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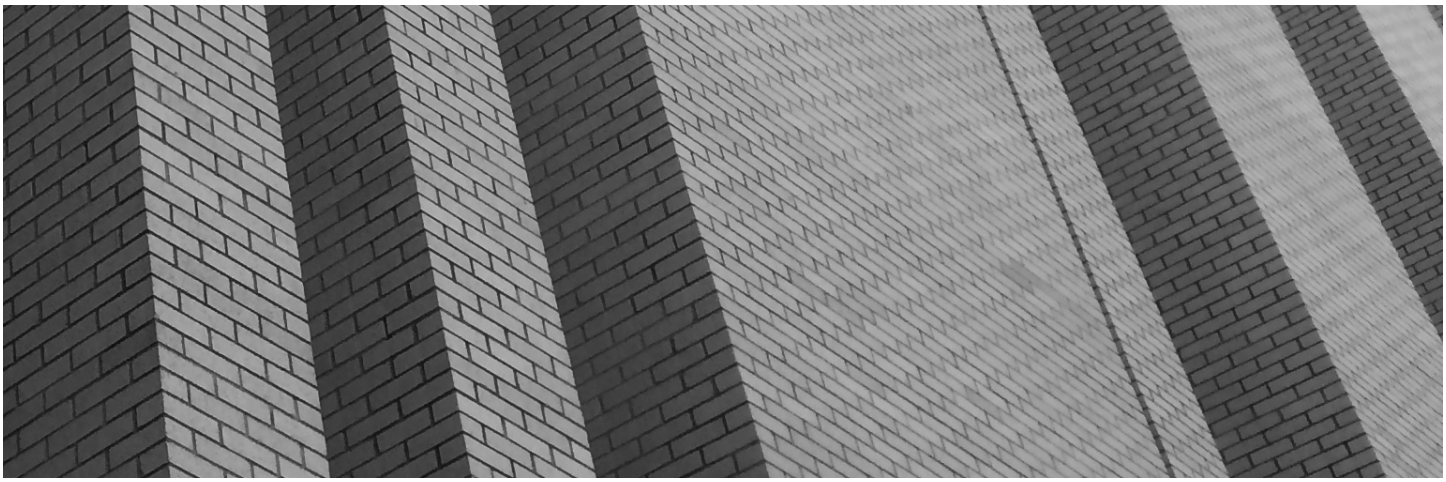
Center for Heritage Conservation



Olin E. Teague Research Center

Texas A&M University
735 Lamar Street
College Station, Texas

Historic Structures Report

Benjamin E. Baaske

11 December 2017

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Figure 1. (page 4) northwest facade.

Figure 2. (below) “Exploration of Space” sculpture at the main entrance.

A seemingly unspectacular building, the Olin E. Teague Research Center’s primary character lies in the vertically striated exterior and stark contrast between a light masonry and tinted glazing.

Figure 3. 1995

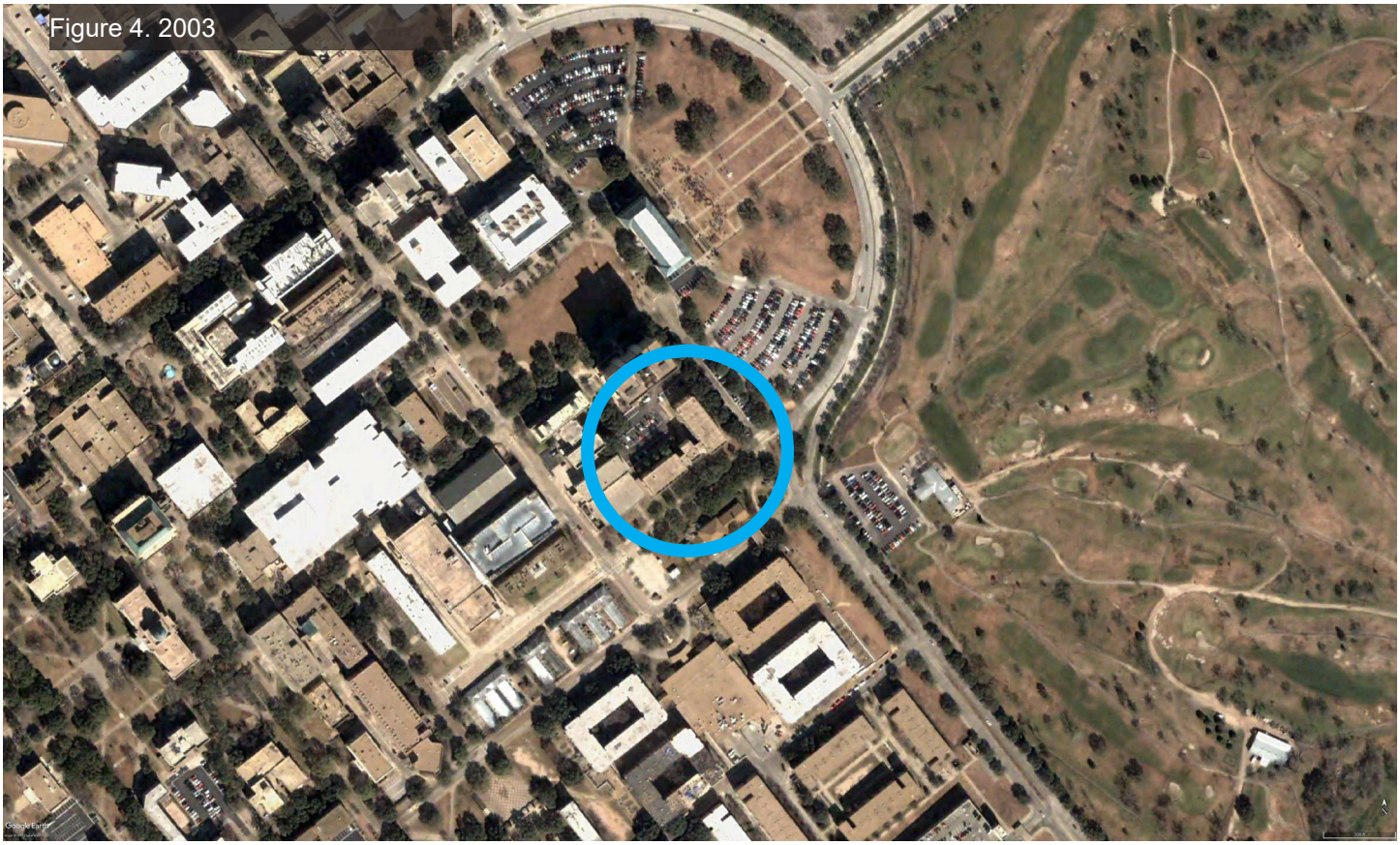


Figure 4. 2003

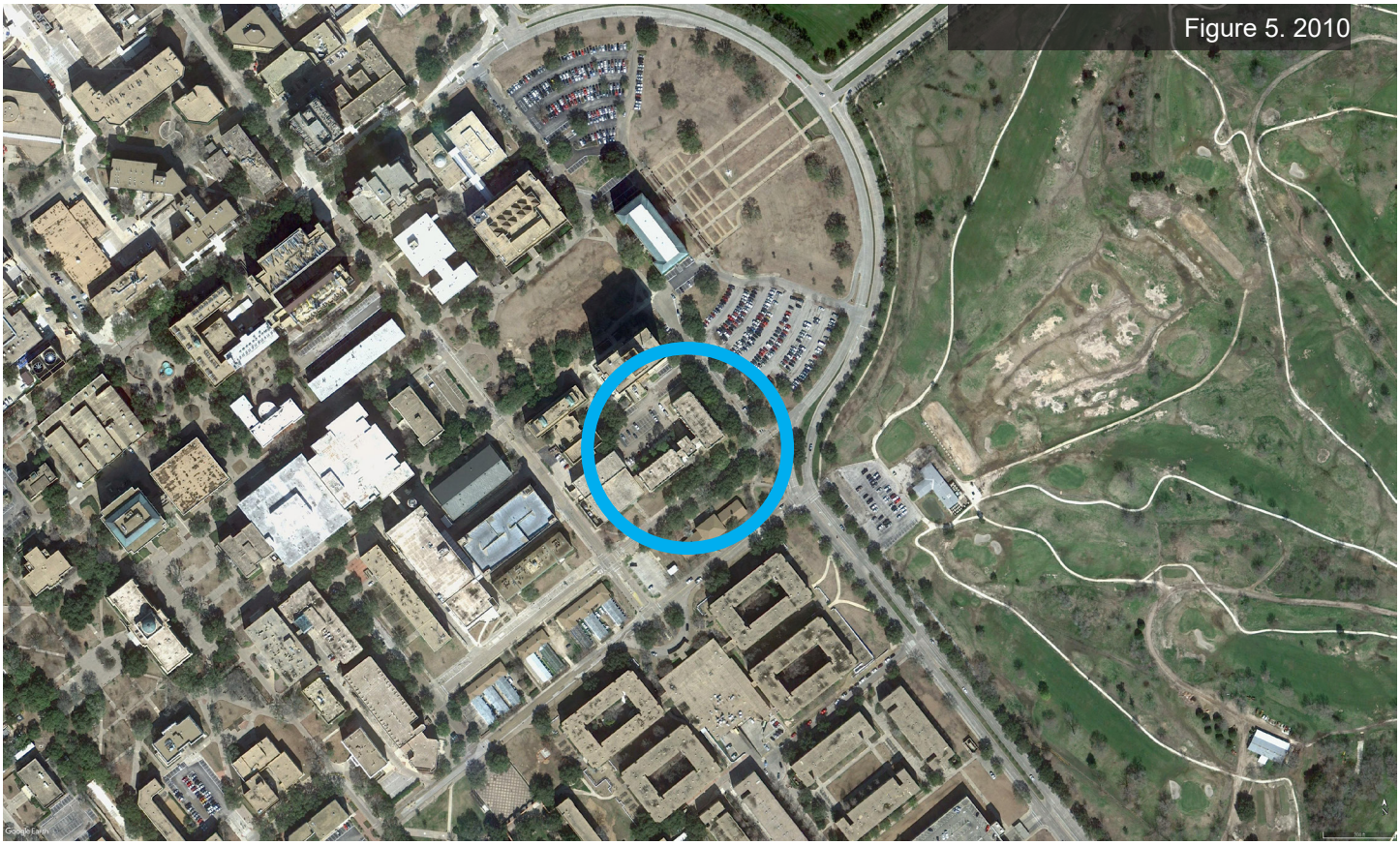


Figure 5. 2010

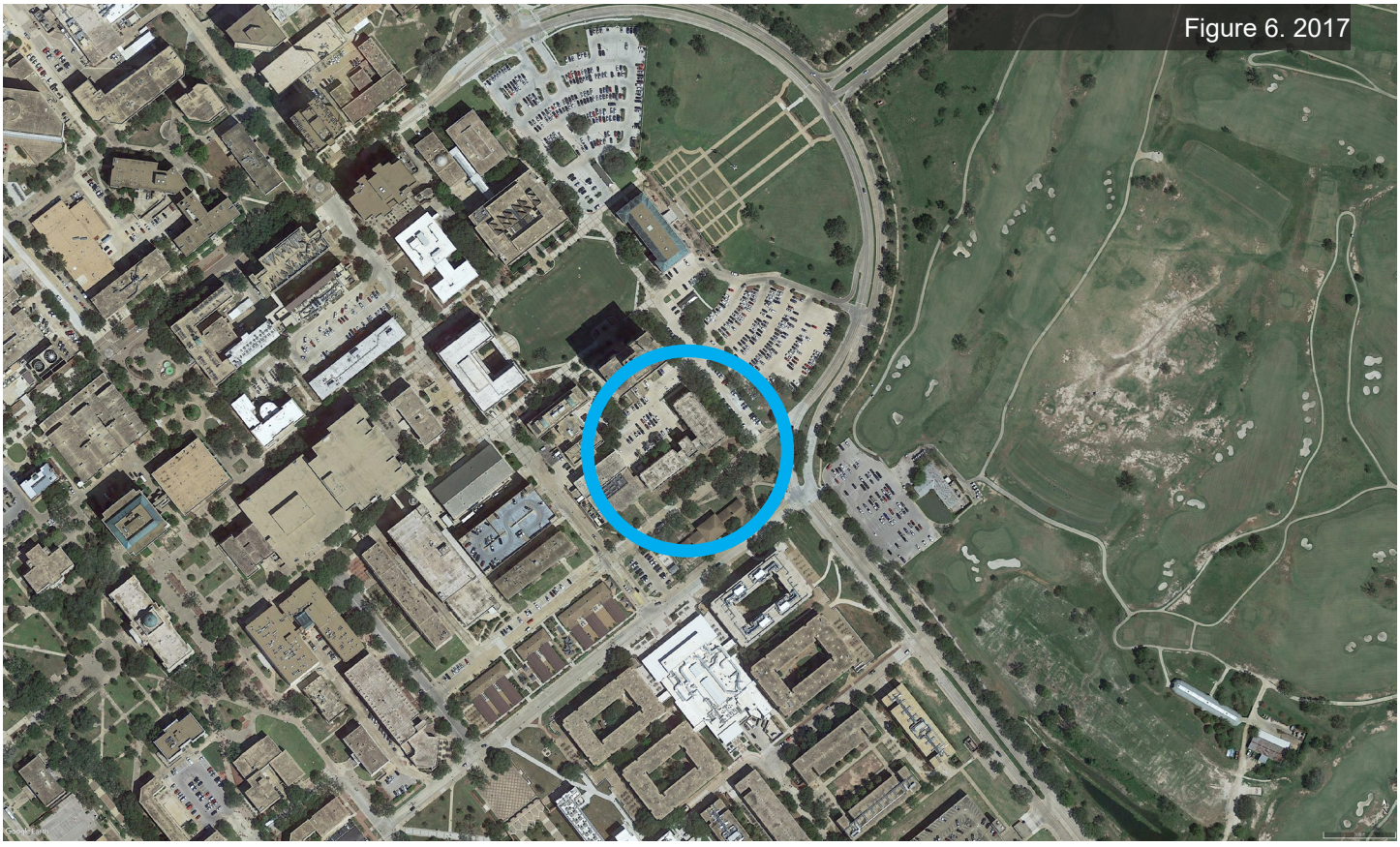


Figure 6. 2017

Figure 3. (top, page 6) Google Earth satellite image from February, 5 1995.

Figure 4. (bottom, page 6) Google Earth satellite image from February, 28 2003.

Figure 5. (top, page 7) Google Earth satellite image from February, 5 2010.

Figure 6. (bottom, page 7) Google Earth satellite image from September, 9 2017.

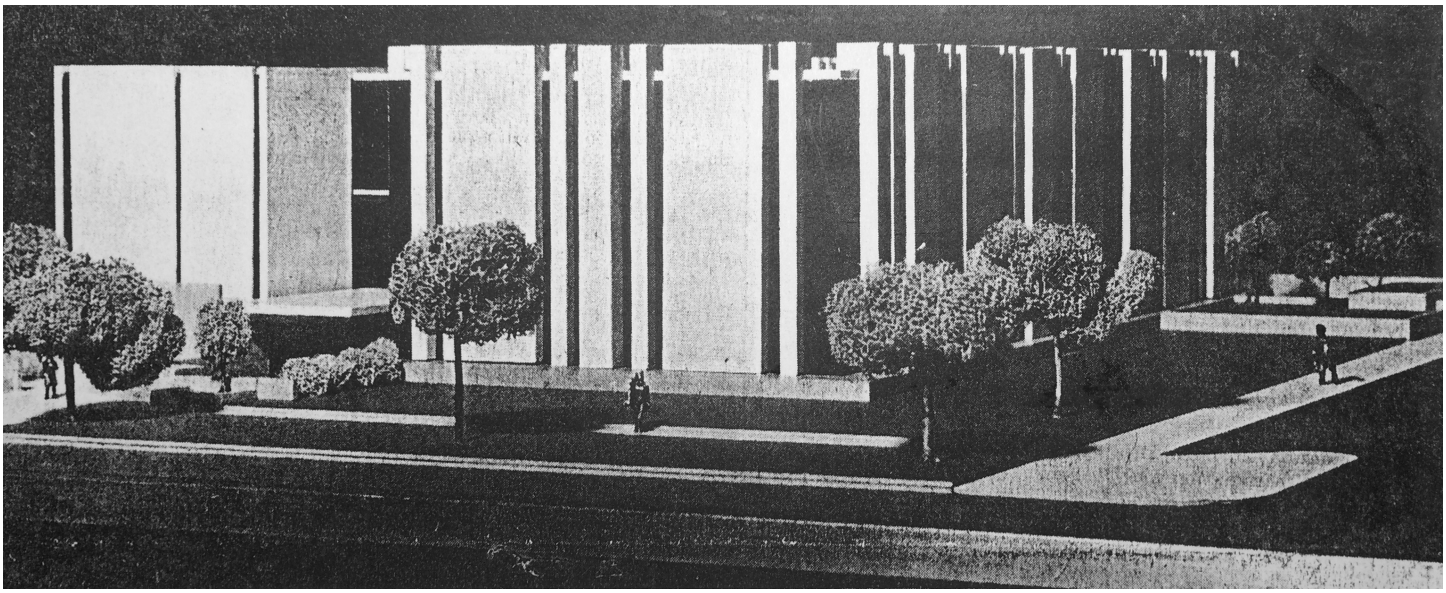
Figure 7. (top) Google Earth satellite image from February, 5 1995.

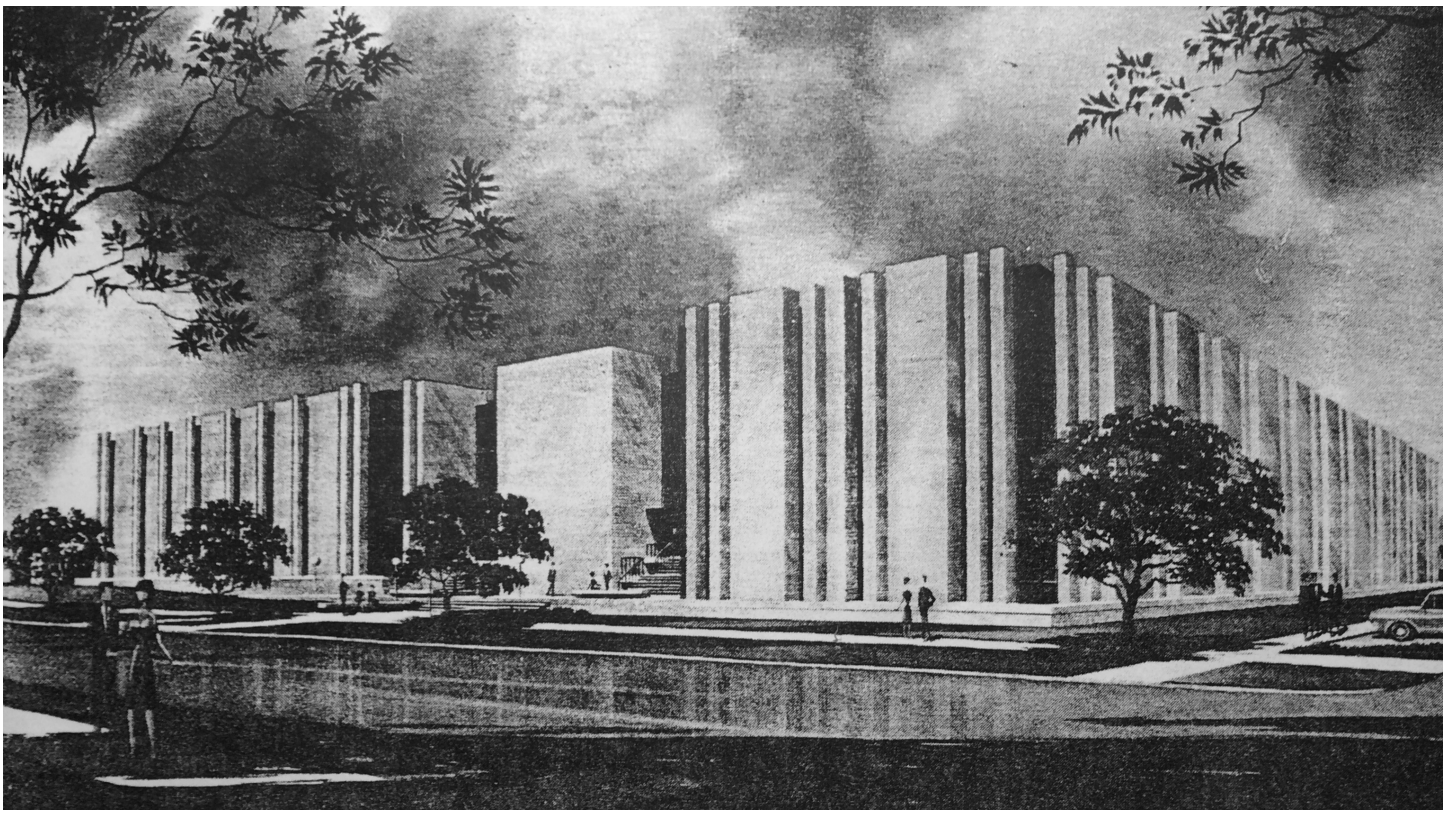
Figure 8. (middle) Google Earth satellite image from February, 28 2003.

Figure 9. (bottom) Google Earth satellite image from February, 5 2010.

Figure 10. (page 9) Google Earth satellite image from September, 9 2017.

Figure 10. 2017





The inception of a space research center at Texas A&M University began in 1963 with a proposal by the university to the National Aeronautics and Space Administration (NASA). The proposal was approved, with NASA covering $1 million of the cost. Early concepts were within the NASA budget, but Texas A&M wanted to expand the design, resulting in the university covering an additional $665,000 for construction of the new research center. Construction began in July of 1965, concluding in October of 1966. The center was dedicated the following fall on September 9, 1967. The “Space Research Center” was dedicated to Texas A&M alumni, veteran, and congressman, Olin E. (Tiger) Teague.

Figure 11. (top) southeast perspective; concept model, 1965.

Figure 12. (above) southeast perspective; artist rendering, 1965.

The research center on campus would house an array of endeavors to aid in the heated, space race of the 1960s. These research areas included activation analysis, hypervelocity acceleration, solid propellants, aerodynamics, propellers, oceanography, nuclear orientation, fuel cells, biomedical engineering, rheology, plasma research, cosmic rays, structural shells, spacecraft cost analysis, materials, and computerized data handling. In addition to the Olin E. Teague Research Center, supporting facilities were planned: the Data Processing Center (left side of Figure 13), the Cyclotron Institute and the Nuclear Science Center. The Olin E. Teague Research Center stood as Texas A&M's flagship facility for their space research program, a program which boasted an interdisciplinary atmosphere where "personnel from seemingly unrelated fields" would come together in research. In addition to space research, the development of Texas A&M space program would bolster the university's research and development in technology.

Figure 13. (below) southwest perspective; historic photo from Cushing Library archive, 1967.

Figure 14. (above) south facade; postcard from Cushing Library archives, 1967.

Figure 15. (right) east facade; historic photo from Cushing Library archives, 1969.

Figure 16. (bottom) main entrance, south facade; historic photo from Cushing Library archives, 1969.

3.1 Space Research Center: “Teague Research Center”

Figure 17. (below) southwest perspective; cover of dedication booklet from Cushing Library archives, 1967.

TEAGUE HONORED

Congressman Olin E. Teague (center), in whose honor Texas A&M's new space research and computer complex was dedicated Saturday, chats with A&M President Earl Rudder second from right), NASA Administrator James Webb (right) and three astronauts following the ceremonies. The astronauts, who assisted in unveiling the building marker bearing Teague's name, are (from left) D K. Slayton, Charles Conrad Jr. and Richard Gordon.

Figure 18. (above) Teague dedication; newspaper clipping from Cushing Library archive, 1967.

3.1 Space Research Center: “Teague Research Center”

Olin E. Teague, for which the Teague Research Center is named, was part of Texas A&M’s class of 1932, served in World War II, and would later go on to serve as U.S. Representative for the Sixth Congressional District of Texas. Teague began his tenure in the House of Representatives in 1946 and won reelection every term leading up to the Teague Research Center’s dedication. He chaired the Committee of Veterans Affairs, while he was also ranking majority member on the Committee on Science and Astronautics, and chaired the Subcommittee on Manned Space Flight and the Subcommittee on Legislative Oversight.

In his service during World War II, Teague was the infantry battalion commander for the European Campaign. The exceptionalism of his service resulted in numerous accolades: the Silver Star with two clusters, the Bronze star with two clusters, the French Croix de Guerre with Palm, the Purple Heart with two clusters, and the Combat Infantryman’s Badge and the Army Commendation Ribbon. Teague was discharged in 1946 after spending two years in an Army hospital in recovery from combat wounds.

Teague served as a captain and company commander in the Corp of Cadets during his time at Texas A&M. He went on to be awarded the university’s Distinguished Alumni Award in 1966.

Figure 19. (below) Olin E. Teague.

Figure 20. (below, right) Olin E. Teague.

Figure 21. (above) dedication of “Exploration of Space” sculpture - (from left) Ford D. Albritton Jr., Earl Rudder, W. B. Moore, L. F. Peterson, and William B. Clarke Jr.; newspaper clipping from Cushing Library archive, 1968.

Figure 22. (right) “Exploration of Space” sculpture; historic photo from Cushing Library archive, 1968.

3.2 Sphere Sculpture: “Exploration of Space”

The “Exploration of Space” sculpture, which stands at the south entrance to the Olin E. Teague Research Center, was presented to Texas A&M University by Albritton Engineering, Inc. (from Bryan, Texas) and Reynolds Metal Company (from Richmond, Virginia) on January 25, 1968. In attendance at the unveiling were president of Albritton Engineering, Ford D. Albritton Jr.; Texas A&M President, Earl Rudder; Reynolds Vice President, W. B. Moore; Texas A&M President L. F. Peterson; and the divisional sales manage for Reynolds Metal Company, William B. Clarke Jr.

The sculpture is made of aluminum, stands eight feet high, and depicts space flight. More specifically, the sculpture shows a rocket’s trajectory in reaching escape velocity to break free from the Earth’s gravitational pull or as a means to enter in low-Earth orbit.

Figure 23. (below) Diann Beene, secretary at the Olin E. Teague Research Center with the new sculpture one week before its dedication; newspaper clipping from Cushing Library archive, 1968.

Figure 24. Basement Plan; Facility Coordination, 2000.

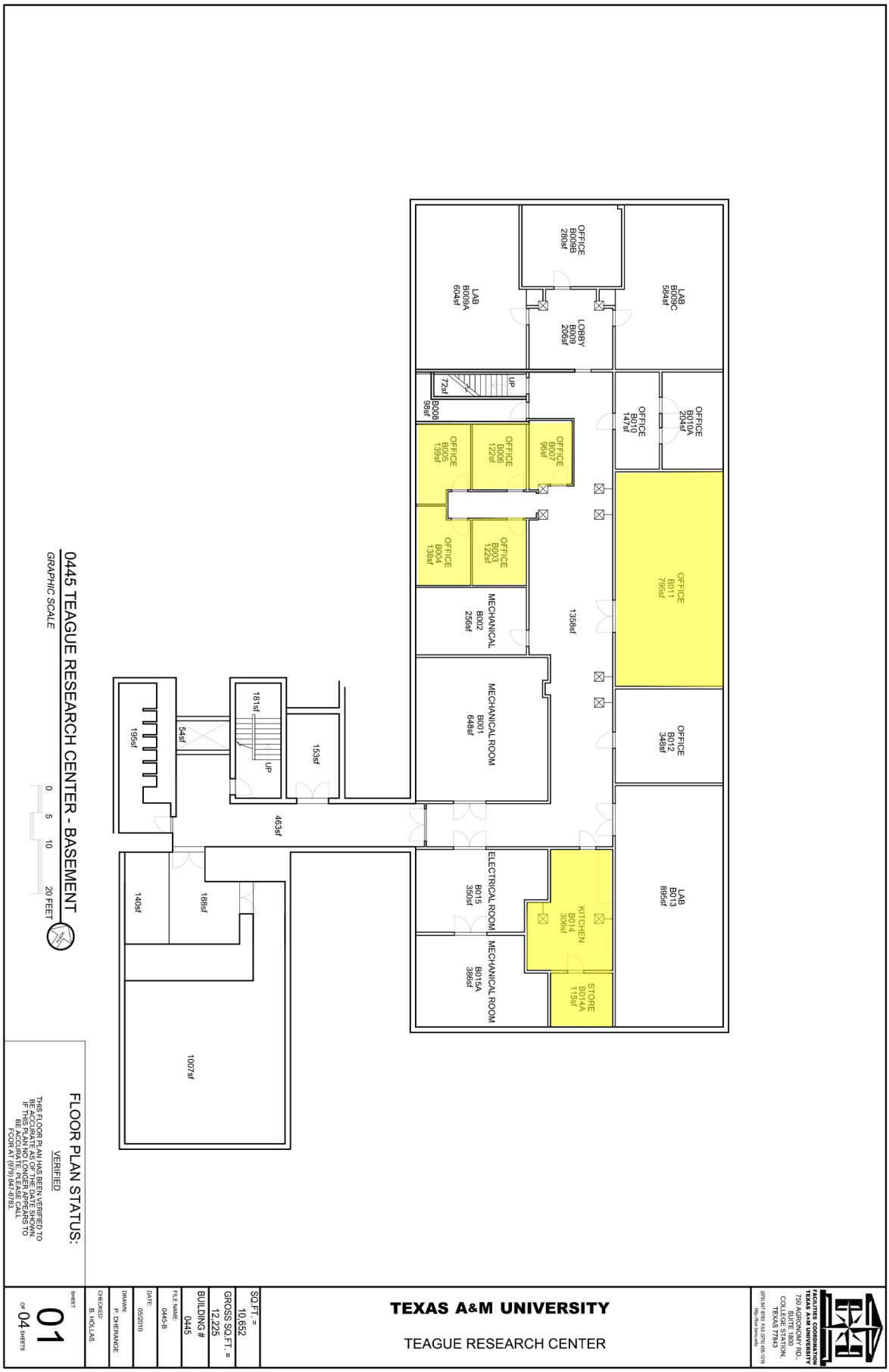
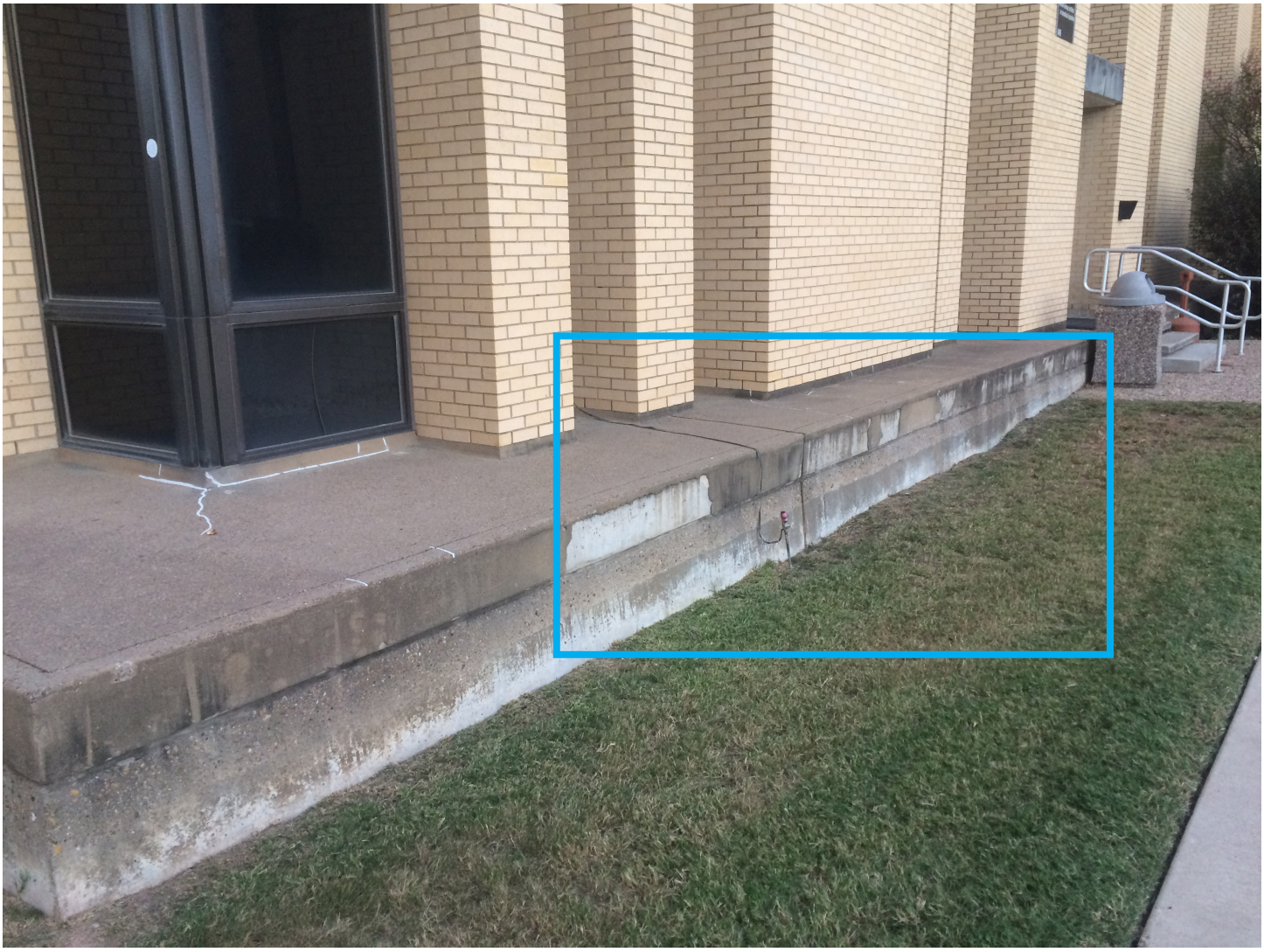


Figure 25. First Floor Plan; Facility Coordination, 2000.

Figure 26. (page 20) East wing stairwell; field survey, November 30, 2017.



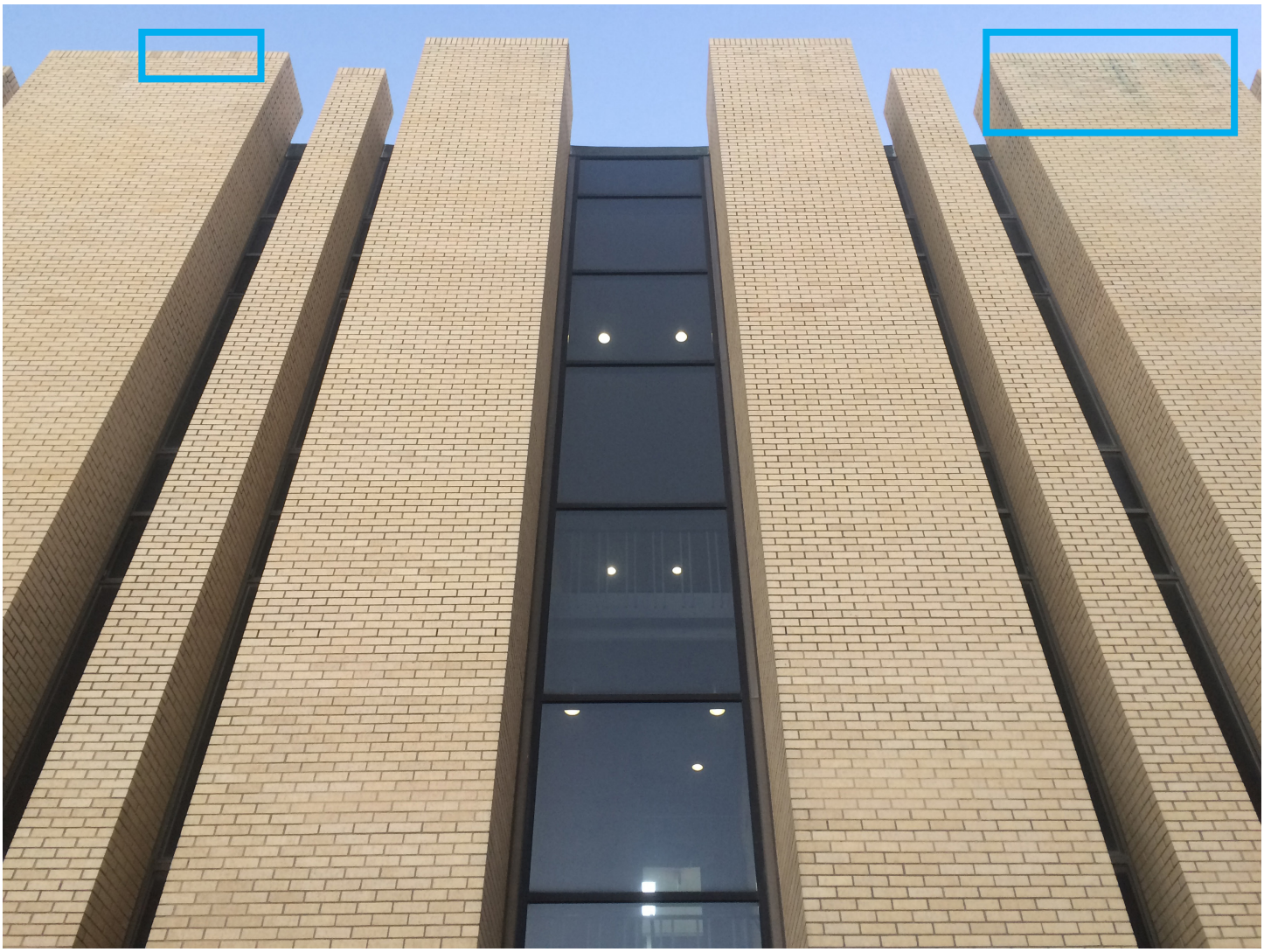
Repaired cracking of foundation concrete on the left with spalling of outer concete layer on the right side of Figure 27.

Figure 27. (above) East wing foundation; field survey, October 17, 2017.

Individual bricks discolored on the left side of Figure 28. These might have possibly been damaged or recently replaced.

On the right side of Figure 28, there is mild moisture damage, possibly spalling. From examination of a similar phenomena on the rest of the building, this is possibly a build-up of sediment carried in bulk moisture.

Figure 28. (below) West facade of the East wing; field survey, November 30, 2017.



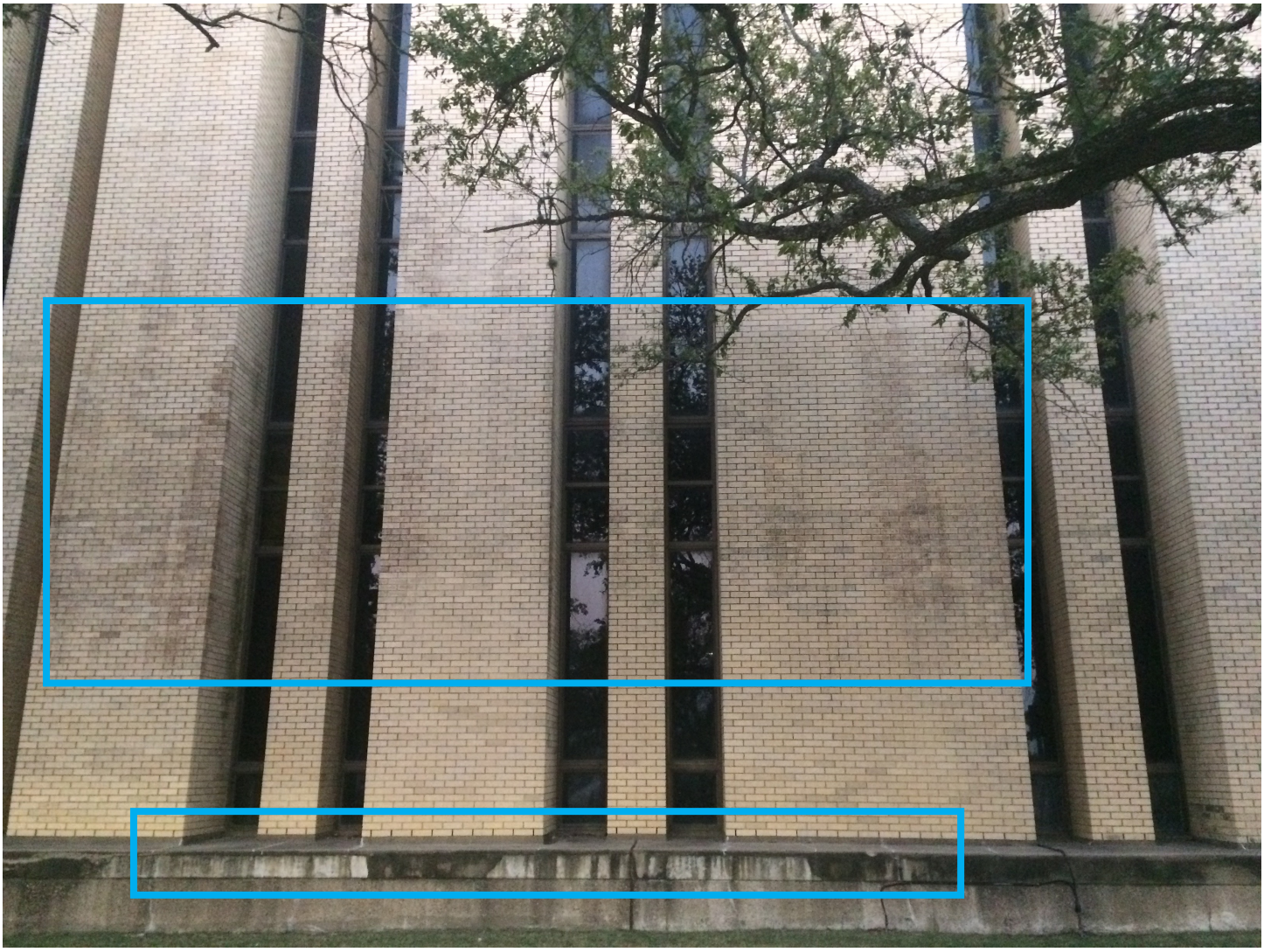


Figure 29. (above) East facade and foundation of the East wing; field survey, October 17, 2017.

Moisture damage in a wide band on the facade, possibly spalling. This could also be the build-up of sediment from bulk moisture, but the location on the middle of the facade is suspect.

The foundation of the East facade continues to show considerable degradation, likely due to moisture. There is also staining due to mildew, algae, and possibly minor efflorescence. The top layer of concrete on the foundation is also spalling, as is occurring on the West side of the building (Figure 28).

Spalling and efflorescence of concrete with cracking and extensive erosion. The entire plinth (foundation) is in poor condition: spalling, cracking, erosion, algae, efflorescence, etc. The plinth has no protection from moisture; the building may as well be sitting on an exposed sidewalk.

Figure 30. (below) South facade and foundation; field survey, November 12, 2017.

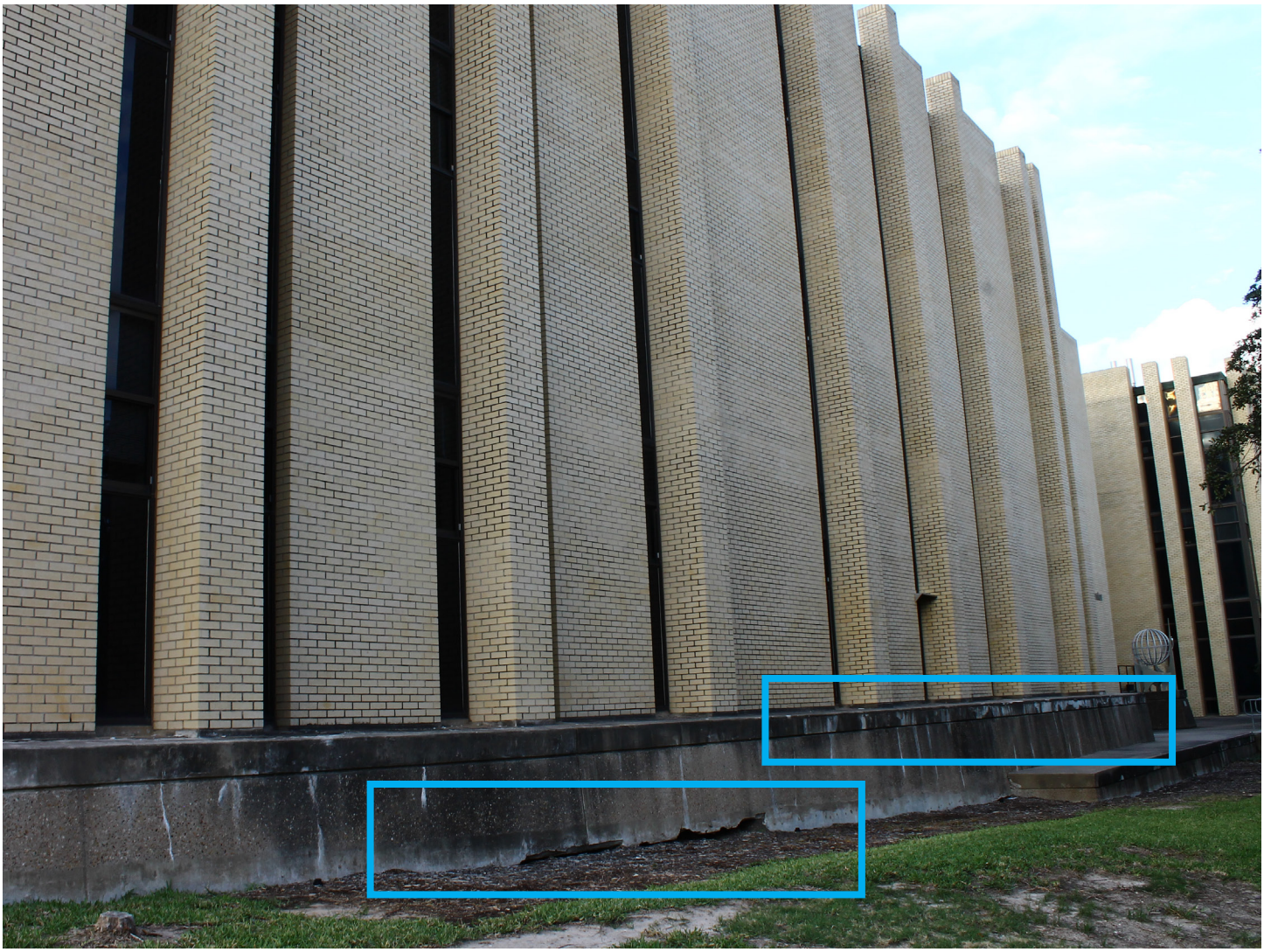


Figure 31. (above) balcony beside the main entrance on the south side of the building; field survey, November 30, 2017.

Figure 32. (below) sediment build-up from moisture run-off; field survey, November 30, 2017.

Figure 33. (below) typical masonry with slight coloration of mortar; field survey, November 30, 2017.

There is rust on the balcony rails, particularly on the joints with rust stains on the sandstone masonry. The floor plate of the balcony is cracking and eroding. Here, the discoloration of the masonry is likely due to sediment build-up from water not draining propperly and then splashing up on the brick surface.

Figure 34. (below) balcony beside the main entrance on the south side of the building; field survey, October 17, 2017.

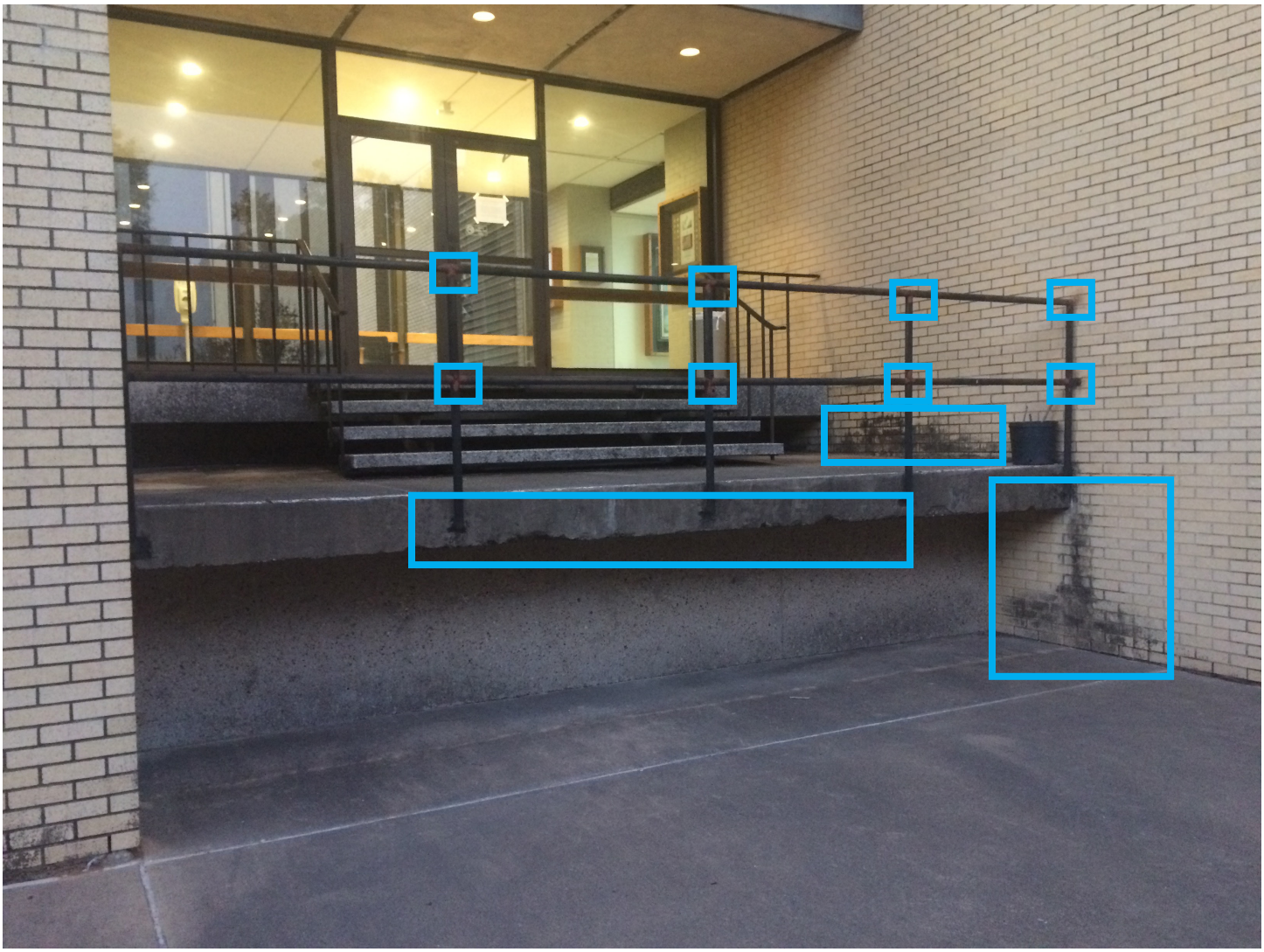


Figure 35.

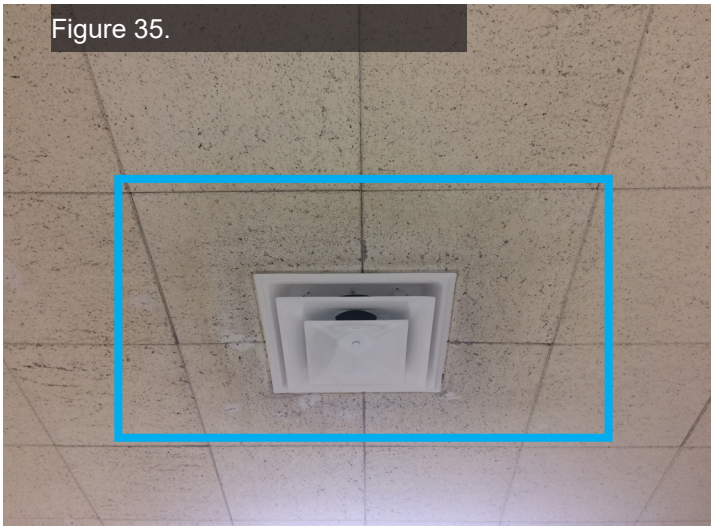


Figure 36.

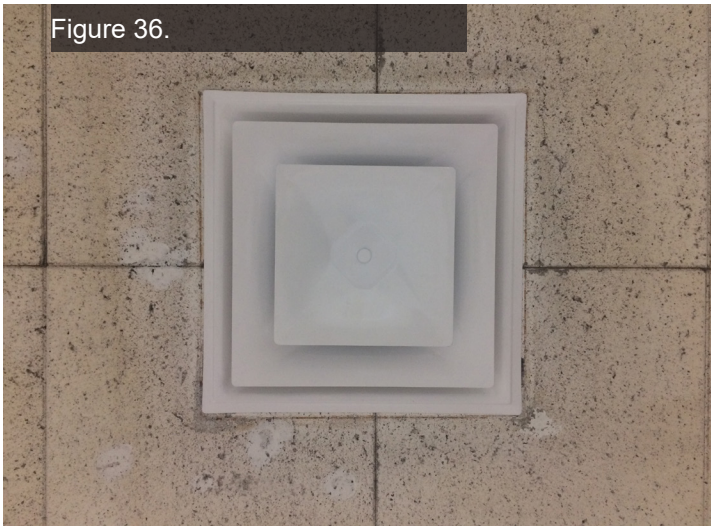


Figure 37.

Figure 35. (top left, page 28) air diffuser moisture damage, first floor corridor; field survey, November 30, 2017.

Figure 36. (top right, page 28) air diffuser moisture damage, first floor corridor; field survey, November 30, 2017.

Figure 37. (bottom, page 28 and below) panorama of intersection of East (below) and West (bottom, page 28) wings on first floor; field survey, November 30, 2017.

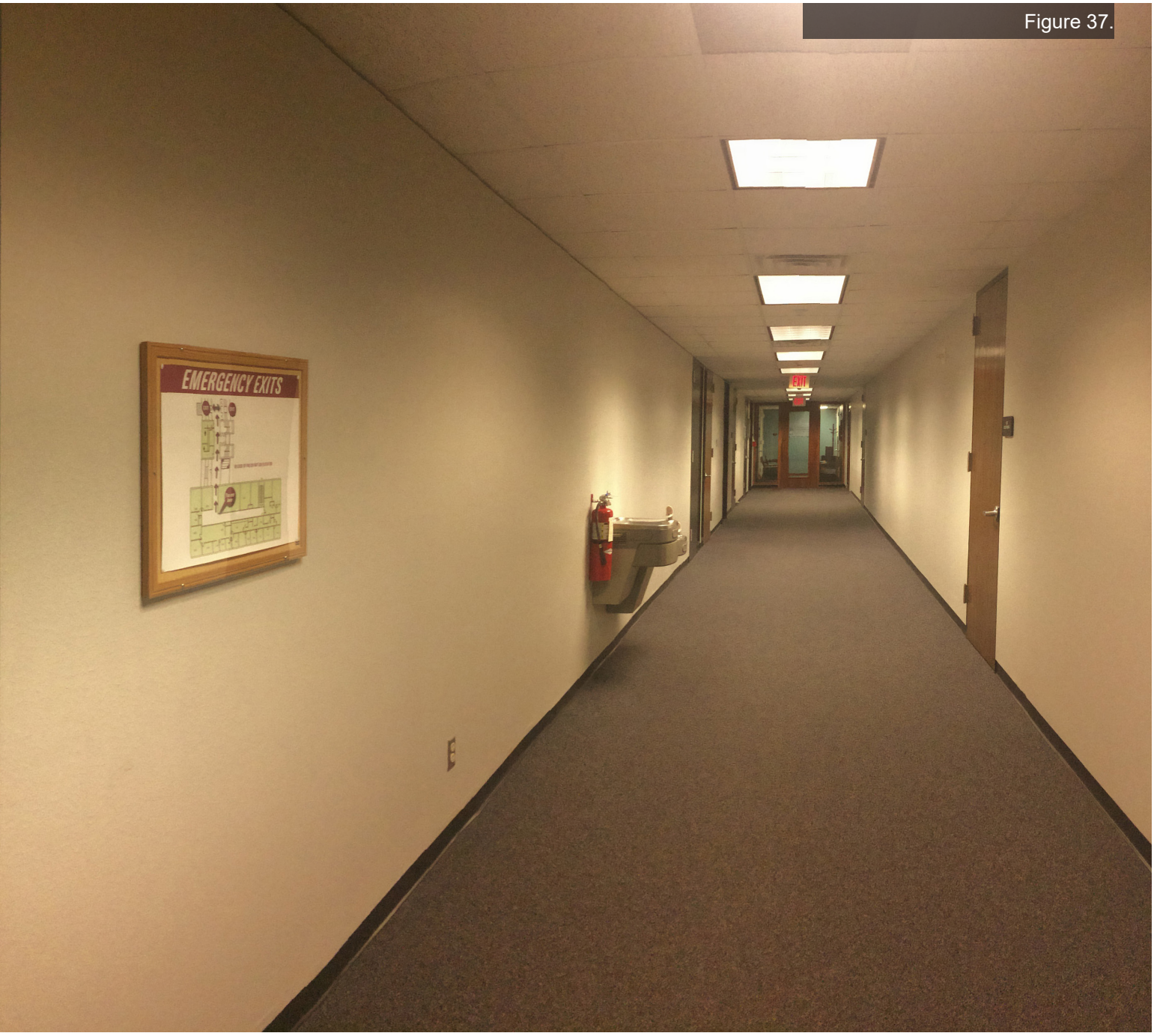


Figure 37.

Figure 38.

Figure 39.

Figure 38. (top, page 30) damaged outlet, first floor; field survey, November 30, 2017.

Figure 39. (bottom, page 30) damaged outlet, second floor; field survey, November 30, 2017.

Figure 40. (left) damaged terrazzo floor, first floor; field survey, November 30, 2017.

Figure 41. (below) damaged terrazzo, first floor; field survey, November 30, 2017.

Figure 42.

Figure 43.

Figure 42. (top, page 32) north end of the East wing, connecting to stairwell; field survey, November 30, 2017.

Figure 43. (bottom, page 32 and below) panorama of intersection of East (below) and West (bottom, page 28) wings on second floor; field survey, November 30, 2017.

Figure 43.

Figure 44. (above) West stairwell, first floor to second floor; field survey, November 30, 2017.

Figure 45. (right) also West stairwell, first floor to second floor; field survey, November 30, 2017.

Figure 46. (below) West stairwell; field survey, November 30, 2017.

Figure 47. Top view, building scale; laser scanning conducted December 2, 2017

Figure 48. Top view, site scale; laser scanning conducted December 2, 2017

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