

# STATE HIGHWAY LAB



Fig. 1. Computer Engineering and Plasma lab, December 1993. This picture shows the Johnson Drive face of the original Highway lab building. [Author Photo, AP-19]



Fig 2. The CAE building from ERB, 1996. Notice the 1987 angled addition (left) to the original rectangular highway lab (right).

*Built with state funds to house the state highway laboratory in 1939, this building became the property of the University by virtue of the 40 year lease of the land. The lease expired in 1977, and the building was remodelled for use by the computer science department, and was enlarged in 1983.*

As early as January 1924, when there were less than 5000 miles of paved roads in Wisconsin, the university and the state highway commission had a mutually advantageous relationship. The state had room in a frame building behind the engineering building on Bascom hill, in which they carried out material testing. In return the state engineers gave lectures and demonstrations to the students in mechanical and civil engineering. Engineering Dean Turneure was an ex officio member of the highway commission.<sup>1</sup>

This relationship worked well throughout the 1920s and early 1930s. Then as space requirements grew and the condition of the old building deteriorated, the state decided to seek new quarters. In July 1937 president Dykestra read to the regents a request from Thomas Pattison of the Wisconsin Highway Commission for the lease of University ground on which to erect a laboratory building for the Highway Commission. The months that followed are marked by discussion and proposals of various kinds referring to the highway lab. H. F. Janda, professor of Highway engineering, lobbies business manager Phillips, in favor of the lab. Acting dean of engineering, A. V. Millar, tells Phillips that he has consulted the faculty of civil, mechanical, and chemical engineering and finds them in accord with the opinion of dean Turneure, that the highway lab should be located in the vicinity of the engineering laboratories on the camp Randall site.<sup>2</sup>

At their December 1937 meeting the executive committee adopted a motion of the business manager that the regents approve a lease to the State Highway Commission for the lab. The lease

had been in the works since at least September and grants the highway commission the wedge of land bounded by Randall Street, the railroad tracks, and a north south line to the west of Randall Street. The lease was for forty years, and was non-renewable. It allowed the state to erect a building for materials testing, marking and signing facilities and other functions. The state would provide educational and research facilities. The university besides providing the land, agreed to remove a rail spur from the site, and to provide heat and electricity to the building at a reasonable rate. The state agreed to maintain the building, sidewalks and roads around it in good repair, and to remove the old building on Bascom Hill. At the end of the lease the land and building would revert to the university. This lease was signed in December 1937.<sup>3</sup>

Although the regents had retained the right to approve of the plans for the building, no record has been found that they ever so approved. The building was designed by state architect Arthur Peabody, near the end of his long career in Wisconsin. Peabody's plans are dated January, 1938. The fact that Peabody and his work were well known to the regents may account for the casual treatment. Likewise no record has been found of the exact dates or circumstances of the erection of the building, but most sources indicate 1939. The 162 foot X 62 foot building was steel framed, with concrete floors and roof brick sheathing, stone trim, two stories, and a full basement.<sup>4</sup>

For the forty years of its lease the state highway lab operated in the Camp Randall location, testing materials in conjunction with the engineering department, and making highway signs. The metal signs were made in the state prison, but the wooden signs were made in a room at the laboratory. Then in July of 1976 the highway department (by then the DOT) informed the university that they were about to build a new laboratory facility at Truax field and would vacate the old building in the fall of 1977.<sup>5</sup>

The first use of the building by the university was as the home of computer engineering, then a relatively small enterprise. When the engineering department remodelled the building in 1983, the computer labs and graduate study areas were kept open during the work. This \$2.3 million job by Arnold and O'Sheridan of Madison renovated the rooms on the first and second floors and built a new penthouse on the roof. The building was not big enough for long. In February of 1987, the university spent another \$2.5 million to add a wedge-shaped two story addition to the north side of the building to house Computer Aided engineering labs and offices on the first floor, and biomedical labs and offices on the second floor. Silicon fabrication facilities and plasma laboratories were installed in the older part of the building. This job was designed by Berners-Schober Associates of Green Bay, and brought the building to its current (1993) configuration.<sup>6</sup>

1) Executive Committee Minutes, January 25, 1924; Roettiger to Phillips, October 29, 1937, series 24/1/1 box 139 Highway laboratory folder; Wisconsin Blue Books

2) Minutes of the Regents July 10, 1937. Millar to Phillips, October 12, 1937, series 24/1/1 box 139 Highway laboratory folder. Janda to Phillips, October 11, 1937, series 24/1/1 box 139 Highway laboratory folder.

3) Regent's Minutes, December 7-8, 1937, October 12-13, 1937; Memorandum of conference for Proposed State Highway Commission Laboratory, series 24/1/1 box 139 Highway Laboratory folder.

4) Plans in the plans room of the physical plant department.

5) Wisconsin Blue Books.

6) University directories; plans at physical plant plans room. McGown to Edsall, July 12, 1976, papers of general counsel Chuck Stathas.