

Georgia Institute of Technology

Deborah L. Greene, PhD

Capital Planning and Space Management



Georgia Institute of Technology
October 2010

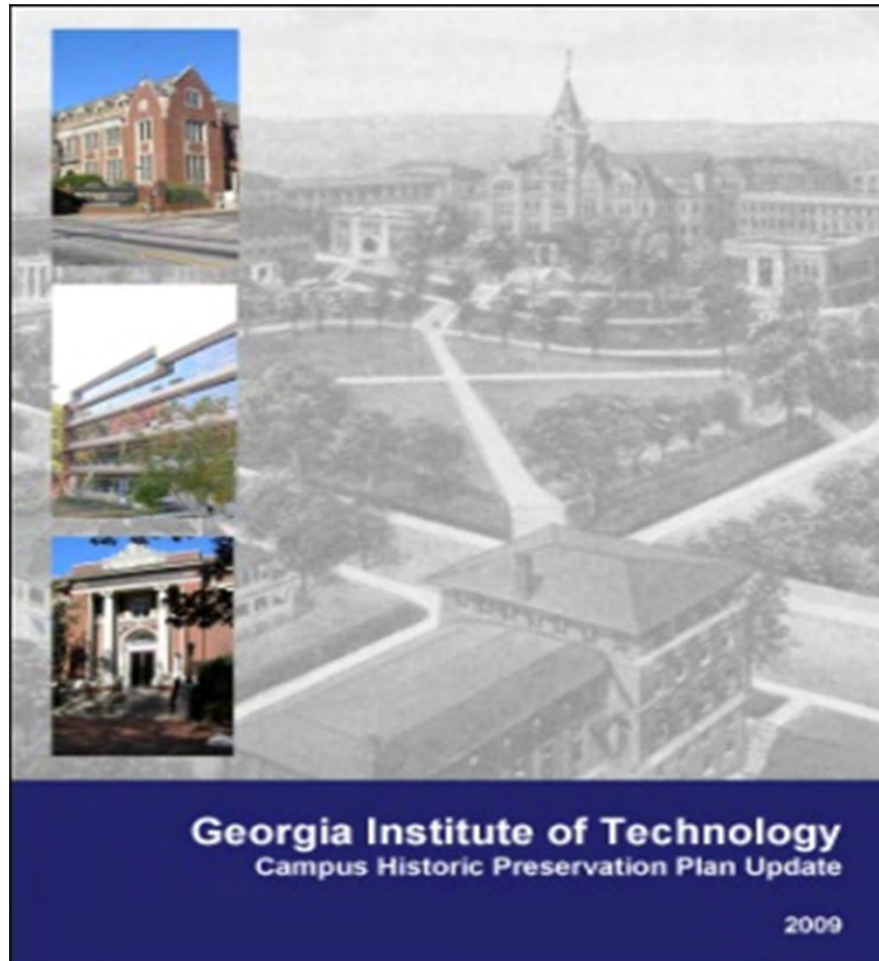


Mid-20th Century Buildings Workshop

Facility Officers Conference/ Columbus, Ga./ 26 October 2011

2009 Campus Historic Preservation Plan Update

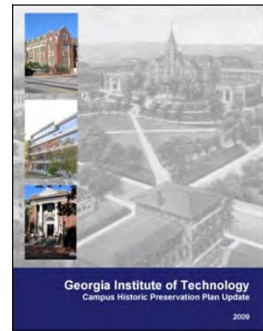
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2009 Campus Historic Preservation Plan Update – Background



- **2001** Georgia Tech is the first USG institution to submit a comprehensive campus preservation plan under the State Stewardship Program
 - The 2001 CHPP document was created prior to the development of BOR's Campus Historic Preservation Plan Guidelines.
 - The 2001 CHPP document was organized according to the Seven Standards of the State Stewardship Program.
 - The 2001 CHPP document provided an adequate framework for decision-making but did not fully satisfy the requirements of the 2005 CHPP Guidelines.
- **2009** Georgia Tech issued report card on its 2001 Plan
- **2009** Georgia Tech updated its Campus Historic Preservation Plan
 - **The 2009 CHPP Update expands upon the previous 2001 effort and integrates the requirements of the 2005 CHPP Guidelines.**

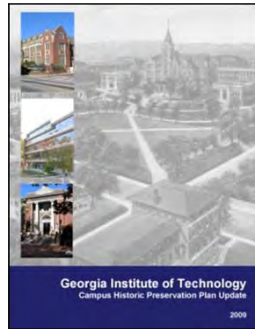


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2009 Campus Historic Preservation Plan Update

- Conducted a **Phase I architectural survey** of all resources 40 years old or older. A total of **66** buildings were documented as part of this effort. (Approximately half of these would be considered modern resources)



2.4 Results of Cultural Resources Surveys

2.4.1 Historic Architectural Resources

A review of available building lists and Facilities Department data provided by the Institute identified 66 buildings on Georgia Tech's campus that were found to be at least 40 years old during the year the historic resource survey was conducted (2008). Given their ages, each of these buildings was evaluated according to the *National Register Criteria for Evaluation*. Various state and local historic contexts were used as a framework for evaluating the significance of these buildings.

In summary, of the 66 buildings surveyed, 10 buildings had been previously listed on the GANRHP as contributing elements of the Georgia Tech Historic District. These include:

- Andrew Carnegie Building
- Lloyd W. Chapin Building
- John Saylor Coon Building
- Leticia Fate Whithead Evans Administration Building
- Aaron S. French Building
- Lyman Hall Building
- L.W. Robert Alumni Faculty House
- Domenico Pietro Savant Building
- David Melville Smith Building
- Janie Austell Swann Building

The survey identified an additional 36 buildings that were recommended eligible for the GANRHP based on their historic associations and level of integrity. These include:

- Architecture Building (East)
- Army Offices
- W.C. and Sarah Bradley Building
- Marion L. Britain Dining Hall
- Marion L. Britain "T" Room Addition
- Julian Brown Residence Hall
- Calculator Building
- Civil Engineering Building (Old CE)
- Josiah Cloudman Residence Hall
- J. Allen Couch Building
- J.L. Daniel Laboratory Building
- Cherry L. Emerson Building
- Engineering Science and Mechanics Building
- Judge S. Price Gilbert Memorial Library
- William H. Glenn Residence Hall
- Daniel F. Guggenheim Building
- Nathaniel E. Harris Residence Hall

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2009 Campus Historic Preservation Plan Update
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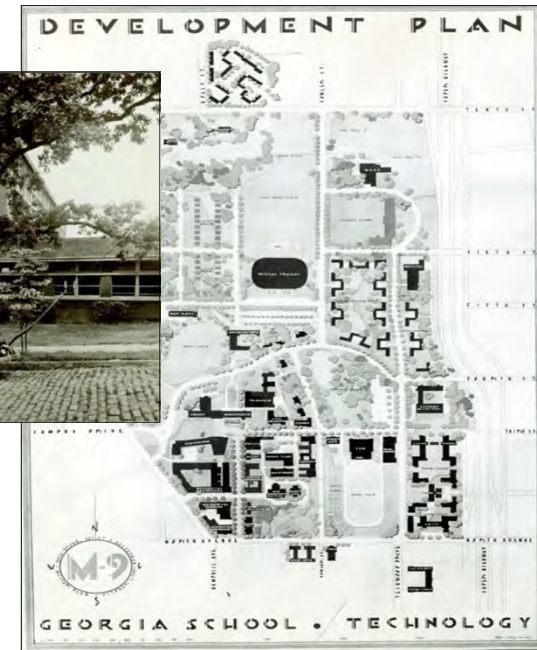
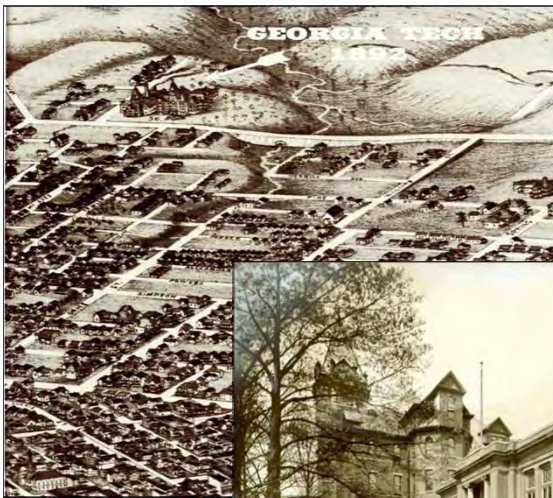
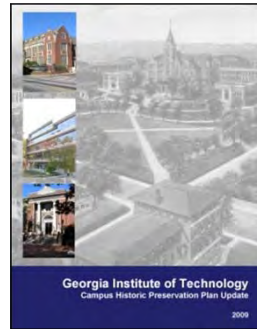


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2009 Campus Historic Preservation Plan Update

- Conducted research and developed a **historic context** that documents the physical evolution of the campus from
- pre-history and the Civil War through to the present.

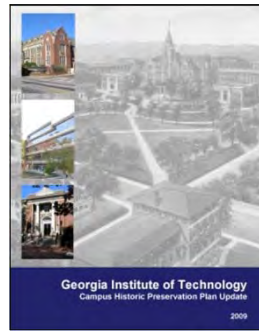


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2009 Campus Historic Preservation Plan Update – Organization

- **Historic Context of Capital Improvements**
- **Identification and Evaluation of Historic Resources**
- **Consultant Recommendations for Treatment and Use of Historic Resources**
- **Appendices – Synthesis of Information and Consultation Recommendations by Building**
- **Resources**

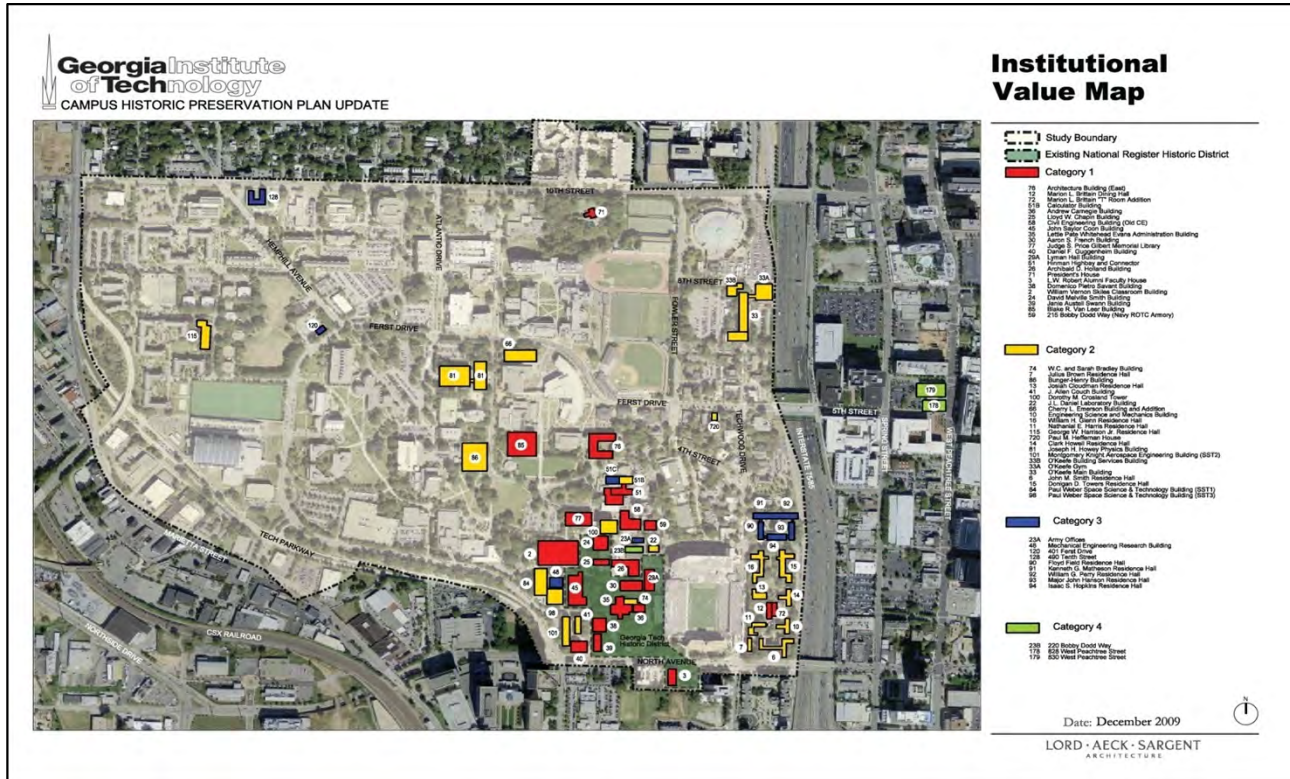
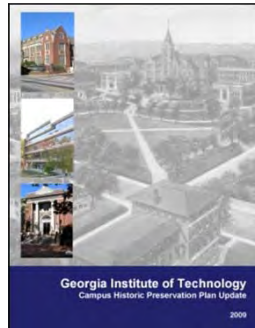


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2009 Campus Historic Preservation Plan Update

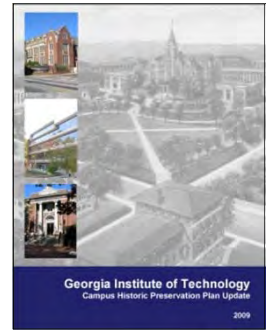
- Evaluated National Register Eligibility and “Institutional Value” of surveyed resources.



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2009 Campus Historic Preservation Plan Update – Recommended Eligible for Listing on the National/Georgia Register



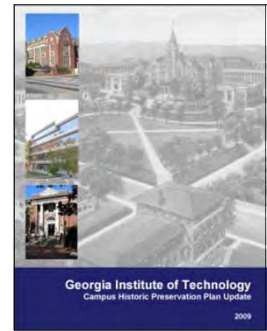
- **Currently Listed (10 buildings)**
- **Recommended Eligible (36 buildings) (e.g., Hinman Research Building)**
- **Recommended Eligible for Planning Purposes (N=13)**
- **Recommended Not Eligible (N=8)**



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2009 Campus Historic Preservation Plan Update – Institute Valuation of 66 Buildings



- **Category 1: Long-Term Preservation (highly valued by GT) (N=23)**
- **Category 2: Consideration for Long-Term Preservation (some potential for continued or adaptive use; valued by GT (N=23)**
- **Category 3*: Limited Potential for Preservation (N=17)**
- **Category 4*: No Value (N=3)**

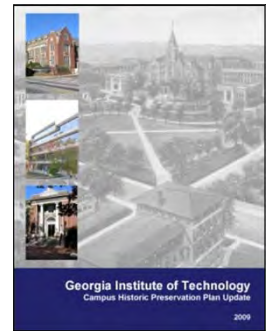
*** Not a BOR Category**



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2009 Campus Historic Preservation Plan Update – Recommended Treatment Options



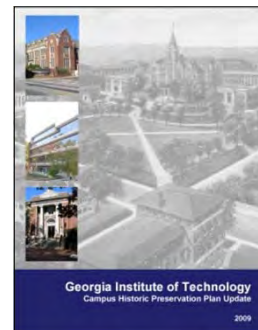
- **Extensive Rehabilitation (e.g., Hinman Research Building in 2009) (N=32)**
- **Moderate Rehabilitation (e.g., Carnegie in 2007) (N=5)**
- **Minor Rehabilitation (e.g., Dancord in 2009 (N=8)**
- **Corrective Maintenance (e.g., Old Civil Engineering in 2011)(N=6)**
- **Demolition (e.g., 220 Bobby Dodd Way in 2010) (N=15)**



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2009 Campus Historic Preservation Plan Update – Consultant Recommendations



- **East Campus Residential Historic District (10 buildings)**
- **Modern-Era Historic District (5 buildings)**
 - **Architecture Building East (1 – highly valued/long-term preservation)**
 - **Heffernan House (2 – some potential for continued or adaptive use; valued by GT)**
 - **Hinman Highbay (1 – highly valued/long-term preservation)**
 - **Price Gilbert Memory Library (1 – highly valued/long-term preservation)**
 - **Skiles Classroom Building (1 – highly valued/long-term preservation)**

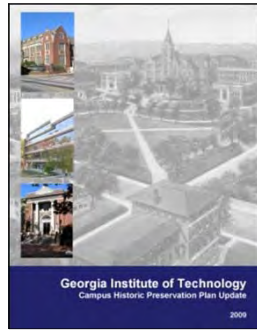


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2009 Campus Historic Preservation Plan Update

- Conducted a **reconnaissance-level survey of historic landscape resources** 40 years old or older. **Twelve** historic landscapes were identified in consultation with the project steering committee.



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Shop Building and Administration Building: note trees in front of Administration Building (c.1888)



Tech Tower Lawn: post construction of Savant and Swann buildings, note mature trees in front of Administration Building, streetscape and specimen trees at North Avenue (c.1901)



Tech Tower Lawn: note street trees along North Avenue, Lettie Pate Whitehead Evans stairs, stairs to Swann (behind tree leading to colonnade) and stairs to Shop Building (leading to arch) (c.1901)



Administration Building and Service Lane: note service lane street trees, service lane alignment, adjacent slopes to service lane, and recently planted hedge (c.1910)



Administration Building: note Lettie Pate Whitehead Evans Stairs, presence of two service lanes, and a large white oak at the lower service lane (pre-1907)



Academic Building and Carnegie Library: note presence of service lane at Carnegie Library and Administration Building, mature trees, and original pedestrian circulation to buildings (c.1907)



Savant and Swann Buildings: note service lanes, Savant and Swann plaza, hedge along service lane, stairs to Swann, and mature trees along service lane (c.1910)



Swann, Savant, Administration Building and Carnegie Lib.: note condition of plaza at Swann and Savant, street trees along lower service lane, and young evergreen hedges (c.1910)



Tech Tower Lawn: note cruciform sidewalks, young hedges, large white oak, young street trees, and offset stairs and sidewalk (c.1918)



Tech Tower Lawn: note cruciform sidewalks, no flagpole, service lanes, young hedges along lane and enclosing lawn, large white oak in service lane, and young street trees (c.1918)



Savant Building: note evergreen hedge, circular planting bed, and groundcover on slopes (c.1918)



DRAWING:
**HISTORIC
 LANDSCAPE
 PHOTOS**

LETTIE PATE WHITEHEAD EVANS STAIRS AND TECH TOWER LAWN

AUGUST 2, 2011



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 CIVIL ENGINEERING
 LANDSCAPE ARCHITECTURE



Bird's Eye View of Tech Tower Lawn : note hedges, street trees, service lanes, sidewalks, and Savant and Swann plaza (c.1920)



Bird's Eye View of Tech Tower Lawn : note flagpole in lawn, cruciform sidewalks, lush canopy and red stars in lawn (c.1938)



Bird's Eye View of Tech Tower Lawn : note circulation, tree canopy, and evergreen plantings in lawn, and parked cars in front of Swann and parallel parking along service lane (c. 1950)



Administration Building Stairs : note additional plantings in lawn, Lettie Pate Whitehead Evans stairs before brick added, white oak and view to Administration Building (c.1948)



Corner of Tech Tower Lawn : note lane between stadium and lawn, stars and circular plantings in lawn, and sidewalks (c. 1951)



Bird's Eye View of Tech Tower Lawn : note addition of sidewalk in lawn, parallel parking in service lane, canopy, geometric planting beds (including star beds) and benches in lawn (1950s)



Bird's Eye View of Tech Tower Lawn : note parallel parking in service lane, and lush canopy (1970s)



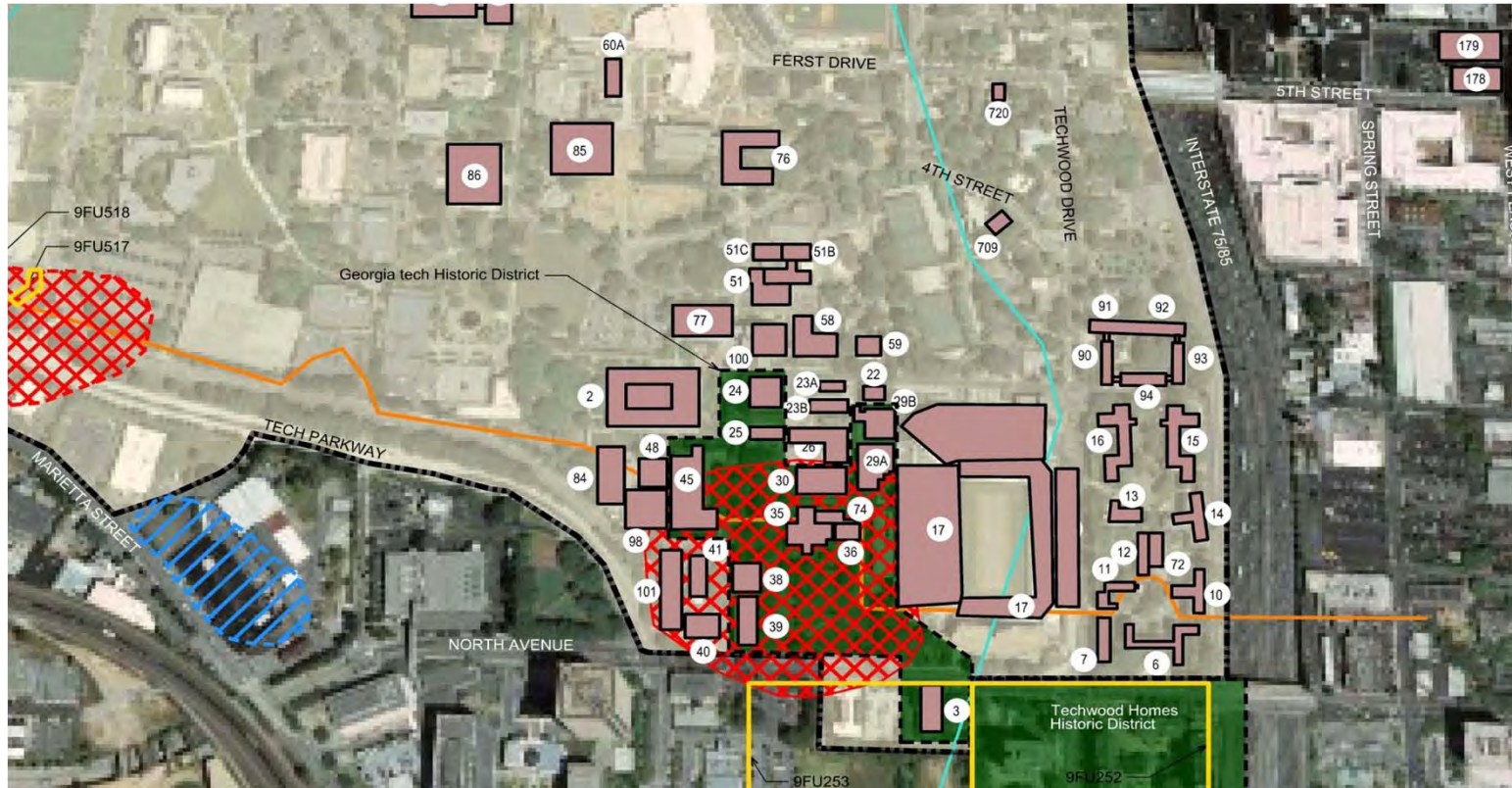
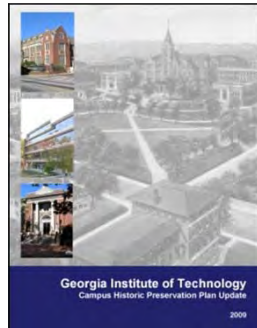
Bird's Eye View of Tech Tower Lawn : note presence of parking lot, canopy, overhead walkway, and updated cruciform sidewalk (2005)

TIMELINE:

- 1888 - Administration Building constructed
- 1900 - Swann Building constructed
- 1901 - Savant Building constructed
- 1901 - North Avenue streetscape in place, includes white picket fence, street trees, and curbing
- c. 1901 - Service lanes and cruciform sidewalks in lawn are constructed, Lettie Pate Whitehead Evans Stairs, stairs to Swann Building and stairs between Savant Building and Administration Building are built
- c. 1901 - Street trees are added to North Avenue
- 1906 - Carnegie Library constructed
- c. 1908 - Grant Field constructed
- 1910 - Swann and Savant plaza constructed, lawn is built up in southeastern corner to create flat lawn, evergreen hedge planted around lawn and service lanes, and cruciform sidewalks are in current alignments
- c. 1910 - Street tree installed along service lane
- c. 1910 - Plaza at Swann and Savant Buildings constructed
- 1920s - Memorials added to service lane
- 1925 - Bobby Dodd Stadium at Grant Field constructed
- c. 1938 - Flagpole and geometric planters added to center of lawn
- c.1948 - Ornamental plantings added to lawn
- 1950 - Parallel parking added along service lanes, additional sidewalks added to lawn, and parking established in Swann and Savant plaza
- late 1970s - Parking lot added to western side of lawn, cross-tie retaining walls constructed
- 1980s - Overhead walkway constructed
- 1980s - Sidewalks repaved, brick added, red maple planted at sidewalk crossing

2009 Campus Historic Preservation Plan Update

- Expanded pre-historic context and **updated Archaeological Sensitivity Maps** based on new information.

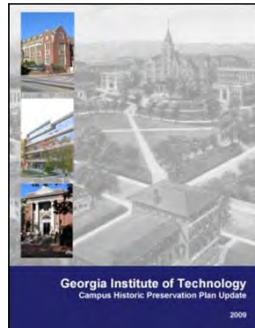


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2009 Campus Historic Preservation Plan Update

- Evaluated condition of historic resources and developed **Treatment Guidelines** for most commonly identified issues.



replacement units should be materially compatible with adjacent historic fabric and match the original in terms of size, color, graining, tooling, and other visual characteristics.

In addition to natural forces, inappropriate and incompatible treatment can also damage masonry or accelerate deteriorative processes. Harsh chemical or abrasive cleaning, painting, or sealing the masonry with impermeable coatings, the use of incompatible mortars, caulks, or sealants, and poor workmanship all can potentially harm and diminish the character of historic masonry.

Factors to consider when repairing deteriorated masonry and mortar follow:

The repair and maintenance of masonry structures should be undertaken by personnel who are sensitive to preservation philosophy and skilled in required techniques.

with adjacent historic fabric and match historic units in size, color, and texture when replacement or infill is necessary.

Replacement and repair mortars should match the original in composition, strength or hardness, color, and texture. It is recommended that information about the make-up of historic mortars be acquired through a program of mortar analysis.

Caulk or other synthetic compounds should not be used as a pointing material. When used to repair deteriorated masonry joints, caulk or sealant can trap moisture within the wall assembly. Most historic mortars are breathable and therefore provide a path for water to move to the surface of the wall and evaporate. When this path is disrupted by caulk or sealant the wall cannot sufficiently dry out. Trapped moisture can lead to accelerated deterioration of the materials that make up the wall assembly. The lifespan of caulks and sealants are short when compared to mortar and, therefore, treatment by this method provides only a temporary masking of the underlying problem. Caulks and sealants were not available historically and when used to point historic masonry often result in an unsightly and artificial aesthetic.

Mortar repair should match the original wall construction in terms of joint width and tooling. Repairs should be neat and the level of workmanship of the repair comparable to that found in the original construction.

When infilling of historic openings is necessary, consideration should be given to recessing the new masonry slightly and allowing the historic opening to "breathe" as opposed to bringing the infill flush with the rest of the wall. When infill masonry is not toothed into the adjacent wall, future reversibility is more easily allowed.



Figure 106: The pointing mortar used in this stone repair at D. M. Smith does not appear to match the historic mortar.



Figure 107: The repointing of mortar joints should use mortar that is materially compatible with the historic masonry and should also be visually consistent with the adjacent work.

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2009 Campus Historic Preservation Plan Update

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Clean masonry conditions should be maintained on buildings. Masonry should be inspected regularly and repaired as needed. When masonry repair is required, it should be done by a qualified mason. The cost of masonry repair should be included in the building's maintenance budget.

3.4.4 Accessibility and Historic Resources

Efforts to make historic buildings accessible to people with disabilities should be made with sensitivity to the historic character of the building. The Secretary of the Interior's Standards for Rehabilitation should be consulted for guidance on how to balance accessibility with historic preservation.

Identify the building's historic character, including its contributing materials, landscapes, spaces, and elements that make the building historic.

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- Retaining Original Materials and Design Elements
- Repair and Replacement of Windows and Doors
- Historic Masonry Repair and Restoration
- Accessibility and Historic Resources
- Additions to Historic Buildings
- Rehabilitating Historic Interiors
- Treatment Guidelines for Historic Landscapes

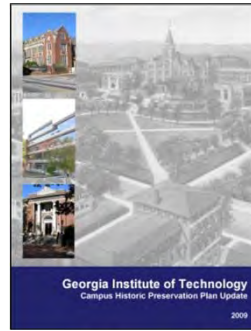


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2009 Campus Historic Preservation Plan Update

- Developed a “Catalog of Historic Resources” that summarizes the information collected on each historic architectural and landscape resource.



077 Judge S. Price Gilbert Memorial Library

RESOURCE DATA

Date of Completion: 1953
 Style/Typology: Modernism
 Architect/Designer: Bush-Brown, Gailey & Helfman
 Builder: J. A. Jones
 Building Area: 99,832 gsf
 Historic Use: university library
 Current Use: academicrosearch

LOCATION MAP

MAJOR RENOVATIONS/ADDITIONS: 2005
INSTITUTIONAL VALUE CATEGORY: Category 1
ANTICIPATED TREATMENT: Extensive Rehabilitation
NATIONAL REGISTER OF HISTORIC PLACES: Recommended eligible for NRHP

016 William H. Glenn Residence Hall

RESOURCE DATA

Date of Completion: 1947
 Style/Typology: Collegiate Gothic
 Architect/Designer: Bush-Brown, Gailey & Helfman
 Builder: J. A. Jones
 Building Area: 60,453 gsf
 Historic Use: housing - dormitory
 Current Use: housing

LOCATION MAP

MAJOR RENOVATIONS/ADDITIONS: 1995
INSTITUTIONAL VALUE CATEGORY: Category 2
ANTICIPATED TREATMENT: Extensive Rehabilitation
NATIONAL REGISTER OF HISTORIC PLACES: Recommended eligible for NRHP

002 William Vernon Skiles Classroom Building

RESOURCE DATA

Date of Completion: 1959
 Style/Typology: Modernism
 Architect/Designer: A. Thomas Bradbury
 Builder: A. R. Briggs Construction Co.
 Building Area: 139,854 gsf
 Historic Use: academic
 Current Use: academicrosearch

LOCATION MAP

MAJOR RENOVATIONS/ADDITIONS: 2004
INSTITUTIONAL VALUE CATEGORY: Category 1
ANTICIPATED TREATMENT: Moderate Rehabilitation
NATIONAL REGISTER OF HISTORIC PLACES: Recommended eligible for NRHP

024 David Melville Smith Building

RESOURCE DATA

Date of Completion: 1923
 Style/Typology: Collegiate Gothic
 Architect/Designer: Robert & Co. (Francis P. Smith Assoc.)
 Builder:
 Building Area: 38,306 gsf
 Historic Use: academic - physics
 Current Use: academicrosearch

LOCATION MAP

MAJOR RENOVATIONS/ADDITIONS:
INSTITUTIONAL VALUE CATEGORY: Category 1
ANTICIPATED TREATMENT: Extensive Rehabilitation
NATIONAL REGISTER OF HISTORIC PLACES: Listed on the National Register of Historic Places - 1974



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Recent Residence Hall Renovations



- Folk and Caldwell (constructed 1969)
- Armstrong and Hefner (constructed 1969)
- Fitten, Freeman & Montag (constructed 1972)



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2009 Student Housing Master Plan



Georgia Institute of Technology Student Housing Master Plan

Final Report
March 2009



BRAILSFORD & DUNLAVEY

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2009 Student Housing Master Plan

- Existing Conditions
- Demographics Analysis
- 4 Levels of Community Assessment
- Focus Groups
- Interviews
- Off-campus Housing Market Analysis
- 10-Year Projections

2003	2004
4,276,384	4,447,439
1,428,000	1,485,120
122,182	127,070
40,800	42,432
42,335	44,458
1,428,000	1,485,120



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2009 Student Housing Master Plan

- Current use
- Safety enhancements
- Amenities
- MEP
- Living/learning
- Community spaces
- Data enhancements
- Elevator/increased access
- Landscape enhancements
- 2-pipe conversion to 4-pipe



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Fitten, Freeman & Montag



before



Exterior Front Entrance - after

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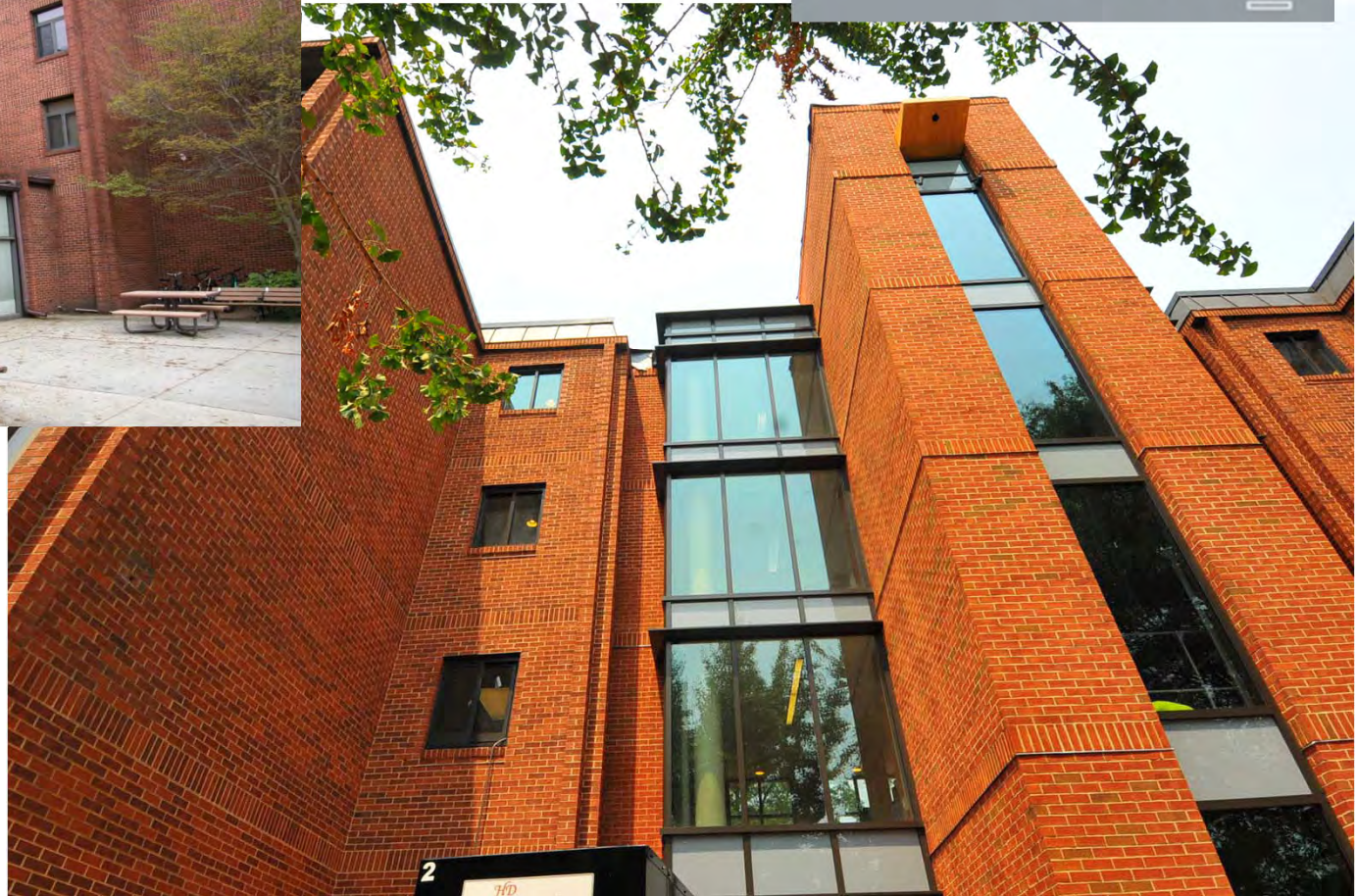


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Fitten, Freeman & Montag



before



Exterior Elevator - Rear Entrance - after



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Interior Entry Looking Out - before



Interior Entry Looking Out - after

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Fitten, Freeman & Montag



Interior Entry - Freeman - before

Interior Entry - Freeman - after

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Terrace Connector - before



Terrace Connector - after



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Fitten, Freeman & Montag



Kitchen - before



Kitchen - after



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Interior Room - before



Interior Room - after



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Showers - before



Showers - after



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Toilets - before



Toilets - after



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Housing Facilities Warehouse - before



Information Technology Group Office - after

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Fitten, Freeman & Montag



Learning Center - before



Learning Center - after



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Upcoming Residence Hall Renovations



- Glenn (constructed in 1948) and Towers (constructed in 1949)



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Flippen D. Burge Apartments



Completed in 1947
Architect: Burge & Stevens
Builder: J.A. Jones
Size: 64,459 sf
Historic Use: Housing/apartments



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Flippen D. Burge Apartments



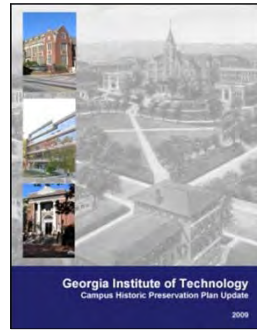
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2009 Campus Historic Preservation Plan Update

Modern Era District:

- The 2001 CHPP and 2009 Update recognize the significance of Georgia Tech's collection of modern resources and recommends the establishment of a "Modern-era Historic District."



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W.V. Skiles Classroom Building



- Completed: 1959
- Architect: A. Thomas Bradbury
- Builder: A.R Briggs Construction Company
- Size: 139,854 sf
- Historic Use: Academic
- Current Use: Academic/Research



Mid-20th Century Buildings Workshop

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W.V. Skiles Classroom Building

Georgia
Tech



- MRR investments
- New elevator
- Classroom renovations
- Departmental offices

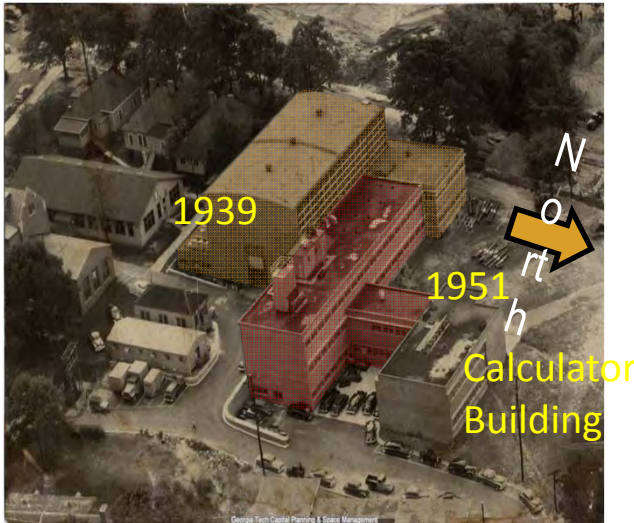


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Hinman Research Building (1955)

- Completed: 1939, 1951
- Architect: Bush-Brown & Gailey (Heffernen-Designer)
- Builder: PWA
- Size: 30,340
- Historic Use: Academic
- Current Use: Academic/Research



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Hinman Research Building

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Hinman Research Building



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Hinman Research Building



High Bay -before



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Hinman Research Building



Studio-after



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QUESTIONS?



www.space.gatech.edu/assets/HistPresPlan/pdf

deborah.greene@spaceplan.gatech.edu



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