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Greenville Coliseum Complex

Michael Joseph Murray
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Greenville
Collision
Complex

GREENVILLE COLISEUM COMPLEX

By

Michael Joseph Murray

A terminal project submitted to the faculty of the
College of Architecture, Clemson University in
partial fulfillment of the requirements
for the degree of


Master of Architecture

May 1981

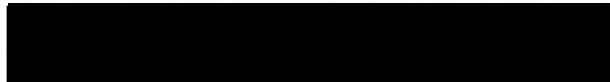
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Acknowledgments

To my parents, for without them this would not
have been possible.

To Sherry, for her neverending love and
understanding.

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Introduction

INTRODUCTION

"The Greenville Auditorium Board is considering the construction of a 20,000 seat coliseum in Greenville County to provide better access to major entertainment events for the people of Greenville and a place for large attendance gatherings in the county."¹

The present Greenville Auditorium is no longer competitive with newer and larger facilities in the region. "The Greenville Memorial Auditorium reached its capacity in providing arena events in Greenville in the 1971/1972 fiscal year when 414 events were held."² It is projected that a 20,000 seat coliseum would reach its capacity by 1992 due to the rapid economic growth in the area.

Office space of 200,000 square feet is also being considered as a part of the coliseum complex. Currently Greenville County has an occupancy rate of ninety-three percent for leasable office space. Part of this office space could be used by the city and county government.

Greenville: County / City

HISTORY

HISTORY

The territory of Greenville County was acquired from the Cherokee Nation by the State of South Carolina in 1767. The first permanent settlement on the site of the present city of Greenville was established by Richard Pearis in 1776. Following the end of the American Revolutionary War, migrants from the Northern states and populous areas along the coast began to settle in the county. Greenville County was created by the General Assembly in 1776, and in 1797 the county seat was laid out and called Pleasantburg. The name was changed to Greenville in 1812 and the town was chartered by the State in 1831.

The early economy of Greenville County centered around agriculture, with the trade and service sectors playing significant roles. After the Civil War, the textile industry began to replace agriculture as the dominate segment of the economy, and by 1930 Greenville was known as the "Textile Center of the South." With the introduction of the new industries following World War II, the economy became more diversified and less dependent on textiles for its vitality. The economic growth of the Greenville area has led to substantial increases in population.

Climate

CLIMATE

Greenville County has a relatively mild climate, with moderately cold winters and warm, but not oppressively hot summers.

Climate Data:*

| | |
|-----------------------------------|-----------|
| Average annual rainfall | 52.42 in. |
| Average temperature | 61.0 deg. |
| Average January minimum | 21.1 deg. |
| Average July maximum | 92.4 deg. |
| No. of days with 90 deg. or above | 31 days |
| No. of days with 32 deg. or below | 68 days |
| Latitude | 34 54 N. |
| Longitude | 82 13 W. |
| Altitude | 952 ft. |

*Greenville Market Data, Greater Greenville Chamber of Commerce, South Carolina, p. 34.

Monthly Norms*

| Month | Temp. | Rain | Wind Sp. | Wind Dir. |
|-------------------|-------|--------|----------|-----------|
| January | 30.7 | 3.53 | 7.3 | SW |
| February | 42.4 | 2.00 | 7.8 | SW |
| March | 54.5 | 8.47 | 7.7 | SW |
| April | 62.4 | 3.23 | 6.9 | W |
| May | 71.5 | 2.71 | 5.8 | SW |
| June | 77.5 | 2.88 | 6.3 | N |
| July | 81.9 | 0.80 | 5.8 | N |
| August | 78.7 | 4.99 | 5.3 | N |
| September | 74.4 | 9.44 | 5.2 | NW |
| October | 59.9 | 6.39 | 7.0 | SW |
| November | 54.8 | 4.43 | 7.0 | SW |
| December | 42.8 | 3.55 | 6.8 | SW |
| Annual Average | 61.0° | 52.42" | 6.6 mph | SW |

*Greenville Market Data, Greater Greenville Chamber of Commerce,
Greenville, South Carolina.

Normal Degree-Days by Month*

| | |
|-----------|------------|
| January | 673 |
| February | 552 |
| March | 442 |
| April | 161 |
| May | 32 |
| June | 0 |
| July | 0 |
| August | 0 |
| September | 10 |
| October | 131 |
| November | 411 |
| December | <u>648</u> |
| Total | 3,060 |

*The Passive Solar Energy Book, Edward Mazria, Rodale Press, Emmaus, Pa., 1979, pp. 390-391.

Population

POPULATION

Greenville County currently ranks 151 out of 3,143 counties in the United States in terms of population size. The current population is estimated to be 286,000 persons. The Greenville Metropolitan area, consisting of Greenville, Spartanburg and Pickens Counties, has an estimated population of 560,000 persons and is ranked seventy-third largest in the United States and fourth largest in the Carolinas and Georgia. Greenville County is also the economic activity center for a larger eleven-county area.

The population of Greenville County has been growing at a rate of approximately 2.5 percent per year, twice the rate of population gain in the United States.

Population Trends Greenville Area 1950-1979*

| <u>Year</u> | <u>City</u> | <u>County</u> | <u>SMSA**</u> | <u>GEA***</u> |
|-------------|-------------|---------------|---------------|---------------|
| 1979 | 62,000 | 283,000 | 587,532 | 958,000 |
| 1970 | 61,208 | 240,774 | 473,454 | 817,923 |
| 1960 | 66,188 | 209,776 | 414,277 | 741,305 |
| 1950 | 58,161 | 168,152 | 358,559 | 677,284 |

*Greenville South, Greater Greenville Chamber of Commerce, Greenville, S.C.
 **Standard Metropolitan Statistical Area
 ***Greenville Economic Area

The population of Greenville County is expected to continue to grow at a rate of 2.5 percent per year in the future, increasing sixty-four percent from 1976-2000. The comparable increase in the United States population is expected to be only twenty-one percent.

| <u>Year</u> | <u>Population Projections*</u> | |
|-------------|------------------------------------|------------------------------------|
| | <u>Greenville County (000)</u> | <u>United States (million)</u> |
| 1979 | 240.8 | 203.2 |
| 1976 | 267.4 | 215.1 |
| 1980 | 290.6 | 222.2 |
| 1985 | 342.9 | 232.9 |
| 1990 | 385.6 | 242.5 |
| 1995 | 422.8 | 252.8 |
| 2000 | 440.9 | 260.4 |

*Greenville South, Greater Greenville Chamber of Commerce, Greenville, S.C.

Greenville County has a relatively young population in relation to other parts of the United States, with only eight percent of the population

of the county being over sixty-four years of age compared to eleven percent for the nation. Likewise, thirty-six percent of the population is under twenty years of age while only thirty-four percent of the nation's population is under twenty years of age.

Transportation

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TRANSPORTATION

Rail

Greenville is served by both the major railroads operating in the Southeast: Seaboard Coast Line and Southern Railway, and also one short line: Greenville and Northern.

Air

Greenville-Spartanburg Airport, located twelve miles northeast of the city of Greenville has two commercial passenger air carriers: Eastern and Republic.

Also serving Greenville is the Downtown Airport which is used for business, training and pleasure flights.

Bus

The city is served by two inter-city bus lines: Greyhound and Continental Trailways. Public bus service within the metro area is provided by the Greenville Transit Authority.

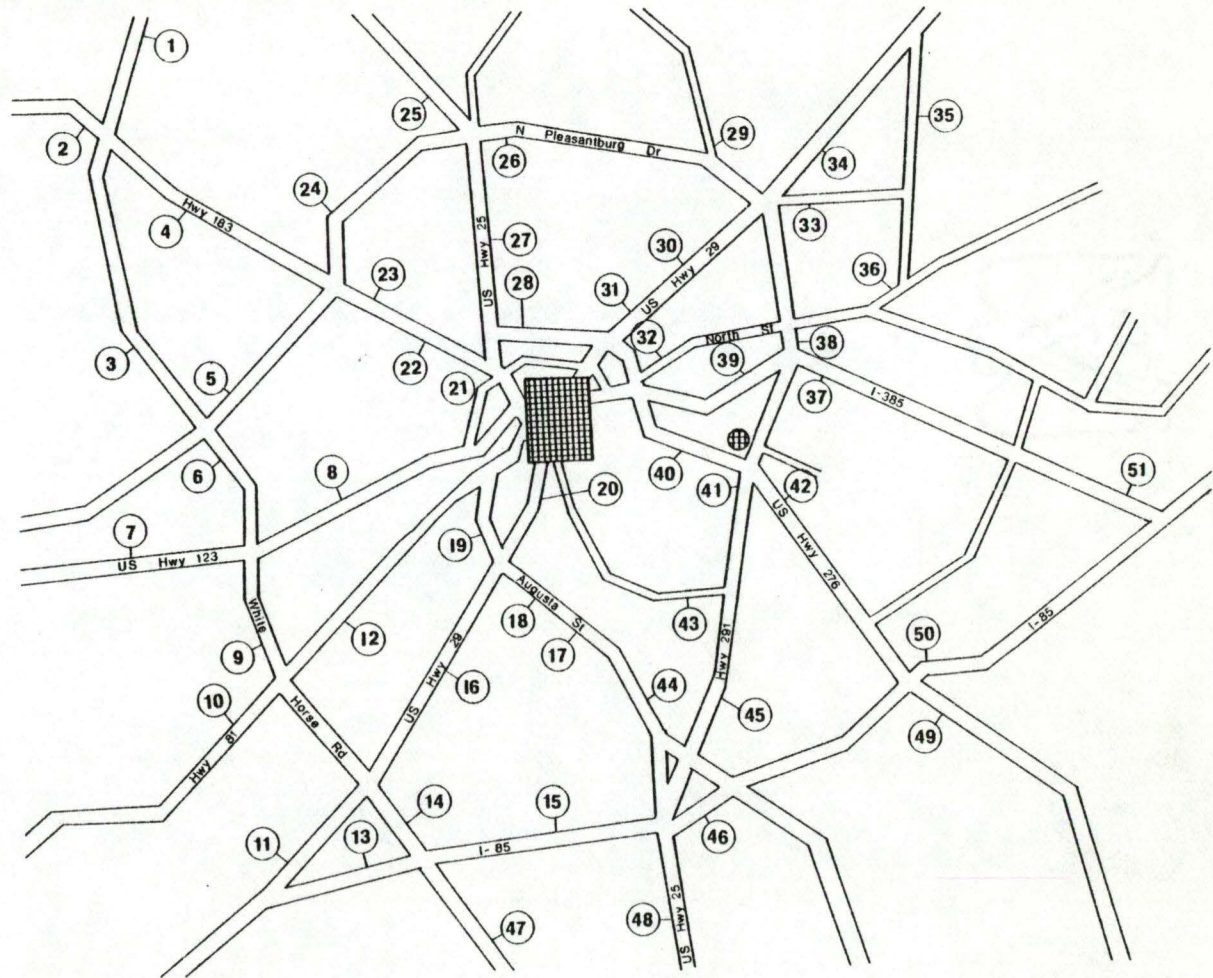
Car

Four major U.S. highways pass through Greenville with Interstate 85 giving direct access to Atlanta and Washington.

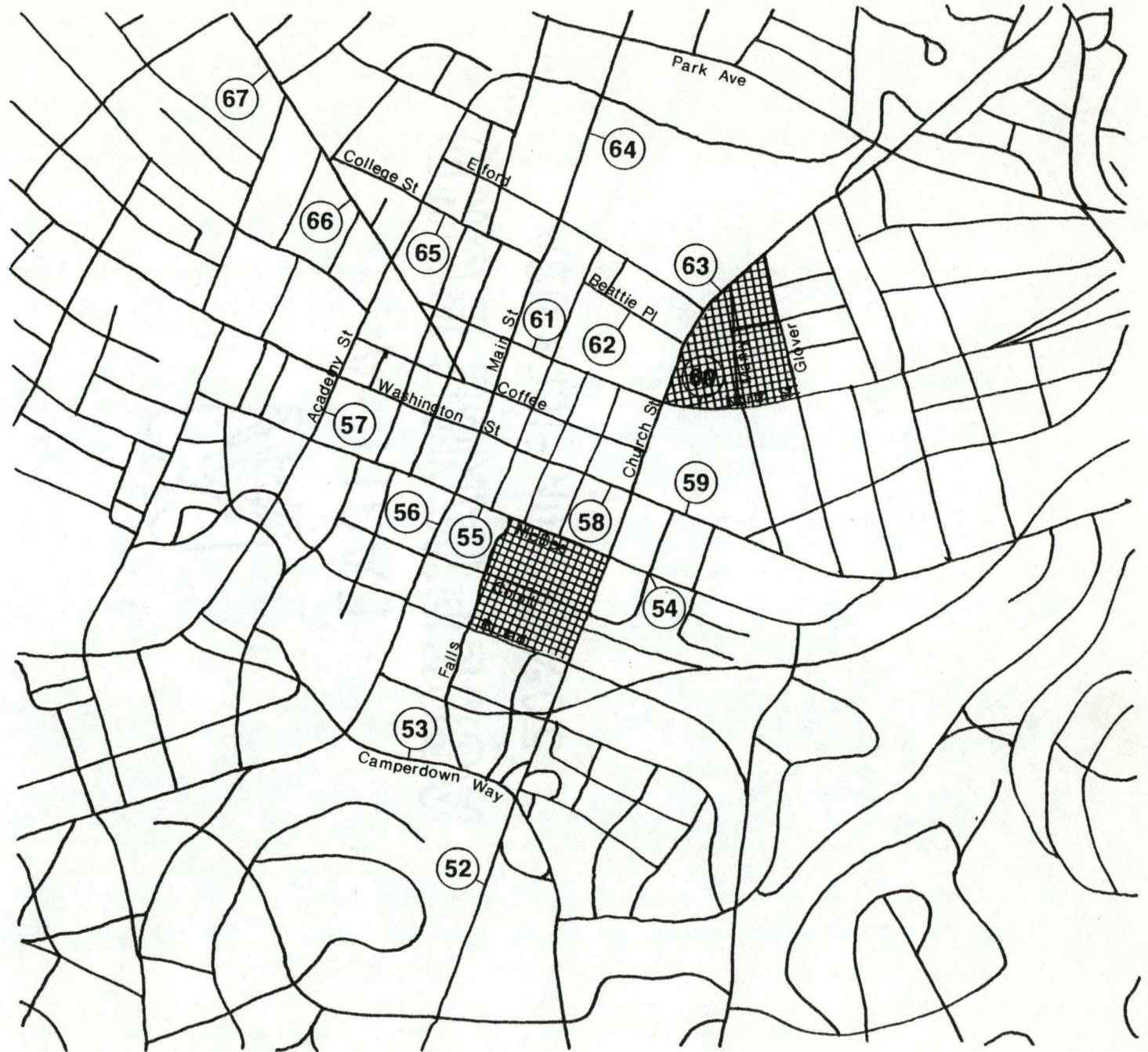
The map on the following page shows the traffic volumes for metro
Greenville.

| <u>Key</u> | <u>1965</u> | <u>1977</u> | <u>Key</u> | <u>1965</u> | <u>1977</u> |
|------------|-------------|-------------|------------|-------------|-------------|
| 1 | 3,338 | 8,759 | 35 | 1,022 | 4,202 |
| 2 | 4,244 | 6,551 | 36 | 3,046 | 11,813 |
| 3 | 6,501 | 16,731 | 37 | 5,431 | 20,019 |
| 4 | 6,705 | 13,045 | 38 | 22,746 | 39,438 |
| 5 | 7,853 | 12,944 | 39 | 7,577 | 15,306 |
| 6 | 12,913 | 25,908 | 40 | 20,253 | 25,439 |
| 7 | 9,000 | 11,906 | 41 | 13,991 | 26,932 |
| 8 | 15,055 | 18,837 | 42 | 21,029 | 22,599 |
| 9 | 14,104 | 23,509 | 43 | 7,904 | 8,529 |
| 10 | 2,718 | 9,614 | 44 | 14,056 | 13,900 |
| 11 | 4,956 | 6,623 | 45 | 11,158 | 24,245 |
| 12 | 4,917 | 9,614 | 46 | 14,676 | 32,451 |
| 13 | 9,700 | 22,373 | 47 | 5,907 | 14,144 |
| 14 | 13,796 | 22,194 | 48 | 8,200 | 22,232 |
| 15 | 16,322 | 31,988 | 49 | 12,854 | 27,815 |
| 16 | 7,432 | 13,845 | 50 | 11,247 | 27,967 |
| 17 | 5,191 | 10,604 | 51 | 4,796 | 8,931 |
| 18 | 18,215 | 17,670 | 52 | 21,500 | 27,347 |
| 19 | 14,412 | 12,673 | 53 | 7,301 | 5,530 |
| 20 | 8,771 | 4,221 | 54 | 4,695 | 5,472 |
| 21 | 20,776 | 21,048 | 55 | N/A | N/A |
| 22 | 14,411 | 17,188 | 56 | 5,770 | 3,824 |
| 23 | 11,800 | 14,118 | 57 | 5,078 | 22,635 |
| 24 | 5,850 | Const. | 58 | 28,726 | 28,327 |
| 25 | 17,359 | 23,683 | 59 | 9,744 | 10,003 |
| 26 | 13,570 | 23,810 | 60 | 11,201 | 15,955 |
| 27 | 16,195 | 16,456 | 61 | 7,422 | 6,698 |
| 28 | 9,035 | 9,778 | 62 | 6,646 | 4,465 |
| 29 | 1,240 | 2,706 | 63 | 22,738 | 16,627 |
| 30 | 24,009 | 27,172 | 64 | 11,201 | 6,733 |
| 31 | 8,558 | 7,827 | 65 | 6,223 | 5,588 |
| 32 | 8,286 | 11,885 | 66 | 10,660 | 8,618 |
| 33 | 2,966 | 10,316 | 67 | 20,776 | 21,048 |
| 34 | 20,665 | 34,523 | | | |

*Greenville Market Data, Greater Greenville Chamber of Commerce,
Greenville, South Carolina.



Downtown
Traffic
Volumes



Facilities

PARKING

Parking fees in the downtown area range from a low of \$6.00 per month in the southern end of the central business district to a high of \$35.00 per month for a reserved space in the Daniel Building garage.

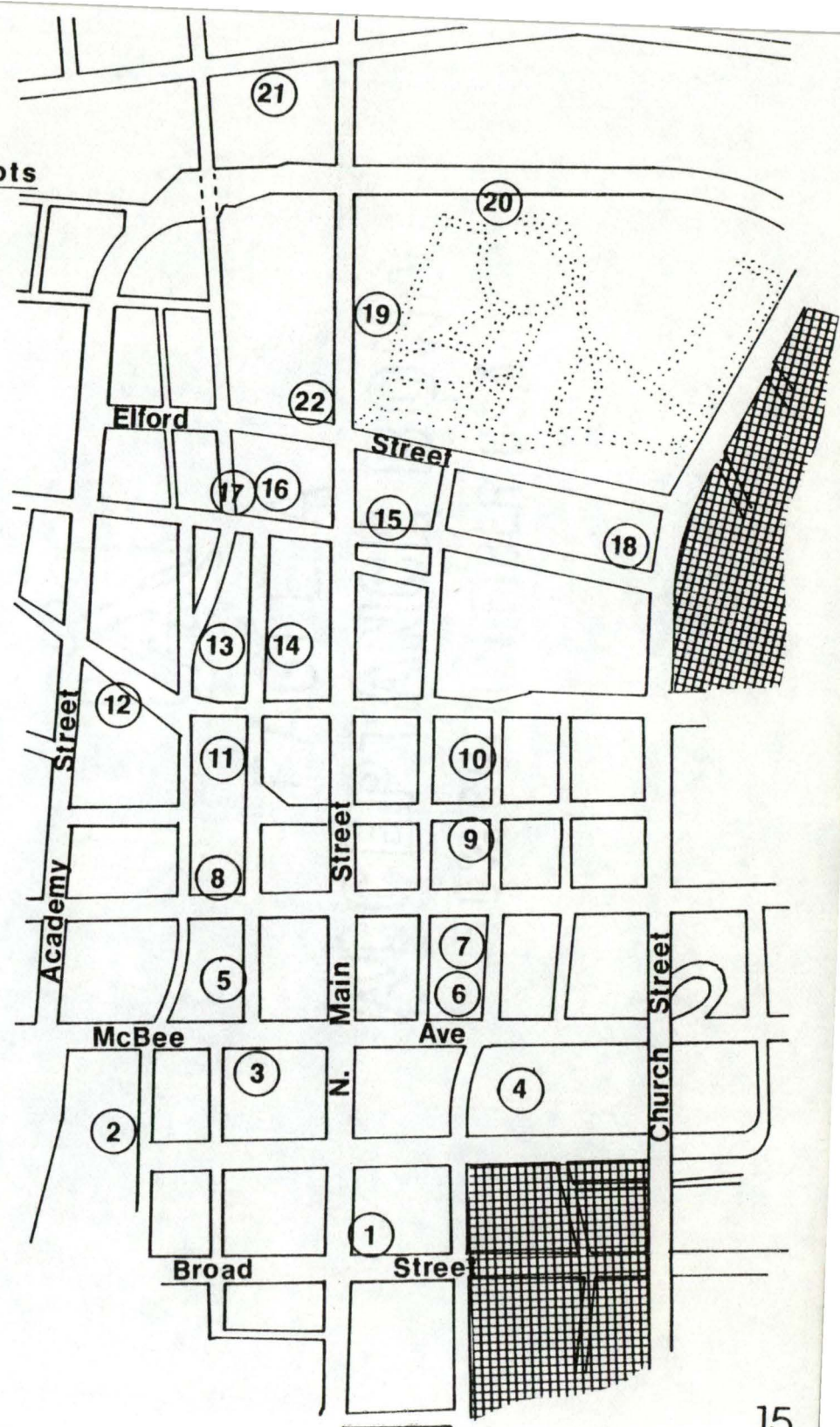
There are currently 2,847 parking spaces in the Central Business District. All lots have at least a sixty-five percent occupancy rate or better except for the McBee parking lot which has a rate of only twenty percent for 269 spaces. With the addition of the coliseum and its accompanying office space, this rate would be expected to increase.

The following two pages list the major city and private parking facilities, the number of spaces in each, and their location in the city.

| <u>Map No.</u> | <u>Lot Name</u> | <u>No. of Spaces</u> | <u>Percent Occupancy</u> | <u>Monthly Rate</u> |
|----------------|--|----------------------|--------------------------|---------------------|
| 1 | Wade Stack | 138 | 65 | 6.00 |
| 2 | Belk Simpson (old Belk's Lot) | 225 | | |
| 3 | Belk Simpson Garage (Belk's Garage) | 90 | | |
| 4 | McBee | 269 | 20 | 10.00 |
| 5 | McDonald's | - | - | (1.50/day) |
| 6 | SCN Garage (SCN Customers & Employees Only) | | | |
| 7 | Greenville Municipal | 432 | 80 | 15.00 |
| 8 | Bankers Trust | 300 | 100 | 10.00 |
| 9 | Handy Park (Fidelity Federal Cust. & Empl) | | | |
| 10 | Handy Park | 75 | 75 | 20.00 |
| 11 | North Street | 120 | 100 | 15.00 |
| 12 | Handy Park | 75 | 85 | 10.00 |
| 13 | Private | 68 | 70 | 12.00 |
| 14 | 200 Mall | 118 | 90 | 12.00 M 20.00 NM |
| 15 | Handy Park | 77 | - | .35/hr |
| 15A | Handy Park | 85 | 100 | 20.00 |
| 16 | Daniel Building | 400 | 100 | 27.50 NR 35.00 R |
| 17 | Daniel Handy Park | 20 | 100 | 20.00 |
| 18 | Curb Market | 150 | 90 | 15.00 |
| 19 | North Main | 143 | 90 | 15.00 |
| 20 | Academy Street | 32 | 90 | 10.00 |
| 21 | Private | - | 90 | 10.00 |
| 22 | Private | 30 | 100 | 18.00 |
| TOTAL | | 2,847 | | |

*Greenville Market Data, Greater Greenville Chamber of Commerce, Greenville, South Carolina.

City and Private Parking Lots



OFFICE SPACE

Currently Greenville has approximately one million square feet of net leasable office space in both downtown and suburban locations. As of July, 1980, there was a 93.3 percent occupancy rate:

| | <u>Leasable Area</u> | <u>Available Area</u> | <u>Occupancy Rate</u> |
|----------|----------------------|-----------------------|-----------------------|
| Downtown | 487,268 sq ft | 38,628 sq ft | 92.5% |
| Suburban | 648,408 sq ft | 38,000 sq ft | 94.2% |
| Total | 1,135,676 sq ft | 76,628 sq ft | 93.3% |

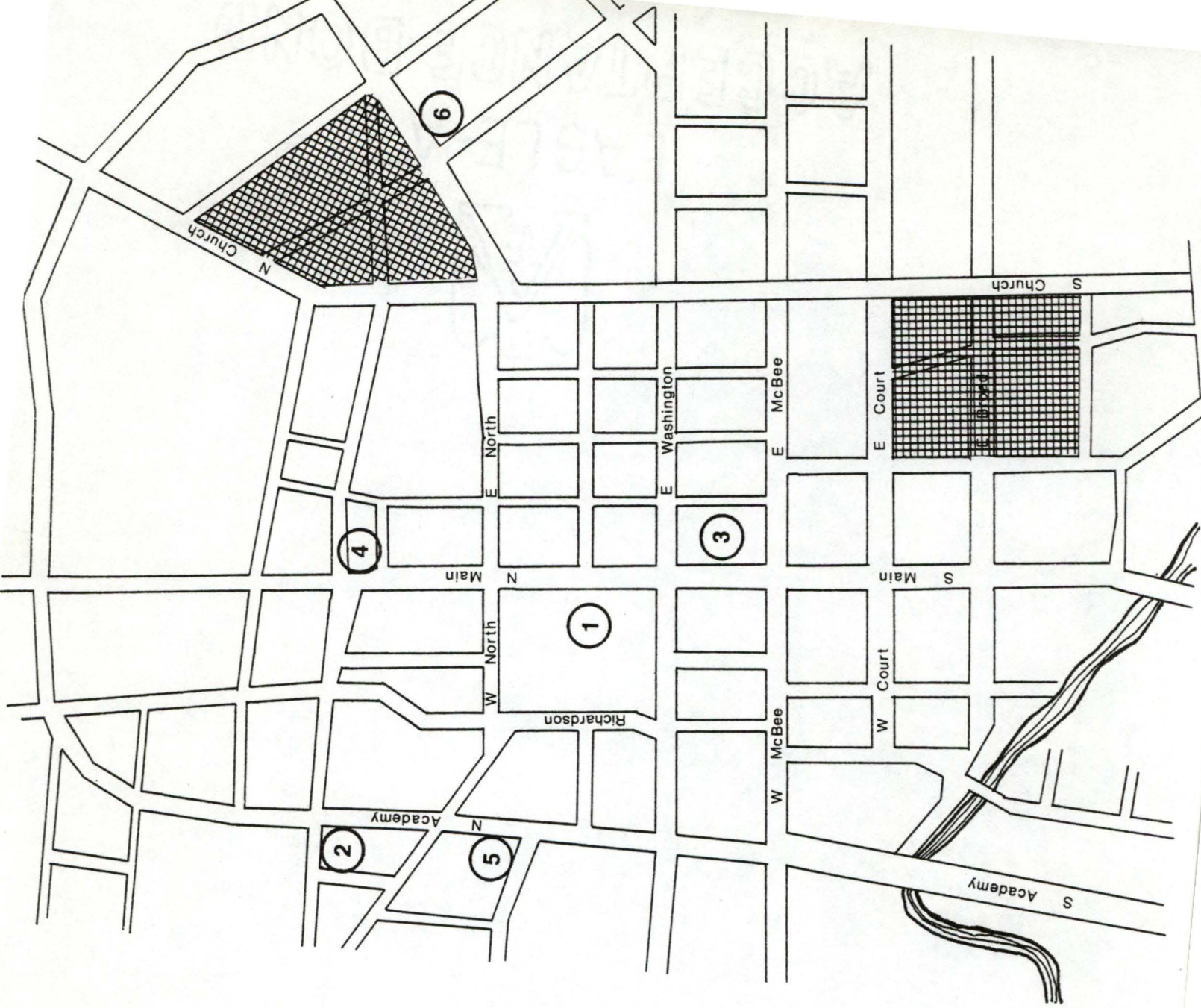
The addition of the 200,000 square foot office space associated with the coliseum complex will bring the net leasable office space in the Greenville area to 1,335,676 square feet. The following two pages are a summary of office space locations, net leasable space and space now available.

The office space associated with this complex, through the use of tax increment financing, will help pay for part of the coliseum construction cost.

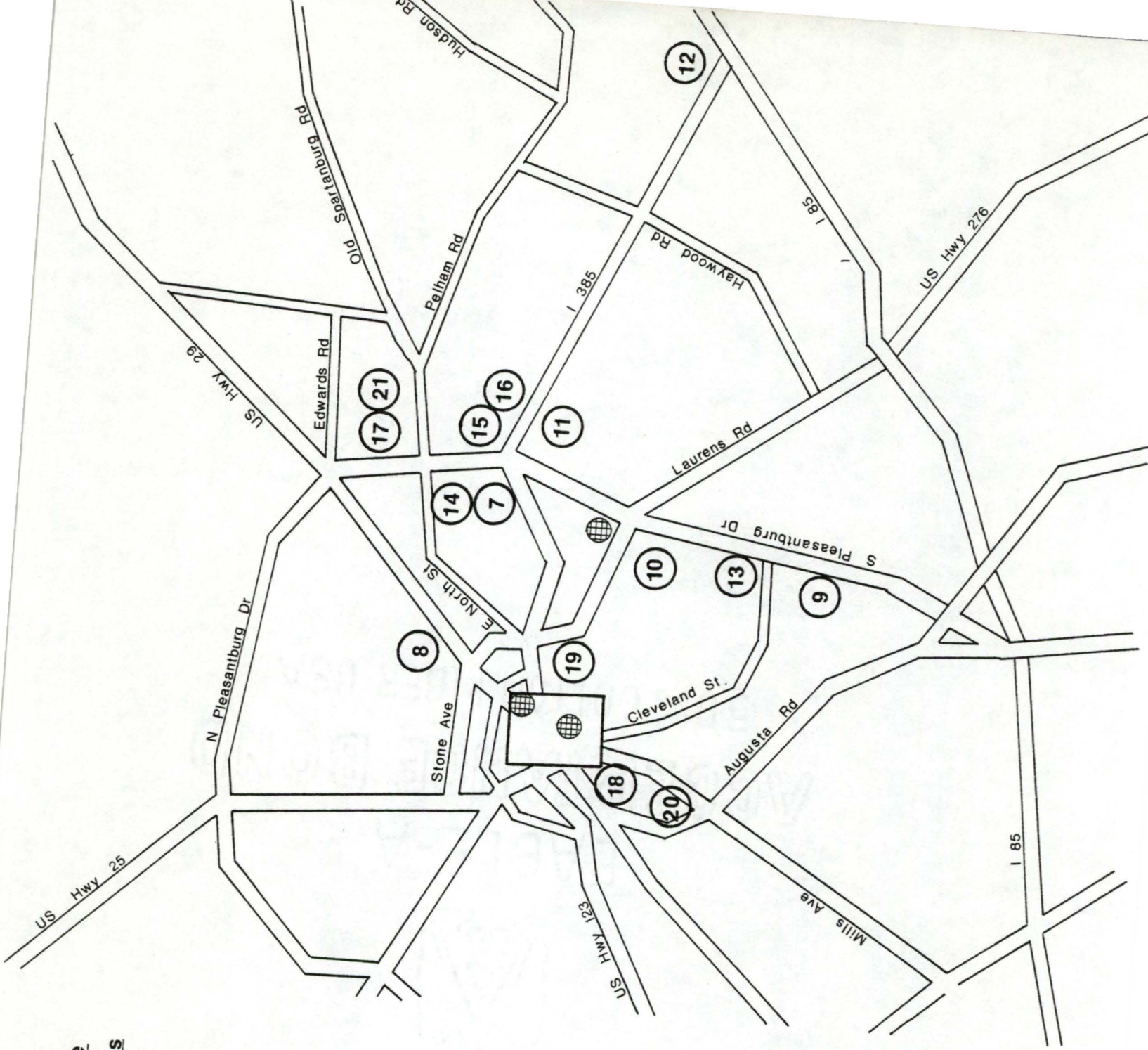
| DOWNTOWN OFFICE SPACE | <u>Map No.</u> | <u>Building Name</u> | <u>Net Leasable Space</u> | <u>Available Space</u> |
|---------------------------|----------------|----------------------|---------------------------|------------------------|
| | 1 | Bankers Trust | 147,000 sq ft | None |
| | 2 | First Federal | 104,500 | 1,000 |
| | 3 | SCN Bank | 140,000 | 14,000 |
| | 4 | Greenville Commons | 73,000 | 22,000 |
| | 5 | Academy Plaza | 12,000 | None |
| | 6 | Dalton Building | 9,768 | 1,628 |
| SUBURBAN OFFICE SPACE | 7 | Century Plaza | 50,000 | 1,100 |
| | 8 | Chick Hampton | 35,000 | None |
| | 9 | Diran Executive | 36,156 | None |
| | 10 | Edinburgh Arcade | 12,000 | 1,500 |
| | 11 | Green Gate Park | 104,352 | 4,000 |
| | 12 | Koger Executive | 97,300 | 2,000 |
| | 13 | Morgan Manor | 60,000 | 4,000 |
| | 14 | North Executive | 20,000 | 9,800 |
| | 15 | Piedmont Center | 63,000 | 6,000 |
| | 16 | Regency Plaza | 18,000 | 1,500 |
| | 17 | Piedmont East | 71,000 | 1,300 |
| | 18 | 300 Building | 45,600 | 3,000 |
| | 19 | 800 Building | 15,000 | None |
| | 20 | Dobson Building | 15,000 | 3,800 |
| | 21 | Grove Building | 6,000 | None |

Greenville Market Data, Greater Greenville Chamber of Commerce,
Greenville, South Carolina.

**Downtown Office
Space Locations**



Suburban Office
Space Locations



ENTERTAINMENT

Greenville currently has over 260 restaurants as well as a number of live entertainment and dancing clubs. Other entertainment activities include sporting events, country and rock concerts, Holiday on Ice shows, World Championship Rodeo, Miss South Carolina Pageants and state-wide craft shows, most of which are now being held in Memorial Auditorium.

EXHIBITIONS

Textile Hall contains over 500,000 square feet of exhibition space with a permanent American Textile Machinery Exhibit. Visiting shows have included Southeastern Recreational Vehicle show, the American Kennel Club Dog show and the Chapman Antique show.

RECREATION

"The city recreation department operates thirty-five parks, playgrounds and recreational centers, several senior citizens programs and special events sponsored by the department. A children's zoo is also located within Cleveland park."³

CULTURAL

The new Heritage Green Cultural Center is the focal point of Greenville cultural activity. This downtown complex is currently the home of the Greenville County Library, the Greenville County Museum of Art and the Greenville Little Theater.

BUSINESSES

Greenville County now has approximately 3,171 retail trade businesses with 1,428,000 dollars in sales per year. In the last five years retail sales have increased approximately fifty-two percent, with wholesale trade increasing at the remarkable rate of 125 percent in the last eight years.

A majority of the shopping areas in Greenville County are located out of the Central Business District (see map on following page). Main Street, as part of the Downtown Redevelopment Project, has tried to bring part of this retail trade back to the Central Business District. The addition of the 60,000 square foot retail space proposed as part of the Coliseum Project could help to further increase the retail market in the downtown area, thus reinforcing the Main Street Redevelopment Project.

SHOPPING AREAS

| <u>Key</u> | <u>Shopping Area</u> | <u>Square Feet</u> |
|------------|------------------------------|--------------------|
| 1 | McAlister Square | 570,000 |
| 2 | Greenville Mall | 650,000 |
| 3 | Bell Tower | 325,000 |
| 4 | Greer Plaza | 168,000 |
| 5 | Wade Hampton Mall | 160,000 |
| 6 | University Square | 130,000 |
| 7 | Pleasantburg Shopping Center | 125,989 |
| 8 | J. M. Fields Plaza | 123,000 |
| 9 | North Hills | 115,000 |
| 10 | Westowne | 108,000 |
| 11 | K-Mart (Mills Avenue) | 108,000 |
| 12 | K-Mart (Sulpher Springs) | 106,000 |
| 13 | Mauldin Plaza | 105,000 |
| 14 | K-Mart Plaza (Wade Hampton) | 100,000 |
| 15 | Lewis Plaza | 75,000 |
| 16 | Anderson Road Plaza | 62,000 |
| 17 | Morgan Manor | 60,000 |
| 18 | Simpsonville Plaza | 60,000 |
| 19 | Golden Strip Shopping Center | 57,000 |

| <u>Key</u> | <u>Shopping Area</u> | <u>Square Feet</u> |
|------------|-----------------------------|--------------------|
| 20 | Whatley Square | 55,600 |
| 21 | Eastgate Village | 55,000 |
| 22 | Peachtree Shopping Center | 55,000 |
| 23 | AGC Shopping Center | 55,000 |
| 24 | Terrace Shopping Center | 80,000 |
| 25 | Berea Shopping Center | 40,150 |
| 26 | Hampton Village | 38,000 |
| 27 | Centre West Shopping Center | 37,200 |
| 28 | Hillandale Shopping Center | 30,000 |
| 29 | Bell Plaza | 30,000 |
| 30 | Gallery Shopping Center | 25,000 |
| 31 | Cedar Lane Plaza | 25,000 |
| 32 | Westwood Plaza | 10,270 |
| 33 | Stone Plaza | --- |
| 34 | Lake Forest Shopping Center | |
| 35 | Haywood Mall | 800,000 |
| 36 | Mulberry Square | 20,000 |
| 37 | Old Towne Shopping Center | |
| 38 | Vaughn's at East North | |

The G.M.A.

GREENVILLE MEMORIAL
AUDITORIUM

The Greenville Memorial Auditorium began operations in the late 1950's. The auditorium is technically termed an arena and is a multi-use structure located at the intersection of Church and East North Streets, directly across from the Greenville County Courthouse.

"The Greenville Memorial Auditorium has a lower level exhibit hall in addition to the main arena floor and is flexible for use by theater type events and trade shows, sports events, arena spectaculars, large meetings and private parties (by placing a canopy over the arena floor, a festive ballroom environment can be created). The building also has two large meeting rooms holding 300 and 500 persons."⁴

The Greenville Memorial Auditorium has a standard maximum seating capacity of 6,220. When a theater environment is created with the addition of a stage and curtains, the seating capacity is reduced to 3,863. The capacity for basketball games is 5,476; for circus events, 4,982; and for the Holiday on Ice Show, 4,063. When "festival seating," which makes use of much of the arena floor, is employed the capacity of the auditorium can rise to over 7,000 persons.

"The Facility has been an innovative leader in its industry providing imaginative use of the building for a wide variety of entertainment and meeting events with vastly different requirements, operating without public subsidy for 400 event days in years of peak usage."⁵

The following table lists the number and kinds of events at the GMA and how they have changed over the years.

NUMBER AND KIND OF MAJOR TICKET EVENTS AT THE GMA⁶

| <u>1971</u> | | <u>1977</u> | |
|----------------------|----------------------|--------------------------|----------------------|
| | <u>No. of Events</u> | | <u>No. of Events</u> |
| Total | 121 | | 115 |
| Concerts | 13 | | 22 |
| Including: | | Including: | |
| David Cassidy | | Tom Jones | |
| Osmonds | | Englebert Humperdinck | |
| Carpenters | | Parliament Funkadelics | |
| Liberace | | Johnny Cash | |
| James Brown | | Loretta Lynn | |
| | | Lynyrd Skynrd | |
| | | James Brown | |
| Wrestling | 45 | | 45 |
| College Basketball | 20 | | 23 |
| Poinsettia Classic | | Poinsettia Classic | |
| (Furman, Clemson, | | (Furman, Tennessee Tech, | |
| Auburn, Holy Cross) | | Appalachian State and | |
| | | Georgia Southern) | |
| Arena Spectaculars | 43 | | 25 |
| Ringling Circus | 12 | | -- |
| Shrine Circus | 5 | | 8 |
| Holiday on Ice | 6 | | 6 |
| Rodeo | 4 | | 3 |
| Harlem Globetrotters | 2 | | 1 |
| Children's Shows | 11 | | 5 |
| Lippizan Stallions | 3 | | |

Greenville Memorial Auditorium patrons also attend other arenas in the area including Clemson's Littlejohn Coliseum; Asheville Civic Center; Greenwood Civic Center; Spartanburg Memorial Auditorium; Charlotte Coliseum; Omni, in Atlanta; Greensboro Coliseum; and Carolina Coliseum. A survey of 395 patrons, conducted by Lawrence H. Shaw for the Greenville Auditorium Board in 1978 produced the following results:

| | |
|---|----------------|
| Average number of times patron attended in the last year | 8.2 |
| Adjusted for type of events | 6.1 |
| Attendance by GMA patrons at other arenas in the last year: | <u>Percent</u> |
| No other arena attended | 40% |
| Attended another arena | 60% |
| Distribution of attendance at other arenas: | 100% |
| Littlejohn Coliseum | 26 |
| Asheville Civic Center | 8 |
| Greenwood Civic Center | 3 |
| Spartanburg Memorial Auditorium | 17 |
| Charlotte Coliseum | 17 |
| Omni | 14 |
| Greensboro Coliseum | 4 |
| Carolina Coliseum | 12 |

With the addition of a 20,000 seat coliseum in Greenville County and the larger and more popular shows it would attract, the percent of patrons traveling to out-of-town arenas could be significantly reduced.

Forty-two percent of the patrons surveyed drink or dine in connection with attending events at the Greenville Memorial Auditorium. As the popularity of events increases so will the distance persons will travel to attend these events thus increasing the percentage of persons dining and drinking in the downtown area, supporting its growth and quality.

Market Area

MARKET AREA

The proposed Greenville Coliseum is to be a publicly owned facility designed to serve the people of Greenville County and provide them with facilities for entertainment and other events involving large gatherings of people.

"The persons attending events at a 20,000 seat coliseum will essentially be the same persons who are currently attending events at the Greenville Memorial Auditorium. A larger arena, which will make it possible to attract a wider array of events appealing to a larger audience, will reduce the proportion of the population which do not attend any events; a larger arena should also increase the number of times per year current patrons attend."¹² In addition, a larger arena, by attracting large regional events, will tend to expand attendance from a larger region.

"The current pattern of attendance at the Greenville Memorial Auditorium offers substantial insight to the geographic distribution of patrons at a large coliseum. In order to quantify the residence location of patrons at the Greenville Memorial Auditorium, patrons at ten events at the Greenville Memorial Auditorium in the period from January 19, 1978 through March 3, 1978 were surveyed."¹³ These events were: one wrestling event, one religious crusade, a Holiday on Ice and a Hanneford-Shrine Circus, three basketball games and three concerts. The sample was used to esti

the extent to which the changing program of events would affect the pattern of attendance at new 20,000 seat coliseum.

CHANGE IN MARKET AREA WITH THE ADDITION
OF A 20,000 SEAT COLISEUM

| | <u>Currently at GMA</u> | % | <u>At a 20,000 seat Coliseum</u> |
|--|-----------------------------|---|--------------------------------------|
| Greenville County and Easley residents | 66 | | 60 |
| Residents of other places in Pickens County, Anderson County, Laurens County and Spartanburg County | 23 | | 26 |
| Residents of Oconee, Abbeville, Union, Cherokee and Greenwood Counties | 5 | | 6 |
| Nearby areas of North Carolina and Georgia | 3 | | 3 |
| Residents of other areas at a considerable distance from Greenville | <u>3</u> | | <u>5</u> |
| Total | 100 | | 100 |

The Audience

THE AUDIENCE

It is expected that approximately fifty-five percent of the patrons attending the proposed coliseum will be from Greenville County; twenty-six percent from the surrounding counties of Pickens, Laurens, Anderson and Spartanburg; eight percent from within a fifteen mile radius of the facility; five percent from Easley; three percent from Georgia and North Carolina; and the remaining three percent coming from areas outside a sixty mile radius of Greenville.

"It is the nature of arenas to present events during the course of a year which will appeal to a wide audience of persons with different occupational, educational and income characteristics. Age is, however, a factor in arena attendance and there will be a much larger proportion of persons in the 18-34 age group attending events at the coliseum than these persons represent in the total population. Similarly, a very small proportion of the population over 65 will attend events at a coliseum."¹⁴

The following table gives the expected attendance at the coliseum by age.

ATTENDANCE BY AGE AT THE COLISEUM

| <u>Age</u> | <u>Patrons/ Population</u> -----%----- | <u>Attendance/ Population</u> _____ times per year----- | <u>Attendance/ Patrons</u> | <u>Percent of Attendance</u> |
|-------------|---|--|--------------------------------|----------------------------------|
| 18-34 | 78 | 3.4 | 4.4 | 66 |
| 35-64 | 48 | 1.5 | 3.1 | 32 |
| 65 and over | 25 | .5 | 2.0 | 3 |
| All adults | 57 | 2.1 | 3.7 | 100 |

The 20,000 seat coliseum will have an attendance of 843,000 persons in the fiscal period ending in mid-1982. The Greenville Memorial Auditorium is expected to have an attendance of 380,500 in the same period. Together the two facilities would represent attendance of 1,223,500. It is projected that attendance at these two facilities will increase at an annual rate of three percent, demand, however, is expected to increase at an annual rate of 6.7 percent.

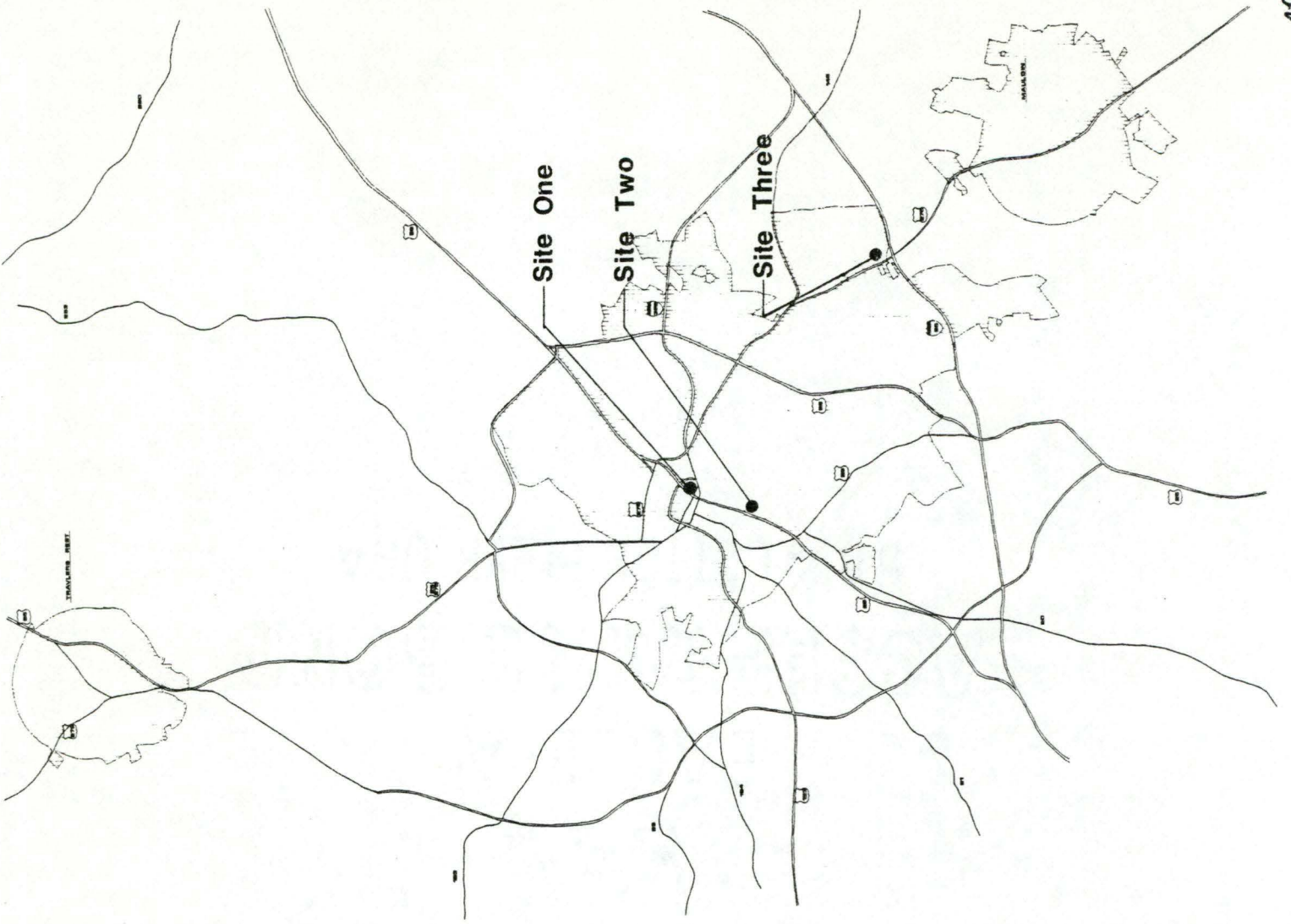
Site Selection

SITE ANALYSIS

Three sites have been considered for the location of the coliseum complex which will consist of the 20,000 seat arena; 200,000 square feet of office space; 60,000 square feet of retail space; and a 5,000 car parking structure. Each of the sites was evaluated on the basis of the following criteria:

1. Population center - proximity of site to the population center.
2. Surrounding growth - availability of land surrounding the facilities to accommodate coliseum generated activities.
3. Site size.
4. Availability of land.
5. City balance - expansion of city in an even growth pattern.
6. Main Street Development - proximity to Main Street and how redevelopment would benefit from site location.
7. Regional access - number and location of major routes adjacent to the site.
8. Local access - number of vehicular turning movements in the vicinity of the site, number and widths of local roads and turns into and out of the site.

Site Locations



9. Dump time - time required to completely empty the parking facilities after an event.
10. Existing parking - existing parking that could be utilized during events to cut down on the amount of on-site parking.
11. Lodging - number of hotel and motel accommodations in proximity of the site.
12. Restaurants - number and proximity of restaurants to the site.
13. Fire protection - station size and ease of access to the site.
14. Availability of water.
15. Availability of sewer.
16. Soil - soil suitability for coliseum construction.
17. Site occupation - vacant, wooded or with structures.

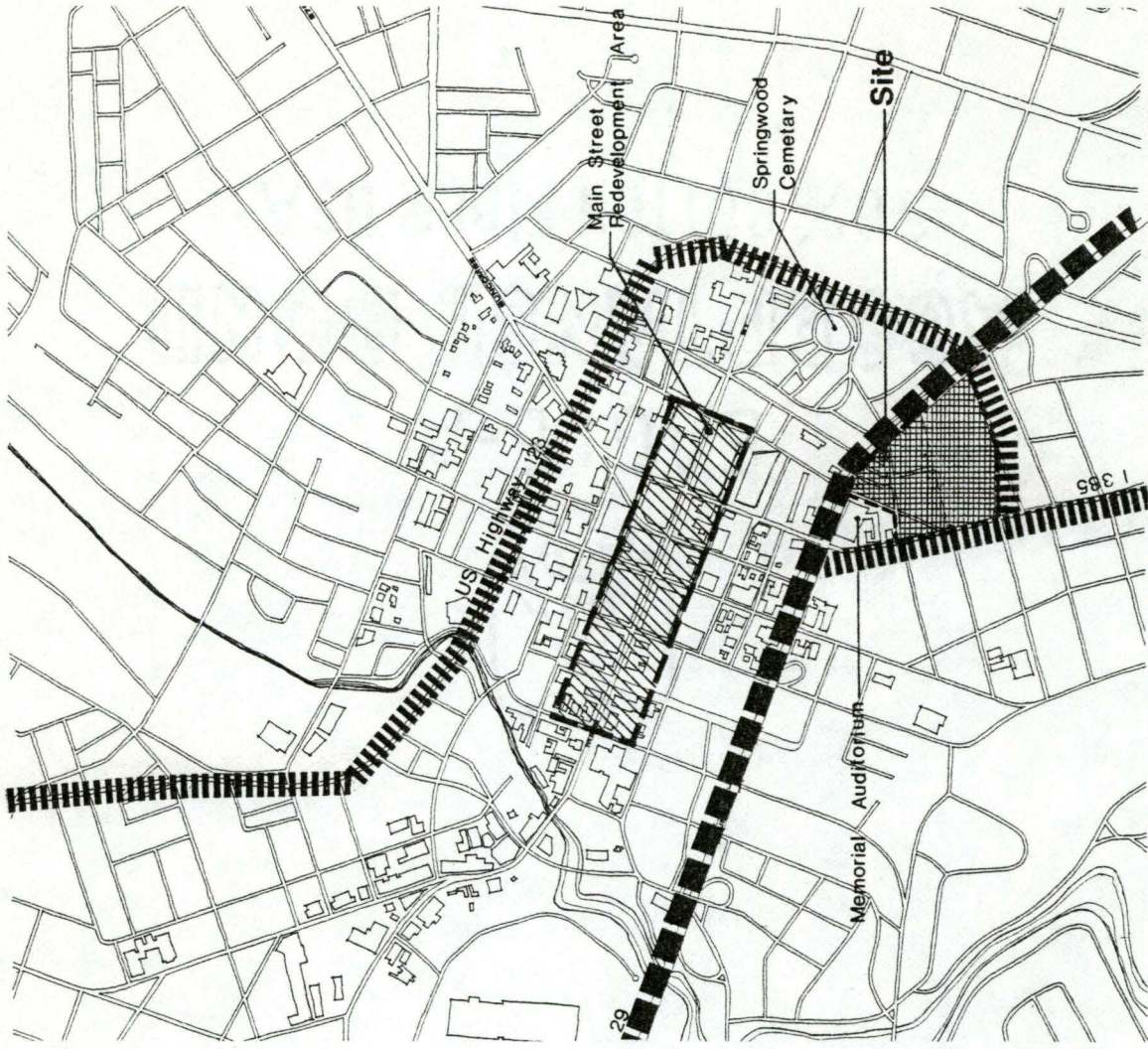
SITE ONE

The existing Greenville Memorial Auditorium site, bounded by East North Street, Church Street and Academy Street, has already been acquired for the construction of the proposed coliseum. Access to this site is relatively good, however, it would be difficult to alter existing traffic patterns to accommodate greatly increased traffic.

The major shortcoming of this site is its relationship to the city and the Main Street Redevelopment Project. At this time the northern section of the city has been the recipient of most redevelopment projects, including the recent Hyatt Convention center, while little development has occurred in the southern section. The construction of the proposed coliseum in this northern part of Greenville might further inhibit development of the southern section of the city.

Parking for this location would need to be almost totally on the site itself since few public parking lots are within a convenient distance.

Future expansion in this area is limited by the cemetery bordering the north side, the courthouse to the south, and county law offices to the west.



QUANTITATIVE SITE ANALYSIS

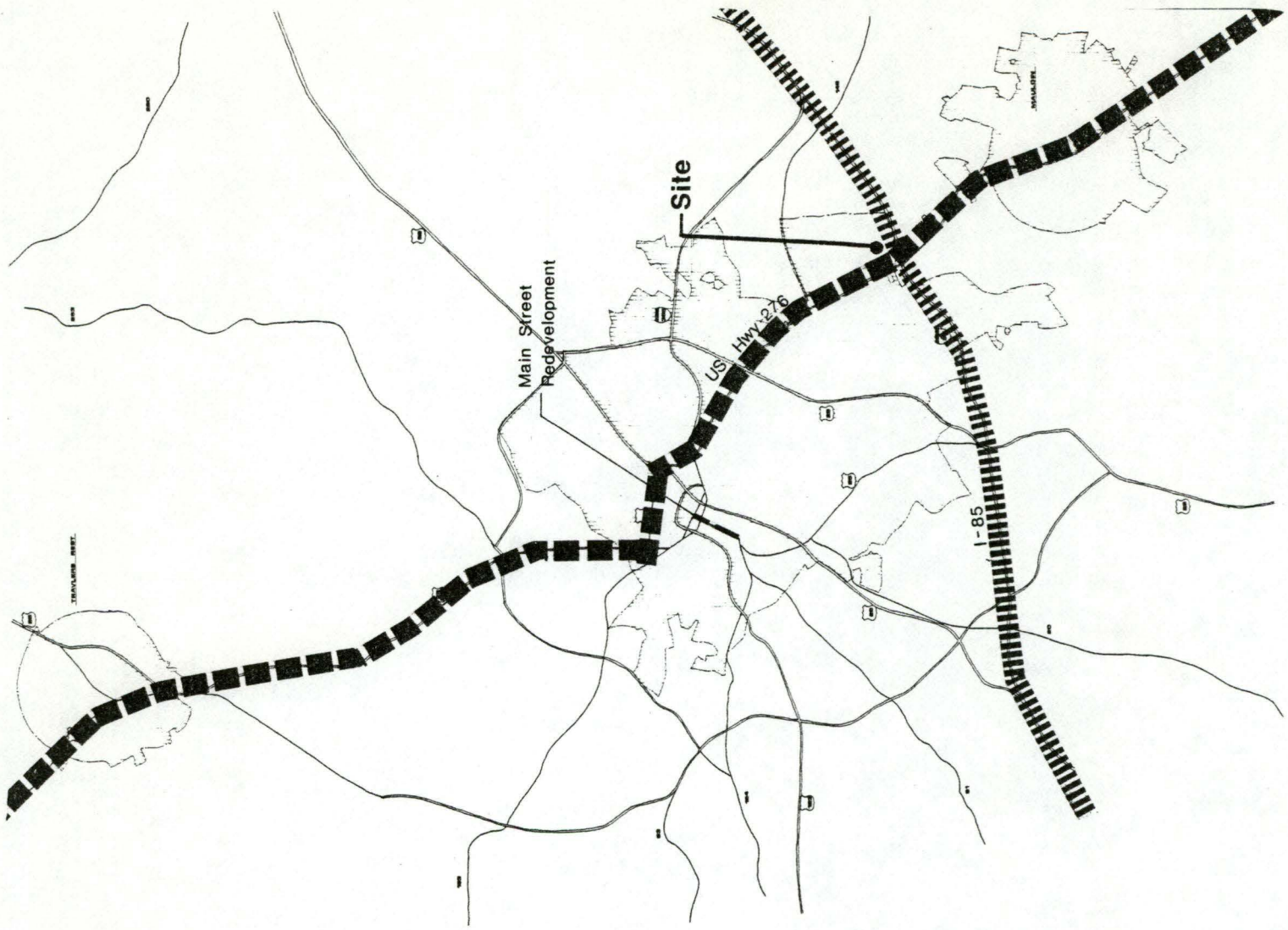
| | <u>Rating</u> |
|---|---------------|
| Local access | 4 |
| Dump time 45 minutes (1/45)x100 | 2.22 |
| Regional access | 4 |
| Motels | 4 |
| Restaurants | 3 |
| Fire protection | 5 |
| Population Center | 3 |
| Surrounding growth | 2 |
| Existing parking | 3 |
| Availability of water | 4 |
| Availability of sewer | 4 |
| Availability of land | 5 |
| Site size | 3 |
| Soil | 3 |
| Site occupation | 4 |
| Main Street Redevelopment | 2 |
| City balance | <u>2</u> |
| TOTAL | 57.22 |

Poor Fair Good
 1 2 3 4 5

SITE TWO

The second location considered for the construction of the coliseum complex is a site that is located well out of the Central Business District in an area bounded by I-385 and I-276 (Laurens Road). Although this site is close to the population center of projected coliseum users, it would not contribute to the growth and economic development of downtown Greenville and the Main Street Redevelopment Project. Access to this site is by only one major highway, six-lane Laurens Road.

Fire protection at this location is another problem to be considered. At the present, the nearest fire station is a one engine residential station. A coliseum in this area would require another station or the expansion of the existing station.



QUANTITATIVE SITE ANALYSIS

| | <u>Rating</u> |
|------------------------------------|---------------|
| Local access | 2 |
| Dump time 52 minutes (1/52)x100 | 1.92 |
| Regional access | 4 |
| Motels | 1 |
| Restaurants | 3 |
| Fire protection | 2 |
| Population center | 5 |
| Surrounding growth | 4 |
| Existing parking | 2 |
| Availability of water | 3 |
| Availability of sewer | 3 |
| Availability of land | 4 |
| Site size | 5 |
| Soil | 4 |
| Site occupation | 5 |
| Main Street Redevelopment | 1 |
| City balance | <u>1</u> |
| TOTAL | 50.92 |

Poor Fair Good
 1 2 3 4 5

SITE THREE

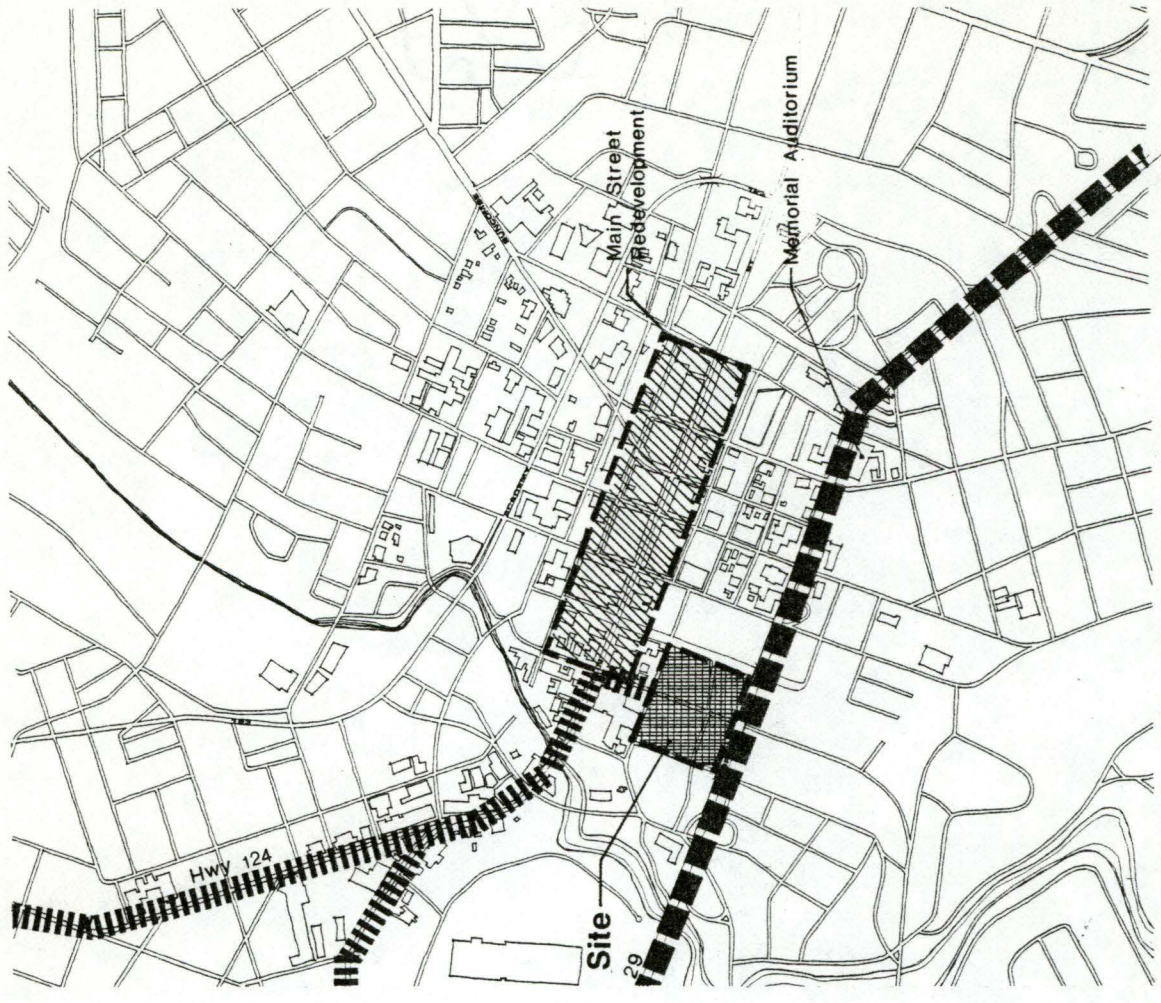
The third site considered for the construction of the coliseum complex is bounded by McBee Avenue, Church Street, Falls Street, and Broad Street in downtown Greenville. Access to this site, with the addition of a new ramp off the Church Street overpass, is the best of the sites considered. If traffic direction on the streets surrounding the site was altered at the conclusion of coliseum events, the area could be cleared in approximately forty-five minutes.

Existing public parking near this site is greater than that of the other two locations. This would greatly reduce the amount of on site parking, which would in turn reduce the cost of the overall complex.

This site also has the best relationship to the Main Street Redevelopment Project and the city as a whole. A coliseum in this location would form a much needed anchor for the southern end of the city as well as helping to revive the retail that would exist between this complex and the existing buildings in the northern end of the city.

This site is also in an excellent location to relate to the Reedy River development. With a large amount of housing planned for the surrounding area, people working in the office portion of the complex could live in relative proximity to their jobs. This would again help to revive downtown Greenville and enforce the efforts to bring the people back to downtown.

The superiority of this site over the other two sites can be clearly seen in the following quantitative analysis. Therefore, the McBee-Church Street location will be proposed as the site of the Greenville Coliseum Project.



QUANTITATIVE SITE ANALYSIS

| | <u>Rating</u> |
|------------------------------------|---------------|
| Local access | 4 |
| Dump time 41 minutes (1/41)x100 | 2.44 |
| Regional access | 3 |
| Motels | 3 |
| Restaurants | 4 |
| Fire protections | 5 |
| Population center | 3 |
| Surrounding growth | 3 |
| Existing parking | 4 |
| Availability of water | 4 |
| Availability of sewer | 4 |
| Availability of land | 4 |
| Site size | 4 |
| Soil | 3 |
| Site occupation | 4 |
| Main Street Redevelopment | 4 |
| City balance | <u>5</u> |
| TOTAL | 63.44 |

Poor Fair Good
 1 2 3 4 5

Activities

ACTIVITIES

The 20,000 seat coliseum envisioned by the Greenville Auditorium Board would serve solely as a performance arena. It would not provide facilities for conventions. While some arenas are utilized for major exhibits and trade shows, this coliseum would only be used for such activities as boat and car shows, antique fairs, and flea markets.

The arena floor will be a flexible space with its size determined by ice hockey requirements. Other activities which would take place would include basketball, circus, ice shows, concerts and theater performances.

In the period 1981/1982 the coliseum is expected to have 187 events, with this number increasing to 261 by 1991/1992. "In the initial year of operations of the coliseum, concerts will account for a quarter of the total attendance at the facility." Top popular singers, rock groups, country singers and variety attractions would be among the performers at the coliseum. Nineteen percent of attendance would be for arena spectacles, including indoor rodeos, ice shows and indoor circuses. Seventeen percent of the featured events would be sporting events; Furman University basketball would be one of the main attractions with other events being the possibility of major tournament events, professional games, tennis, or other sports events.

Fiscal Years Ending June 30

| <u>Type of Event</u> | <u>No. of Events</u> | <u>Attendance</u> | <u>No. of Events</u> | <u>Attendance</u> | <u>No. of Events</u> | <u>Attendance</u> |
|------------------------------------|----------------------|-------------------|----------------------|-------------------|----------------------|-------------------|
| Contemporary Concerts | 24 | 144 | 30 | 180 | 36 | 216 |
| Variety concerts | 12 | 72 | 17 | 102 | 25 | 150 |
| Wrestling | 8 | 64 | 8 | 72 | 8 | 80 |
| Religious and Educational | 25 | 125 | 27 | 130 | 30 | 140 |
| Proms and Graduations | 7 | 28 | 7 | 28 | 7 | 28 |
| Sports events | 35 | 140 | 38 | 150 | 40 | 160 |
| Arena Spectaculars | 40 | 160 | 50 | 200 | 60 | 240 |
| Walk-through exhibits and shows | 10 | 30 | 15 | 50 | 18 | 72 |
| Pet shows | 2 | 4 | 2 | 5 | 2 | 5 |
| Closed circuit TV | 4 | 16 | 6 | 20 | 8 | 25 |
| Cultural exchange | 10 | 40 | 15 | 60 | 17 | 70 |
| Flea markets and merchandise marts | <u>10</u> | <u>20</u> | <u>10</u> | <u>20</u> | <u>10</u> | <u>20</u> |
| Totals | 187 | 843 | 225 | 1,017 | 261 | 1,206 |

Source: Frances Deering

The office facilities associated with the coliseum will consist of approximately 200,000 square feet of leasable space. Revenues from this space will help in the funding of the entire complex; some of the office space will be leased to the city. Parking for the office space will be combined with the coliseum parking. General retail space leased to local merchants will comprise 60,000 square feet of the complex.

Required Spaces

PROGRAM SPACES

COLISEUM

| | Sq. Ft. |
|---------------------------------|-----------|
| Arena: | |
| Seating capacity 20,000 | 212,000 |
| Arena floor | 28,000 |
| Sports dressing: | |
| Team dressing 4 @ 900 | 3,600 |
| Team rooms 2 @ 1,800 | 3,600 |
| Training room | 600 |
| Coaches offices 4 @ 140 | 560 |
| Officials dressing room 4 @ 140 | 560 |
| First Aid: | |
| Locker area | 400 |
| Tickets: | |
| Ticketing facilities | 7,000 |
| Concession: | |
| Concession stands 8 @ 400 | 3,200 |
| Concession storage 8 @ 400 | 3,200 |
| Star/performer dressing areas: | |
| Private star 4 @ 280 | 1,120 |
| Performing artists 4 @ 900 | 3,600 |
| Storage 2 @ 1,800 | 3,600 |
| General spaces: | |
| Public toilets | as req'd. |
| Press room | 1,000 |
| Darkroom | 150 |
| Security | 2,000 |
| Lounge | 300 |
| Office | 160 |
| Multi-purpose room 2 @ 2,000 | 4,000 |
| Ice machine | 250 |

Administration:

| | |
|----------------------------|-----------|
| Reception | 300 |
| Secretarial | 200 |
| Toilets | as req'd. |
| Supply/storage | 100 |
| Office machine | 250 |
| File storage | 250 |
| Ticket manager | 160 |
| Ticket storage | 100 |
| Ticket counting | 240 |
| Accounting offices 4 @ 160 | 640 |
| Waiting | 120 |
| Director | 180 |
| Arena manager | 160 |
| Conference room | 450 |
| Board room | 900 |
| Lounge | 700 |
| Janitor | as req'd. |
| Storage | as req'd. |

Services:

| | |
|--------------------|--------|
| Mechanical | 22,000 |
| Staging | 18,000 |
| Maintenance shop | 4,000 |
| Shop storage | 3,000 |
| Central janitorial | 2,600 |
| Offices 2 @ 140 | 280 |
| Receiving | 2,000 |

| | |
|------------|-----------------------|
| NET AREA | 335,570 |
| TARE @ 24% | <u>80,062</u> |
| GROSS AREA | Total Sq. Ft. 415,632 |

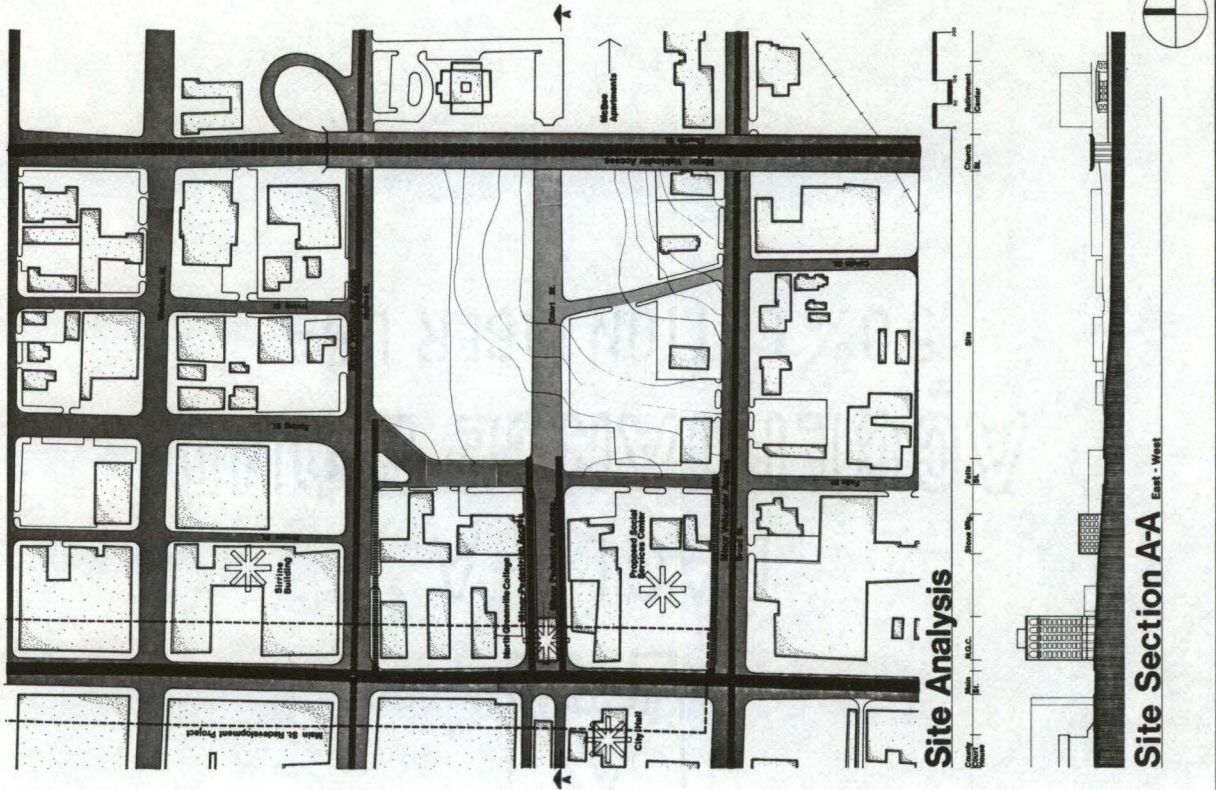
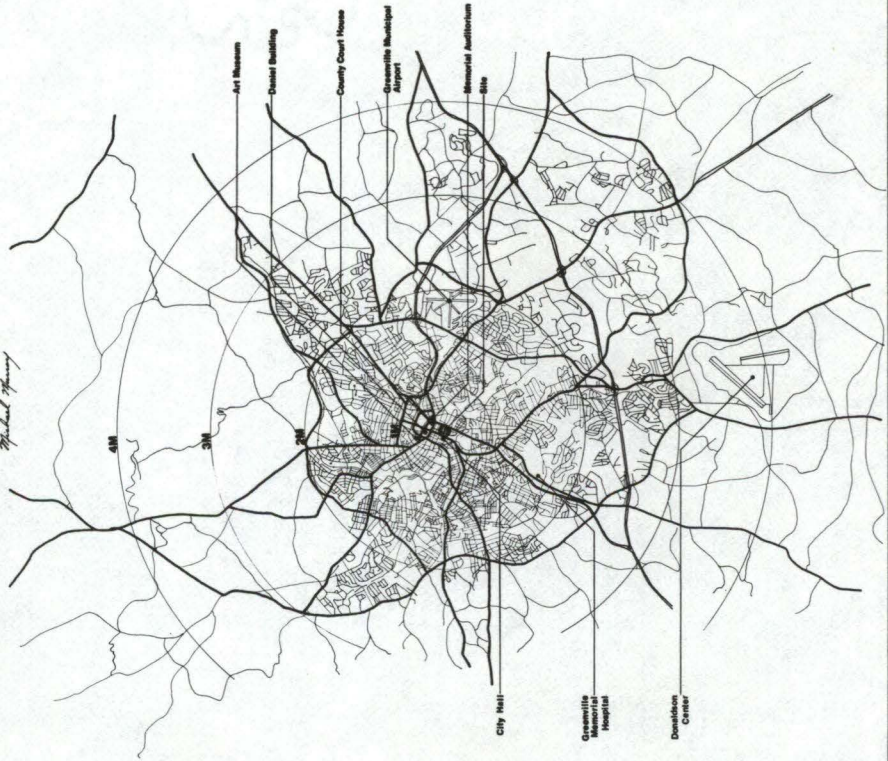
| | OFFICE | Sq. Ft. |
|----------------|---------------|---------------|
| Office: | | |
| Flexible space | | 200,000 |
| Reception | | 1,000 |
| Services: | | |
| Security | | 400 |
| Toilets | | as req'd. |
| Janitorial | | as req'd. |
| Dining | | 7,000 |
| Mechanical | | 15,000 |
| | | <hr/> |
| NET AREA | | 223,400 |
| TARE @ 15% | | <u>33,510</u> |
| GROSS AREA | Total Sq. Ft. | 256,910 |

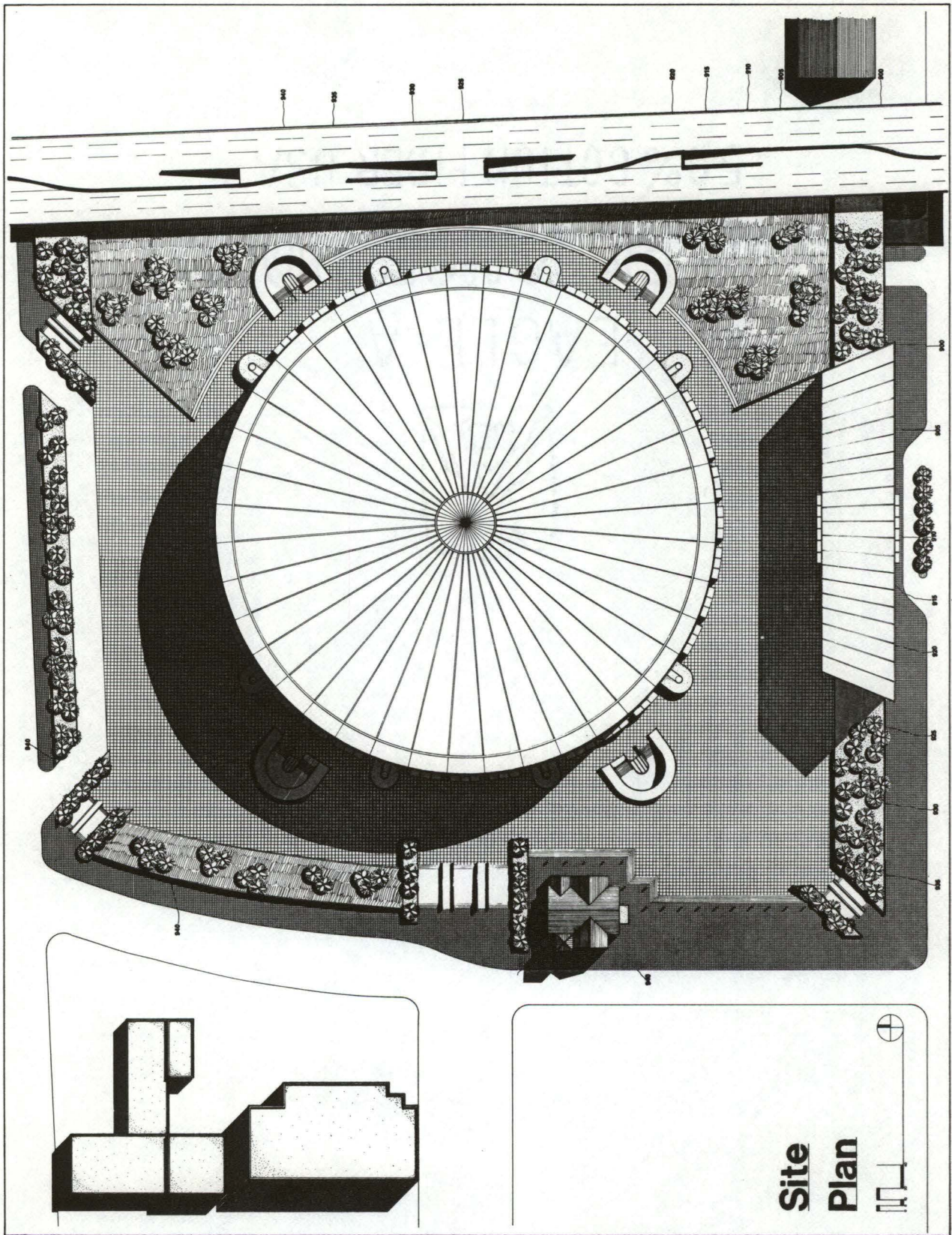
COMPLEX GROSS TOTAL 672,542

GREENVILLE COLISEUM COMPLEX

A terminal project submitted to the faculty of The College of Architecture, Clemson University in partial fulfillment of the requirements for the degree of Master of Architecture.

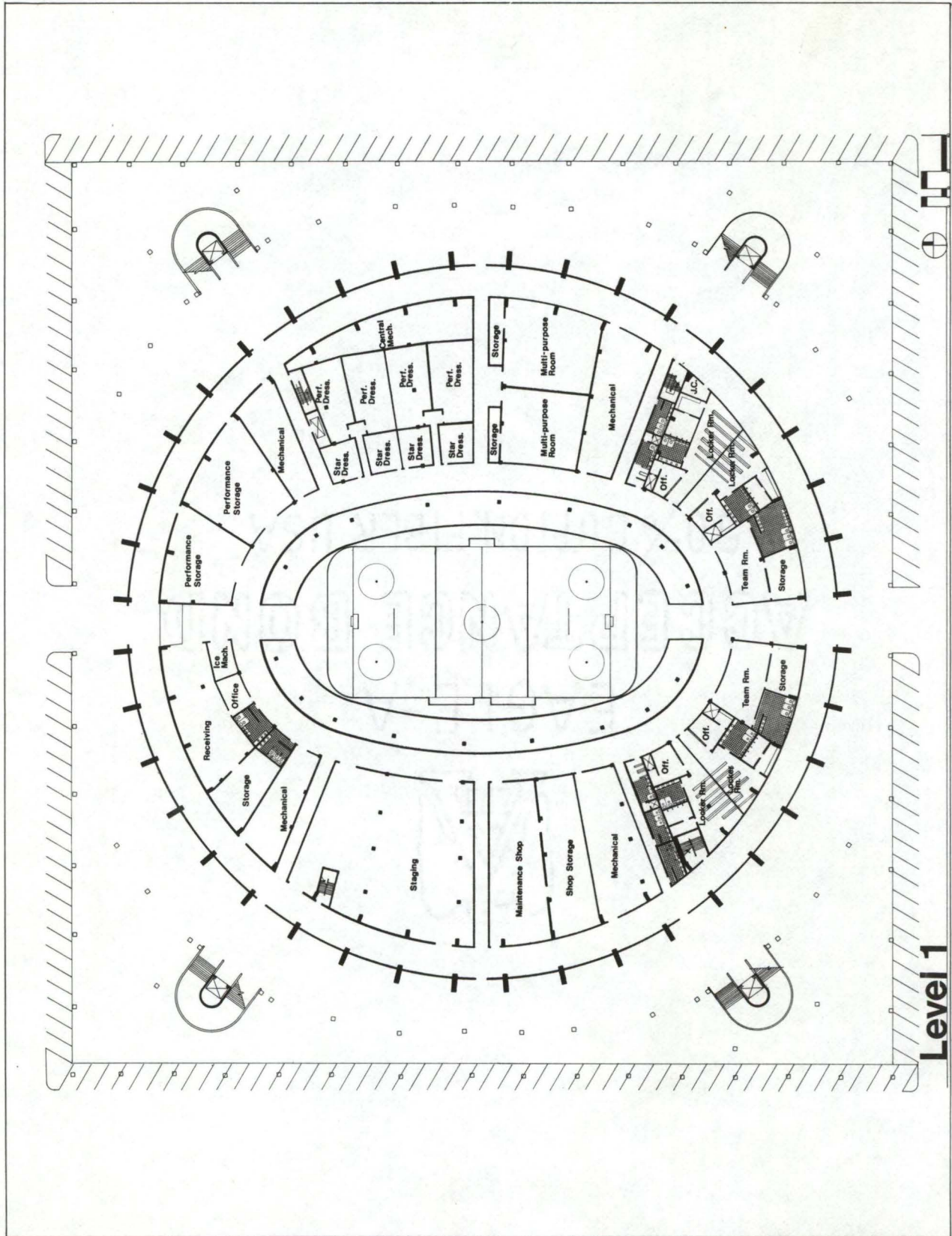
Michael Henry



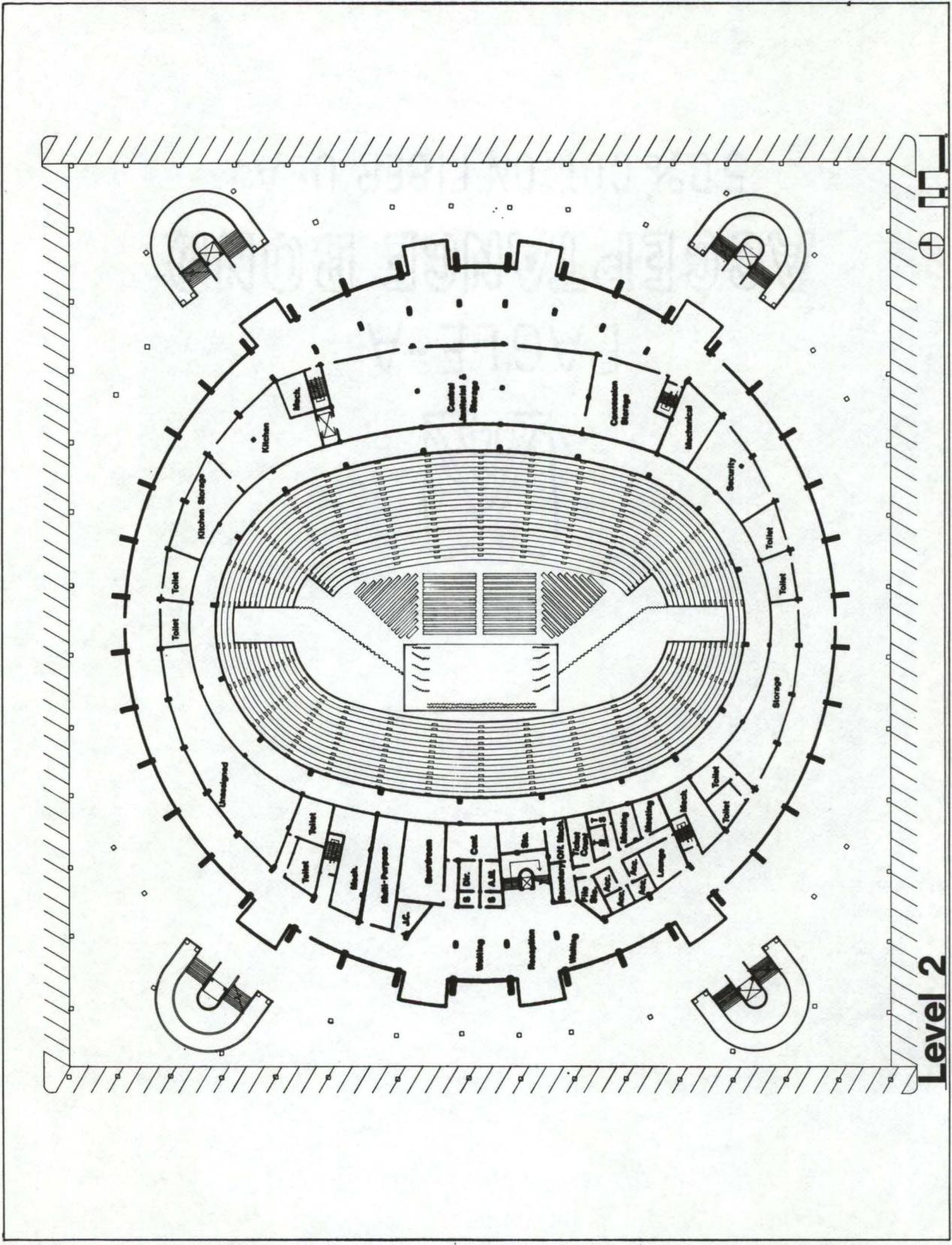


**Site
Plan**

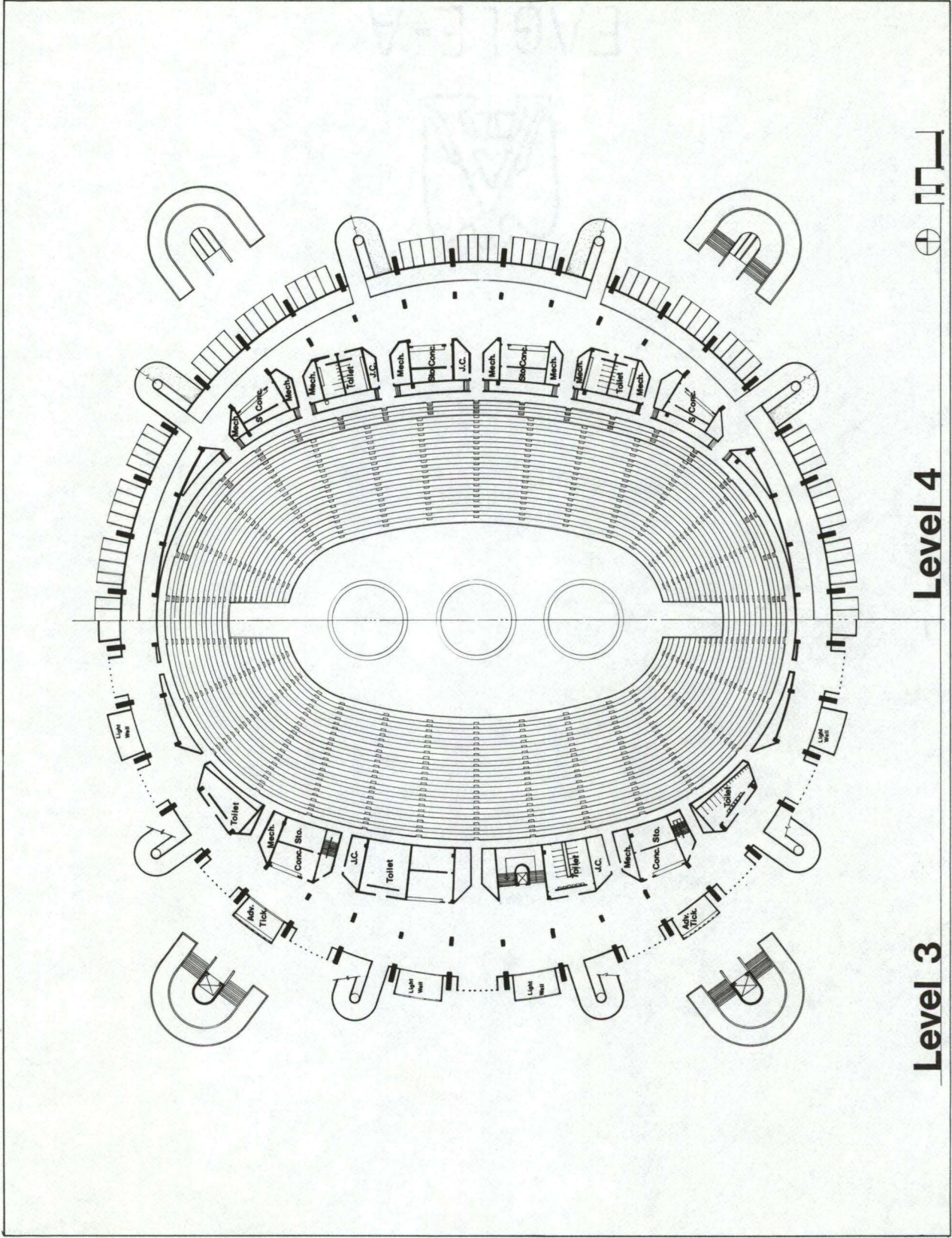




Level 1

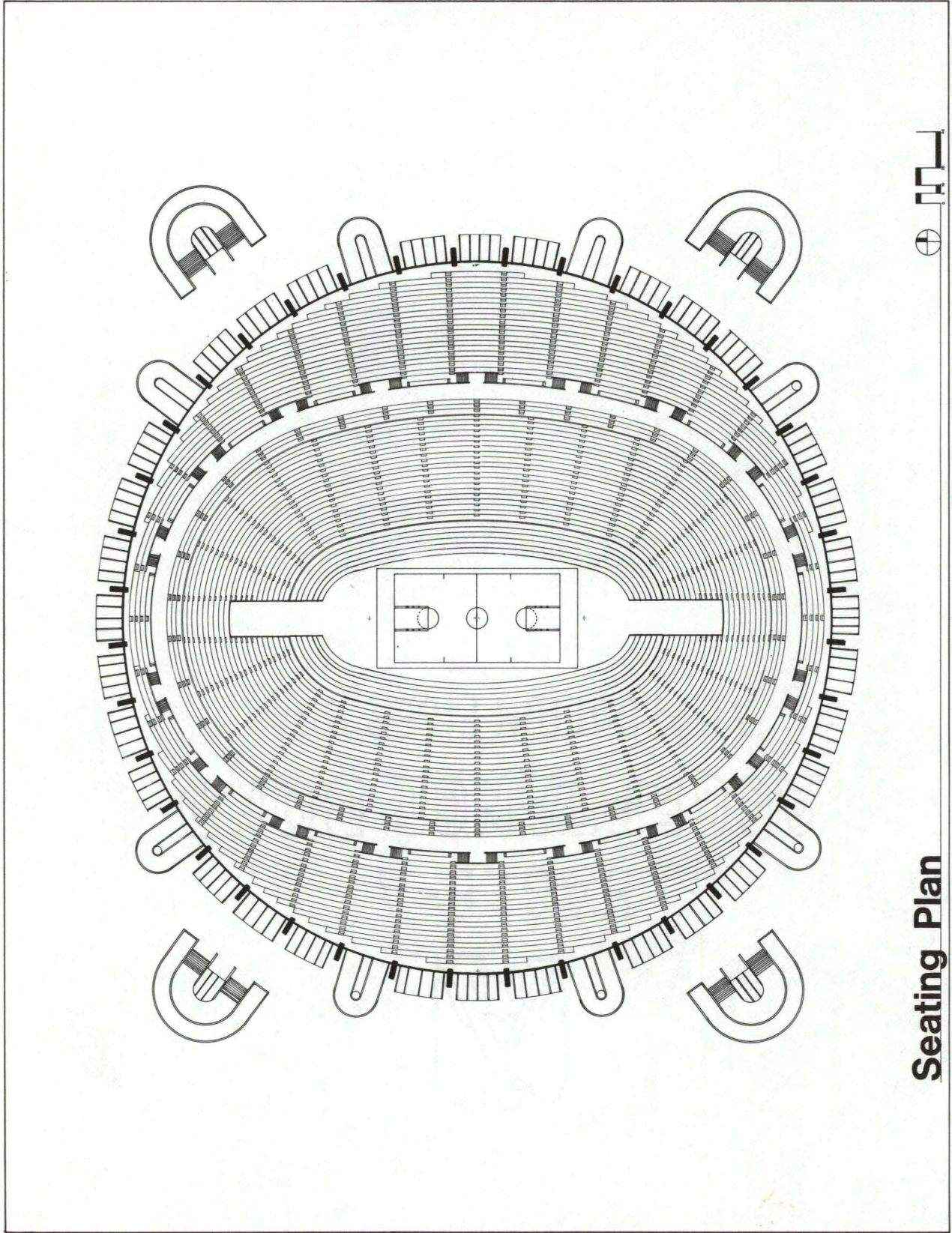


Level 2

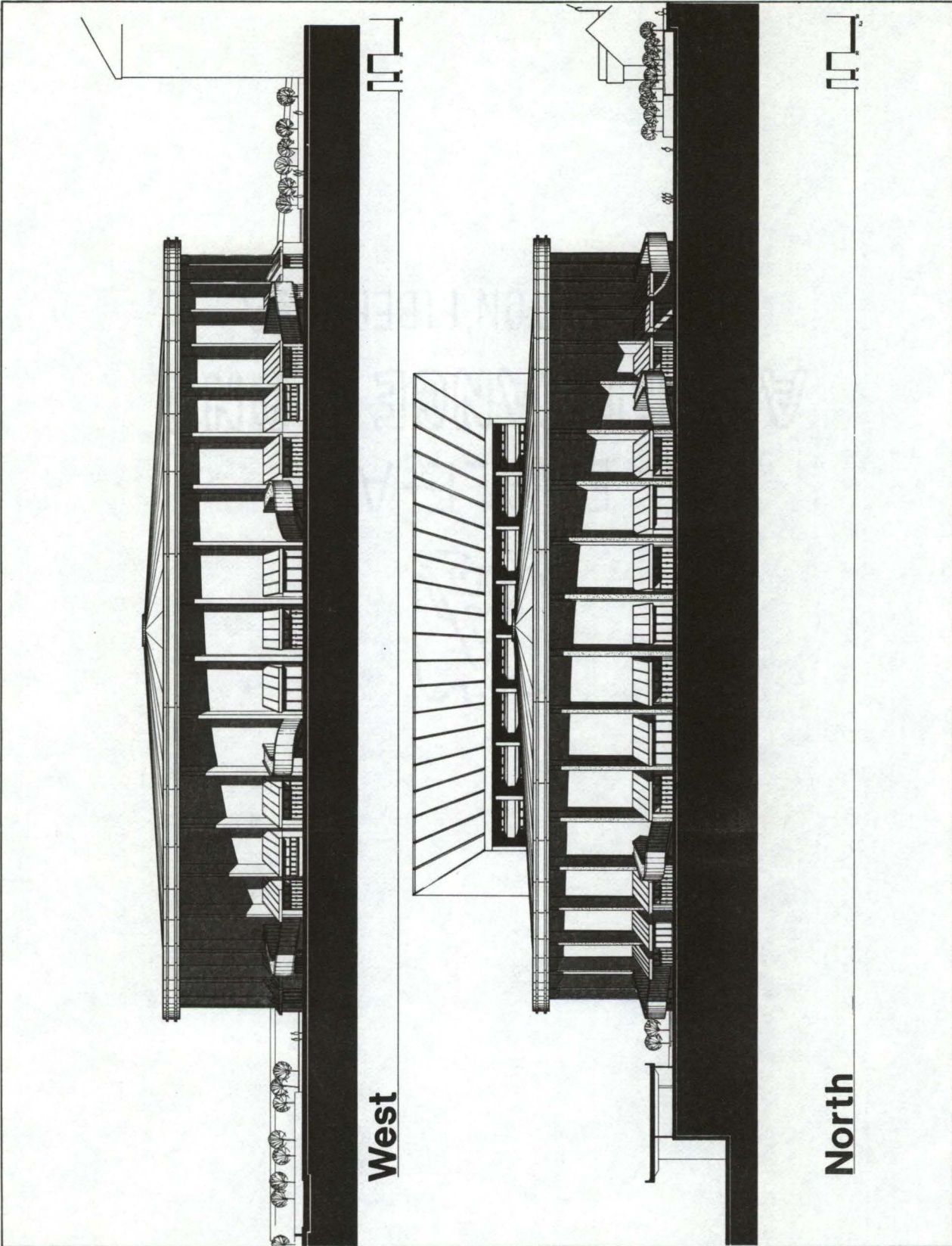


Level 4

Level 3

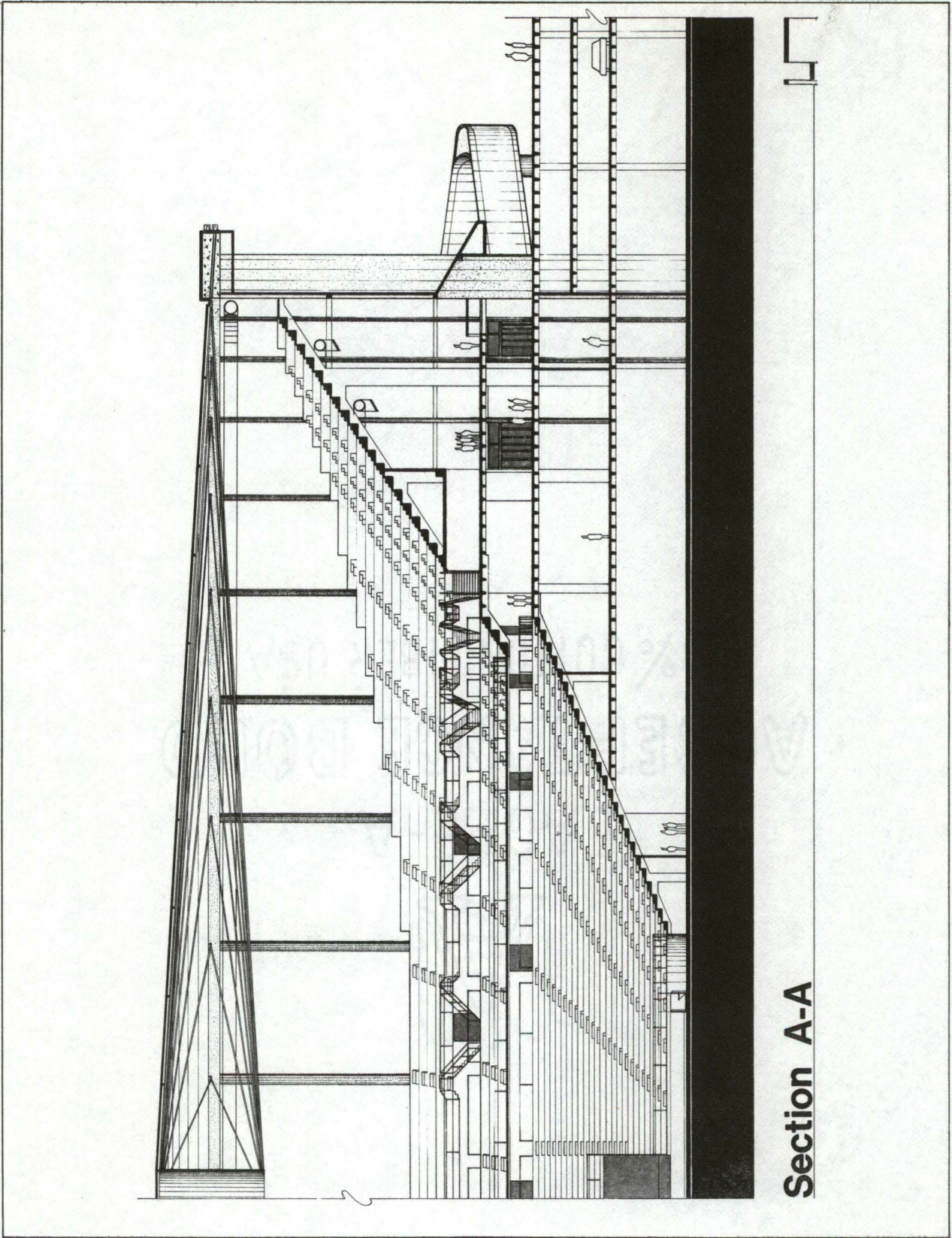


Seating Plan

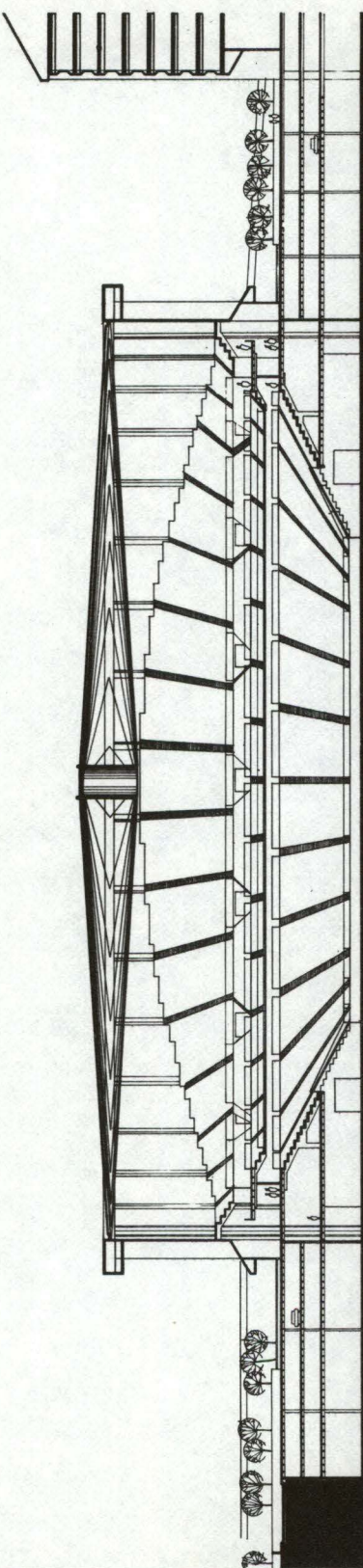


West

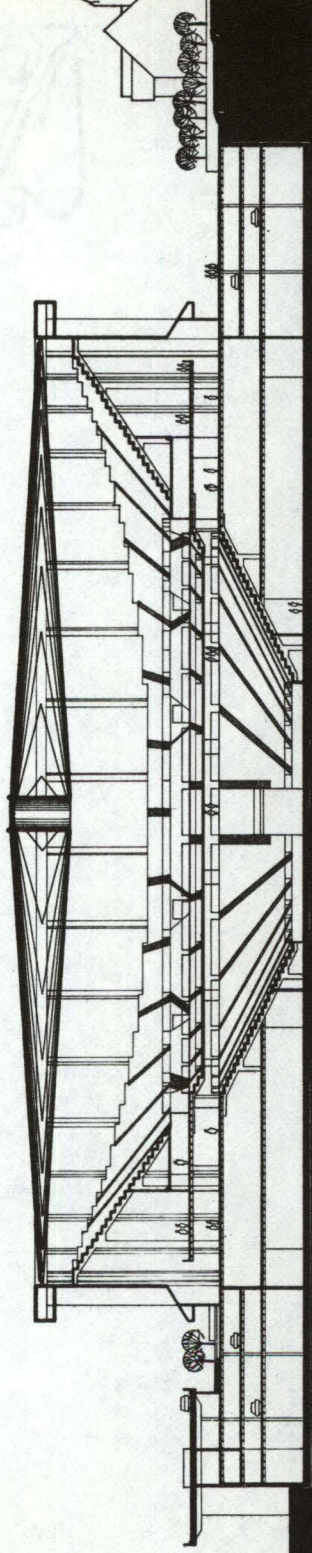
North



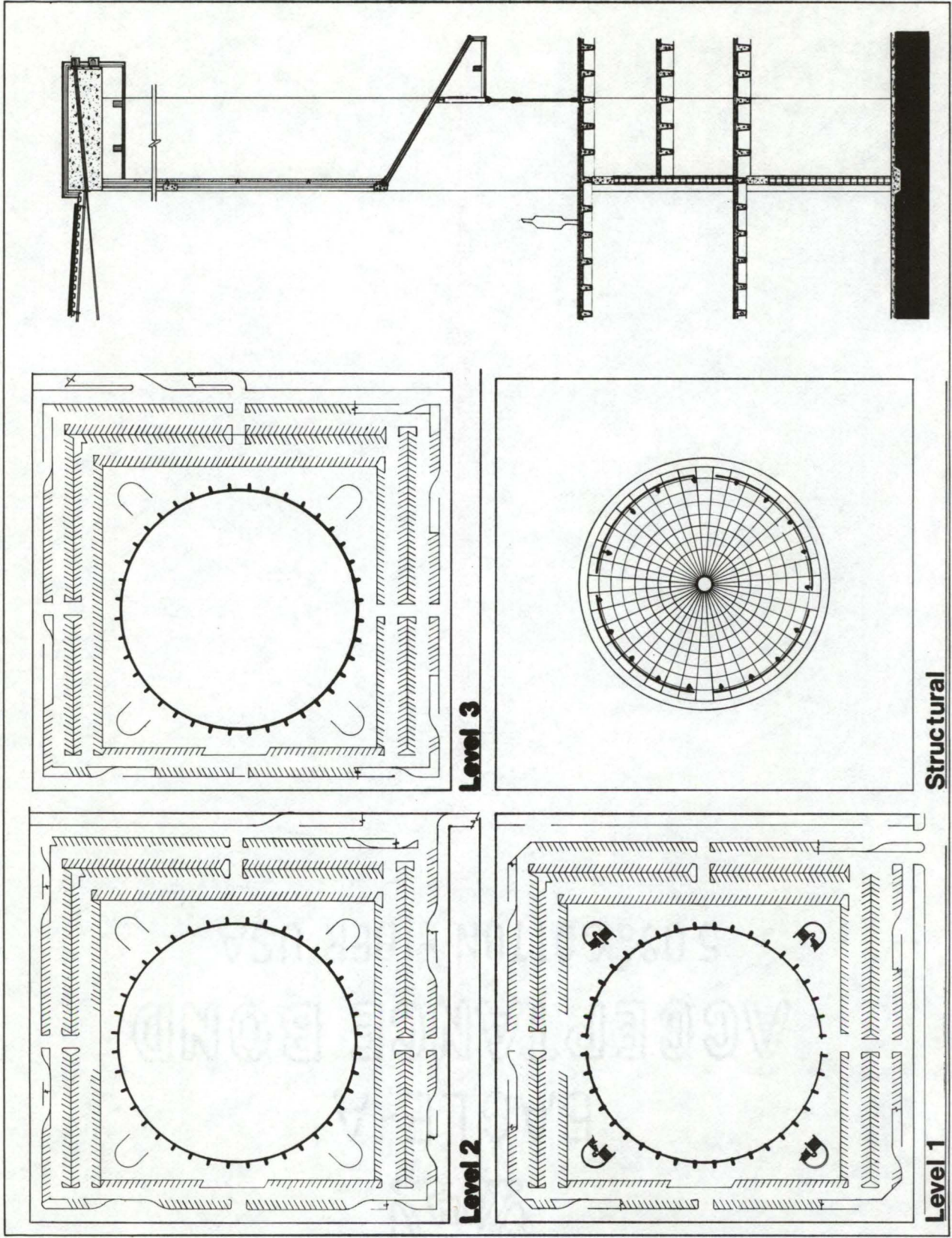
Section A-A



North - South



East - West



Level 3

Structural

Level 2

Level 1

FOOTNOTES

¹ Lawrence H. Shaw, "Economic Feasibility of a 15,000 Seat Coliseum in Greenville County," Economic Analysis, May 1978, p. 5.

² Ibid, p. 5.

³ Greenville South, Greater Greenville Chamber of Commerce, Greenville County Redevelopment Board (Greenville, South Carolina, 1979).

⁴ Shaw, p. 34.

⁵ Ibid., p. 34.

⁶ Shaw, p. 63.

⁷ "Three New Arenas," Architectural Record, February 1980, p. 114.

⁸ Ibid., p. 116.

⁹ "Theaters Framing a Square," Architectural Forum, March 1971, p. 45.

¹⁰ Shaw, p. 40.

¹¹ Shaw, p. 46.

¹² Shaw, p. 101.

¹³ Shaw, p. 102.

¹⁴ Shaw, p. 23.

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"Theaters Framing a Square." Architectural Forum, March 1971, pp. 44-47.

"Three New Arenas." Architectural Record, February 1980, pp. 114-116.