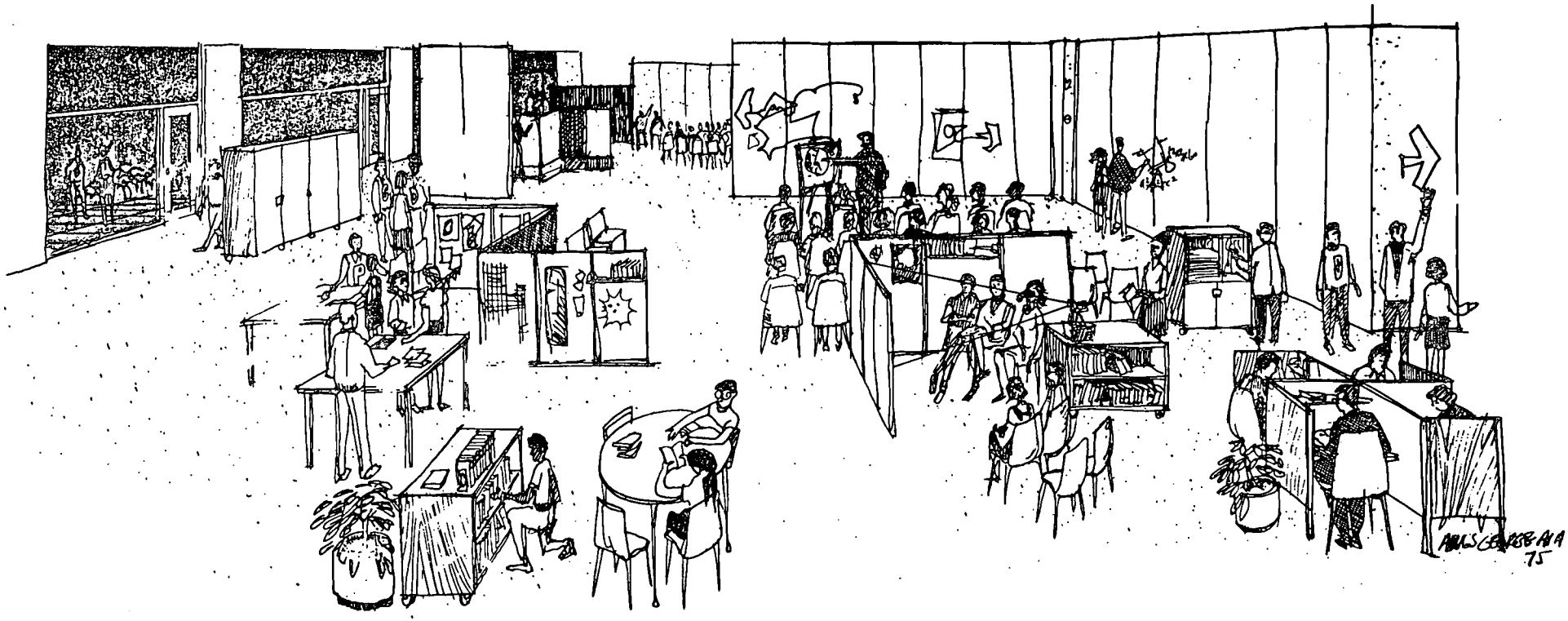
This is one of three new occupational or education centers in North Carolina. Another is in Winston-Salem and the third is in Monroe. All are designed for similar educational concepts. The differences between each center are in the depth and variety of programs offered. Each center serves the entire system within which it is constructed. All are intersting architectural designs and have functional features which aren't ordinarily found in regular occupational, science or arts programs.

The Greensboro Center is located in the downtown area. Characteristic parking problems required that additional parking lots be developed. The major parking is connected to the school by means of a pedestrian tunnel under busy Spring Street.

The building structural system consists of a reinforced concrete frame, precast concrete walls, prestressed concrete double tees for floors and some roofs. Most interior spaces can be divided as required by educational programs. High ceiling shop areas can be horizontally divided by adding a second floor if necessary. Architects sketches show the design intent for several of the interior spaces.

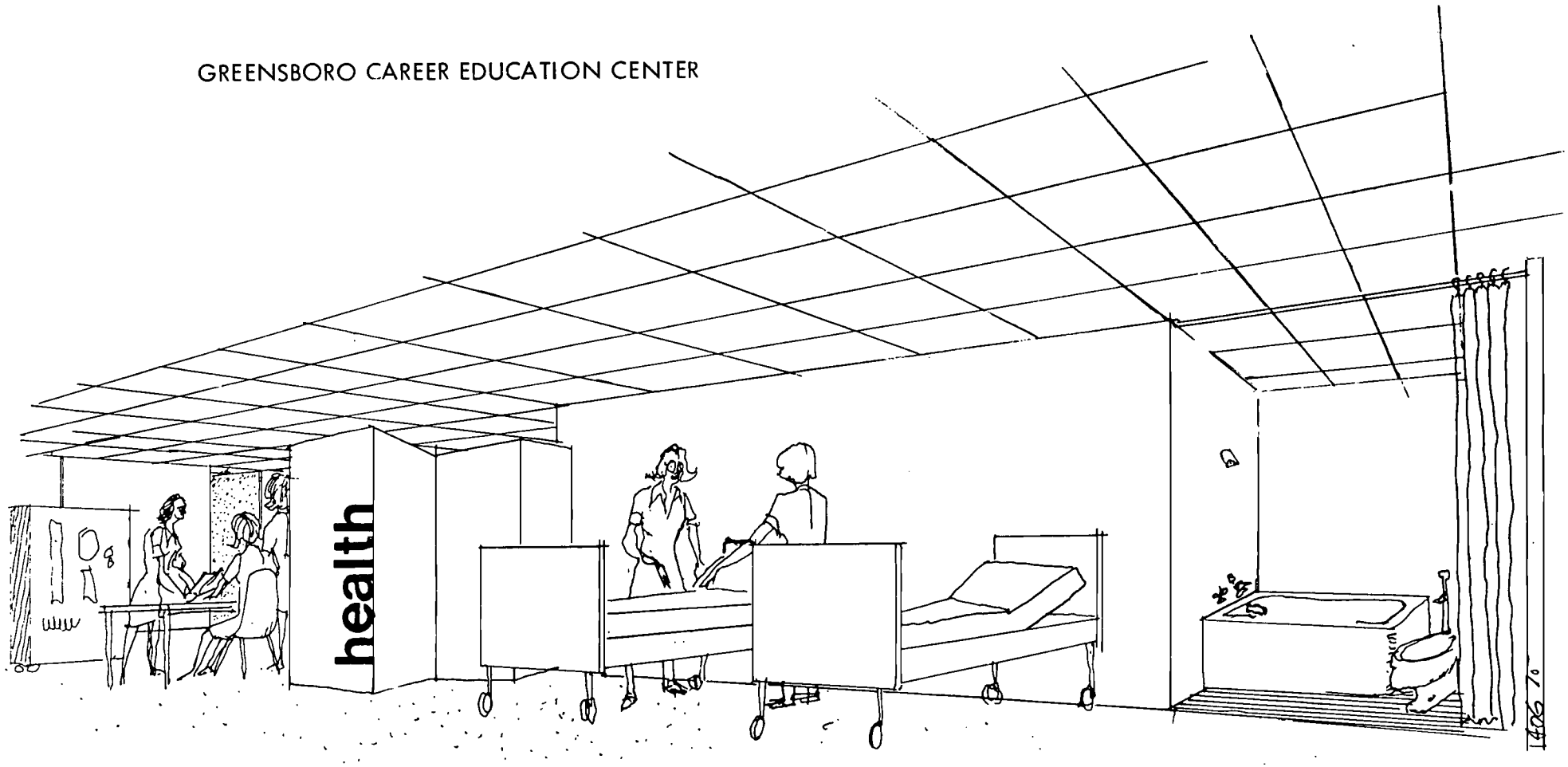


GREENSBORO CAREER EDUCATION CENTER



Open Concept

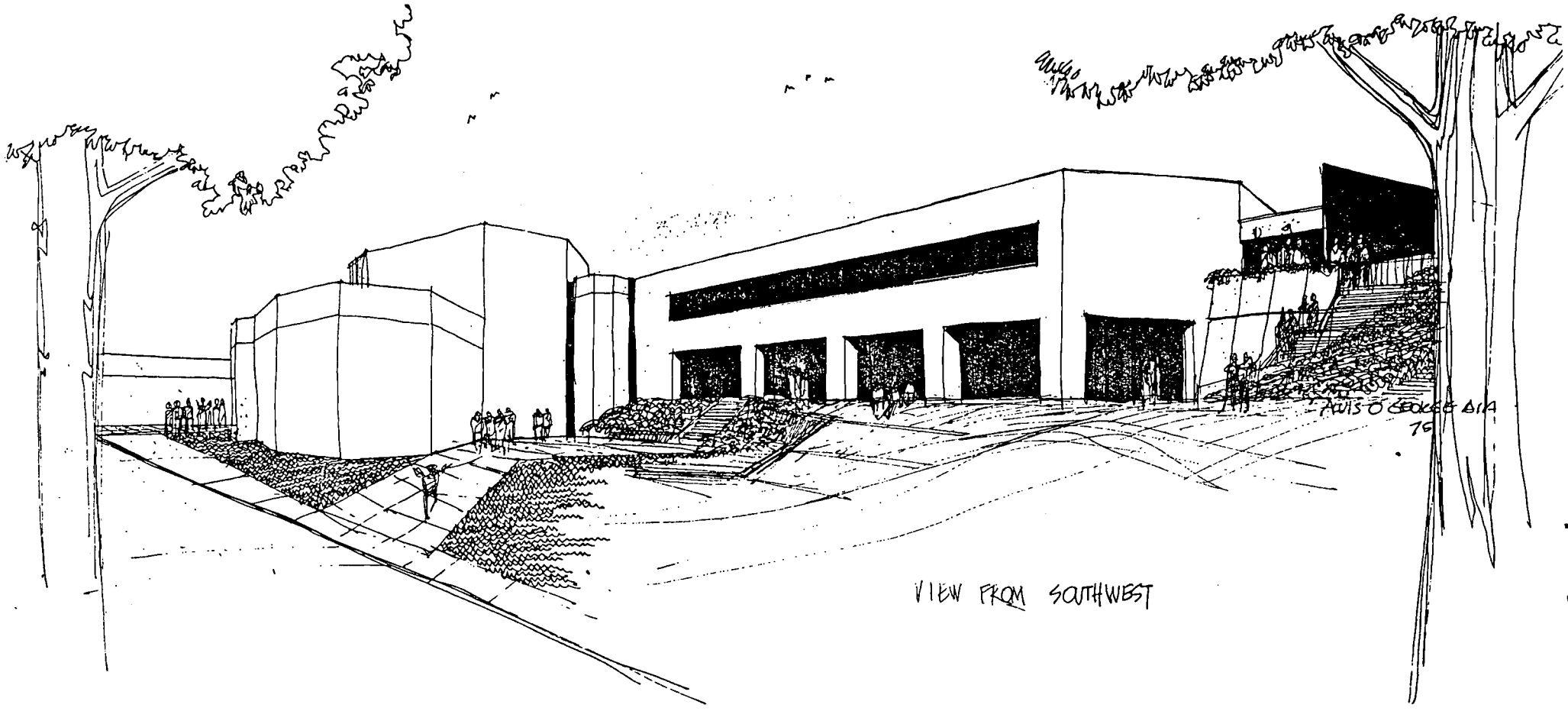
GREENSBORO CAREER EDUCATION CENTER



Administrative Unit	*Greensboro*
DSP Property Number	*411-3714*
Superintendent	*Dr. W. J. House*
Grade Organization	*10-12*
Type of Building	*New*
Square Footage	*100,000*
Approval Date	*June 1976*
Architect	*J. Hyatt Hammond Associates, Inc.*
Structural Engineer	*W. A. Hammond*
Mechanical Engineer	*Leonard H. Owen*
Electrical Engineer	*W. H. Johnson*

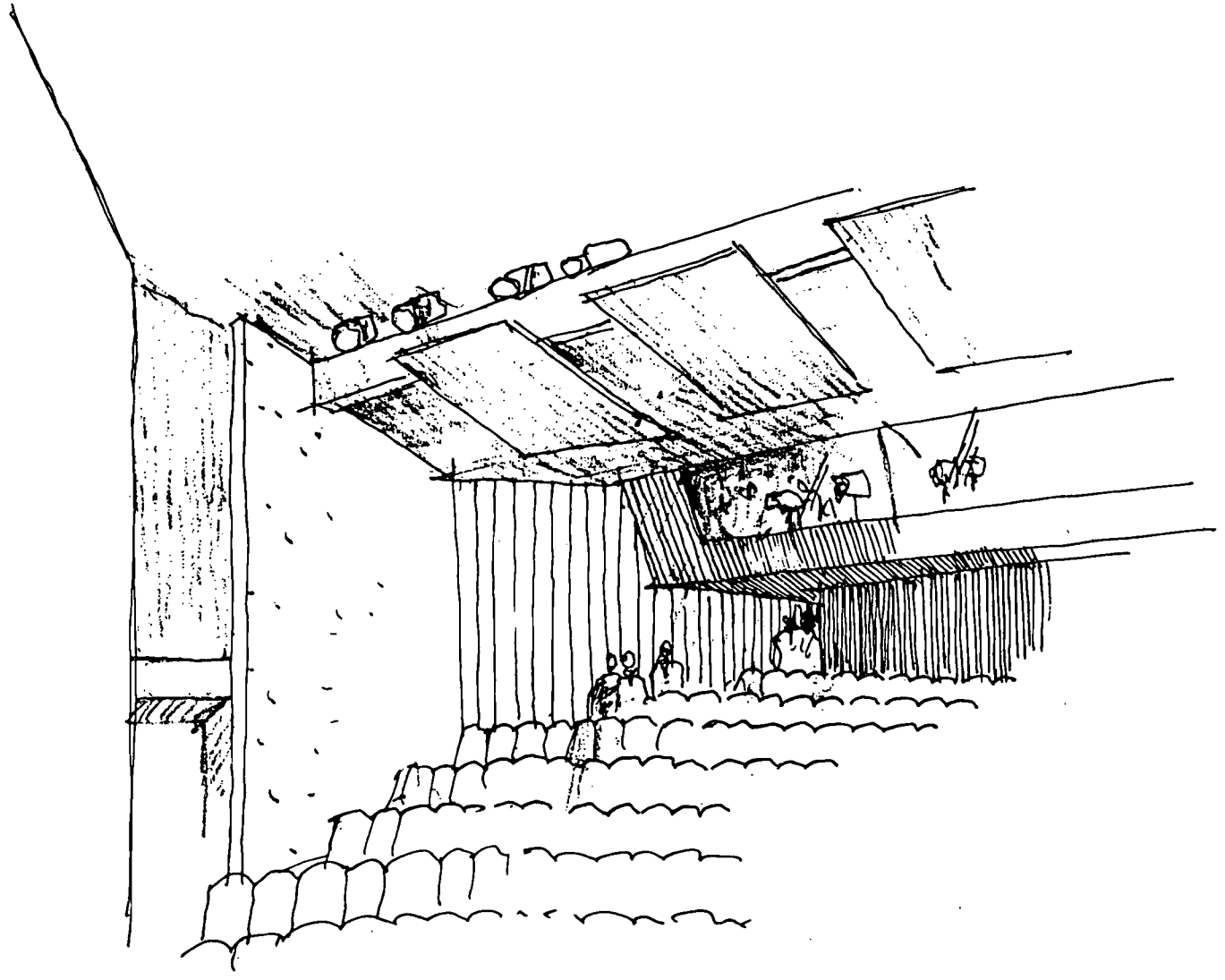
Skills Area

GREENSBORO CAREER EDUCATION CENTER



92

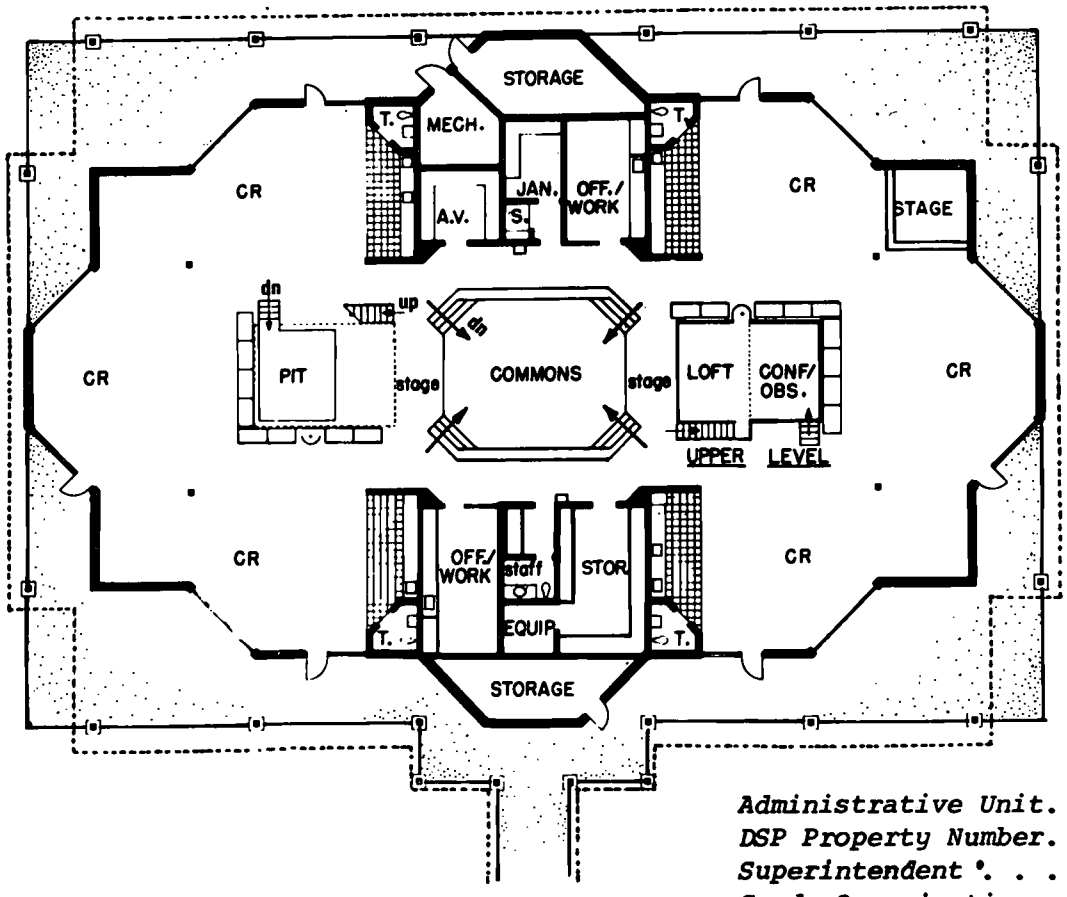
93



Theater

Fayetteville Kindergartens

The architects were directed to plan a small and architecturally interesting building which could be used on more than one site. This plan is the result. It contains eight classes in a low eaved, gabled roof, steel frame structure. Both ends have play pits and tree houses. The central sunken area and support rooms are shared by all. Interior overhead space follows the roof shape.



Administrative Unit . . . . . .Fayetteville
DSP Property Number 261-1607, 261-1613, 261-1614
Superintendent . . . . . R. Max Abbott
Grade Organization K-03
Type of Building . . . . . .Addition
Approximate Capacity 210
Square Footage 9,600
Approval Date . . . . . .April 1974
Architect . . . . . Macmillan & Macmillan
Structural Engineer . . . . . .B. R. Huskie
Mechanical and Electrical Engineers . . . . . H. L. Buffaloe and Associates

96

97

New Schools Bid From 1969 to 1976

	Unit	School	Capacity
1969-70			
Elementary:	Alamance Co.	Haw River	300
	Alamance Co.	North Graham	600
	Chapel Hill City	Elizabeth Seawell	360
	Cumberland Co.	Ponderosa	720
	Cumberland Co.	Rockfish	690
	Davie Co.	Mocksville	720
	Davie Co.	Pinebrook	540
	Fairmont City	Fairmont	378
	Gaston Co.	Belmont Central	855
	Guilford Co.	Western	460
	High Point City	Shady Brook	648
	Iredell Co.	East Iredell	800
	Richmond Co.	West Rockingham	515
Middle:	Alamance Co.	Woodlawn	900
Junior High:	Gaston Co.	William C. Friday	870
	McDowell Co.	West McDowell Junior	900
	New Bern City	H. J. MacDonald	1,440
Senior High:	Bladen Co.	East Bladen	875
	Craven Co.	Havelock	1,000
	Craven Co.	West Craven	1,000
	Gaston Co.	Ashbrook	1,880
	Gaston Co.	North Gaston	1,200
	Guilford Co.	Ragsdale	450
	Hertford Co.	Ahoskie	1,200
	Hertford Co.	Murfreesboro	800
	McDowell Co.	McDowell Senior	1,500
	Pitt Co.	Ayden Grifton	850
	Pitt Co.	Farmville Central	1,050
	Randolph Co.	Southwestern	600
1970-71			
Elementary:	Buncombe Co.	Glen Arden	600
	Gaston Co.	Ida A. Rankin	850
	Watauga Co.	Hardin Park	1,300
Middle:	Hendersonville City	Hendersonville Intermediate	550
Junior High:	Henderson Co.	Flat Rock Junior High	750
	Henderson Co.	Rugby	750

	Unit	School	Capacity
Senior High:	Brunswick Co.	Northern Brunswick High	750
	Brunswick Co.	Southern Brunswick High	750
	Brunswick Co.	West Brunswick High	1,000
	Burke Co.	Freedom	1,560
	Chatham Co.	Northwood	1,200
	Cumberland Co.	Douglas Byrd Senior	1,460
	Cumberland Co.	South View	1,250
	Cumberland Co.	Pine Forest	1,375
	Gaston Co.	East Gaston	1,200
	Halifax Co.	Northwest	450
	Hickory City	Hickory High	1,600
	Hyde Co.	Ocracoke	75
1971-72			
Elementary:	Cabarrus Co.	Mt. Pleasant	405
	Chapel Hill City	Ephesus Road	440
	Duplin Co.	Rose Hill-Magnolia	960
	Jackson Co.	Fairview	986
Middle:	Catawba Co.	H. M. Arndt	600
Senior High:	Burke Co.	East Burke High	1,560
	Madison Co.	Madison County Consolidated	1,000
	Martin Co.	Williamston	855
1972-73			
Elementary:	Duplin Co.	North Duplin	590
	Gaston Co.	Page Elementary	325
	Martin Co.	Jamesville	575
	Rowan Co.	North Rowan	1,100
	Union Co.	Hemby Bridge	750
Middle:	Alamance Co.	Southern Middle	900
Junior High:	Durham Co.	Charles H. Chewning	700
	Lincoln Co.	East Lincoln Junior High	925
	Lincoln Co.	West Lincoln Junior High	925
	Thomasville City	Thomasville Junior High	900
Senior High:	Buncombe Co.	A. C. Reynolds	1,800
	Guilford Co.	Eastern Guilford	1,057
	Iredell Co.	West Iredell High	1,000

	Unit	School	Capacity
1973-74			
Elementary:	Brunswick Co.	Southport Primary	624
	Burlington City	Harvey R. Newlin	778
	Cabarrus Co.	West Cabarrus	1,000
	Davidson Co.	Arcadia-Reedy Creek	850
	Duplin Co.	Wallace	1,200
	Duplin Co.	Warsaw	1,100
	Elkin City	Elkin	614
	Guilford Co.	Alamance Primary	500
	Haywood Co.	East Waynesville-Lake Junaluska	798
	Martin Co.	Williamston Primary	648
	Mooresville City	South Elementary	500
	Mount Airy City	South Elementary	800
	Orange Co.	Grady A. Brown	808
	Transylvania Co.	Brevard Elementary	1,084
	Transylvania Co.	Rosman Elementary	664
Middle:	Transylvania Co.	Brevard Middle	1,206
	Union Co.	Parkwood Middle	750
	Union Co.	Piedmont Middle	750
	Union Co.	Sun Valley Middle	750
Junior High:	Cumberland Co.	Douglas Byrd Junior High	1,200
	Cumberland Co.	Southview Junior High	884
	Cumberland Co.	Westover Junior High	1,080
	Davidson Co.	E. Lawson Brown	600
	Kings Mountain City	Kings Mountain Junior High	850
	Wake Co.	East Millbrook Junior	1,000
	Wake Co.	Maynard Road Junior High	1,000
Senior High:	Buncombe Co.	Clyde Erwin High	1,800
	Davidson Co.	Ledford Senior High	850
	Jackson Co.	Blue Ridge	
	Lincoln Co.	Lincolnton High	750
	Martin Co.	Roanoke	850
	Pender Co.	Central Pender	850
	Pender Co.	Topsail High	360
	Randolph Co.	Randleman	970
	Wake Co.	Fuquay Senior	800
	Wake Co.	Apex Senior High	800

	Unit	School	Capacity
1974-75			
Elementary:	Burlington City	R. Homer Andrews	778
	Catawba Co.	Charles H. Tuttle	650
	Catawba Co.	Webb A. Murray	600
	Goldsboro City	North Drive	
	Granville Co.	Butner	
	Granville Co.	Creedmoor	416
	Guilford Co.	Southern Primary	400
	High Point City	Oak Hill	
	New Hanover	Emma B. Trask	
	New Hanover	Mary C. Williams	
	McDowell Co.	Eastfield	500
	Rowan Co.	Knollwood	650
	Stokes Co.	Germanton	
	Wake Co.	Lynn Road	812
	Wake Co.	Millbrook	
	Winston/Forsyth	Hall-Woodward	700
Middle:	Alexander Co.	West Middle	420
	Monroe City	Monroe Middle	800
	Pitt Co.	Belvoir-Stokes-Pactolus	520
	Pitt Co.	Farmville	520
	Surry Co.	North Surry	900
Junior High:	Cleveland Co.	Burns	1,300
	Cleveland Co.	Crest	1,300
	Durham Co.	South Eastern	600
	Forsyth Co.	Southeast	671
	Johnston Co.	Smithfield Junior High	825
	Onslow Co.	Swansboro	333
	Wake Co.	West Millbrook	
Senior High:	Caldwell Co.	South Caldwell	1,200
	Clinton City	Clinton	1,000
	Currituck Co.	Currituck	900
	New Hanover Co.	Laney High	1,200
	Onslow Co.	Southwest Junior-Senior	700
	Swain Co.	Swain Co. High	
	Winston/Forsyth	Career Center	1,200
	Winston/Forsyth	South Park (special school)	600
	Yancey Co.	Mountain Heritage	850

	Unit	School	Capacity
1975-76			
Elementary:	Bladen Co.	New Elementary	400
	Buncombe Co.	Haw Creek	820
	Chatham Co.	New Elementary	750
	Gaston Co.	Bessemer City West	500
	Gaston Co.	Myrtle	700
	Goldsboro City	North Drive	900
	Granville Co.	West Oxford	750
	Guilford Co.	Northeast	500
	Lexington City	New Elementary	400
	Madison/Mayodan	Madison-Mayodan Primary	250
	Charlotte/Mecklenburg	Piney Grove	360
	Charlotte/Mecklenburg	Sharon	690
	Salisbury City	Harold Isenberg	350
	Stanly Co.	Stanfield	325
	Winston/Forsyth	Thomas H. Cash	700
Middle:	Craven Co.	West Craven	750
	Fayetteville City	Raeford Road	1,000
	Fayetteville City	Ramsey Street	1,000
	Iredell Co.	West Iredell	600
	Macon Co.	Macon Middle	500
	Newton-Conover	Newton-Conover	750
	Randolph Co.	Archdale/Trinity	1,150
Junior High:	Charlotte/Mecklenburg	Northeast	890
	Sanford-Lee	East	850
	Sanford-Lee	West	850
Senior High:	Caldwell Co.	West Caldwell	1,000
	Cumberland Co.	Westover	1,100
	Greensboro City	Career Center	1,500
	Harnett Co.	Harnett Central	1,200
	Harnett Co.	Western Harnett	1,000
	Mitchell Co.	Mitchell	894
	Rockingham Co.	Rockingham	1,000
	Union Co.	Career Center	300

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").