The University of Georgia Technical Memorandum

| Date | 10/12/98 | | | | | |
|---|--|--|--|--|--|--|
| Project | University of Georgia Physical Master Plan | | | | | |
| Subject | Cost Estimates for Building, Infrastructure, and Site Improvements (Section VII A) | | | | | |
| From | Ayers / Saint / Gross | | | | | |
| То | University of Georgia The objective of this work element is to document preliminary cost estimates for building, | | | | | |
| Architects and Campus Planners Ayers/Saint/Gross | site and infrastructure improvements. Documents Included: | | | | | |
| 222 Saint Paul Place Baltimore, MD 21202 410/347-8500 Fax 410/347-8519 | Area Calculations for Proposed Buildings and Open Spaces (Figure VII A Ex1-6) | | | | | |
| Architecture and Engineering Heery International | Graphic (Figure VIIA Labeling Proposed Buildings and Open Spaces) | | | | | |
| 999 Peachtree Street, NE Atlanta, GA 30367 | Cost Estimates (Divided into Seven Precincts) | | | | | |
| 404/881-9880 Fax 404/875-1283 | Summary of Costs | | | | | |
| Landscape Architecture Hughes, Good, O'Leary & Ryan 1708 Peachtree Street, Suite 444 Atlanta, GA 30309 404/876-7726 Fax 404/876-6858 | Note : Because information on the proposed Food Science facility was not available until after the completion of Section VI, it was not included in that section but is represented in Section VII as S26 for implementation purposes. | | | | | |
| <i>Traffic Engineering</i> LRE Engineering 1475 Peachtree Street, Suite 220 Atlanta, GA 30309 404/888-8800 Fax 404/876-7797 | | | | | | |
| Academic Programming Paulien & Associates 899 Logan Street, Suite 508 Denver, CO 80203-3156 303/832-3272 Fax 303/832-3380 | | | | | | |

| UNIVER | SITY OF G | EORGI | A PHYS | SICAL MA | ASTER P | LAN / A | SG PROJ | ECT # 97 |
|--------------------------|------------------|--------------------|-----------|-------------|-------------------------|------------|----------------|-----------------|
| Prelimina | ry Area Calc | ulations f | or Propo | sed Buildir | ngs and Pa | rking Dec | ks | |
| CALCULAT | ED FROM JUL | Y 98 PLAN | [| 35,983 | | gsf = gros | ss square feet | |
| Building / Open Space | | Area Per Floor, | Number | Total Area, | Area Per Car / Bed . | Number of | Number of | Area of Open |
| Number | Building Use | gsf | of Floors | gsf | gsf | | | Space, acres |
| NORTH CA | MPUS | | | - | | | | _ |
| N1 | residential life | 4,000 | 4 | 16,000 | 400 | | 40 | |
| N2 | residential life | 6,800 | 4 | 27,200 | 400 | | 68 | |
| N3 | residential life | 4,800 | 4 | 19,200 | 400 | | 48 | |
| N4 | | 5,400 | 4 | 21,600 | | | | |
| N5 | | 17,250 | 4 | 69,000 | | | | |
| N6 | residential life | 15,800 | 4 | 63,200 | 400 | | 158 | |
| N7 | residential life | 10,800 | 4 | 43,200 | 400 | | 108 | |
| N8 | residential life | 15,000 | 4 | 60,000 | 400 | | 150 | |
| N9 | residential life | 28,000 | 4 | 112,000 | 400 | | 280 | |
| N10 | residential life | 15,000 | 4 | 60,000 | 400 | | 150 | |
| NP1 | | 95,000 | 5 | 475,000 | 350 | 1,357 | | |
| subtotals | | | | 966,400 | | 1,357 | 1,002 | |
| OS1 | | | | | | | | 1.29 |
| OS2 | | | | | | | | 1.68 |
| OS4 | | | | | | | | 2.3 |
| OS5 | | | | | | | | 0.82 |
| OS6 | | | | | | | | 1.65 |
| OS7 | | | | | | | | 0.44 |
| subtotals | | | | | | | | 8.18 |

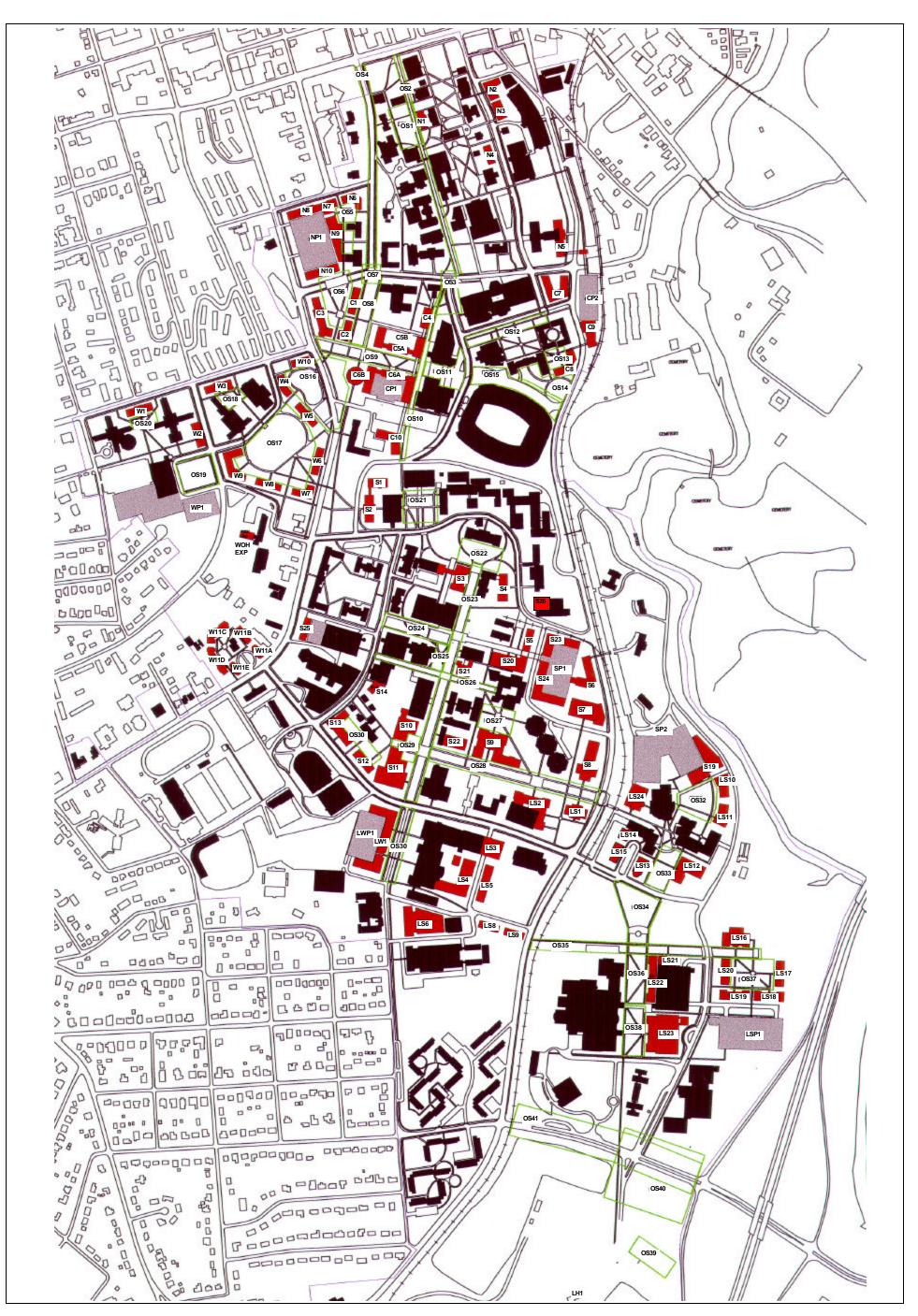
| D 111 / | | | | | | | | |
|----------------|------------------|----------|-----------|-------------|----------|------|-----------|--------------|
| Building / | | Area Per | | | Area Per | | NT 1 4 | Area of |
| Open Space | | Floor, | | Total Area, | | | Number of | - |
| Number | Building Use | gsf | of Floors | gsf | gsf | Cars | Beds | Space, acres |
| CENTRAL O | | | | | | | | |
| C1 | residential life | 11,400 | 4 | 45,600 | 400 | | 114 | |
| C2 | residential life | 10,200 | 4 | 40,800 | 400 | | 102 | |
| C3 | residential life | 19,200 | 4 | 76,800 | 400 | | 192 | |
| C4 | | 11,200 | 4 | 44,800 | | | | |
| C5A | | 32,900 | 4 | 131,600 | | | | |
| C5B | | 24,000 | 2 | 48,000 | | | | |
| C6A | | 42,700 | 4 | 170,800 | | | | |
| C6B | | 12,265 | 2 | 24,530 | | | | |
| C7 | residential life | 18,500 | 4 | 74,000 | 400 | | 185 | |
| C8 | residential life | 16,800 | 4 | 67,200 | 400 | | 168 | |
| C9 | residential life | 14,400 | 4 | 57,600 | 400 | | 144 | |
| C10 | residential life | 14,400 | 3 | 43,200 | 400 | | 108 | |
| CP1 | | 50,000 | 2 | 100,000 | 350 | 286 | | |
| CP2 | | 28,800 | 5 | 144,000 | 350 | 411 | | |
| subtotals | | | | 1,068,930 | | 697 | 1,013 | |
| OS3 | | | | | | | | 1.03 |
| OS8 | | | | | | | | 1.42 |
| OS9 | | | | | | | | 1.93 |
| OS10 | | | | | | | | 1.1 |
| OS11 | | | | | | | | 1.09 |
| OS12 | | | | | | | | 1.1 |
| OS13 | | | | | | | | 0.48 |
| OS14 | | | | | | | | 1.12 |
| OS15 | | | | | | | | 1.73 |
| subtotals | | | | | | | | 11 |

| | | | | | | | | Area of |
|------------|------------------|----------|-----------|-------------|------------|-------|-----------|------------|
| | | Area Per | | | Area Per | | | Open |
| Building | | Floor, | | Total Area, | Car / Bed, | | Number of | • <i>′</i> |
| Number | | gsf | of Floors | gsf | gsf | Cars | Beds | arcres |
| WEST CAM | | | | | | | | |
| W1 | residential life | 12,000 | 5 | 60,000 | 400 | | 150 | |
| W2 | residential life | 10,200 | 5 | 51,000 | 400 | | 128 | |
| W3 | residential life | 12,000 | 5 | 60,000 | 400 | | 150 | |
| W4 | residential life | 7,500 | 5 | 37,500 | 400 | | 94 | |
| W5 | residential life | 12,000 | 5 | 60,000 | 400 | | 150 | |
| W6 | residential life | 12,000 | 5 | 60,000 | 400 | | 150 | |
| W7 | residential life | 12,100 | 5 | 60,500 | 400 | | 151 | |
| W8 | residential life | 9,000 | 5 | 45,000 | 400 | | 113 | |
| W9 | residential life | 13,200 | 5 | 66,000 | 400 | | 165 | |
| W10 | residential life | 6,500 | 5 | 32,500 | 400 | | 81 | |
| W11A | | 5,000 | 2 | 10,000 | | | | |
| W11B | | 6,300 | 2 | 12,600 | | | | |
| W11C | | 12,000 | 3 | 36,000 | | | | |
| W11D | | 9,000 | 2 | 18,000 | | | | |
| W11E | | 5,000 | 2 | 10,000 | | | | |
| O HOUSE EX | residential life | 5,000 | 9 | 45,000 | 400 | | 113 | |
| WP1 | | 43,200 | 6 | 259,200 | 350 | 741 | | |
| WD EXP | | | | 410,200 | 350 | 1,172 | | |
| subtotals | | | | 1,333,500 | | 1,913 | 1,444 | |
| OS16 | | | | | | | | 3.81 |
| OS17 | | | | | | | | 5.33 |
| OS18 | | | | | | | | 5.33 |
| OS19 | | | | | | | | 1.51 |
| OS20 | | | | | | | | 0.36 |
| subtotals | | | | | | | | 16.34 |

| | | | | | | | | Area of |
|------------------------------|------------------|----------|-----------|-------------|---------------------------------------|-------|-----------|---------|
| | | Area Per | | | Area Per | | | Open |
| Building | | Floor, | Number | Total Area, | · · · · · · · · · · · · · · · · · · · | | Number of | • · |
| Number | | gsf | of Floors | gsf | gsf | Cars | Beds | arcres |
| SOUTH CA | | | | | | | | |
| S1 | residential life | 10,800 | 4 | 43,200 | 400 | | 108 | |
| S2 | | 12,000 | 4 | 48,000 | | | | |
| S3 | | 26,000 | 4 | 104,000 | | | | |
| S4 | | 14,000 | 4 | 56,000 | | | | |
| S5 | residential life | 10,200 | 4 | 40,800 | 400 | | 102 | |
| S6 | residential life | 30,000 | 4 | 120,000 | 400 | | 300 | |
| S7 | | 28,500 | 4 | 114,000 | | | | |
| S8 | residential life | 29,600 | 4 | 118,400 | 400 | | 296 | |
| S9 | | 43,600 | 4 | 174,400 | | | | |
| S10 | | 25,000 | 4 | 100,000 | | | | |
| S11 | | 55,000 | 4 | 220,000 | | | | |
| S12 | residential life | 10,800 | 4 | 43,200 | 400 | | 108 | |
| S13 | residential life | 18,800 | 4 | 75,200 | 400 | | 188 | |
| S14 | | 6,500 | 4 | 26,000 | | | 100 | |
| S15 (not use | (be | 0,200 | • | 20,000 | | | | |
| S15 (not use S16 (not use | , | | | | | | | |
| S10 (not use $S17$ (not use | , | | | | | | | |
| S17 (not use | , | | | | | | | |
| S18 (not use S19 | | 40,400 | 4 | 161,600 | | | | |
| S19 S20 | residential life | 25,000 | 4 | 101,000 | 400 | | 250 | |
| S20 | residential life | 11,800 | 3 | 35,400 | 400 | | 230 | |
| S21 S22 | residential life | | 3 | | 400 | | 69 | |
| S22 S23 | | 13,600 | 4 | 40,800 | | | | |
| | | 21,600 | | 86,400 | | | | |
| S24 | | 28,200 | 4 | 112,800 | 100 | | 100 | |
| S25 | residential life | 10,200 | 4 | 40,800 | 400 | | 102 | |
| S26 | | 6,095 | 3 | 18,285 | 2.50 | 0.055 | | |
| SP1 | | 120,000 | 6 | 720,000 | 350 | 2,057 | | |
| SP2 | | 126,000 | 5 | 630,000 | 350 | 1,800 | | |
| SD EXP | | | | 107,800 | 350 | 308 | | |
| subtotals | | | | 3,337,085 | | 4,165 | 1,543 | |
| OS21 | | | | | | | | 1.42 |
| OS22 | | | | | | | | 1.27 |
| OS23 | | | | | | | | 3.67 |
| OS24 | | | | | | | | 1.33 |
| OS25 | | | | | | | | 0.45 |
| OS26 | | | | | | | | 0.97 |
| OS27 | | | | | | | | 1.05 |
| OS28 | | | | | | | | 3.48 |
| OS29 | | | | | | | | 0.56 |
| OS30 | | | | | | | | 0.76 |
| subtotals | | | | | | | | 14.96 |

| Building Number | | Area Per Floor, gsf | Number of Floors | Total Area, gsf | Area Per Car/Bed, gsf | Number of Cars | Number of Beds | Area of Open Space, acres |
|--------------------|------------------|---------------------------|---------------------|--------------------|-----------------------------|-------------------|-------------------|---------------------------------|
| | OUTH AND EAS | | US | | | | | |
| LS1 | | 12,800 | 4 | 51,200 | | | | |
| LS2 | | 29,800 | 4 | 119,200 | | | | |
| LS3 | | 18,200 | 4 | 72,800 | | | | |
| LS4 | | 29,900 | 4 | 119,600 | | | | |
| LS5 | | 8,400 | 4 | 33,600 | | | | |
| LS6 | | 41,800 | 4 | 167,200 | | | | |
| LS8 | residential life | 9,000 | 4 | 36,000 | 400 | | 90 | |
| LS9 | residential life | 9,000 | 4 | 36,000 | 400 | | 90 | |
| LS10 | | 14,000 | 4 | 56,000 | | | | |
| LS11 | | 14,000 | 4 | 56,000 | | | | |
| LS12 | | 24,800 | 4 | 99,200 | | | | |
| LS13 | | 9,000 | 4 | 36,000 | | | | |
| LS14 | | 9,800 | 4 | 39,200 | | | | |
| LS15 | | 12,000 | 4 | 48,000 | | | | |
| LS16 | | 26,000 | 4 | 104,000 | | | | |
| LS17 | residential life | 11,700 | 5 | 58,500 | 400 | | 146 | |
| LS18 | residential life | 14,700 | 5 | 73,500 | 400 | | 184 | |
| LS19 | residential life | 14,700 | 5 | 73,500 | 400 | | 184 | |
| LS20 | residential life | 11,700 | 5 | 58,500 | 400 | | 146 | |
| LS21 | residential life | 9,350 | 5 | 46,750 | 400 | | 117 | |
| LS22 | residential life | 19,250 | 5 | 96,250 | 400 | | 241 | |
| LS23 | | 76,900 | 4 | 307,600 | | | | |
| LS24 | | 23,400 | 3 | 70,200 | | | | |
| LSP1 | | 124,900 | 6 | 749,400 | 350 | 2,141 | | |
| subtotals | | , | | 2,608,200 | | 2,141 | 1,198 | |
| OS31 | | | | , , | | , | , | 1.43 |
| OS32 | | | | | | | | 1.52 |
| OS34 | | | | | | | | 1.15 |
| OS35 | | | | | | | | 3.26 |
| OS36 | | | | | | | | 1.57 |
| OS37 | | | | | | | | 1.7 |
| OS38 | | | | | | | | 1.38 |
| OS40 | | | | | | | | 7.81 |
| OS41 | | | | | | | | 5.48 |
| subtotals | | | | | | | | 25.3 |
| LAKE HEI | RRICK | | | | | | | |
| LH1 | | 45,600 | 4 | 182,400 | | | | |
| subtotals | | 15,000 | | 182,400 | | | | |
| OS39 | | | | 102,400 | | | | 1.11 |
| LOWER W | /EST | | | | | | | 1,11 |
| LW1 | | 52,400 | 4 | 209,600 | | | | |
| LWP1 | | 70,000 | 6 | 420,000 | 350 | 1,200 | | |
| subtotals | | | | 629,600 | 550 | 1,200 | | |

| GRAND TOTALS FOR PROPOSED AREA CALCULATIONS | |
|---|------------|
| TOTAL PROPOSED GSF | 10,126,115 |
| TOTAL GSF FOR PROPOSED PARKING DECKS | 4,065,750 |
| TOTAL PROPOSED PARKING SPACES | 11,473 |
| TOTAL GSF FOR PROPOSED HOUSING | 2,479,500 |
| TOTAL PROPOSED BEDS | 6,200 |
| TOTAL PROPOSED OPEN SPACE, ACRES | 76.89 |

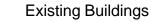


Not to Scale

7/98



Legend



Proposed Buildings

Proposed Open Space Projects

Implementation

The University of Georgia Physical Master Plan

Figure VII A

| | | NORTH | CAMPU | IS | | |
|---------------------------------|----------------------|------------------------|---------------------|--------------------|-----------|---------------|
| Building / Open Space Number | Building/Land Use | Area Per Floor, gsf | Number of Floors | Total Area, GSF | Unit Cost | Total Cost |
| N1 | residential life | 4,000 | 4 | 16,000 | \$ 102.69 | \$ 1,643,040 |
| N2 | residential life | 6,800 | 4 | 27,200 | \$ 102.69 | \$ 2,793,168 |
| N3 | residential life | 4,800 | 4 | 19,200 | \$ 102.69 | \$ 1,971,648 |
| N4 | academic bldg. | 5,400 | 4 | 21,600 | \$ 127.27 | \$ 2,749,032 |
| N5 | academic bldg. | 17,250 | 4 | 69,000 | \$ 127.27 | \$ 8,781,630 |
| N6 | residential life | 15,800 | 4 | 63,200 | \$ 102.69 | \$ 6,490,008 |
| N7 | residential life | 10,800 | 4 | 43,200 | \$ 102.69 | \$ 4,436,208 |
| N8 | residential life | 15,000 | 4 | 60,000 | \$ 102.69 | \$ 6,161,400 |
| N9 | residential life | 28,000 | 4 | 112,000 | \$ 102.69 | \$ 11,501,280 |
| N10 | residential life | 15,000 | 4 | 60,000 | \$ 102.69 | \$ 6,161,400 |
| NP1 | parking deck | 95,000 | 5 | 475,000 | \$ 34.58 | \$ 16,425,500 |
| subtotals | | | | 966,400 | | \$ 69,114,314 |
| OS1 | quadrangle | | | 56,190 | \$ 12.00 | \$ 674,280 |
| OS2 | plaza | | | 73,180 | \$ 18.00 | \$ 1,317,240 |
| OS4 | plaza | | | 100,190 | \$ 18.00 | \$ 1,803,420 |
| OS5 | field-like | | | 35,720 | \$ 7.00 | \$ 250,040 |
| OS6 | quadrangle | | | 71,880 | \$ 12.00 | \$ 862,560 |
| OS7 | plaza | | | 19,170 | \$ 18.00 | \$ 345,060 |
| subtotals | | | | 356,330 | | \$ 5,252,600 |

| | CENTRAL CAMPUS | | | | | | | |
|---------------------------------|----------------------|------------------------|---------------------|-----------|----|----------|------------|-------------|
| Building / Open Space Number | Building/Land Use | Area Per Floor, gsf | Number of Floors | , | | nit Cost | Total Cost | |
| C1 | residential life | 11,400 | 4 | 45,600 | \$ | 102.69 | \$ | 4,682,664 |
| C2 | residential life | 10,200 | 4 | 40,800 | \$ | 102.69 | \$ | 4,189,752 |
| C3 | residential life | 19,200 | 4 | 76,800 | \$ | 102.69 | \$ | 7,886,592 |
| C4, see note 1. | academic bldg. | 11,200 | 4 | 44,800 | \$ | 127.27 | \$ | 5,701,696 |
| C5A, see note 1. | academic bldg. | 32,900 | 4 | 131,600 | \$ | 127.27 | \$ | 16,748,732 |
| C5B, see note 1. | academic bldg. | 24,000 | 2 | 48,000 | \$ | 127.27 | \$ | 6,108,960 |
| C6A, see note 1. | academic bldg. | 42,700 | 4 | 170,800 | \$ | 127.27 | \$ | 21,737,716 |
| C6B | academic bldg. | 12,265 | 2 | 24,530 | \$ | 127.27 | \$ | 3,121,933 |
| C7 | residential life | 18,500 | 4 | 74,000 | \$ | 102.69 | \$ | 7,599,060 |
| C8 | residential life | 16,800 | 4 | 67,200 | \$ | 102.69 | \$ | 6,900,768 |
| С9 | residential life | 14,400 | 4 | 57,600 | \$ | 102.69 | \$ | 5,914,944 |
| C10 | residential life | 14,400 | 3 | 43,200 | \$ | 102.69 | \$ | 4,436,208 |
| CP1 | parking deck | 50,000 | 2 | 100,000 | \$ | 34.58 | \$ | 3,458,000 |
| CP2 | parking deck | 28,800 | 5 | 144,000 | \$ | 34.58 | \$ | 4,979,520 |
| subtotals | | | | 1,068,930 | | | \$ | 103,466,545 |
| OS3 | plaza | | | 44,870 | \$ | 18.00 | \$ | 807,660 |
| OS8 | quadrangle | | | 61,860 | \$ | 12.00 | \$ | 742,320 |
| OS9 | plaza | | | 84,070 | \$ | 18.00 | \$ | 1,513,260 |
| OS10 | plaza | | | 47,920 | \$ | 18.00 | \$ | 862,560 |
| OS11 | plaza | | | 47,480 | \$ | 18.00 | \$ | 854,640 |
| OS12 | field-like | | | 47,920 | \$ | 7.00 | \$ | 335,440 |
| OS13 | quadrangle | | | 20,910 | \$ | 12.00 | \$ | 250,920 |
| OS14 | quadrangle | | | 48,790 | \$ | 12.00 | \$ | 585,480 |
| OS15 | plaza | | | 75,360 | \$ | 18.00 | \$ | 1,356,480 |
| subtotals | | | | 479,180 | | | \$ | 7,308,760 |

NOTES:

1. These four building sites generally represent the proposed Student Learning Center. More detailed program and budget planning has been developed for this project as a part of the Capital Outlay Plan. The current total project budget for this project is \$44,024,000.

| WEST CAMPUS | | | | | | | | |
|---------------------------------|----------------------|------------------------|---------------------|--------------------|-----------|--------|------------|------------|
| Building / Open Space Number | Building/Land Use | Area Per Floor, gsf | Number of Floors | Total Area, GSF | Unit Cost | | Total Cost | |
| W1 | residential life | 12,000 | | 60,000 | | 102.69 | \$ | 6,161,400 |
| W2 | residential life | 10,200 | 5 | 51,000 | \$ | 102.69 | \$ | 5,237,190 |
| W3 | residential life | 12,000 | 5 | 60,000 | \$ | 102.69 | \$ | 6,161,400 |
| W4 | residential life | 7,500 | 5 | 37,500 | \$ | 102.69 | \$ | 3,850,875 |
| W5 | residential life | 12,000 | 5 | 60,000 | \$ | 102.69 | \$ | 6,161,400 |
| W6 | residential life | 12,000 | 5 | 60,000 | \$ | 102.69 | \$ | 6,161,400 |
| W7 | residential life | 12,100 | 5 | 60,500 | \$ | 102.69 | \$ | 6,212,745 |
| W8 | residential life | 9,000 | 5 | 45,000 | \$ | 102.69 | \$ | 4,621,050 |
| W9 | residential life | 13,200 | 5 | 66,000 | \$ | 102.69 | \$ | 6,777,540 |
| W10 | residential life | 6,500 | 5 | 32,500 | \$ | 102.69 | \$ | 3,337,425 |
| W11A, see note 1. | academic bldg. | 5,000 | 2 | 10,000 | \$ | 127.27 | \$ | 1,272,700 |
| W11B, see note 1. | academic bldg. | 6,300 | 2 | 12,600 | \$ | 127.27 | \$ | 1,603,602 |
| W11C, see note 1. | academic bldg. | 12,000 | 3 | 36,000 | \$ | 127.27 | \$ | 4,581,720 |
| W11D, see note 1. | academic bldg. | 9,000 | 2 | 18,000 | \$ | 127.27 | \$ | 2,290,860 |
| W11E, see note 1. | academic bldg. | 5,000 | 2 | 10,000 | \$ | 127.27 | \$ | 1,272,700 |
| O HOUSE EXP | residential life | 5,000 | 9 | 45,000 | \$ | 102.69 | \$ | 4,621,050 |
| WP1 | parking deck | 43,200 | 6 | 259,200 | \$ | 34.58 | \$ | 8,963,136 |
| WD EXP | parking deck | | | 410,200 | \$ | 34.58 | \$ | 14,184,716 |
| subtotals | | | | 1,333,500 | | | \$ | 93,472,909 |
| OS16 | plaza | | | 165,960 | \$ | 18.00 | \$ | 2,987,280 |
| OS17 | quadrangle | | | 232,170 | \$ | 12.00 | \$ | 2,786,040 |
| OS18 | field-like | | | 232,170 | \$ | 7.00 | \$ | 1,625,190 |
| OS19 | plaza | | | 65,780 | \$ | 18.00 | \$ | 1,184,040 |
| OS20 | field-like | | | 15,680 | \$ | 7.00 | \$ | 109,760 |
| subtotals | | | | 711,760 | | | \$ | 8,692,310 |

NOTES:

1. These five building sites generally represent both the proposed J. W. Fanning Leadership Center and the proposed Chappelle Matthews Public Service Complex. More detailed program and budget planning has been developed for these projects as a part of the Capital Outlay Plan. The current total project budget for the J.W. Fanning Leadership Center is \$4,750,000. The current total project budget for the Chappelle Matthews Public Service Complex is \$9,692,500.

| | | SOUTH | I CAMP | US | | | |
|------------------|----------------------|------------|-----------|-------------|-----------|-------------|-----|
| | 1 | | | | | | |
| Building / Open | Building/Land | Area Per | Number | Total Area, | | | |
| Space Number | Use | Floor, gsf | of Floors | GSF | Unit Cost | Total Cost | t |
| S1 | residential life | 10,800 | 4 | 43,200 | \$ 102.69 | \$ 4,436,2 | 208 |
| S2 | science bldg. | 12,000 | 4 | 48,000 | \$ 193.22 | \$ 9,274,5 | 560 |
| S3 | science bldg. | 26,000 | 4 | 104,000 | \$ 193.22 | \$ 20,094,8 | 880 |
| S4 | science bldg. | 14,000 | 4 | 56,000 | \$ 193.22 | \$ 10,820,3 | 320 |
| S5 | residential life | 10,200 | 4 | 40,800 | \$ 102.69 | \$ 4,189,7 | 752 |
| S6 | residential life | 30,000 | 4 | 120,000 | \$ 102.69 | \$ 12,322,8 | 800 |
| S7 | science bldg. | 28,500 | 4 | 114,000 | \$ 193.22 | \$ 22,027,0 | 080 |
| S8 | residential life | 29,600 | 4 | 118,400 | \$ 102.69 | \$ 12,158,4 | 496 |
| S9 | science bldg. | 43,600 | 4 | 174,400 | \$ 193.22 | \$ 33,697,5 | 568 |
| S10, see note 1. | science bldg. | 25,000 | 4 | 100,000 | \$ 193.22 | \$ 19,322,0 | 000 |
| S11 | science bldg. | 55,000 | 4 | 220,000 | \$ 193.22 | \$ 42,508,4 | 400 |
| S12 | residential life | 10,800 | 4 | 43,200 | \$ 102.69 | \$ 4,436,2 | 208 |
| S13 | residential life | 18,800 | 4 | 75,200 | \$ 102.69 | \$ 7,722,2 | 288 |
| S14 | science bldg. | 6,500 | 4 | 26,000 | \$ 193.22 | \$ 5,023,7 | 720 |
| S15 (not used) | | | | | | | |
| S16 (not used) | | | | | | | |
| S17 (not used) | | | | | | | |
| S18 (not used) | | | | | | | |
| S19, see note 2. | academic bldg. | 40,400 | 4 | 161,600 | \$127.27 | \$ 20,566,8 | 832 |
| S20 | residential life | 25,000 | 4 | 100,000 | \$ 102.69 | \$ 10,269,0 | 000 |
| S21 | residential life | 11,800 | 3 | 35,400 | \$ 102.69 | \$ 3,635,2 | 226 |
| S22 | science bldg. | 13,600 | 3 | 40,800 | \$ 193.22 | \$ 7,883,3 | 376 |
| S23 | science bldg. | 21,600 | 4 | 86,400 | \$ 193.22 | \$ 16,694,2 | 208 |
| S24 | science bldg. | 28,200 | 4 | 112,800 | \$ 193.22 | \$ 21,795,2 | 216 |
| S25 | residential life | 10,200 | 4 | 40,800 | \$ 102.69 | \$ 4,189,7 | 752 |
| S26 | science bldg. | 6,095 | 3 | 18,285 | \$ 193.22 | \$ 3,533,0 | 028 |
| SP1 | parking deck | 120,000 | 6 | | \$ 34.58 | \$ 24,897,0 | 600 |
| SP2 | parking deck | 126,000 | 5 | 630,000 | \$ 34.58 | \$ 21,785,4 | 400 |
| SD EXP | parking deck | | | 107,800 | \$ 34.58 | \$ 3,727,7 | |
| subtotals | | | | 3,337,085 | | \$ 347,011, | 642 |
| OS21 | quadrangle | | | 61,860 | \$ 12.00 | \$ 742,3 | 320 |
| OS22 | quadrangle | | | 55,320 | \$ 12.00 | \$ 663,8 | 840 |
| OS23 | plaza | | | 159,870 | \$ 18.00 | \$ 2,877,0 | 660 |
| OS24 | quadrangle | | | 57,930 | | \$ 695, | 160 |
| OS25 | plaza | | | 19,600 | | \$ 352,8 | 800 |
| OS26 | plaza | | | 42,250 | | \$ 760,5 | 500 |
| OS27 | quadrangle | | | 45,740 | | \$ 548,8 | 880 |
| OS28 | plaza | | | 151,590 | | \$ 2,728,0 | 620 |
| OS29 | plaza | | | 24,390 | | \$ 439,0 | |
| OS30 | quadrangle | | | 33,100 | \$ 12.00 | \$ 397,2 | |
| subtotals | | | | 651,650 | | \$ 10,206, | 000 |

NOTES: see next page

SOUTH CAMPUS

NOTES:

1. This building site generally represents the proposed Addition to the Pharmacy Building. More detailed program and budget planning has been developed for this project as a part of the Capital Outlay Plan. The current total project budget for this project is \$22,500,000.

2. This building site generally represents the proposed PVAC Phase III, Dance and Drama Buildings. More detailed program and budget planning has been developed for this project as a part of the Capital Outlay Plan. The current total project budget for this project is \$22,000,000.

| UNIVERSITY OF GEORGIA PHYSICAL MASTER PLAN |
|--|
| Preliminary Area Calculations for Proposed Buildings and Parking Decks |
| CALCULATED FROM JULY 98 PLAN |

| LOWER SOUTH AND EAST CAMPUS | | | | | | | |
|---------------------------------|----------------------|------------------------|---------------------|--------------------|-----------|----|-------------|
| Building / Open Space Number | Building/Land Use | Area Per Floor, gsf | Number of Floors | Total Area, GSF | Unit Cost | | Total Cost |
| LS1 | science bldg. | 12,800 | 4 | 51,200 | \$ 193.22 | \$ | 9,892,864 |
| LS2 | science bldg. | 29,800 | 4 | 119,200 | \$ 193.22 | \$ | 23,031,824 |
| LS3 | science bldg. | 18,200 | 4 | 72,800 | \$ 193.22 | \$ | 14,066,416 |
| LS4 | science bldg. | 29,900 | 4 | 119,600 | \$ 193.22 | \$ | 23,109,112 |
| LS5 | science bldg. | 8,400 | 4 | 33,600 | \$ 193.22 | \$ | 6,492,192 |
| LS6 | science bldg. | 41,800 | 4 | 167,200 | \$ 193.22 | \$ | 32,306,384 |
| LS8 | residential life | 9,000 | 4 | 36,000 | \$ 102.69 | \$ | 3,696,840 |
| LS9 | residential life | 9,000 | 4 | 36,000 | \$ 102.69 | \$ | 3,696,840 |
| LS10, see note 1. | academic bldg. | 14,000 | 4 | 56,000 | \$ 127.27 | \$ | 7,127,120 |
| LS11, see note 1. | academic bldg. | 14,000 | 4 | 56,000 | \$ 127.27 | \$ | 7,127,120 |
| LS12, see note 1. | academic bldg. | 24,800 | 4 | 99,200 | \$ 127.27 | \$ | 12,625,184 |
| LS13, see note 1. | academic bldg. | 9,000 | 4 | 36,000 | \$ 127.27 | \$ | 4,581,720 |
| LS14, see note 2. | academic bldg. | 9,800 | 4 | 39,200 | \$ 127.27 | \$ | 4,988,984 |
| LS15, see note 2. | academic bldg. | 12,000 | 4 | 48,000 | \$ 127.27 | \$ | 6,108,960 |
| LS16 | academic bldg. | 26,000 | 4 | 104,000 | \$ 127.27 | \$ | 13,236,080 |
| LS17 | residential life | 11,700 | 5 | 58,500 | \$ 102.69 | \$ | 6,007,365 |
| LS18 | residential life | 14,700 | 5 | 73,500 | \$ 102.69 | \$ | 7,547,715 |
| LS19 | residential life | 14,700 | 5 | 73,500 | \$ 102.69 | \$ | 7,547,715 |
| LS20 | residential life | 11,700 | 5 | 58,500 | \$ 102.69 | \$ | 6,007,365 |
| LS21 | residential life | 9,350 | 5 | 46,750 | \$ 102.69 | \$ | 4,800,758 |
| LS22 | residential life | 19,250 | 5 | 96,250 | \$ 102.69 | \$ | 9,883,913 |
| LS23 | academic bldg. | 76,900 | 4 | 307,600 | \$ 127.27 | \$ | 39,148,252 |
| LS24 | academic bldg. | 23,400 | 3 | 70,200 | \$ 127.27 | \$ | 8,934,354 |
| LSP1 | parking deck | 124,900 | 6 | 749,400 | \$ 34.58 | \$ | 25,914,252 |
| subtotals | | | | 2,608,200 | | \$ | 287,879,328 |
| OS31 | field-like | | | 62,290 | \$ 7.00 | \$ | 436,030 |
| OS32 | quadrangle | | | 66,210 | \$ 12.00 | \$ | 794,520 |
| OS33 | quadrangle | | | 57,500 | \$ 12.00 | \$ | 690,000 |
| OS34 | plaza | | | 50,090 | | \$ | 901,620 |
| OS35 | quadrangle | | | 142,000 | \$ 12.00 | \$ | 1,704,000 |
| OS36 | quadrangle | | | 68,390 | \$ 12.00 | \$ | 820,680 |
| OS37 | quadrangle | | | 74,050 | | \$ | 888,600 |
| OS38 | quadrangle | | | 60,110 | \$ 12.00 | \$ | 721,320 |
| OS40 | plaza | | | 340,200 | | \$ | 6,123,600 |
| OS41 | plaza | | | 238,710 | \$ 18.00 | \$ | 4,296,780 |
| subtotals | <u>^</u> | | | 1,159,550 | | \$ | 17,377,150 |

NOTES:

1. These four building sites generally represent the proposed PVAC Phase II, School of Art Buildings. More detailed program and budget planning has been developed for this project as a part of the Capital Outlay Plan. The current total project budget for this project is \$35,000,000.

2. These two building sites generally represent the proposed Addition to the Georgia Museum of Art. More detailed program and budget planning has been developed for this project as a part of the Capital Outlay Plan. The current total project budget for this project is \$8,600,000.

| CALCULATED FROM JUL 1 98 PLAN | | | | | | | |
|---------------------------------|----------------------|------------------------|---------------------|--------------------|-----------|---------------|--|
| LAKE HERRICK | | | | | | | |
| Building / Open Space Number | Building/Land Use | Area Per Floor, gsf | Number of Floors | Total Area, GSF | Unit Cost | Total Cost | |
| LH1, see note 1. | academic bldg. | 45,600 | 4 | 182,400 | \$ 127.27 | \$ 23,214,048 | |
| subtotals | | | | 182,400 | | \$ 23,214,048 | |
| OS39 | field-like | | | 48,350 | \$ 7.00 | \$ 338,450 | |
| | | | | | | | |

| LOWER WEST CAMPUS | | | | | | | |
|---------------------------------|----------------------|------------------------|---------------------|--------------------|-----------|---------------|--|
| Building / Open Space Number | Building/Land Use | Area Per Floor, gsf | Number of Floors | Total Area, GSF | Unit Cost | Total Cost | |
| LW1 | science bldg. | 52,400 | 4 | 209,600 | \$ 193.22 | \$ 40,498,912 | |
| LWP1 | parking deck | 70,000 | 6 | 420,000 | \$ 34.58 | \$ 14,523,600 | |
| subtotals | | | | 629,600 | | \$ 55,022,512 | |
| | | | | | | | |

NOTES:

1. This building site generally represents the proposed Alumni Center Complex. More detailed program and budget planning has been developed for this project as a part of the Capital Outlay Plan. The current total project budget for this project is \$23,000,000.

| SUMMARY OF COSTS | | | | | | | | | | |
|-----------------------------|------------------------|--------------------------|-----------------------|------------------------|-------------------------------|---------------------------------|--------------|-----------|---------|--------------------|
| BUILDINGS AND OPEN SPACE | NORTH CAMPUS GSF | CENTRAL CAMPUS GSF | WEST CAMPUS GSF | SOUTH CAMPUS GSF | L. S. & EAST CAMPUS GSF | LAKE H. & L.W. CAMPUS GSF | TOTAL GSF | Unit Cost | | Total Cost |
| BUILDINGS: | | | | | | | | | | |
| SCIENCE BLDG. | 0 | 0 | 0 | 1,065,258 | 563,600 | 209,600 | 1,838,485 | \$ 193.22 | \$ | 355,232,072 |
| ACADEMIC BLDG. | 90,600 | 419,730 | 86,600 | 161,600 | 816,200 | 182,400 | 1,757,130 | \$ 127.27 | \$ | 223,629,935 |
| RESIDENTIAL LIFE | 400,800 | 405,200 | 577,500 | 652,400 | 479,000 | 0 | 2,514,900 | \$ 102.69 | \$ | 258,255,081 |
| PARKING DECK | 475,000 | 244,000 | 669,400 | 1,457,800 | 749,400 | 420,000 | 4,015,600 | \$ 34.58 | \$ | 138,859,448 |
| | | | | | | | | | \$ | - |
| TOTAL BUILDINGS | | | | | | | 10,126,115 | | \$ | 975,976,536 |
| | | | | | | | | | \$ | - |
| BUILDING SITEWORK: | | | | | | | | | \$ | - |
| SITEWORK | | | | | | | 10,126,115 | \$ 6.00 | \$ | 60,756,690 |
| UTILITIES | | | | | | | 10,126,115 | | \$ | 15,189,173 |
| | | | | | | | | | \$ | - |
| TOTAL SITEWORK | | | | | | | 10,126,115 | | \$ | 75,945,863 |
| | | | | | | | · · · | | \$ | - |
| INFRASTRUCTURE: | | | | | | | | | \$ | - |
| UTILITIES | | | | | | | 6,110,515 | \$ 5.50 | \$ | 33,607,833 |
| SCUB - CHILLED WATER | | | | | | | 6,110,515 | \$ 5.00 | \$ | 30,552,575 |
| SCUB - HEATING | | | | | | | 6,110,515 | \$ 3.50 | \$ | 21,386,803 |
| | | | | | | | | | \$ | - |
| TOTAL INFRASTRUCTURE | | | | | | | 6,110,515 | | \$ | 85,547,210 |
| | | | | | | | | | \$ | - |
| OPEN SPACE: | | | | | | | | | \$ | - |
| FIELD - LIKE | 35,720 | 47,920 | 247,850 | 0 | 62,290 | 48,350 | 442,130 | \$ 7.00 | \$ | 3,094,910 |
| QUADRANGLE | 128,070 | 131,560 | 232,170 | 253,950 | 468,260 | , | 1,214,010 | | \$ | 14,568,120 |
| PLAZA | 192,540 | 299,700 | 231,740 | 397,700 | 629,000 | | 1,750,680 | | \$ | 31,512,240 |
| | | | | | , | | * * | | \$ | - |
| TOTAL OPEN SPACE | | | | | | | 3,406,820 | | \$ | 49,175,270 |
| TOTAL | | | | | | | | | \$ ¢ | - 1,186,644,878 |
| IOTAL | | | | | | | | | φ | 1,100,044,070 |

The University of Georgia Technical Memorandum

| Date | October 12, 1998 | | | | | |
|---|--|--|--|--|--|--|
| Project | University of Georgia Physical Master Plan | | | | | |
| Subject | Capital Improvement and Phasing Plan | | | | | |
| From | Ayers / Saint / Gross | | | | | |
| То | University of Georgia The objective of this work element is to prepare a capital budget by phased 5-year | | | | | |
| Architects and Campus Planners Ayers/Saint/Gross 222 Saint Paul Place Baltimore, MD 21202 | increments based upon the cost estimates and to pre- increments to the target year. The phasing plan wil likely short- and long-term improvements and projec | l reflect priority projects as well as | | | | |
| 410/347-8500 Fax 410/347-8519 | Each phase represented below lists the projects on li within each five-year period. The plan numbers assign | gned to each project are general | | | | |
| Architecture and Engineering Heery International 999 Peachtree Street, NE Atlanta, GA 30367 | estimates of where the programs may be accommodated on the plan and are not meant to restrict the programs to those particular sites. This is strictly for very preliminary planning purposes only. | | | | | |
| 404/881-9880 Fax 404/875-1283 | In Figures VII B-A through VII B-G, the projects on the main campus that are projected for each five-year increment are graphically represented. Buildings are colored in as they are built. | | | | | |
| Landscape Architecture Hughes, Good, O'Leary & Ryan 1708 Peachtree Street, Suite 444 Atlanta, GA 30309 404/876-7726 Fax 404/876-6858 | The building lists include foreseeable capital projects the buildings that would be on line for these particula building sites to accommodate these projects as they number of building sites are marked to be completed program. The "Unassigned Buildings" title at the er | r five-year periods. The plan provides occur. For each phase a certain but are not assigned a particular | | | | |
| Traffic Engineering LRE Engineering | marker for these unnamed projects. | | | | | |
| 1475 Peachtree Street, Suite 220 Atlanta, GA 30309 404/888-8800 Fax 404/876-7797 | "Phase A" represents projects that are currently in planning (as approved by the Board of Regents) | | | | | |
| | Phase A: | Plan # | | | | |
| Academic Programming Paulien & Associates 899 Logan Street, Suite 508 Denver, CO 80203-3156 | Building: Student Learning Center Animal Science Arena AGTEC Facility (GRA) | C5A, C5B, C4, C6A | | | | |
| 303/832-3272 Fax 303/832-3380 | Parking Deck Veterinary Medicine Bio Resources Fac | NP1 | | | | |
| | J. W. Fanning Leadership Center Alumni Center Complex | W11C LH1 | | | | |

Unassigned Buildings

Open Space:

Herty Field

Phase B:

| i C | D. | |
|-----|---|------------------|
| | Building: | |
| | PVAC II – School of Art | LS10, LS11, LS12 |
| | PVAC II - Georgia Museum of Art Addition | LS14, LS15 |
| | RDC Conference Center Auditorium (Tifton) | |
| | Parking Deck | SP2 |
| | Pharmacy Addition | S10 |
| | College of Agriculture | |
| | Land Acquisition – Phase I &II | |
| | Student Housing | LS16, LS17, |
| | | LS18, LS19, LS20 |
| | Food Science Addition | S26 |
| | Unassigned Buildings | |
| | | |
| | Open Space: | |
| | Reed Alley | OS14, OS15 |
| | D.W. Brooks | OS23 |
| | East Campus Gateway | OS40 |
| | East Campus Residential Quad | OS37 |
| | | |

Phase C:

| Building: | |
|--|---------------------|
| PVAC III – Drama and Dance Departments | S19 |
| Parking Deck | LWP1 |
| PDRC Poultry Housing Facility | |
| Student Housing | W1, W2, W3, W4, W10 |
| Unassigned Buildings | |
| | |
| Open Space: | |

Central Campus / Tate Center AreaCPVAC / College Station RoadCEast Campus QuadC

OS9, OS14 OS32, OS33, OS34, OS41 OS36, OS38

Phase D:

Building: Library Building – Special Collections and Repository Marine Education and Research Center

| | (Sapelo Island) Renovate Memorial Hall Parking Deck Student Housing Unassigned Buildings | LSP1 C1, C2, C3 W5, W6, W7, W8, W9 |
|--------|--|--|
| | Open Space: Lumpkin Improvement Ag Drive Conner Hall | OS4, OS7 OS31 OS22 |
| Phase | E. | |
| 1 muse | Building: Chapelle Matthews Public Service Complex Environmental Health Science | W11A, W11B, W11C, W11D, W11E |
| | Moore College Candler Hall Music Library Parking Deck Student Housing | SP1 N6, N7, N8, N9, N10, C8 |
| | Unassigned Buildings | 110, 117, 110, 119, 1110, CO |
| | Open Space: West Parking Quad Hooper Street Area Green Street | OS19 OS12 OS28 |
| Phase | г. | |
| 1 nase | Building: Environmental Science Project – Phase I Animal Science Facility – Tifton Research and Teaching Greenhouses Horse Unit Establishment Parking Deck Student Housing Unassigned Buildings | CP2 C7, C9, C10 |
| | Open Space: Legion Field Open Space between Old Lumpkin and New Lumpkin OS16 | OS17 |

| Phase G: Building: Science Library – Add 3 Stories Beef Operations | |
|--|--------------------------|
| Fine Arts – Auditorium Only Parking Deck Student Housing Environmental Science Project – Phase II Unassigned Buildings | WDEXP, WP1 |
| Open Space: Residential Quads Chemistry Quad East Campus (Link to East Campus Road) | OS5, OS6 OS21 OS35 |

The University of Georgia Technical Memorandum

| Date | 10/20/98 |
|---------|---|
| Project | University of Georgia Physical Master Plan |
| Subject | Capital Improvement and Phasing Plan (Graphics) |
| From | Ayers / Saint / Gross |
| То | University of Georgia |

Architects and Campus Planners Ayers/Saint/Gross 222 Saint Paul Place

Baltimore, MD 21202 410/347-8500 Fax 410/347-8519

Architecture and Engineering Heery International

999 Peachtree Street, NE Atlanta, GA 30367 404/881-9880 Fax 404/875-1283

Landscape Architecture Hughes, Good, O'Leary & Ryan 1708 Peachtree Street, Suite 444 Atlanta, GA 30309 404/876-7726 Fax 404/876-6858

Traffic Engineering

LRE Engineering 1475 Peachtree Street, Suite 220 Atlanta, GA 30309 404/888-8800 Fax 404/876-7797

Academic Programming Paulien & Associates 899 Logan Street, Suite 508

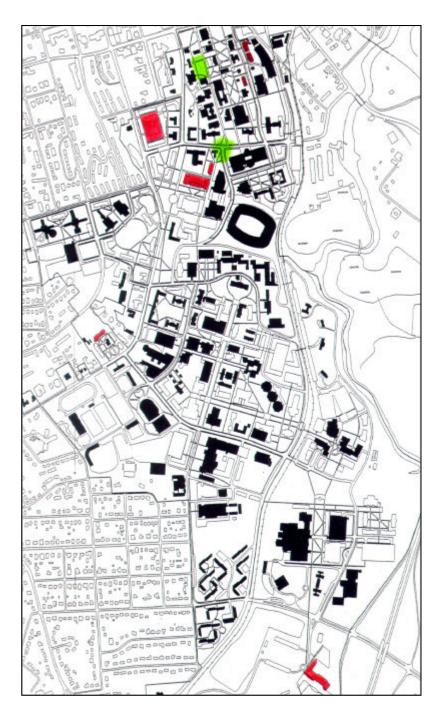
Denver, CO 80203-3156 303/832-3272 Fax 303/832-3380 The following graphics represent the build out for the five-year increment phasing plan. Major known capital projects that are to occur on Main Campus are listed and the approximate locations of those projects are colored in bright red. Major open space projects are represented in green. These graphics are strictly meant for diagrammatic purposes and are not to be considered as representations of exactly where and how future build out will occur. Dark red represents buildings that are not listed and are referred to in the preceding document as "Unassigned Buildings." It should be understood that the buildings listed would not be the only buildings or projects completed within each five year phasing period. The unassigned buildings will serve as place markers for this future development.

Project Title

Student Learning Center Parking Deck Vet Med Bio Resources Facility J. W. Fanning Leadership Center Alumni Center Complex Student Housing

Open Space

Herty Field Baldwin / Sanford Intersection



Not to ScaleFive Year ImplementationPhase A10/9/98

Capital Improvement Program and Phasing Plan (Main Campus)

The University of Georgia Physical Master Plan

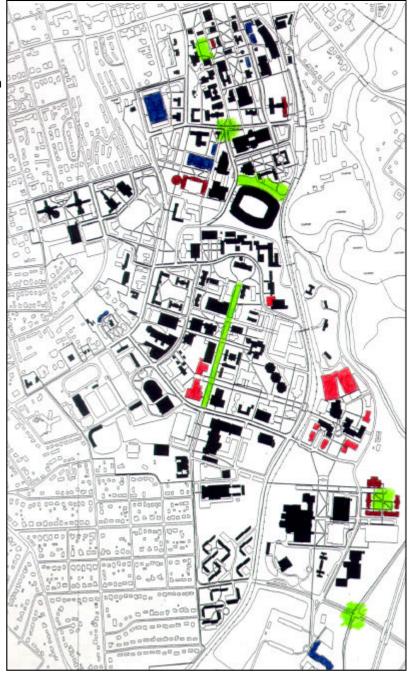
Figure VII B-A



PVAC II - School of Art PVAC II - GA Museum of Art Addition Parking Deck Pharmacy Addition Student Housing Food Science Addition

Open Space

Reed Alley D. W. Brooks East Campus Gateway East Campus Residential Quad



Five Year Implementation Phase B Not to Scale 10/9/98 and Phasing Plan

Capital Improvement Program (Main Campus)

The University of Georgia Physical Master Plan

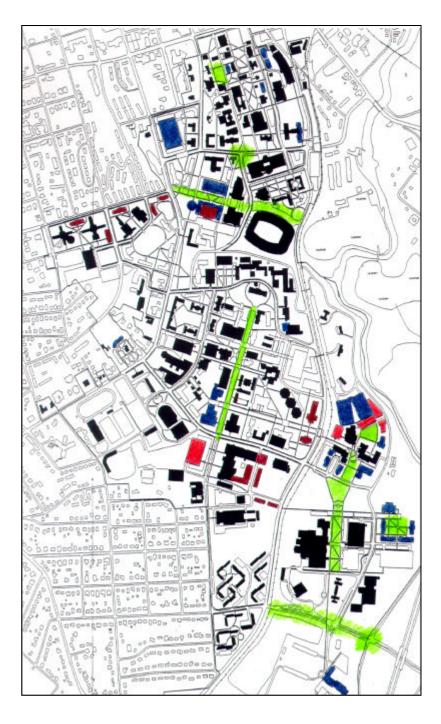
Figure VII B-B



PVAC III - Drama and Dance Departments Parking Deck Student Housing

Open Space

Central Campus / Tate Area PVAC College Station Rd East Campus Quad



Not to Scale
10/9/98Five Year ImplementationPhase C

Capital Improvement Program and Phasing Plan (Main Campus)

The University of Georgia Physical Master Plan

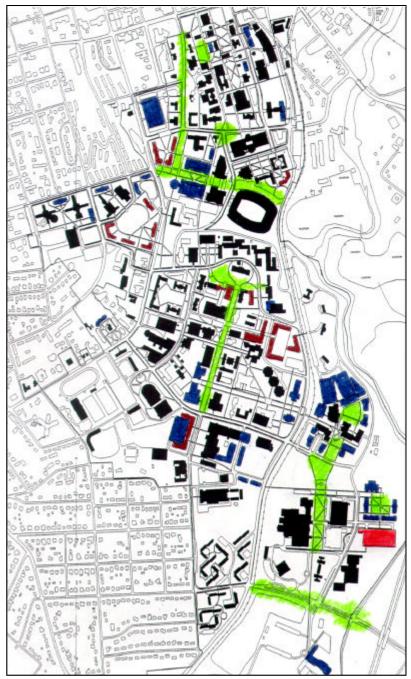
Figure VII B-C



Library Building - Special Collections Parking Deck Student Housing

Open Space

Lumpkin Improvement AG Drive **Conner Hall**



Five Year Implementation Phase D Not to Scale and Phasing Plan 10/9/98

Capital Improvement Program (Main Campus)

The University of Georgia Physical Master Plan

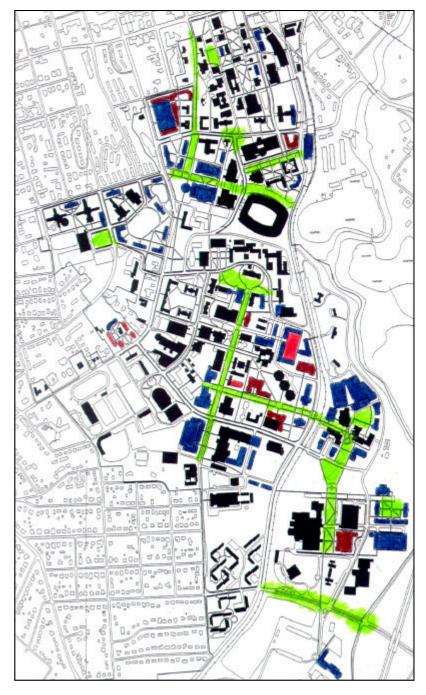
Figure VII B-D



Chappelle Matthews Public Service Complex Environmental Health Science Music Library Parking Deck Student Housing

Open Space

West Parking Quad Hooper Street Improvement Green Street Improvement



Capital Improvement Program Five Year Implementation Phase E Not to Scale 10/9/98 and Phasing Plan

(Main Campus)

The University of Georgia Physical Master Plan

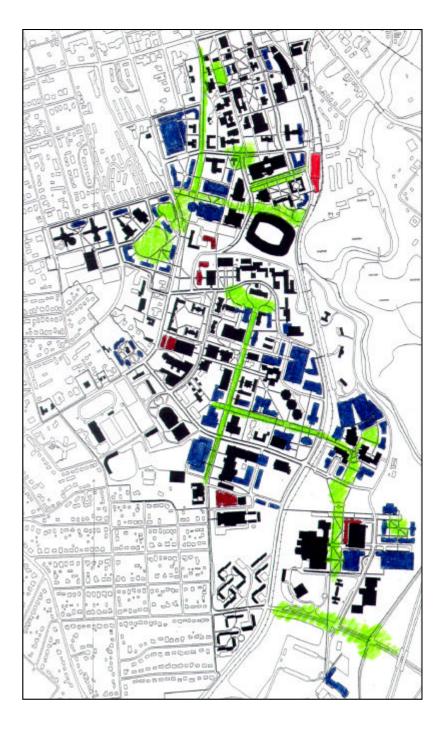
Figure VII B-E



Environmental Science Project -Phase I Parking Deck Student Housing

Open Space

Legion Field Intersection of Old Lumpkin and New Lumpkin



Five Year Implementation Phase F Not to Scale and Phasing Plan 10/9/98

Capital Improvement Program (Main Campus)

The University of Georgia Physical Master Plan

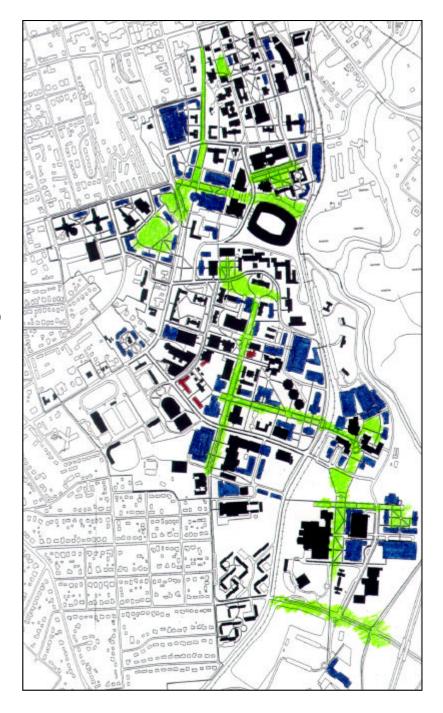
Figure VII B-F



Science Library - Addition Environmental Science Project-Phase II Parking Deck Student Housing

Open Space

NW Campus Residential Quads Chemistry Quad East Campus (link to East Campus Road)



Capital Improvement Program Five Year Implementation Phase G Not to Scale 10/9/98 and Phasing Plan

(Main Campus)

The University of Georgia Physical Master Plan

Figure VII B-G



The University of Georgia Technical Memorandum

| Date | 10/23/98 |
|---------|---|
| Project | University of Georgia Physical Master Plan |
| Subject | Physical Master Plan Design Standards (Section VII C) |
| From | Ayers / Saint / Gross |
| То | University of Georgia |
| | Section VII C 2b – Site Design Character |

Architects and Campus Planners Ayers/Saint/Gross 222 Saint Paul Place

Baltimore, MD 21202 410/347-8500 Fax 410/347-8519

Architecture and Engineering

Heery International 999 Peachtree Street, NE Atlanta, GA 30367 404/881-9880 Fax 404/875-1283

Landscape Architecture Hughes, Good, O'Leary & Ryan 1708 Peachtree Street, Suite 444 Atlanta, GA 30309 404/876-7726 Fax 404/876-6858

Traffic Engineering

LRE Engineering 1475 Peachtree Street, Suite 220 Atlanta, GA 30309 404/888-8800 Fax 404/876-7797

Academic Programming Paulien & Associates 899 Logan Street, Suite 508 Denver, CO 80203-3156 303/832-3272 Fax 303/832-3380 The objective of the Site Design Standards is to encourage a unified visual image throughout the campus. Stressing consistency of planning principles, site design details and landscape design across the entire campus will develop an identifiable sense of place. The site design character should reflect and support the architectural design standards as outlined in section VII C 2a.

The specific site design elements defined in this section are intended to guide designers in the selection and placement of materials in order to integrate and unify all regions of the Main Campus of the University of Georgia.

The two main components of site design are hardscape and landscape. As outlined in these guidelines, hardscape elements consist of site amenities, site furnishings, lighting, paving, safety and security devices and signage. The landscape component addresses streetscapes, quadrangles and naturalized landscapes.

The University of Georgia

Physical Master Plan Design Standards

Site Design Standards

Table of Contents

1. Site Amenities

- A. Bus Shelters
- B. Kiosks
- C. Gateways and Thresholds
- D. Site Walls and Seat Walls

2. Site Furnishings

- A. Benches
- B. Trash Cans
- C. Ash Urns
- D. Removable Bollards
- E. Post and Chain
- F. Bicycle Racks
- G. Drinking Fountain
- H. Group Newspaper Boxes
- I. Picnic Tables

3. Lighting

- A. Pedestrian Lighting
- B. Lighted Bollard

4. Paving

- A. Pedestrian Pathways
- B. Crosswalks and Curbcuts
- C. Stairs
- D. Bicycle Routes

5. Site Safety and Security

- A. Handrails and Guardrails
- B. Fencing
- C. Screen

6. Signage

7. Landscape

- A. Streetscapes
- B. Quadrangles
- C. Naturalized Landscapes

The University of Georgia

Physical Master Plan Design Standards

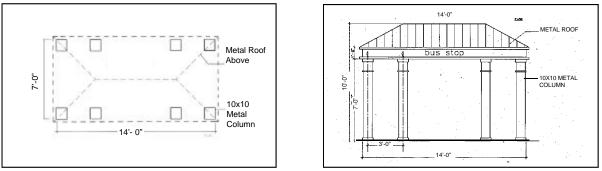
Site Design Standards

1. Site Amenities

Constructed objects with an architectural character are considered site amenities. The design of these objects should reflect the style and materials defined in the architectural design standards. The following design standards should be adhered to when constructing and placing site amenities on the University of Georgia campus.

A. Bus Shelters

Bus shelters should be located where space is available and the volume of riders and traffic patterns justify their use. The shelters should not be obtrusive to its setting and should be illuminated for safety and partially enclosed to offer protection from wind and rain. Seating should be provided within the shelter.

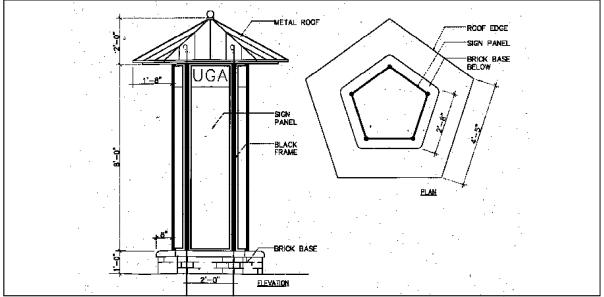


bus shelter (plan)

bus shelter (elevation)

B. Kiosks

In areas with high volumes of pedestrian traffic, an element is needed to organize and concentrate notices and flyers regarding campus activities. A kiosk that provides minimal protection from rain suits this purpose and can help to define the identity of outdoor spaces as part of the University of Georgia campus.



kiosks

The University of Georgia Physical Master Plan Design Standards

Site Design Standards

C. Gateways and Thresholds

Columns, walls and decorative fences should be used to define campus entrances and boundaries. The dimensions and materials demonstrated in the columns located at the intersection of Herty Drive and Broad Street serve as a good guide for construction of future columns. Decorative brick walls and black iron fencing should be used in conjunction with columns at major campus entrances.



gateways and thresholds

D. Site Walls and Seat Walls

Whether for seating, retaining soil, or as a design feature, any site wall should be constructed of natural stone. Grey granite is native to the Athens, Georgia area and should be utilized for wall construction. Low walls should be constructed entirely of granite and taller retaining walls should have a granite veneer over its structural components. Walls should have only vertical and horizontal mortar joints. A granite cap should be used on all seat walls; the width of the cap should be equal to the width of the top of the wall.



site walls and seat walls

The University of Georgia

Physical Master Plan Design Standards

Site Design Standards

2. Site Furnishings

The use of standardized furnishings throughout the campus will unify the outdoor spaces and establish an identity unique to the University of Georgia. The University currently has standards for some site furnishings such as benches and trash receptacles. In the future, efforts should be made to replace existing site furnishings that do not conform to the design standards and to ensure that all new construction utilizes the items described in the design standards. The following design standards should be adhered to when constructing and placing site furnishings on the University of Georgia campus.

A. Benches

| Manufacturer/Vendor | : |
|-----------------------|--------------------------------|
| TimberForm by Colum | mbia Cascade/ |
| Slagley Architectural | & Recreation Products |
| | P.O. Box 496 |
| | Greenville, AL 36037 |
| | Phone: (800) 753-8707 |
| | or (334) 382-7789 |
| | Fax: (334) 382-9847 |
| Model: | Renaissance Bench |
| | with Armrests, #2806-6 |
| Size: | 6 ft. length |
| Finish/Color: | Color-coated Steel/Black Suede |
| Special Features: | Permanent surface mount |



e bench

B. Trash Receptacles

| Manufacturer/Vendor | : | |
|---|--------------------------|--|
| TimberForm by Columbia Cascade/ | | |
| Slagley Architectural & Recreation Products | | |
| | P.O. Box 496 | |
| | Greenville, AL 36037 | |
| | Phone: (800) 753-8707 or | |
| | (334) 382-7789 | |
| | Fax: (334) 382-9847 | |
| Model: | Renaissance Litter | |
| | Container, #2811-OT | |
| Finish/Color: | Color-coated Steel/Black | |
| | Suede | |
| Special Features: | Open Top | |

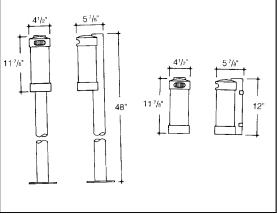


trash receptacle

The University of Georgia Physical Master Plan Design Standards

Site Design Standards

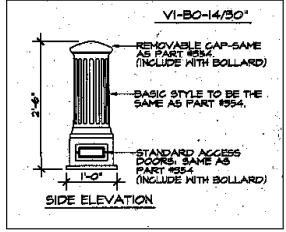
| C. Ash Urns | | | | |
|------------------|-------------------------------|---------|-------|----------------------------|
| | | | | |
| Manufacturer: | | 41/2" | 57/8" | |
| Forms & Surfaces | | | | |
| | 6395 Cindy Lane | | | |
| | Carpinteria, CA 93013 | 11 7/6" | | , <u>+⁴¹/2"</u> |
| | Phone: (800) 451-0410 | | | |
| | Fax: (805) 684-8620 | | 48" | 11 ⁷ /8" |
| Model: | Buttler Ash Receptacle with | | | |
| | medium canister, | | m | <u></u> ∔└┘ |
| | #AE5601 (single pole mounted) | | | |
| | and #AE5603 (wall mounted) | | | |
| Finish/Color: | Pole: Frost-Black Powdercoat | | + | |
| | Canister: Bronze Anodized | | | |
| | | | | |



standing ash urn and wallmount ash urn

D. Removable Bollards

| Manufacturer/Vendor | : | |
|--------------------------------|-----------------------|--|
| Valley Iron and Steel Company/ | | |
| | Lumen Source | |
| | 1005 Alderman Drive | |
| | Alpharetta, GA 30005 | |
| | Phone: (770) 521-9940 | |
| | Fax: (770) 521-9944 | |
| Model: | Cast Iron Bollard, | |
| | #VI-BO-14/30" | |
| Finish/Color: | Painted Black | |
| Special Features: | Removable Mounting | |



removable bollard

E. Post and Chain

For temporary barriers in pedestrian settings, an easy to install, simple post and chain device is required.



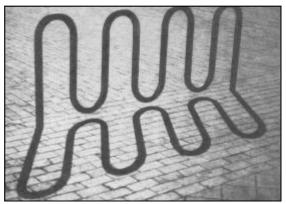
post and chain

The University of Georgia Physical Master Plan Design Standards

Site Design Standards

F. Bicycle Racks

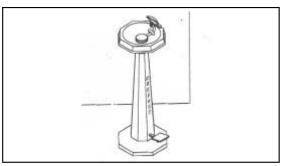
Manufacturer: Brandir International, Inc. 200 Park Avenue, Suite 303E New York, NY 10166 Phone: (212) 505-6500 Fax: (212) 505-6813 ribnrack@aol.com Ribbon Rack - 7 bicycle, Model: #RB-07IG Size: 62.375" length Hot-dipped galvanized Finish/Color: Special Features: Inground anchor mount



bicycle rack

G. Drinking Fountains

| Manufacturer: | |
|---------------|----------------------------|
| Murdoch | 2488 River Road |
| | Cincinnati, OH 45204 |
| | Phone: (513) 471-7700 |
| | Fax: (513) 471-3299 |
| Model: | Antifeeezing Drinking |
| | Fountain, #M-30 |
| Size: | 37" height |
| Finish/Color: | Bowl: Chrome-plated brass, |
| Pedestal: | Painted/dark green |
| | |



drinking fountain

H. Group Newspaper Boxes

Manufacturer: Go Plastics

| | 515 Brown Industrial Parkway Canton, GA 30114 Phone: (770) 345-0535 |
|--------|---|
| | Fax: (770) 345 0530 |
| Model: | #SS-9 |
| Size: | 3 door |
| Color: | Black |



newspaper boxes

The University of Georgia

Physical Master Plan Design Standards

Site Design Standards

I. Picnic Tables

Manufacturer/Recommended Vendor: Victor Stanley, Inc./Contract Connections P.O. Box 1134 Roswell, GA 30067 Phone: (800) 772-8369 or (770) 640-5599 Fax: (770) 446-5677 e-mail: nflcci@msn.com Model: Center Post table, #CP-4,3x4 Size: 3 ft. square top Finish/Color: Wood Components: Ipe, Steel Components: Painted/Black Inground mount **Special Features:**



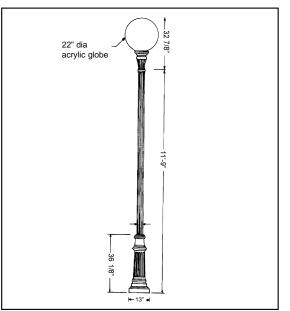
picnic table

3. Lighting

An essential aspect of any outdoor space, lighting plays a dual role in the visual character campus. During the day light fixtures are part of the site furnishings and help to define the campus' site character. At night lighting is critical for pedestrian and vehicular safety as well as building security. Currently, there is a wide range of fixture types throughout the campus. The lack of uniformity contributes to the disconnected look of the various campus regions. The fixtures described in this section are meant to be both decorative and functional and if placed in an orderly fashion throughout the campus will help to unify all segments of the campus.

A. Pedestrian Lighting

| 0 | 8 |
|---------------------------------|--------------------------|
| Manufacturer/Vendor: | |
| Dynamic Lighting/Addison-Parish | |
| | 3988 Flowers Road, |
| | Suite 690 |
| | Atlanta, GA 30360 |
| | Phone: (770) 458-9911 |
| | Fax: (770) 457-1665 |
| Pole Model: | Pittsburgh Series, #D93- |
| | 12-BLK |
| Size: | 11'-9" height |
| Finish/Color: | Powdercoated/Black |
| Luminaire and Lamp: | Fixture: Model# |
| | D137/G22ACKWH/BLK |
| | (150HPS-120v) |
| | |



pedestrian lighting

Physical Master Plan Design Standards

Site Design Standards

B. Path Light Manufacturer/Vendor: Kim Lighting/Newman Penter James Co., Inc. 3100 Medlock Bridge, Rd Suite 330 Phone: (770) 447-0661 Fax: (770) 449-0833 Model: #SL3/70hps120/BL-P Size: 42 ¾" overall height Finish/Color: Powder-Coat/Black



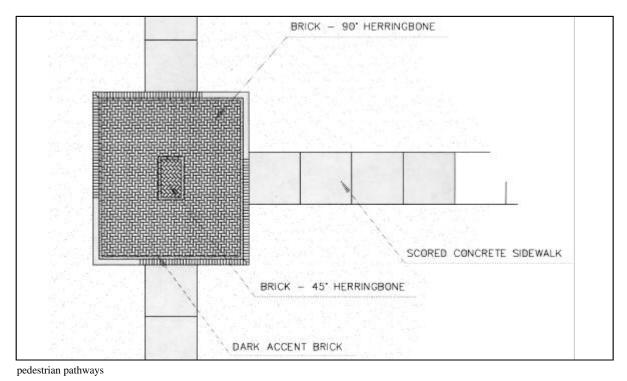
lighted bollard

4. Paving

The network of pathways that form the pedestrian and bicycle connections throughout the campus should consist of uniform materials that are both attractive and practical to install and maintain. Size requirements for paving vary with the volume of traffic and pavement widths should be determined on a case-by-case basis.

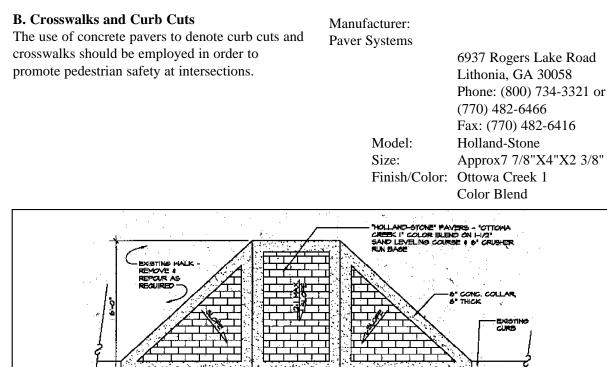
A. Pedestrian Pathways

Typical pedestrian pathways should be constructed of scored concrete. Brick accents should be used to denote significant locations, such as building entrances and major intersections.



Physical Master Plan Design Standards

Site Design Standards



accessible curb cut

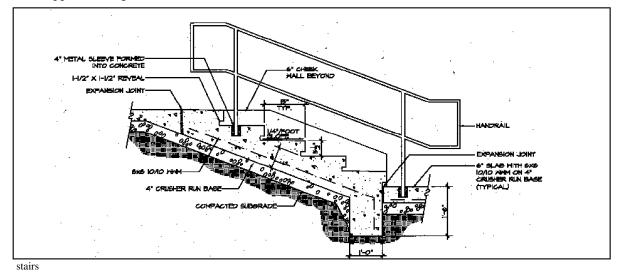
C. Stairs

Stairs should be constructed of concrete and should have concrete cheekwalls. Handrails should be mounted on stair treads inside the cheekwalls. All portions of stairs shall comply with A.D.A. and other applicable regulations.

edore flush with Asphalt----- TAPERED CURE

TAPERED CURE

6'-0'

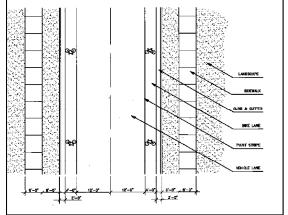


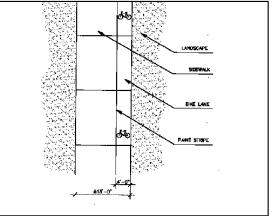
Physical Master Plan Design Standards

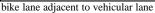
Site Design Standards

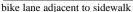
D. Bicycle Routes

Dedicated bicycle routes should be clearly delineated from vehicular and pedestrian traffic through the use of painted lanes and easily recognizable symbols. Along roads shared with motorized vehicles, a four foot wide lane should be marked on each side of the pavement where possible. Where the road is too narrow to accommodate two bike lanes, a single lane will be designated. If conditions allow, the single lane will be located on the side of the road that runs uphill with the flow of traffic.







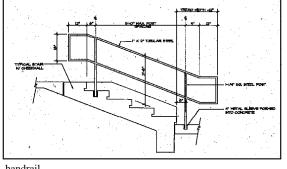


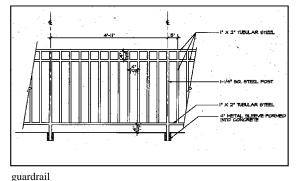
5. Site Safety and Security

The need to make outdoor spaces safe for pedestrians is inevitable. Stairs, ramps and severe grade changes must be made safe through the use of handrails and guardrails. Sensitive sites such as detention ponds and materials storage areas require the use of security fencing. Unsightly and/or dangerous areas such as HVAC units and dumpsters can be secured with screen fencing.

A. Handrails & Guardrails

The materials used by the UGA Physical Plant to construct the existing handrails on campus are simple and effective and should be used in future construction. All handrails and guardrails shall comply with A.D.A. and other applicable regulations. Handrails and guardrails should be constructed of steel and finished with black paint. See details below for typical dimensions.





handrail

Physical Master Plan Design Standards

Site Design Standards

B. Fencing

The need for security/safety fencing is unavoidable. Where fencing is required, either by code or for security purposes, black, vinyl-coated, chain link fence should be used. The height of the fence should be determined by the University according to the specific situation.





C. Screen fences

Screen fences should be constructed of brick of a type and pattern that match adjacent buildings.



screen fence

6. Signage

Campus signage should follow the guidelines set forth in "Sign System Guidelines", 1998, by Professor Ken Williams which is available at the University of Georgia Physical Plant. A copy of these guidelines can be found in the Appendix. Signage should be used for necessary identification purposes not for wayfinding or detailed location information. If the placement of signage is not discrete and limited, it creates an unattractive and distracting clutter. When used in a very prudent fashion it can contribute to the identity of the campus fabric.

7. Landscape

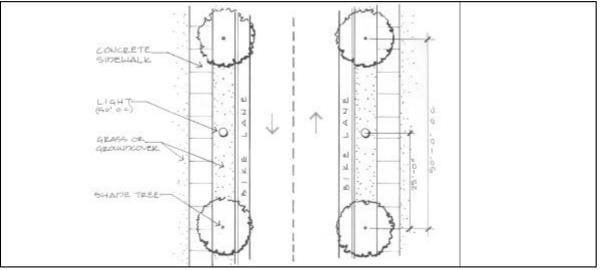
The campus landscape can be divided into three broad categories: streetscapes, quadrangles and naturalized landscapes.

A. Streetscapes

The University of Georgia campus has streets of many sizes and functions. In order to provide a safe and aesthetically desirable walking environment, each general type of street will have a character that suits its function. The street types are as follows: Publicly Accessible Streets at the Edge of Campus, Publicly Accessible Streets on the Interior of Campus, and Limited Access Streets. Wherever possible, the landscape component of a streetscape should utilize a planted strip separating the sidewalk from the edge of the road. In general, streetscapes should have a simple, orderly appearance. Trees should be arranged in a linear fashion with turf or a low groundcover below. Street trees should be "shade trees" such as Oaks that will grow over or can be pruned above the height of passing traffic.

Physical Master Plan Design Standards

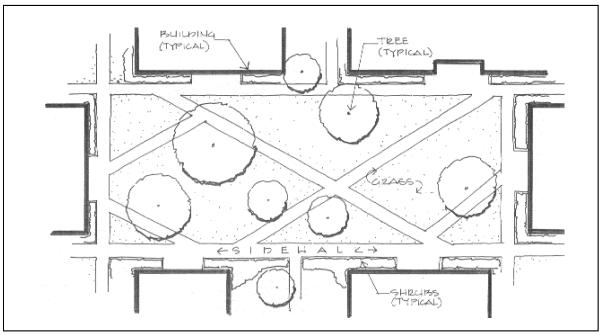
Site Design Standards



streetscapes

B. Quadrangles

Quadrangles are defined green spaces that act as landmarks along circulation corridors (streetscapes). The edges of these spaces are primarily defined by buildings. The character of these spaces should be park-like, similar to the quadrangles on North Campus. The planting should be grass and shade trees with multiple paved walkways. Building entrances and other focal points should be accented with shrubs, seasonal color and other ornamental plants.

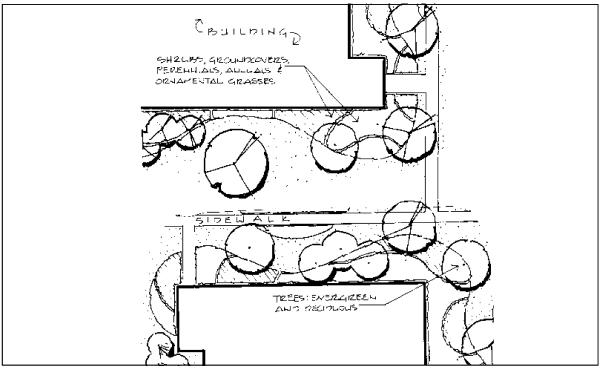


quadrangles

Site Design Standards

C. Naturalized Landscapes

Naturalized spaces on the University of Georgia Campus are defined as areas dominated by informally arranged vegetation that connect the campus with its natural site elements. Landscape design in naturalized areas should utilize a palette of native plants selected for their compatibility with the micro-climatic conditions on the individual site.



naturalized landscapes

The University of Georgia Technical Memorandum

| | Architectural Design Standards | | | | |
|---------|---|--|--|--|--|
| То | University of Georgia | | | | |
| From | Ayers / Saint / Gross | | | | |
| Subject | Physical Master Plan Design Standards (Section VII C) | | | | |
| Project | University of Georgia Physical Master Plan | | | | |
| Date | 10/23/98 | | | | |

Architects and Campus Planners
Ayers/Saint/Gross

222 Saint Paul Place Baltimore, MD 21202 410/347-8500 Fax 410/347-8519

Architecture and Engineering

Heery International 999 Peachtree Street, NE Atlanta, GA 30367 404/881-9880 Fax 404/875-1283

Landscape Architecture Hughes, Good, O'Leary & Ryan 1708 Peachtree Street, Suite 444 Atlanta, GA 30309 404/876-7726 Fax 404/876-6858

Traffic Engineering

LRE Engineering 1475 Peachtree Street, Suite 220 Atlanta, GA 30309 404/888-8800 Fax 404/876-7797

Academic Programming

Paulien & Associates 899 Logan Street, Suite 508 Denver, CO 80203-3156 303/832-3272 Fax 303/832-3380 The purpose of this section of the master plan document is to form a basis for the architectural character, composition, and typology of future buildings, groups of buildings and exterior spaces on the University of Georgia campus. This document can serve as a touchstone for architects, landscape architects, planners, and other design professionals working on future UGA projects.

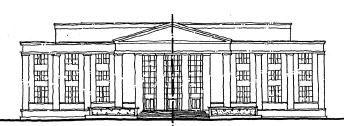
In order to ensure adherence to these architectural standards, it is imperative that the University designate an authoritative party to review and approve physical alterations to the University of Georgia campus. As a policy of the University of Georgia and The University System Board of Regents, the Office of the University Architect for Facilities Planning has been designated by the President to review and approve the aesthetic impact of all facility and grounds alterations to assure compliance with the Physical Master Plan. This review includes the construction of all new buildings and new structures, additions to existing buildings, general maintenance of the exterior of buildings and exterior paint colors, grounds and landscaping additions or changes, and any other general alterations to the physical appearance of the campus.

Design consultants will submit all plans, elevations, models, perspectives or any other renderings that appropriately represent the aesthetic nature of the proposed alterations to the Office of the University Architect for Facilities Planning for their approval. Design consultants will submit these renderings at the schematic design and design development stages. These plans must be approved by the University Architect before the consultant submits the documents to the Board of Regents for their approval and before the consultant may proceed on the subsequent design phase. It is the responsibility of the University unit (IE. Physical Plant Division, University Housing, Athletic Association, Georgia Center for Continuing Education, etc.) initiating the alteration to advise either the President or the University Architects of such planned alterations.

Within five working days following submission of the plans for approval, the Director of The Office of the University Architect for Facilities Planning will provide either written approval of the plans, or a detailed list of deficiencies and concerns that need further

development by the design consultants within five working days following submission by the consultants.

Architectural Design Standards



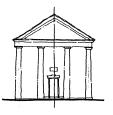
Main Library



| Ī | | | m | | | | | | | | Т Ш | | | |
|---|---|---|---|---|---|---|---|---|---|---|--------|---|---|---|
| Ī | H | 囲 | | 囲 | Ⅲ | Ⅲ | 團 | 囲 | 围 | 囲 | Ħ | 田 | 田 | Π |
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New College

Old College





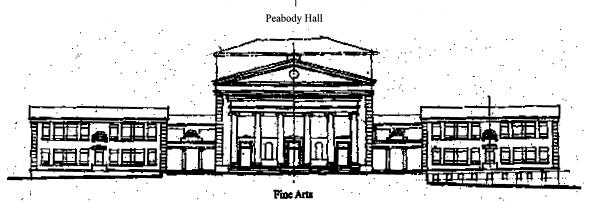


Phi Kappa

Chapel

Demosthenian





Physical Master Plan Design Standards

Architectural Design Standards

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- A. Vernacular / Georgian / Neo-Classical
- B. Beaux Arts
- C. Modern and Traditional
- D. Modern / Contemporary

3. The Application of American Campus Campus Planning Principles to the University of Georgia

4. Campus Building Typology

- A. The Edge-Defining Type
- B. The Centralized Type
- C. The Composite Type
- D. The Compound Type

5. Massing Diagrams

6. Campus Facade Typology

A. The Planar Facade with Simple OpeningsB. The Planar Facade in ReliefC. The Planar Facade with Clustered OpeningsD. The Frame Facade

7. Conclusion

8. Acknowledgements

Architectural Design Standards

1. Introduction

The purpose of this section of the master plan document is to form a basis for the architectural character, composition, and typology of future buildings, groups of buildings and exterior spaces on the University of Georgia campus. This portion of the document aspires to be both a "mirror" and a "lamp." The buildings already existent on the Athens campus were observed, documented, and analyzed in the course of preparation of this study. Thus the suggestions for future architectural interventions made herein attempt to reflect the best architectural traditions evident on campus.

While many aspects of the University of Georgia's campus make it one of the most memorable compositions of buildings and open-spaces to be found in the nation, it is not the purpose of this document to replicate the historic core in order to create a new architecture of empty nostalgia. The University of Georgia campus forms a collection of buildings from many different time-periods and of various styles. There is not a unique "University of Georgia style" per se, rather the notable buildings built over the course of time, reflect both the needs of the moment and the traditions of architecture compatible with the context of the Athens campus.

It is hoped that the insights gleaned from a reading of this section will enable the campus community to better recognize and understand the architectural traditions of the campus, while simultaneously forming a touchstone for architects, landscape architects, planners, and other design professionals working on future projects. Since innovation is always understood relative to some context, the traditions suggested by this portion of the document are intended to "light-the-way" for future projects.

Physical Master Plan Design Standards

Architectural Design Standards

2. Existing UGA Building Styles

Below is an outline of the various "styles" of buildings that can be found on the UGA campus and a brief indication of their characteristics:

A. Vernacular / Georgian / Neo-Classical

| <u>Examples:</u> | |
|------------------|----------------------|
| Old College | Phi Kappa Society |
| New College | Demosthenean Society |
| Chapel | |

Observations:

- Domestic scale unassuming character with exception of the Chapel
- Generally more wall than window
- Visual tension between proportions of opening and wall (i.e., the proportions of the wall are often more dominant than the proportions of window)
- Architectural elements are often integral to the building's construction.
- Vertical bay structure and vertically oriented openings.
- Spartan vocabulary, restrained use of ornament.
- Pragmatic elements modulate facade (e.g., downspout, chimneys, entrances)
- Facade is not overly "deep" except when a portico element is added to recognize entry.

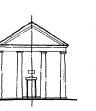






New College

Old College





Phi Kappa

Chapel

Demosthenian

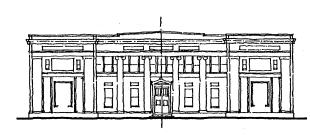
riysical Master Flan Design Standards

Architectural Design Standards

B. Beaux-arts:

Examples:

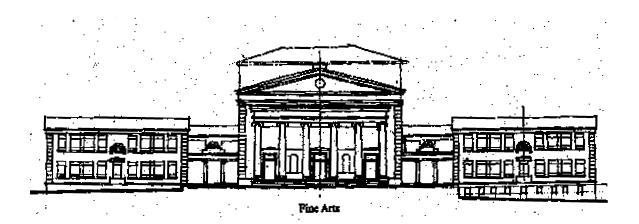
Peabody Hall Memorial Hall Business School





Observations:

- Monumental scale compatible with domestic core of campus
- Range of proportion of window to wall
- System of ornamentation may not be directly tied to constructional technique, rather it is tied to broader cultural ideals related to building type (i.e., you know it is a "library" by its appearance, but what you see may or may not directly be related to how it was built.)
- Use of sophisticated proportioning systems
- Division into 3-parts vertically and horizontally clear hierarchy of parts
- Facade is "sculpted" in 3-dimensions as if carved from a block of clay.
- Preference for symmetry, however complex over-lapping local symmetries are sometimes used to produce localized picturesque effects.
- · Generally incorporates historical references



Physical Master Plan Design Standards

Architectural Design Standards

C. Modern and Traditional

Examples:

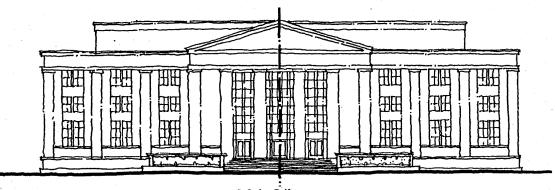
Library Fine Arts Building Additions Sanford Hall



Sanford Hall

Observations:

- A more monumental scale
- Recognition of frame construction techniques in aesthetic of vertical surface
- Often more window than wall or an equivalent proportion of window and wall
- Facade is "layered" as a series of flat, planar surfaces composed within the constraints of a modest dimension.
- System of ornamentation is restrained, however attempts to relate constructional techniques to cultural ideals related to building type (i.e., you know it is a "library" by its appearance, and you have an idea of how it was built.)
- Draws inspiration from history and ideas of contemporary life



Main Library

Physical Master Plan Design Standards

Architectural Design Standards

D. Modern/Contemporary

Examples:

Chemistry Annex

Observations:

- Vertical surfaces are less likely to be designed as "facades"
- Overall massing dictates form buildings less likely to participate in campus space-making
- Openings are "slots" or "zones" where wall surface is omitted rather than an incised opening
- Character of building is particular to the whim of the architect, client, donor..
- Building does not necessarily communicate an idea of what it is or how it was built.
- Un-clear hierarchy of parts
- Scale is indeterminate
- Abstract form preferred over forms of "traditional building" i.e., roofs, walls, doors, windows, are replaced with horizontal planes, vertical planes, and various kinds of apertures.
- Preference for asymmetrical massing and the picturesque over symmetry
- Notion of the Zeitgeist prevails, history and tradition are devalued draws little upon immediate physical context.



Chemistry Annex

Architectural Design Standards

3. The Application of American Campus Planning Principles to The University of Georgia

The planning principles exhibited on American campuses are truly a unique art form. While the traditions of campus planning in the United States are closely related to attitudes concerning building and the landscape developed between the 16th and 19th centuries in England, France, and Italy, the application of these principles to the built form of the university is an artform which evolved principally in this country. The close relationship between built form and the landscape is a characteristic of campus planning that is the taproot of this artform. From Thomas Jefferson's University of Virginia, to Saarenin's Cranbrook Academy, this tradition remained unbroken until the Second World War.

One of the most readily identifiable characteristics of this tradition was the creation of exterior spaces which could be likened to interior rooms. In the diagram illustrated in Figure 1, a prototypical room is drawn alongside a university quadrangle of similar proportions. Nearly everyone is familiar with the sense of enclosure and protection afforded by a room's bound-

ing surfaces — walls enclose space; windows admit light and air while permitting views to the exterior world; doors permit access; and typically there is some element of focus within the room, perhaps a hearth. It is readily evident that every element performs a role supporting the larger notion of "room." That is, walls alone do not the room make. The interdependency of elements and the specialized tasks they play relegate elements of the room to hierarchical roles in the overall composition. That is a door to the room will serve to frame a view of the room's principal feature — the hearth, and all along the corners of the room will be subservient to both the former and later elements.

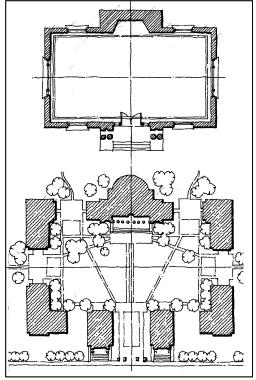


Figure 1

Physical Master Plan Design Standards

Architectural Design Standards

Likewise, the exterior room of a campus quadrangle has features which might be seen as analogous to that of a traditional interior room. The library may dominate the composition in much the same manner as the hearth, while a pair of buildings axially disposed across the quadrangle from this principal feature might serve the same threshold purposes as that of a door. One might readily see that a successful composition of a college quadrangle requires that the buildings operate in concert with one another. Sometimes buildings are called upon to play more assertive roles, that of a "hero," like the library, or the matching buildings forming the campus threshold. The heroic buildings, however, require substantial amounts of good "soldier" buildings to form the backdrop against which these more assertive buildings might be seen.

In planning and building a new campus or on a portion of an existing campus it is very important to understand the role that individual buildings are required to play. Too many heroic structures would be like a room full of guests all talking at the same time. Too few heroic buildings would be like a party where none of the guests ever arrived — a bit of a bore. In planning a successful campus composition, one seeks to strike a balance between the "heroes" and the "soldiers." Experience has shown that every trustee, donor, president, dean, every department chair, or faculty member, usually like to view their "new building" as aspiring to be a "hero." And, while much might be said of the heroic nature of the common foot-soldier, it is recommended that the creation of heroic buildings on college campuses be limited to those building types which embody and relate the most universal and lofty aspirations of the entire institution — churches, libraries, places of assembly, etc.



Physical Master Plan Design Standards

Architectural Design Standards

4. Campus Building Typology

A. The Edge-Defining Type

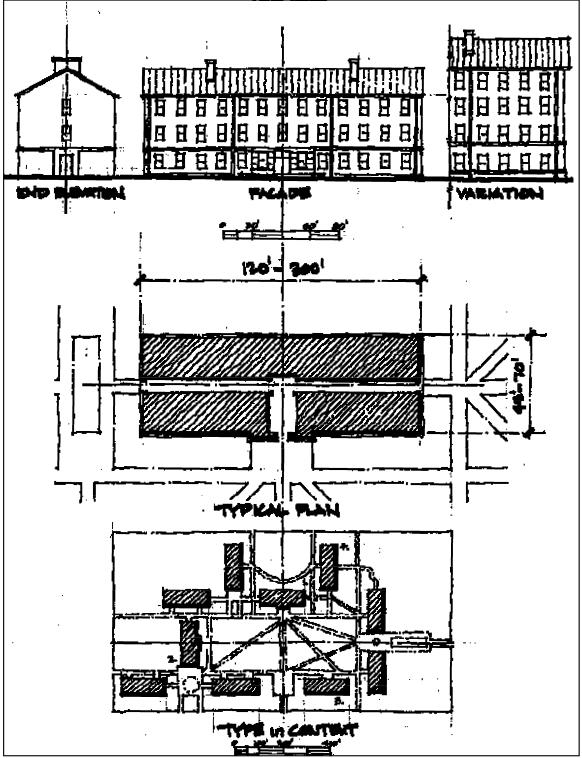
This building type often performs the role of the common foot-soldier, but it may also take on heroic assignments. The generic configuration of the type is that of an elongated rectilinear volume. Most often entry is achieved on the center of one of the long faces, however edge entries, or entry from one of the narrow elevations is also possible (see facade guidelines). This building type commonly aligns its eaves and ridge lines, not the gable end, to the quadrangle thus reinforcing the geometry of this exterior room. A central corridor gives access to the rooms. Typically the corridor is double loaded, however in some instances a single loaded corridor may serve the needs of the program. The length of this building type may vary from 120 feet to 300 feet, while the width of the type is generally in the neighborhood of 45-90 feet. When this type exceeds the 90 foot width dimension natural lighting and ventilation of the interior spaces becomes impossible. Thus, depending upon the actual intended use of buildings of this type, care should be given to the width of the block.

There are a variety of methods for distributing this type in a campus plan (Figure 2).

- Illustrates this building type located as a central element on the long side of a campus quadrangle — the building performs both the role of edge definer and central focus.
- 2) Much the same might be said about the positioning of the type in this configuration, however because the building alone forms the edge of the narrow side of a long quadrangle, it tends to take on a more heroic dimension.
- 3) In this instance the type is paired to form both the wall to the quadrangle as well as a threshold to the campus.
- 4) The final illustration of this type in context is interesting because it presents its end elevation to the major quadrangle of the campus while forming the edge of a new quadrangle behind the first building discussed in this drawing.

Examples of this building type on the UGA campus are Old College and New College, at other institutions, Nassau Hall, Princeton and Old East and Old West at UNC Chapel Hill. The type might accommodate housing, classrooms, laboratories, administrative activities, and a wide variety of other functions. It is typically the most prevalent variety of building to be found on college campuses. This type along with the Centralized Type form the two essential building blocks of campus architecture from which all other types might be derived.

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B. The Centralized Type

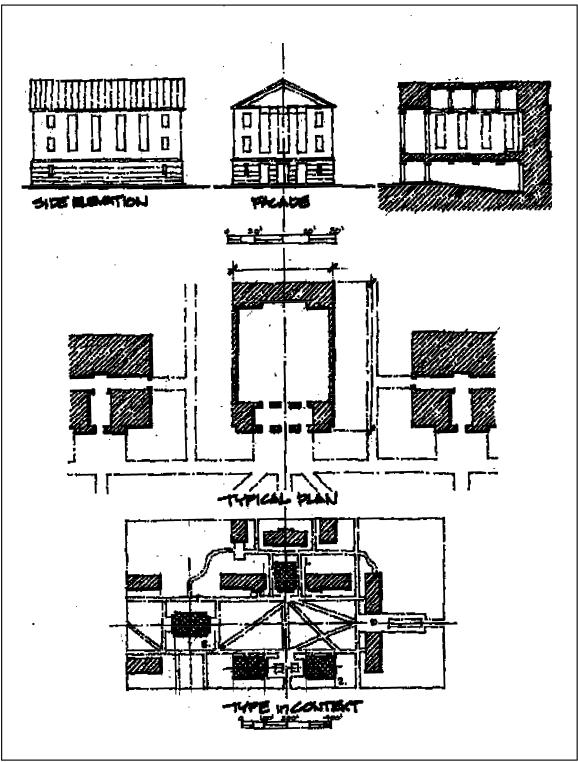
This building type is often associated with an heroic posture within a campus plan, however, the type might defer to other buildings depending upon its specific context. The general configuration of the type is that of a compact rectilinear volume, however other platonic forms are also associated with this type — circular, octagonal, or other centralized forms. Entry is most often achieved on the center of one of the narrow facades and the type most often presents its gabled end to the quadrangle thereby gaining a certain amount of visual attention. Generally the type houses one large open space internally — often conceived of as a space of assembly. The dimensions of the type vary dramatically and should be determined based upon a mitigation of the concerns of the context against those of the building's function.

There are a variety of methods for distributing this type in a campus plan, refer to Figure 3.

- Illustrates this building in a central position on the long edge of a campus quadrangle (a position analogous to that of a hearth in a room).
- 2) The positioning of a pair of buildings around a principal campus axis forms both edge and threshold to the quadrangle.
- 3) The placement of the type in this position affords four separate exposures the building is seen in the round (from all sides). This later placement can present problems in servicing the building if the concerns of use are not properly mitigated against those of the campus context. A chapel or assembly hall might be well served by this location, while a dining hall might not work well with the context given an intensive service component of the program.

Examples of this building type on the UGA campus are the Chapel and the Phi Kappa building, at other institutions, the Rotunda at the University of Virginia and Whig and Clio Halls at Princeton. The type might accommodate various assembly activities: chapel, lecture hall, gymnasium, dinning hall, etc. When used in conjunction with the Edge Defining Type in a single unified composition an unlimited variety of building forms might be created.

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C. The Composite Type

While many contemporary building programs might not be readily addressed by either the Edge-Defining or the Centralized Types alone, in combination the two building types form the essential characteristics of the Composite Type. It is more difficult to talk about general configurations of this type because the possible combinations and recombinations of the basic "building blocks" of typology are limitless. For an insight into the variety of possibilities see, N.C. Curtis, *Architectural Composition*, Cleveland: Jansen, 1927.

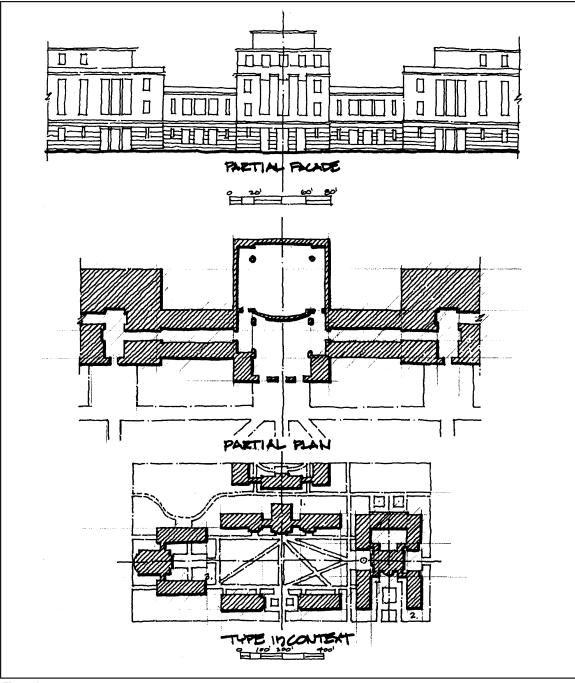
The characteristics of how this building type might address a quadrangle are similar to those outlined in both of the previous two types. Again the actual dimension of the type may vary dramatically, so once again a mitigation of the contingencies of the site against those of building use are highly recommended.

Once again there are a variety of methods for distributing this type in a campus plan, Figure 4.

- Illustrates the simplest form of the type a Centralized Type has been joined with two flanking Edge-Defining Types to form an articulated wall to the quadrangle. The central element provides accent to the quadrangle while the flanking volumes carry the "wall" of the space along the edge of the quad.
- 2) This illustration of the type is a much more complex combination of the campus buildingblocks. A central space of assembly is aligned with the axis of the quadrangle and is used in combination with a series of edge-defining volumes. A forecourt is formed between the campus quadrangle and the central volume, while a automobile forecourt is formed by the wings which extend downward at ninety degree angles to the long axis of the quadrangle. To the far right, a service court is formed, and to the top, edgedefining types wrap the centralized volume to form an internal courtyard.
- 3) In comparison to the previous example, this configuration of the type is very tame. In fact, the type is created by relocating the edge-defining elements at 90 degree angles to the position occupied in example one thus, forming a forecourt. The advantage of this type is that large building programs can be accommodated in this configuration with out dimensionally abandoning a 70 foot maximum building-wing width.

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Examples of this building type on the UGA campus are the Fine Arts Building and the Business School, at other institutions - Bancroft and Mahan Halls at the United States Naval Academy, Annapolis. Most complex programs can be accommodated by this typology.





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D. The Compound Type

In many cases contemporary programs call for very large footprints to accommodate specialized activities. While the advantage of these large footprints is that many activities can be located in an efficient proximity to one another, the liability is that these types of buildings often become hermetically sealed and connections between interior spaces and the exterior world become severed. Faculty, staff, and students can find themselves living out their entire academic life in these "megastructures" without ever stepping foot outside of their own domain. In short the danger of these "academic malls" are that they often do not contribute in an effective manner to the over-all well being of the university. However, when properly designed these big buildings can indeed contribute well to the life of a campus.

Of primary interest is care given to issues of scale and proportion. Where ever possible, the massiveness of the building should be mitigated by elements in concert with the human scale of the campus environment. The Typical Plan in Figure 5 illustrates a Edge-Defining Type used as a frontispiece, or head house, for a much larger building mass. The site-section diagrams located above the typical plan drawing also illustrate two techniques for masking the massiveness of the "large footprint" building. The up-hill site illustrates a laboratory building nestled into the grade to minimize the impact of its height and girth, while the down-hill site illustrates a parking structure carved into the hillside behind an academic building. The upper deck of this later building is then landscaped and treated as a garden terrace.

Again, there are a variety of methods for distributing this type in a campus plan, Figure 5.

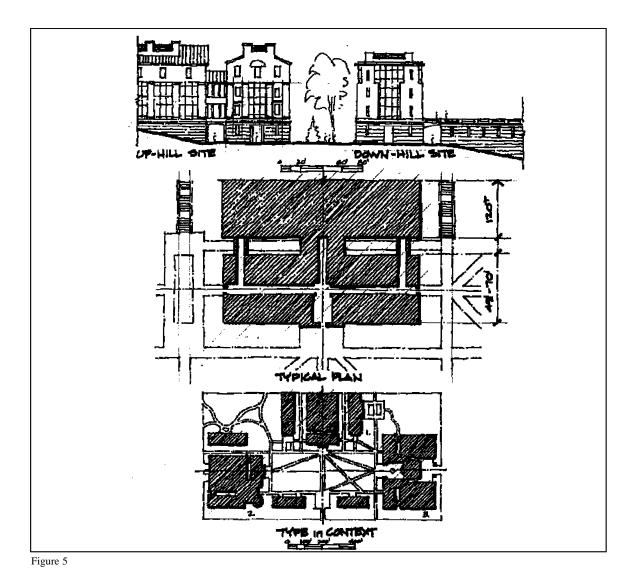
- Illustrates a very large laboratory building which is flanked by two classroom buildings and headed up by an administrative/office wing which mediates a connection to the quadrangle.
- 2) Is a center for continuing education which presents a face both to the outside world (bottom edge) and to the campus quadrangle (right edge). These wings, joined by a rotund element mask the large parking structure located behind. Access to the parking structure is from the extreme right edge of the footprint. It should be noted that care would be given to the surface of the parking structure to create a "handsome" facade in concert with the vocabulary of the campus.

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3) Illustrates a large student center with large dining halls, meeting rooms, ball-rooms, and recreational spaces. The configuration presents a forecourt to the campus quadrangle using two Edge-Defining and one Centralized Type in order to mask the large footprints of the big assembly halls. To the far right a service court provides access for deliveries and waste removal.

Successful examples of this building type are Cabel Hall at the University of Virginia, the Physics and Astronomy Building at Johns Hopkins University, the Student Center at Carnegie Mellon, Barton Hall at Cornell University, and the original buildings on the campus of Duke University.

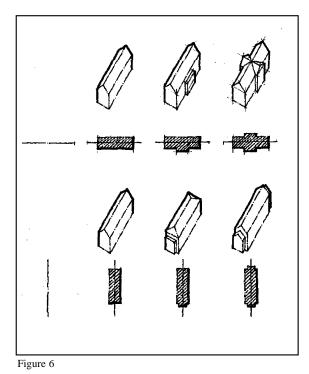


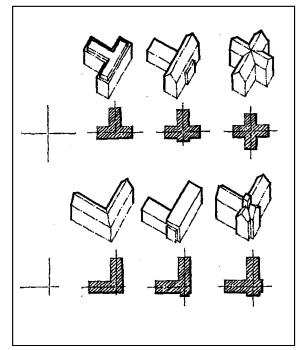
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5. Massing Diagrams

These series of diagrams are intended to suggest the limitless rational combinations and recombinations of the "building blocks" to form more complex compositions appropriate to elaborate programs. Each diagram builds upon the previous drawing suggesting a process of elaboration and combination. Note that the massing is not dependent upon a singular response to issues of symmetry/asymmetry, center/edge, base condition, or roof. Both designers and members of the campus community are encouraged to imagine their own formal inventions as an extension of this exercise.





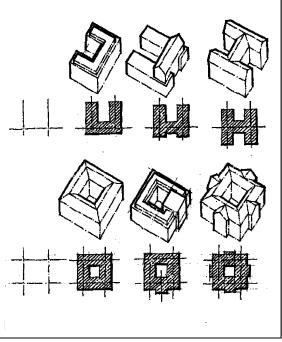


Figure 7

Figure 8

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6. Campus Facade Typology

Each of the facade variations illustrated herein derives from the previously mentioned observation, documentation, and analysis of the UGA campus. The proportions of openings and wall-surfaces are derived from UGA traditions and may not be directly applicable to other campuses, however, many of the techniques for creating hierarchical "readings" of the facades are generic in nature.

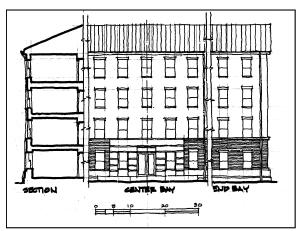
Typically this study recognizes two generic architectural conditions — that of the wall and that of the frame. Both types are to be found alone and in combination on the UGA campus. Once again, the observations made herein are not an attempt to advocate specific styles, however, it is explicitly the intention of this portion of the document to encourage the development of rationale for the vertical surfaces. Thomas L. Schumacher's, "Scull and the Mask," as well as, "The Palladio Variations," (*Cornell Journal of Architecture*, New York: Rizolli) are excellent starting points for discussion of facade making themes. Since a building on a college campus is likely to be kept in service for in excess of 100 years, it is important to give the design of facades considerable attention.

A. The Planar Façade with Simple Openings

This type is derived in part from New College. The aesthetic derives from bearing wall construction techniques. The façade type is characterized by a series of regularly spaced windows of equal dimension. Not only do the windows act as "figure" in the composition of the façade, but the spaces between are also imbued with figural properties. That is, the windows are as interesting to the eye as the wall.

Windows read as discrete architectural elements positioned within the fabric of the wall. The head of the window is characterized by a lintel or flat arch, which occasionally serves as a location for ornamentation. The sills of the window are often stone and project from the surface of the wall. Following the logic of bearing wall construction, the general proportion of each window is that of a vertical rectangle, in this case a square root of two or golden section rectangle. The windows are typically double hung and sub-divided into smaller panes.

In this façade type, the ground floor of the building is given special prominence by rustication or by belt coursing. This treatment permits the composition of the wall to relate well to the ground plane. Typical of many buildings on UGA's campus, the building is capped by a gabled metal roof that is selectively articulated with masonry elements (chimneys, cupolas, etc.). There are examples of very successful buildings on the UGA campus in which the roof is not expressed. Typically, however, these buildings (such as Peabody Hall) terminate the wall with a cornice, or other element which forms a distinct profile against the sky.





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Planar Façade Variations

In this series all of the openings in the façade are created through the use of equally spaced windows of identical dimension. Hierarchy is achieved by manipulating the reading of the wall surface and by adjusting the relationship between the opening and the wall.

Variation A This façade uses a "surround" treatment to distinguish the windows on the first floor from those on the ground and upper floor levels. This treatment may be useful in breaking up the monotony of a façade composed of regularly spaced windows. Additionally, the treatment gives distinction to the first story above the ground level as a place of prominence within the building.

Variation B This façade uses beltcourses and rustication to produce a horizontal effect. This treatment may be an appropriate strategy for making tall facades to appear more in scale with a lower context. Additionally, the treatment may be appropriate when the building is intended at a "background" element in a composition wherein the intention is not to have the eye come to rest on this particular building.

Variation C This façade develops a strong reading of "center" by creating an intersecting gable at the mid-point of the composition. Addition of an attic element and the positioning of chimneys create a strong sense of center. This may be an appropriate treatment when the building is an important element of a group plan, such as the main building of a college, or a prominent building on an open space or quadrangle.

Variation D This façade is characterized by a development of localized centers at the extremities of the façade. The result is a dual centered façade. The use of a segmental gable that penetrates the eaves-line of the roof, strategically positioned chimneys, and downspout, create an emphasis upon the edges of the over-all composition. This treatment may be used in conjunction with elements of Variation C to create a hybrid that emphasizes both center and edge simultaneously. The type may be most appropriate for buildings with multiple entries, for buildings that attempt to down-play their hierarchical importance on a quadrangle or open space, or for buildings which contain more than one academic department.

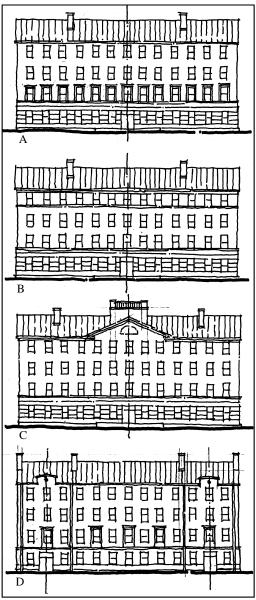


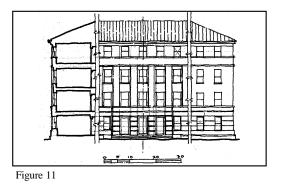
Figure 10

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B. The Planar Facade in Relief

This type is very similar to the previous example, however it differs in that the surface is developed in terms of relief or depth of the wall surface. The amount of relief may vary from only a few inches to that of many feet (in the case of a free-standing portico). Through the introduction of relief, a hierarchical reading of the openings (windows and doors) can be developed.



Planar Facade in Relief Variations

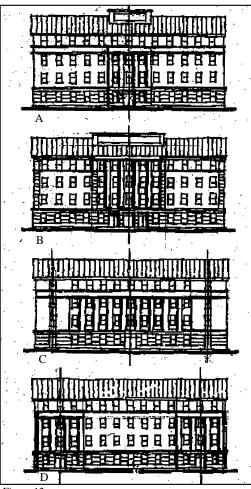
In this series all of the openings in the facade are created through a use of equally spaced windows of identical dimension. Hierarchy is achieved by manipulating the degree of surface relief either in front of or behind the dominant wall plane.

Variation A This facade uses a modestly scaled series of pilasters in front of the dominant wall surface to create a centralized reading and emphasis upon the entry. An element breaking the roof-line (perhaps an elevator core) further emphasizes the centrality of the composition.

Variation B This facade creates a large centralized element by "excavating" or carving into the dominant wall plane in order to create a series of vertical openings articulated as pilasters. The vertical scale of this gesture suggests a more monumental and perhaps heroic character than Variation A.

Variation C This facade balances emphasis to both center and edge by once again "excavating" the dominant wall plane in order to create a rhythm of pilasters. The cadence of vertical openings is terminated at the left and right of the facade by a reassertion of the dominant plane and the creation of secondary entrances on the ground-floor within these zones.

Variation D This facade uses modestly scaled elements applied to the dominant plane of the facade in order to create emphasis at the edges of the composition (in this case the center is down-played). By covering half of this diagram, one can imagine an asymmetrical application of this technique.





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C. The Planar Facade with Clustered Openings

This type is likened to the first example in that there is little relief in the surface of the facade. It achieves its goals in establishing hierarchy by clustering openings of identical proportion and dimension. The type suggests a hybrid of frame and wall characteristics.

Planar Facade with Clustered Openings Variations

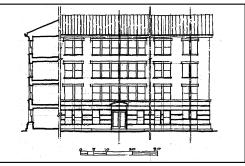
In this series all of the openings in the facade are created through a use of windows of identical dimension. Hierarchy is achieved by manipulating the spacing of windows and other openings.

Variation A This facade develops a hierarchical reading by means of creating a cluster of windows at the center of the composition. The end bays of the composition terminate the composition by paring windows in order to create figural emphasis.

Variation B This facade develops a duality of reading — it emphasizes center through placement of the door and the symmetry around the center, but it creates a tension between center and edge because the large groupings of windows left and right compete for the eye's attention.

Variation C This facade utilizes a more articulated symmetry to create a bi-partite composition. The actual center of the facade is distinctly down-played in favor of development of the dual figure groupings around a vertical axis. Dual doors on the ground level reinforce the notion of a two-part composition.

Variation D This facade emphasizes the edge elements through tiers of paired windows located in the end bays. The emphasis upon edge is further advanced by the position of the doors on the ground floor.





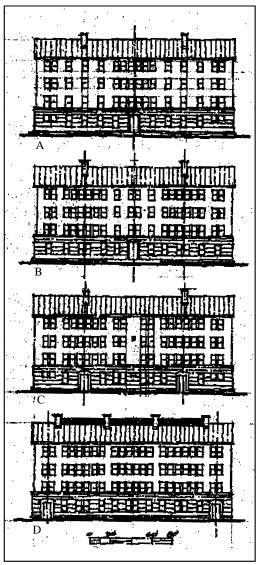


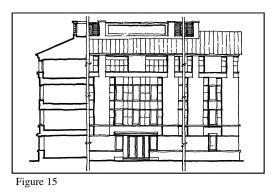
Figure 14

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D. The Frame Facade in Relief

This final example is similar to the previous example in that it employs clustering of openings, however it also utilizes modest relief in order to establish hierarchical readings.



Frame Facade in Relief Variations

Hierarchy is developed by the manner in which the window or opening is surrounded and the degree to which elements such as spandrels are expressed as materially separate from the actual window openings.

Variation A This facade develops a distinct reading of centrality by contrasting the scale of the figure grouping on center with those repetitive bays located to the left and the right of center. The door element is placed on center to further emphasize this portion of the composition.

Variation B This facade emphasizes the edge by employing large-scale figure groupings to the extreme right and left of the composition. As in the previous example, doors are associated with the large-scale figures in order to underscore the compositional strategy.

Variation C This facade is almost the same as Variation B, however the emphasis upon edge has been played down by utilizing large-scale figure groupings in the central range of the facade. The emphatic statement of edge seen in Variation B gives way to a more subtle suggestion of edge in Variation C.

Variation D This facade uses the smaller bays which were prevalent in Variation A in order to create edge emphasis. The end bays containing the doors feature spandrels which are distinguished from the material of the windows, thus presenting a greater degree of solidity and emphasis upon termination of the facade rhythm.

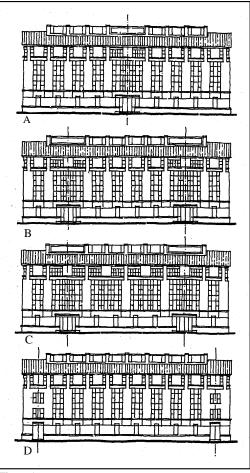


Figure 16

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7. Conclusion

Architects commissioned for UGA buildings should not underestimate the challenge of designing within the shadow of the architects of UGA's early campus buildings. To understand how to integrate a new project into the fabric of UGA's campus, one needs to read thoroughly the overview of UGA's history, that summarizes the founding fathers' intentions for the University.

- Stewardship of the land
- Balance of buildings and open space
- Consistent architectural language

The buildings of North Campus relate to one another along connecting axes. Buildings were aligned along open spaces forming an architectural edge enclosing exterior space and creating outdoor rooms. Walks and roads were generally laid out on axes, tying the campus together.

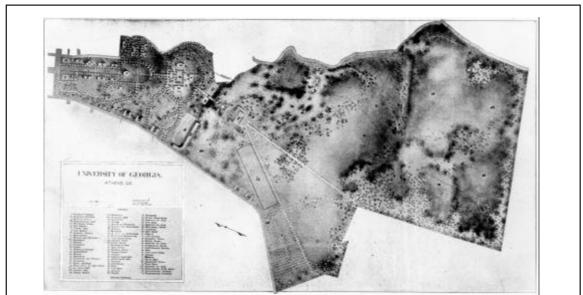
Essential to UGA's growth is the infilling of future buildings within the existing campus such that clear, memorable open spaces are formed. In this regard, site selection is vital to the success of each new building, and the success to the campus as a whole.



UGA's North Campus



Founders Memorial Garden



Physical Master Plan by Charles Leavitt (1906)

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Even more important is the successful integration of new buildings with the broad surrounding context. By definition, a campus is a collection of interrelated buildings and supporting facilities arranged in and around open space. The challenge, then, is for every UGA architect to think globally (campuswide) and to act locally (site specific).

Therefore, in initiating the design process for any building or open space on UGA's campus, each design team should begin with a comprehensive look at the campus context and history. This first step should include an analysis of the site: its history, pedestrian and vehicular traffic, infrastructure, service, views and vistas, topography, vegetation, massing, and architectural character. In synthesizing this analysis, a primary goal of all building projects within UGA's campus should be to create clear, simple open spaces and quadrangles that connect to other existing or proposed adjacent spaces. In this regard, buildings should be budgeted to extend their site work as far as is reasonably possible. At the schematic design phase, site plans should show the ground floor plan of the building within the overall campus context and adjacent open space.

These guidelines do not advocate the replication of the original campus buildings in the design of new buildings. Rather, they suggest the continuing evolution of the principles used in those original campus buildings. Using similar scale, proportions, form, materials, and hierarchy one can design in harmony with the existing grounds and buildings.

The design for both grounds and buildings should then refer to these guidelines in the spirit of both recollection and invention. Examples of this attitude can be seen at other campuses, acting as relevant paradigms for UGA's architects and planners. Some of these examples include the images pictured at right.



Harvard Law School -Kallman McKinnel Wood



Princeton University-Koetter Kim



Syracuse University -Bohlin Cywinski Jackson



Carnegie Mellon -Michael Dennis & Associates



Princeton University -Todd Williams & Billie Trien



Johns Hopkins University Ayers/Saint/Gross



Stanford University -Antoine Predock



University of Virginia -Ellenzweig & Associates

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In summary, the sustained implementation of UGA's Campus Plan relies on re-establishing many of the principles that Charles Leavitt and the pre-WW II architects established on UGA's campus. Leavitt established in his 1906 physical master plan a balance of building and open space, and a stewardship of the land. Pre-WW II buildings on campus express a consistent, yet inventive architectural language. In this regard, UGA's grounds and buildings should be like a good academic curriculum combining tradition and innovation.

8. Acknowledgements

The University of Georgia Architectural Design Standards text and drawings were written and drawn by Brian Kelly, AIA, Associate Professor, Director, Program in Architecture, University of Maryland.

(fff) The University of Georgia Technical Memorandum

| Date | 9/9/98 |
|---------|--|
| Project | University of Georgia Physical Master Plan |
| Subject | Planning and Review Process (Section VII D) |
| From | Ayers / Saint / Gross |
| То | University of Georgia |
| | The objective of this section is for the University to create a planing and design re- |

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Traffic Engineering

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Academic Programming Paulien & Associates 899 Logan Street, Suite 508 Denver, CO 80203-3156 303/832-3272 Fax 303/832-3380 The objective of this section is for the University to create a planing and design review process on campus in order to ensure implementation of the plan in accordance with site and architectural design standards and to deal with the process of change.

1. ASSEMBLE DESIGN REVIEW GROUP

The template provided by the Board of Regents suggests that typical design review group could include the Chief Financial Officer, Director of Campus Planning, Director of the Physical Plant, representative(s) from the faculty senate, Board of Regents program manager, additional representative(s) from the Board of Regents, if appropriate, and outside professional(s).

2. RESPONSIBILITIES OF THE REVIEW GROUP

The responsibilities of the group need to be defined including: goals, objectives, review criteria, administrative procedures, submittal dates, period of reviews and periods of submission for planning and design review process.

3. DOCUMENTATION OF THE RESULTS OF THE REVIEW