Introduction ................................................................. 1
Acknowledgements ......................................................... 2
Abstract ......................................................................... 3
Program ......................................................................... 4-20
Schematic Design 404 ....................................................... 21-50
Design Development 405 .................................................. 51-68
Detail Design 406 ................................................................. 69-85
Conclusion ....................................................................... 86
INTRODUCTION

This thesis book is intended to give a brief overview of my entire design process from conception to climax.

The organization has been laid out in basically four parts: Program, Schematic Design, Design Development, and Detail Design. This format reflects the chronological order of the events in which they occurred. The program included herein is the original and some changes have been made; major changes will be noted in the sections as they occurred.
ACKNOWLEDGEMENTS

I would like to express gratitude and respect for the help and support of those who directly affected the project or myself throughout its duration. To Sonny Palmer whose congenial manner and straightforward responses guided me through my program and intermittently assisted throughout the design process; Jack Wyman, whose consideration for professional details and realistic attitude gave foundation to my concepts; Bob Fisher, whose persistent nagging, needling, excellent sense of humor and creativity prompted me to explore the various potentials which became my basic concepts; Bob Kingsley, whose realistic attitude, abundant suggestions and good judgement gave temper to my design; Maureen Westrick, fellow student and friend, whose keen judgement, personable taste and unyielding patience helped me make the right decisions; Brad Barker, fellow student and friend, whose moral support helped me during periods of disillusionment and disgust, and Delores Neder, my friend who continually reminded me there was an end and gave me support.
Center Northwest Office Complex is located on the northwest periphery of Muncie at the intersection of McGalliard Road and Bethel Avenue. The office complex is four stories (or fifty feet), in height with three usable stories and the upper fourth used for mechanical equipment housing. The office complex encloses 76,000 square feet, provides 337 parking spaces, and offers a 40,000 square foot courtyard to the tenants and restaurant patrons.

Incorporated within the complex are five wings at 10,000 square feet per wing for a total of 50,000 square feet leasable office space. The first level includes a 10,000 square foot restaurant with bar, lounge, restrooms, kitchen facilities, storage, 2,000 square feet of solarium seating, and sliding glass door access to 7,500 square foot cafe seating. Within the centrally located lobby is a florist's kiosk with access to his 2,500 square foot greenhouse stock.

The dynamic features of this project include a 40,000 square foot courtyard with fountains and a park-like atmosphere. Opening onto this courtyard is the entire south facade of the complex providing all offices and restaurant patrons this handsome view. The large glass facade not only provides this gracious view to nature, but also traps the sun's heat within the buildings' greenhouse space providing heat in the winter months, and is pumped out through the roof during summer months. The staggered floor configuration provides shade for the spaces during the summer months. To complement the heat gain benefits, caution has been taken to stop heat loss from the north facades of the building by reducing glass areas to adequate minimums and locating the circulation corridors immediately next to them creating a "buffer" zone.

Finally, the basic form of the project is a progressive, exciting and interesting image to the public, tenants, and clientele.

ABSTRACT
The program herein is the original written prior to first quarter thesis for Programming Elective 498, instructor Sonny Palmer. The Space Requirements section has been deleted as its relevance is minimal. Several changes (as would be expected), have been made, but overall, it has been basically followed and the goals met.

Note: Condor Courts initial name - changed to Center Northwest Office Park
The following contents of this program are meant to convey the general purpose, requirements and criteria of Condor Court necessary for its design and construction.

It should be noted at this point that the requirements set forth are done so with the intent of design excellence. However, should the designer (and it is advocated that he does), make alterations/changes he shall do so only for the welfare of the project and within the constraints of the overall program.

- Net square footage of Architectural firm: 13,032
- Net square footage of Leasable office space: 36,000
- Total gross square footage of complex: 75,618
- Total parking: 380
- Total budget: $11,635,590

A $97/s.f. budget is being utilized for a superb quality project. Thus, this affords the designer a seldom obtained opportunity for true design excellence. The site selected provides an optimum setting. Thus, it can not be emphasized enough, this is truly an opportunity for a significant piece of work, seize it and good luck.

**SUMMARY**
Muncie, In. is located in central Delaware Co., it has a population of 80,000 and serves as the major commerce center for neighboring towns and communities within a 20 mile radius. During the past decade this industry and college based city has experienced a moderate growth rate, resulting in development and implementation of various commercial and residential projects. About the Northwest of Muncie large residential developments have evolved. Marsh Supermarkets Inc. is ensuing this relatively new market. Marsh owns and is developing a commercial area adjacent to this residential section, which is contiguous with the relatively new McCullard extension (5 yrs. old). This new extension is to be linked directly to the major interstate I-69 in 1984. Thus, providing the most direct and desirable route to and from I-69 and Muncie. It should be noted at this point that the site proposed will be at the entrance of incoming Muncie traffic. Until 4 years ago the site was primarily open farmland with a sparse dispersal of small single family units. To date Marsh has developed a Tennis Club,
Raquet-ball Club, Ayr Way Department Store, Foxfires Restaurant and a Marsh Supermarket throughout the site.

The architectural firm of Jones, Jones, Jones and Associates have decided to purchase 5 acres contiguous with this newly developed area and construct an office for their firm of 65 employees and 30,000 net sq. ft. of leasable office space.

The participants and sources utilized in compiling this program are:

- programer ~ david t. haycock
- advisor ~ sony e. palmer
- consultant ~ lenny hayes
- sources ~ listed in appendix

INTRODUCTION
• Create an aesthetic and progressive image of Muncie for incoming traffic.

• Maintain a strong consideration for passive solar techniques.

• Excellence in all phases of design while maintaining optimum standards in function.

• Provide for future expansion of leasable office space and allow for possible expansion of Architectural firm expansion into leasable office space.

• Utilize indirect natural light for general task lighting.

• Atrium lobby shall act as outstanding "highlight" of complex through form and lighting.

GOALS
ORGANIZATIONAL CHART

--- NOT IN-HOUSE PERSONNEL ---
- Principal *1 - Controls finances, administration operations, records, payroll and budget.
- Principal *2 - Controls design, p/r, correlates personnel with projects and deals with clients.
- Principal *3 - Controls construction supervision, specifications writer and deals with project managers, project architects and consultants.
- Administrative - Bids jobs, controls cash flow, assists President and most important, directs support staff.
- Specifications - Compiles specifications documents, deals primarily with Principal *3 and project architect, directs specifications typist.
- Public Relations - Compiles corporate brochures, news releases and market analysis works closely with Principal *2.
- Group (4) - Controls studio of 10. Oversees projects.
- Directors - Works closely with Principals.
- Project (8) - Responsible for particular job assigned them.
- Architects - Directs draftspersons on project. Deals frequently with specifications writer and project managers.

SPACE REQUIREMENTS
USERS and USER ACTIVITIES

Leasable Office Space
Desired occupants fall within the range of professionals and professional services excluding commercial retailers and medical services. Examples: lawyers, engineers, insurance companies, real estate agents, regional headquarters, etc.

PERFORMANCE REQUIREMENTS

Listed on the following 30 pages is the information necessary for preliminary design procedures and design development. The majority of the net sq. ft. allowances were taken from Time Saver Standards for Building Types and noted by (T.S. 6__), following sq. ft. given. Some spaces were estimates based on similar areas taken from the firm of Thompson, Ventulett, Stainback and Associates of Atlanta.
<table>
<thead>
<tr>
<th>Room Type</th>
<th>Sq Ft</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal #1</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>Principal #2</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>Principal #3</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>Administrative Vice-President</td>
<td>150</td>
<td>14</td>
</tr>
<tr>
<td>Accountant</td>
<td>100</td>
<td>14</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>150</td>
<td>80</td>
</tr>
<tr>
<td>Principal's Secretary #1</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Principal's Secretary #2</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Principal's Secretary #3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Reception Area</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>Main Conference Room</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Specifications Writer</td>
<td>150</td>
<td>14</td>
</tr>
<tr>
<td>Public Relations Director</td>
<td>150</td>
<td>14</td>
</tr>
<tr>
<td>Specifications Typist</td>
<td>100</td>
<td>14</td>
</tr>
<tr>
<td>Xerox/Mail Room</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>Equipment Storage</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Lounge</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Lounge Storage</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Xerox 850 Word Processing Station</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>Print Room</td>
<td>250</td>
<td></td>
</tr>
</tbody>
</table>
- Group Director #1 ........................................ 150
- Group Director #2 ........................................ 150
- Group Director #3 ........................................ 150
- Group Director #4 ........................................ 150
- Group Secretary #1 ....................................... 100  14
- Group Secretary #2 ....................................... 100  14
- Group Secretary #3 ....................................... 100  14
- Group Secretary #4 ....................................... 100  14
- Studio #1 .................................................. 1,500
- Studio #2 .................................................. 1,500
- Studio #3 .................................................. 1,500
- Studio #4 .................................................. 1,500
- Conference Room #1 ................................... 2.00
- Conference Room #2 ................................... 2.00
- Conference Room #3 ................................... 2.00
- Conference Room #4 ................................... 2.00
- Supplies Storage ........................................ 300
- Exterior Lounge ........................................... 300
- Sub total .............................................. 12,826  206 = 13,032
- Parking Spaces ........................................... 55

SPACE SUMMARY
<table>
<thead>
<tr>
<th>Item</th>
<th>Area (n.s.f.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasable Office Space</td>
<td>36,000</td>
</tr>
<tr>
<td>Main Lobby</td>
<td>620</td>
</tr>
<tr>
<td>Circulation Node #1</td>
<td>200</td>
</tr>
<tr>
<td>Circulation Node #2</td>
<td>200</td>
</tr>
<tr>
<td>Circulation Node #3</td>
<td>200</td>
</tr>
<tr>
<td>Circulation Node #4</td>
<td>200</td>
</tr>
<tr>
<td>Sub total</td>
<td>37,420</td>
</tr>
<tr>
<td>Leasable Office Parking</td>
<td>325</td>
</tr>
</tbody>
</table>

- Total Net Square Footage: 50,452
- Efficiency Ratio 50%: \( \times 1.5 \)
- Total Gross Square Footage: 75,678
- Total Parking Spaces: 380
• Passive Solar Techniques
  • building orientation
  • operable windows
  • louvered windows
  • earth berms
  • vegetation
  • thermal mass
  • heavy insulation
  • atrium fountain for humidity cooling
  • triple glazed windows
  • utilization of indirect natural lighting

• Expansion Capabilities
  • Architectural firm expansion into leaseable office space.
  • Addition of modules to leaseable office space.
  • Possible 200 parking space increase.

• Flexibility
  • Modular office base 30'x40', may be leased by ½is, ⅓is, ⅔is, 1 or >1.

BUILDING CRITERIA
Quality of Space:
- aesthetically dynamic
- indirect natural lighting
- form as art
- colors as excitement
- large plantings
- sound of atrium space and atrium fountain

Circulation
- logical
- accommodate pauses in corridor about atrium.
- vertical circulation as experience.

Atrium Lobby
- to act as highlight of complex.
- dramatic lighting at night.
- central core of complex
- fountain
- large plantings
• Parking
  • visitor parking preferred spaces.
  • drop off lane.
  • sodium vapor lighting.
  • lot recessed into grade.
  • plantings throughout lot.
  • service area clean and aesthetic not hidden.

• Landscaping/Lighting
  • access/egress shall blend into site.
  • site independant of surrounding forms, image
    and materials.
  • dynamic interior atrium lighting for effect and
    prestige at night.
  • all exterior lighting sodium vapor.

• Image
  • progressive.
  • prestigious.
  • dynamic.
SITE DATA
1. Building cost 75,678 gsf. @ $97/s.f. = $7,407,766
2. Regional modifier (9) ........................................... x 9
   6,606,689
3. Estimated inflation (.01/yr. x 10 yr. = .10) ........................................... x .10
   1,189,204
4. Actual estimated building cost ........................................... $7,795,893

5. Fixed equipment .5% of 4 ........................................... 38,979
6. Site development 20% of 4 ........................................... 1,559,179
7. Total construction cost ........................................... 9,399,051

8. Site acquisition (#10,000/acre x 5 acres) ........................................... 50,000
9. Moveable equipment 10% of 4 ........................................... 779,589
10. Professional fees 7% of 4 ........................................... 554,713
11. Contingencies 10% of 4 ........................................... 779,589
12. Administrative costs 1% of 4 ........................................... 77,959

13. Total budget required ........................................... $11,635,590

COST


• Hayes, Lenny - Real Estate Assistant, Marsh Supermarkets Inc., Yorktown, In. *759-6350.


• Thompson, Ventulett, Stainback and Associates.
  Suite 1200 N. Omni International, Atlanta, Ga.
  *404-926-8000.

APPENDIX
During this quarter the initial steps were taken in the design process. A project description site analysis and building type analysis was required during the first portion of the quarter; that original work is included herein. The following color xeroxes document the chronological development of the project through the quarter. The first drawing was done one week into the quarter for a presentation to show what our basic concepts were. The next three drawings illustrate three different schemes required for the final presentation of the quarter. From the three schemes, the jury selected (and I concurred) scheme #1 was selected as having the most potential for further development.

The basic concepts reached this quarter were: geometric form - to elicit a sense of excitement and progressive image to act as a form of self advertisement to public and tenants, upper corner siting as most prominent position of site, structural bay 25' x 40' to accommodate 5' modular and leaseable office requirements within adequate minimums, glass wall facade on south for passive solar heat gain control, entrances into site to provide adequate distance away from stop light on McGalliard to ensure proper traffic flow, entrance into building and lobby centralized to ensure even distribution to leaseable spaces and separation from courtyard, mechanical equipment rooms and fire stairs located at corners to provide clear unimpeded office spaces and meet code requirements, earth berms about perimeter of parking lot to visual screen view, opening of bottom Northeastern leg and glazed lobby area to provide vehicular traffic with visual cues and protect pedestrian traffic from elements.
This project is an opportunity for a progressive design image, a commodity which Muncie deserves.

The majority of the new buildings in Muncie constructed in the past five years is heading in this direction (i.e. Foxfires, Raquet Club, Ball Headquarters, Marsh Supermarket on Chadam Ln., Butterfields interior, C.A.P. Addition and Burger King on McGalliard), and the community is ready for a new image.

The site is idealic for the building type. The location is on one of the main thoroughfares through town, McGalliard Rd., which will soon become a major link to I-69. Its basically a clean open area void of industrialization and commercial strip litter. Its within 2 miles of the airport and downtown. Residential areas border the site to the North and the South. The openness of the site in terms of context provide an excellent opportunity for freedom of image.

Design style will be avant garde which will be tempered through materials selection and landscaping.

Landscaping will be extremely important as it is the transition zone between building and site and context. Also, the landscaping will act as a framing tool for the building while also serving functional needs as may be required for passive solar technology and as a visual screen of the parking lot.

Passive Solar Technology should be a given in any design but I'm mentioning it here because I'm intending to utilize natural lighting techniques. I'm doing this for several reasons: to reduce the artificial lighting demand thus saving energy and reducing internal heat gain thus reducing the A.C. load. Also, because through my Building Type Analysis I discovered the two main elements of an office building are its external image and its internal character. Although there are infinite ways to create a good internal character the best seemed to be the introduction of natural light.

As I just mentioned the two important features of an office building are its external image and its internal character. The external image is important to two groups of people, the employees and the public. To the employees it should generate a sense of pride almost status so that they "want" to work there. To the public or community it should elicit a sense of respect or become an image of their city. The internal character is also important to two groups of people, the employees and the clientel. To the employees it should be a place where they feel comfortable and secure and offer diversity to prevent monotony. Also, it should provide a link to the outside through view and light. To the clientel it should encourage a sense of importance, security and trust.
The basic goals of my project simply stated are to design a progressive image for employees, clients and community utilizing form, "appropriate" materials, and landscaping. Maintaining a strong consideration for passive solar techniques. And, creating an internal character which is handsome, diverse, and interesting by utilizing geometry, light and view.
WINTER WINDS: JAN., FEB., MAR.
12 M.P.H. AVG.

W. BETHAL AVE.

CLARA LN.

LTN MAR DR.

TIMBER LN.

W. MCGALLARD RD.

SET
W
E

SUMMER
S

RISE

SUN ANGLES

SUN HEIGHTS

JUNE 21
12 NOON
9 AM 3 PM
74° MAX
W. BETHAL AVE.

DEC. 21
12 NOON
9 AM 3 PM
27° MIN.

SUMMER WINDS: APR - DEC
10 - 7 M.P.H. AVG.

SCALE: 1" = 262' 0"
VIEWS TO NORTH ARE BASICALLY GOOD OPEN FARM GROUND WITH BACKDROP OF WOODS & 1 MILE DISTANCE. AT NORTHWEST CORNER VIEW IS OF FOXFIRE RESTAURANT WITH BACKDROP OF AYRES @ 1 BLOCK DISTANCE.

VIEWS TO NORTHWEST ARE OF TRAFFIC AND COMMERCIAL DEVELOPMENT.

VIEWS TO SOUTH ARE OF SPARSELY POPULATED RES. AREA AND OPEN FARM FIELD TO SOUTHEAST.

NOISE IS MOST INTENSE AT THIS POINT.

PRIMARY NOISE GENERATION FROM PASSING TRAFFIC.

VIEWS TO EAST CONSIST OF B.S.U. PLAYING FIELDS & STADIUM BEYOND GOOD OPEN GREEN SPACE BEFORE FIELD.
SITE ANALYSIS

VEHICULAR ACTIVITY

SCALE 1" = 262'-0"

FIRE ROAD

MAIN ROAD

ACCESS ROAD TO
COMMERCIAL DEVELOPMENT
MODERATE TRAFFIC LOAD

SIDE ROAD TO
RESIDENTIAL AREAS

W. McCallard Rd.

Everett Rd.

W Bethel Ave.

Clara Ln.

Lyn-Mar Dr.

Timber Ln.

Major Traffic Light
Intersection

Barrier Road Ends

Gravel Access Road to B.S.
Playing Field

Access Road to
Commercial Development
Moderate Traffic Load

Vehicular Activity
TOTAL GROSS S.F. 75,678
TOTAL PARKING 380

CONDOR PLAZA 75,678 $
380 PARKING SPACES
FOOTBALL FIELD
HUMAN FIGURE

SCALE 1" = 262'-0"
0' 200' 500' 1000'

SCALE REFERENCE

SITE ANALYSIS
SITEING:

The 14 acre site is located in a commercial development strip crowded with low rise office buildings in the Detroit suburb of Southfield. Vehicular access is to the South, off of less traveled side street, while main thoroughfare traffic passes on West and North streets. The building is situated off to one corner providing ample parking area and a green space at entrance for "transition zone". Also, optimum view of building is provided for passing traffic, by this arrangement. The parking lot has multiple plantings throughout and about its perimeter to soften blow of asphalt and parked cars.
CIRCULATION:

Lobby
- Straightforward central core with public entrance through highlighted red enamel air lock to north adjacent to parking lot. Service Area is separate and semi-private at West facade. Privacy is achieved through service road and dense plantings.

Typical
Floor Plan
- 14 stories of open office plans are fed through central elevator core which also includes firestairs, restrooms, vertical chase and toilets

I.B.M. Office Building
Southfield, Michigan
Architect: Gunnar Burkerts and Associates
SPACE:

The dominant element of the office spaces is the pleasant glow of diffused natural light. This effect is achieved by a horizontal band of windows which run continuously about the perimeter. An ingenious system of reflecting natural light into the interior was devised and copyrighted by Birkerts. The openings require only 18% of exterior wall surface. They provide views and luminescence through 2 ft. high inward sloping glass. Light is projected into interior spaces by a pair of reflectors in the wall. The exterior curved stainless steel reflector-panel at bottom of window bounces light up into curved interior panel above the window which pleasantly diffuses the light into the space. Direct sunlight is all but nullified by the 24" thick exterior skin which shades the windows for the major portion of the day.

The effect of the window system enhances ones view outside and reduces the interior lighting load to only 50 ft. candles/sq. ft.
STRUCTURE:

This 14 story square plan is laid out with typical steel frame construction based on square 35 ft. bays.

Corners of building are detailed for architectural impact. Skin of building is reflective aluminum on South and West elevations to reflect light, and charcoal black on North and East facades. Where like colors meet corner is rounded with knuckle lock expression. Where colors oppose a vertical strip of reflective blue glass is set in on 45°.
IMAGES:

Powerful, machine-like, clean and slick are the adjectives I would use to describe the character of this design. The effect of the building skin and window ribbons combine to generate a feeling of composure and true style. The effects of reflectivity, transparency and "mechanistic cool" are emitted and appreciated from this energy conscious design.

The most important feature of this building however lies in its contrast of power and strength generated from its exterior against the gently soft luminescence within.
SITEING:

Sited within a 79 acre meadow and wooded estate the architect was requested to maintain the integrity of the site and design an unobtrusive complex. By controlling the overall scale and material choice as well as maintaining a strong consideration for details (such as separation of the cooling tower, hidden behind a natural clump of trees), Barnes was able to achieve an aesthetic so clean and refined it's almost Japanese in essence.
CIRCULATION:

Vertical circulation through this 3 story complex is achieved by two sets of elevators located at the two corners at the top of the W-configuration plan. Also a centrally located open stairway provides immediate access between floors. Fire stairs are located adjacent to the elevators and at the furthest ends of the plan.

An open corridor is provided about the perimeter of each floor for horizontal circulation through the floor.
SPACE:

Architect Edward Larabee Barnes was instructed by I.B.M. to design their new office complex of 383,000 sq. ft. in an unobtrusive manner so as to blend in with the 79 acre meadow and wooded site in Pocanotico Hills. Which was sold to I.B.M. from the Rockefellers with instructions from them to not spoil the views from several of their houses surrounding the site.

Barnes decided to restrict the volume to a three story building with the second level on grade with the parking area. Also to reduce the length of the building he utilized a W-shaped plan.

The exterior a combination of continuous butt-joint glass and aluminum spandrels with a green anodic finish combine to reflect the beautiful meadow setting from an exterior view. Windows tend to disappear looking from the inside out. A moat was incorporated about the south perimeter to hold water and further reflect and blend. The moat is also used for emergency fire water.

The office interior is open plan which provides an exterior view to 95% of the employees. All office furniture, planters and 60" high acoustic partitions are completely moveable so that new arrangements are possible as the internal office structure changes.

I.B.M. Office Building
Mr. Pleasant, New York
Architect: Edward Larabee Barnes
STRUCTURE:

Simple straightforward steel structural grid overlaid on W-shape configuration. Structure deviates slightly at center of plan. It is my conjecture that because of the vertical circulation at this point the surrounding columns and contingent beams were "beefed up" to provide a column-free area and to accommodate the open stairs.
The aesthetic appeal in this design is extremely successful, both from an exterior view and an interior view.

The exterior form is successful for several reasons: 1. The scale of the structure was confined to a 3-story height and works well in terms of scale with the surrounding open meadow. In effect it blends into the site and does not dominate it. 2. The materials, and vocabulary in which they were utilized also adds to the over clean, reflective and blending feeling the design has. 3. Details such as the moat, intake/exhaust systems camouflaged in planters, hiding the cooling tower and in effect the overall attitude of refinement tie all of the concepts together to produce a cohesive, relaxing and almost natural image.

The interior is equally successful for two basic reasons: 1. The continuous band of mullion-free windows with a direct view of the site which seem to make the site and the interior one and the same. In effect the windows provide a fourth wall composed of the living trees, grass and landscape which are forever changing. 2. The same attitude for detail control has been continued inside as well as out to produce a comfortable, relaxing, atmosphere which is congenial to a working situation.
SITEING:

Located on the side of a steep densely wooded hill just below the crest with a magnificent view of the Chattahoochee River, this uniquely designed office complex nestles into its site quite comfortably creating a dynamic yet personable space for its employees.

The access and egress roads were laid out according to the natural contours of the site and the parking lot was laid out amongst the trees in such a manner as to retain as many trees as possible.
CIRCULATION:

The main entry is located uphill to the south adjacent to the parking area. Circulation between the two levels is achieved by multiple stairs located at strategic positions throughout the south perimeter of the building. One service elevator is also provided at the west end.

Horizontal circulation through the two levels is also located along the south perimeter.

One of the dynamic aspects of the building is the experience of walking through it. Level changes, views and dramatic lighting effects combine to create a enjoyable experience.
SPACE:

The spaces in this office are determined by 4 factors: residential scale, use of wood as the dominant material, clerestory and lower level dramatic lighting affects and notched back level change plan configuration, which all blend together creating an invigoratingly warm personable space.

The overall scale of the complex has been kept very small, almost residential, to provide a relaxed personable feeling amongst its employees (who were previously located in the frantic clap-trap of downtown Manhattan).

The selection of wood and tile floors for the dominant materials was in keeping with the personable concept of the scale and are in fact cost effective in the overall structural sense.

Lighting was of major concern as Georgia is an area where summer solar gain is the domineering environmental factor. By utilizing overhangs, a parallelogram section (for shading window areas) and zoning of executive's offices along the north edge and circulation to the south perimeter T.H.W. & A. were able to beat excessive solar gain and pick up a few dividends, such as: each executive office has his own terrace to the north with a splendid view of the Chattahoochee and dynamic geometric spaces within and in elevation.

The notched back level change was a response to the sloping site as well as a deliberate effort by the architect to exploit the flexibility allowed him by the relatively small or residential scale.
STRUCTURE:

The complex is raised on low-maintenance weathering steel trusses on concrete piers in order not to interfere with the natural drainage patterns. Designed for similar low maintenance is the exterior red cedar siding as well as the cedar shakes on the roof. Aside from the steel trusses, the building is framed entirely with heavy wood members.
The exterior image of the building is fairly obscured by the dense wooded site and sloping terrain surrounding it. However from the entry the dynamic geometry, natural materials and intricate scale of the complex combine to create a personable yet intriguing scenario.

The interior image is also personable and exciting due to the play of clerestory light, geometry of organization, warm materials and residential scale. Also, the bonus provided to each executive of an intimate terrace adjacent to his office which overlooks the Chattahoochee.
SUMMARY:

Strong Points:

Of the three buildings I analyzed each was selected on the basis of its application to my project. The I.B.M. office building by Birkerts was selected because of his energy conscious approach to utilizing natural lighting while deterring solar gain. From the photographs and the writer's comments it appears he was very successful on these counts and as a bonus he achieved a very tranquil atmosphere through the diffusion of light and also a very bold and energetic image through his use of materials on the exterior. I believe these two issues of exterior image and interior atmosphere were appropriate and well executed.

I selected the I.B.M. office building by Barnes for several reasons. The relatively small scale of the project, its union with the landscape and the beautiful view afforded the employees working within. Barnes choice of materials (glass and green anodic finish aluminum spandrels), and his consideration for their detailing such as butt joining the glass and the reflective moat as a transition from the building to the site was very successful. He too achieved success in exterior image and interior atmosphere. The two issues which are important to all buildings but critical when applied to an office building.

The Simmons Company Headquarters was selected on the basis of its unusual geometry, residential scale and its personable atmosphere within. I believe the geometry in this complex is perhaps more successful than the preceding two. Although the exterior image is not so public and perhaps therefore not so critical the scale and intricate spaces complement one another to achieve an interior that is lively, warm and exciting. Also, the way natural lighting was handled creates a dramatic effect while avoiding excess solar gain. Also, the Simmons building provides two amenities as bonuses; a personal terrace for each executives office and shaded parking amongst the dense woods. The three main issues addressed in this design were interior atmosphere, solar gain control and low-maintenance materials selection.

Weak Points:

Birkerts I.B.M. is somewhat weak in landscaping, especially in entry sequence, and at the transition zone between building and site. Although the building was apparently sited in the best location of the site I believe more could have been done with the landscaping to reinforce the strength of the image the building projects. Also, the central core basic square plan is eminently functional and
probably easy to crank out its somewhat bland and common.

Barnes I.B.M. seems quite sufficient. The only criticism I have for it is I would have made more of the central vertical circulation area, perhaps a large atrium type circulation at this point would have been a little better.

The Simmons Headquarters seems equally as well designed. Not knowing the program or client constraints the only change I could offer would have been to create a dining area to the north with a vista of the Chattahoochee, perhaps even an exterior dining area.

Conclusion:

The major strong points of all three buildings lie in their attitude towards warm, personable and relaxing interior atmospheres which was an effect achieved through a combination of light, materials, scale and view. Also, there was a strong consideration for details which tied all the different aspects together and in effect made the difference between a good building and a great one.
There were two phases (or presentations) in 405. The mid-term presentation required we take the initial design selected from 404 and develop it. In the following xeroxes, the first three drawings and three model photographs illustrate the changes and additions I made. The bottom leg of the northeast wing became an enclosed restaurant with entrance adjacent to the main lobby entry. The structure remained the same but the corridor circulation was moved out over the northern perimeters (and cantilevers) while the southern perimeters became greenhouses with glazing at the exterior wall and again at the southern border of the office spaces within. The courtyard became more fully developed with water fountains and ponds and an extreme cafe was located adjacent to the restaurant with access through sliding glass doors. Service was located off to the lower corner of the southwest end so as not to interfere with circulation through the parking lot. The entire north corner was glazed to create a visual highlight to passing traffic and the bottom floor on the northeast elevation was notched under the building to provide protection to pedestrian traffic.

The second phase or presentation required further refinement and response to critiques given to the mid-term presentation. Five xeroxes of final presentation drawings and five xeroxes of the final presentation drawings illustrate the further refinements of the design. More consideration was given to the pedestrian traffic through the parking lot into the building with development of a circulation spline at the southwest edge and circulation through the southeast corner of the building. An entrance pad was developed to define a clearer sense of space. The lobby was reorganized by placing the elevator banks to the northwest side, shielding it against the winter winds and the staircase was framed behind the glazed wall to the northeast side. A florist with kiosk display adjacent to lobby traffic and his stock area within the greenhouse space was incorporated into the project. The courtyard entrance was further defined and the courtyard much further refined to provide users with a more human scale surroundings and variety in privacy through level changes and foliage. Balconies on the first level office side were included to provide tenants with access to greenhouse. In form, the major change was projecting the parapet walls 4’ above the normal parapet wall height at the three corners to provide elevator overrides and fire escape access to roof. A ⅛" scale lobby plan was included to verify actual function of space.
During this quarter the emphasis was placed on refinements and production of final drawings, final model, reduced drawing reproductions mounted on 32" x 48" foam core board and this, the thesis book.

The refinements made this quarter and shown on the following xeroxed copies of the reduced p.m.t.'s and color xeroxed photographs of the final model were: further refinement of the exterior cafe with five balconies projecting out over the 4' waterfalls to incorporate the sound of falling water into the scenario, the central fountain was fractured and recessed into the courtyard steps to allow users to become more involved in the fountain by sitting on the steps and possibly wading, balconies were added to the second and third levels to provide tenants with intimate spaces for conversation and reflection, typical floor plans were layed out on the second and third levels to indicate how spaces could work, areas are indicated on site plan showing future proposed expansion sites, the lobby space was further readjusted to provide the florist with more lobby frontage and a seating-planter-fountain was centered in the lobby to provide seating and incorporate the background noise of running water therein, a bar and lounge were included within the restaurant to further enhance service to patrons, the projected ends were increased to 8' above parapet wall height creating a fourth level which houses mechanical equipment - the boilers, chillers, and vertical chases with fresh air intake - fire stairs and overrides at the corners and a recessed skylight with overhang at center corner to provide clerestory light into lobby and staircase, the courtyard entrance section and elevation was also reworked to express the staggered floor configuration.
CONCLUSION

I feel this experience has given me an advanced education in office design, material selection, detailing, landscaping, circulation routing, vehicular parking and flow, code adherence, professional presentation methods, and overall design ability.

It has been an experience in patience, endurance, and expression.

I feel the project has been very successful and enhanced my ability to follow through to minute details, the design process.