

William R. Dickson Oral History Project
Interviewers: Project Team
April 2005

Conversion of Industrial Buildings to Academic Use at MIT

SC: Hi Ann [Dickson], it's all of us here, Patricia Brady, Vicky [Sirianni], Harry [Ellenzweig], me [Susan Crowley], for Bill.

AD: Oh, OK.

SC: How are you?

AD: Fine, thanks. Bill's right here, too.

SC: Good.

WD: Hello.

SC: Hi, Bill.

AD: Hi, Bill.

WD: How are you?

F[?]: Hi, how are you?

WD: OK.

F: Yeah, it's -- Steve's [Immerman] coming in the door. Vicky, Harry, Susan, and Patricia.

WD: Yes.

F: And we thought we would take a few minutes to see how you think things are going. If there are any changes you would suggest in how we're doing this, to get your thoughts on where we should go next, and then to share some ideas of topics that other people have come up with.

WD: Yes.

F: OK?

WD: Yes.

F: So I guess the first thing is how do you think it's going?

WD: I think fairly well. The once a week thing seems to fit in pretty good, although I told Sue I can't do it this Wednesday.

F: OK.

WD: But other than that there seems to be enough to talk about.

F: OK. Well, on that note I wanted to tell you that we are -- we're going start having the tapes transcribed next -- actually this week.

WD: Yeah.

F: So that will give us a good chance to kind of review all that we've covered and to continue to sort of chart the course going forward.

WD: Yes.

F: But where do you think you'd like to go next?

WD: Well, thinking about it, it seemed to me that one of the things that I ought to probably talk about at least in one session is reengineering.

F: Ah, that came up. Yeah, Jim Bruce suggested that, Yes.

WD: So I think that --

F: Only one session, Bill? [Laughter]

WD: Yeah. Well, it's surprising how little I remember of some of the things. But probably left to my own devices, I'd probably do that at the next session.

F: OK.

WD: And then there are several other -- another subject that I probably would spend the bulk of a session on was the Arab Oil Embargo in 1973 and what the Institute did to reduce consumption of utilities in that period of time. Fairly interesting.

F: And we could use that right now.

WD: Yes. And I'm sure that there's been a lot of slippage. And then of course there are several other buildings that when I go through the list I have a little bit to say about each one.

F: Uh-huh.

WD: As I told Sue, I think before, I'm not going to labor over the details of every building. A building's a building. Most of them are boxes. So I only try and get the interesting things that happened during the design and construction. And on some buildings there are more than others. So I think the three general topics that I plan to talk about are the reengineering, the Arab Oil Embargo, and then some other buildings. There's some other buildings. There probably will be quite a few.

F: John Fresina, you may remember, suggested talking about, you know, the challenges of converting industrial buildings.

WD: Yes. That's a good one.

SC: Particularly unique to MIT's.

WD: Julie had this email and she made a tape of it so I can listen to it. And that was one of the good suggestions I think. And I know quite a bit about many of those buildings, so that would certainly be another session or two.

F: OK. One of the topics that somebody suggested was getting your recollections of the blizzard of '78 and how we handled that.

WD: We shoveled.
[Laughter]

WD: I know the grounds workers worked for a solid week. And just as an aside, I managed to get in on the third day by convincing people that I was in charge of the power plant. And that it was necessary that I travel. So I did get there, although I couldn't get into Cambridge. I got to Watertown at the Cambridge line, and the Campus Police had to send a car out to get me. But I stayed the rest of the week in my office. And on Saturday -- let's see, it happened on Monday. On Saturday the grounds people were going home. And I decided that having worked all week and stuff that they ought to have some money. So I talked to Keohan who was home. And they all decided there wasn't any way I could get money. To make a long story short, I ended up getting the money. It was like \$35,000. And I sat in my office and I paid them off one by one, which went a long way to increasing my standing amongst the troops.

SC: Now I know. I never heard that story.

WD: I actually paid them, each one of them a certain amount of money. I didn't pay their exact salary, but I paid them a significant sum of money, the same for each one of them.

SC: Was it cash?

WD: Cash.

SC: Oh.

WD: We had an armored car come to the Institute.

[Laughter]

F: Good.

WD: So that's another interesting -- that is another interesting story.

F: OK. We'll put the blizzard on the list.

WD: I also went down to the Drive with Larry Picard who was in charge of the grounds and stuff. We went down to Memorial Drive and watched one of these giant army vehicles come through and plow the drive.

F: Wow.

WD: And the snowdrifts were so deep that there was a car parked along the drive completely buried. And this machine just picked it up, I mean mistakenly, and just plowed it right into the pile. That was very interesting the snow could be that deep.

F: Yeah, wow.

WD: OK.

F: All right. One of the other questions or suggestions that was made was you might want to talk about how decisions on capital projects were made while you were in charge.

WD: Simply.

[Laughter]

F: That's different than today.

WD: It didn't take long.

F: OK.

WD: No, I mean it varied over the era of my tenure there. When I was first there and working on all the capital projects, of course I didn't have a lot to say about how they were -- which ones were going to be done and how they were financed, but the Building Committee decided and --

VS: Except for that 11 years when they didn't meet.

WD: Jim Killian would sit there and say to Joe Snyder after somebody mentioned something, some million dollars. He'd say, Joe, do you think we can handle that? Joe would shake his head yes. And that's it. That's how they decided to do it. But of course there was a lot of government money involved, too, like the Bush Building was financed almost a hundred percent from government money. So that it depended

on -- later on when we didn't do -- we built a lot in those days. Later on we didn't do quite as much. Once it was decided that we were going to do it, I frankly made most of the decisions because -- particularly in Gray's era, he didn't really care to participate too much, figuring that that was what I was paid to do. So the Building Committee didn't meet for most of Gray's tenure. We ran things sort of separately. But that's a good subject to talk about.

F: OK. We'll put that on the list. I'm asking folks around the table for comments.

WD: Yes.

SC: It all sounds good to me.

F: OK.

WD: I'm sure I'll think of others as they go along but...

VS: well, I think part of that, how capital projects were approved, I think part of that discussion should also be how capital projects were managed because it's my sense, Bill, that you and a couple of people managed like 20 projects in a ten-year period. You know, how were contracts let, what was the reporting structure? Because I think it was radically different than it is today.

WD: Well, there weren't a lot of people involved.

VS: Right.

WD: And, you know, I can certainly talk about that.

F: And, you know, that raises an interesting question, Vicky, the whole, you know, the whole structure of your department in your era.

VS: Um-hmm.

F: And how that's different from today. Because I -- my sense is, not having been there then that it is quite different.

WD: Well, when I started working on the construction when we built all those buildings during the '60s, we had basically -- well, two people assigned to those things and another one who spent a good deal of time reviewing plans. And naturally over the time, over the ten years, we added some people like Barrett, Dick McKay and Shepherd and stuff. Shepherd came later. But then we had field engineers who basically represented us in the field. And we'd probably do two or three jobs at the same time, I mean construction projects. So that there never was a very large group.

VS: Really no.

WD: And the group was never larger than nine or ten of all sorts of people. And we had five people in the drafting room, as we used to call it, who did smaller projects, space change stuff which, again, there wasn't as much as there's been in recent years. But Joe Salvatore was there, and Ted Jordan who died, and three or four others. And that was pretty much everybody else in the organization worked in operations. So that it was a fairly small group. And that's why I was hired because they knew they were going to build a fair amount of things, and they really didn't have the staff to work on them, and they didn't have -- the staff that was there were basically all in their 50s, so that they knew they were going to run out of people in ten years or so. And when I was hired, they said they hoped I would like working there. And if everything went well maybe I could do something different later on. [Laughter] And obviously that took place.

VS: The other thing, Bill, which is part of that and I really think is important to preserve is the whole idea of -- and it's really your philosophical bent. The philosophical belief of -- we're sitting in John's office and I'm looking at a book that says "Partnering." And so that brings me to I think the idea we could have a very rich discussion about how philosophically you put together chains to do buildings. For example, I have a feeling that when it came time to do X building and Y building, you knew who it was that you wanted to be the builder. And so I mean how did you select the builder, how did you select the team? Because I think it was very different than it is now. And I can remember you saying to me on the power plant, I can remember you saying to me at that point, where I thought we were going to be sued by the engineer and that we were going to sue somebody else, that, you know, in your entire tenure you never had a lawsuit in any of the building projects. So I would like to hear about your philosophy about putting teams together and insuring that they do their projects.

WD: Yes. OK.

VS: OK?

WD: Yes, that's a good idea.

F: The other one that came to mind as you were talking, Vicky, was if you reflect back on your time, Bill, how the regulatory environment changed while you were here. Did it become more complicated to do things and for what reasons?

WD: Well, obviously it did. I mean the -- originally, well, you could do most anything that you wanted within reason. You had to meet the building codes, which were nothing like they are now. Fill in all earthquake considerations to speak of. City of Cambridge Building Department was a bunch of good people, but they weren't too much of sticklers. And that's a good subject.

F: OK.

HE: And, listen, you had a relationship with the politics at City Hall.

VS: Right.

F: Yeah. Did you hear Harry on that one?

WD: I didn't hear it.

F: OK.

HE: You had a relationship with the -- is it the mayor or?

F: City Manager?

HE: The City Manager at City Hall in Cambridge.

WD: Well, we had a good relationship with the managers and particularly the Building Department. I think we were always helpful. The city didn't have a lot of skilled people. And I know the Building Department when they would get a set of plans that seemed to be above their ability to maybe judge some structural stuff or something else, we used to work with them, quietly. It was never spoken about. Plus we had a very good relationship. And we'd try and either from our own knowledge or get the knowledge that would help them make decisions. As far as everybody knew, they were their own decisions. But I had a very good relationship -- as did Mr. Peterson, my original employer. The greatest thing was when it came time to get a building license in the City of Cambridge, Carl had number 23, which was a long time ago. And I went up and got my license from the Building Inspector. Not too much of a strenuous test. And came back and I told Peterson I got my license. "Oh," he said, "great." And proudly said, "And what's your number?" [Laughter] I said, "Seven," which it was. I still hold number seven today. Somebody had died and it became

available. [Laughter] Peterson was always bullshit that I had [laughter] -- it was seven and his was 23. I don't know if anyone that works in the Plant now has a Cambridge Building License.

F: Don't know.

SC: I don't think so.

VS: I don't think so either.

F: No.

WD: There comes a time when you have to have one because you have to sign certain things. So that's the thing that --

HE: Or make a notice of not to see you.

F: Yeah, imagine if we had been in non-compliance all these years. Vicky raised an issue about numbering the buildings. How did we come up with this numbering system?

VS: The Don Whiston plan.

WD: Well, it was long before that, but he had the Whiston Plan as the most recent one, which...

VS: These people here can't figure it out.

WD: All I know is you have to start by standing on Memorial Drive on the axis of Building 10 Dome facing the Institute. That was the original plan. Everything on the --well, no, it was the secondary plan, but everything on the left is odd, and everything on the right is even. So if you think of that, it does work out that way, two, four, eight, six are on the right hand side.

F: Yeah.

WD: One, three, five and seven are on the left hand side.

F: Well, for heaven's sake, now it makes sense.

VS: You didn't know that?

F: I didn't know that.

WD: So that part of it is easy to see. However, the buildings were numbered differently when they were first built. The main group when it was all that there was. Each one of those sections of a building like Tech Building One, it has really three parts. Right? It goes one way, it turns and then it goes the other way. Those would have

been like one, two and three. And it wasn't until we started adding buildings that they decided that that system didn't work. But we had a couple of people around there when I was first there that remembered the old system. So if they were talking about something over in Building 2, for instance, I can remember Miles Cowen saying to me, "It happened..." -- you know, it was a flood, I think. "It happened in Building 2, Section 6."

F: Oh, great.

WD: But section 6 was the old number of the inboard wing of Building 2. So that eventually as we added more and more and went across streets and stuff, Whiston came up with a plan for the northeast and northwest, west and south...

F: Sounds like it's worthy of a session.

WD: So if you know exactly what -- how it came about, it's very simple. If you don't know, you'll never find your way around the Institute.

F: Yes.

WD: The same way with a number in the rooms. We were OK until we get to the Bush Building when we couldn't -- which was double-corridorred. So you couldn't just go 1 to 100 on the first floor. And then 2 through 200 on the second floor. We had to add a fourth digit. And that's why you find in certain buildings, particularly the Bush Building, the numbers -- the room numbers have four digits. OK. That's a good suggestion.

F: Sir, let me just recap what we've put down for future topics here. OK?

WD: Yes.

F: Reengineering.

WD: Yeah.

F: Which you said you want to do in the next section.

WD: I think so.

F: OK. The Arab Oil Embargo in '73 and how the Institute reduced demand for energy.

WD: Yes.

F: Challenges of industrial building conversion. And you can pick some examples.

WD: Yes.

F: The Blizzard of '78.

WD: Yes.

F: Capital projects decision-making, how was it different then?

WD: Yes.

F: And a parallel to that, how were projects managed?

WD: Right.

F: Let's see. And how, philosophically, how you decided to put together teams for certain projects? What was your thinking there?

WD: Yeah.

F: And changes in the regulatory environment that you experienced. And numbering buildings and time capsules is another one that Vicky --

WD: Right.

F: -- mentioned. So that's a pretty rich list.

VS: But, Bill, you still know where the time capsules are?

WD: The what?

VS: You know where the time capsules are?

WD: There's one in the Green Building wall.

VS: Yeah, and there's one in Killian Court. I'm under the impression that there is no one on this campus who knows where they are anymore.

WD: I don't think I knew there were very many. I can remember we put one in the Green Building wall but...

F: Is there one in Stata now?

HE: There's one under the Calder.

F: Oh, OK.

HE: I wonder if Warren Seamans knows...

SC: There's one in Kelly -- Killian Court, too, I think.

F: Do these ten capsules have a date to be uncovered?

SC: Nobody knows where they are.

F: Nobody knows.

SC: They're never going to be out...

F: OK. All right. OK. Sounds like we missed part of that plan. [Laughter] All right. I'm going to -- we're going to try to recap with this group -- and I don't want to tie

you up for this unless you want to -- sort of what we've covered so far in the sessions we've had. And I think we can do that -- with folks around the table. Is there anything else that you want to leave with us at this point?

WD: No, I hope that what we've done so far has been relatively interesting.

F: Yeah, well, we're going to -- as I say, we're going to get it transcribed. And I think it's going to be a real treasure, Bill, I really do.

WD: Well, it was -- to me they're interesting, but I'm not sure about everybody else.

HE: It's been very interesting.

F: They're very interesting. And I tell you, the people struggling today with demand management for energy will be very interested in what we did back in '73.

WD: Yeah.

F: And how the community reacted to that, you know because there is a sense you can't mandate anything around here, so...

WD: Yeah, I think they reacted better then than they would now. I think they probably reacted better because there was practically the only topic on the board.

F: Ah, OK.

WD: And it wasn't so much money as it was the availability of fuel.

F: Um-hmm. OK.

WD: So there were two aspects of it.

F: OK.

WD: And the most important was to try and reduce consumption so that you would have enough to continue to operate.

F: OK.

VS: I thought of something else, too. And it may be something you don't want to talk about or... But certainly how the Institute was managed during the strike because the only strike that ever happened was I think on your watch.

WD: Yeah.

VS: Excuse me for just saying that, but I mean -- so I think that would be good history. And then I think there's --

WD: It was great because nothing broke --

VS: Right. [Laughter]

WD: -- for a month. Nothing at the Institute broke.

VS: Right.

WD: I couldn't believe it.

VS: And as part of that --

F: When was that?

VS: That was in -- what was that, '76?

WD: Seventy-four, I think.

F: OK.

SC: Seventy-four, yeah because I had just come here. And then I think there's a whole bunch of people who probably want to know what happened during this back in the '60s and the early '70s with the student protests.

WD: Yeah, that's not one of my favorite topics.

VS: I didn't think it was going to be one of your favorite topics. But there isn't anyone. Constantine is gone. I mean there isn't anyone else who can talk to us about it. You were here.

WD: Oh, yeah, I turned out to be the front man. Every time there was a tense city or something else, I was out there.

F: That would be an interesting story to tell.

WD: Walter Milne and I spent a lot of time with some of our favorite citizens. Yeah, that's probably worthwhile.

F: OK.

WD: I must say I felt like slugging some of them sometimes but... I had a -- we were dealing -- let me just tell this story. We were dealing with the corporate investments in South Africa. And we had a Shareholder Committee that was formed. Obviously, I hid all of those favorite things when they needed a rational person. And we were meeting in the Maclaren Room. We met almost at 6:00 o'clock. And about 5:30 it sounded like every police siren in the City of Boston and Cambridge was in operation. And I said to Walter Milne, "That must be some accident somewhere." So we broke up at about 6:00. And Walter and I saw a little activity down by Building 7. So we went down there and looked outside, and there was a full pitched battle going on between the Cambridge Police and tactical squads, students on one of these

marches to Boston Common. They used to always march by the Institute and go right by it and end up -- start and end up in Harvard Square where there was trouble. And this time they stopped at the Institute. And so that's why all the police sirens and everything else. There was tear gas being fired. And someone lit a fire to the Sterritt Lumber Company.

F: Oh, my.

WD: Quite an active evening.

[Laughter]

F: OK.

WD: OK.

F: All right. Well, I'll type up this list of topics and I'll send it off to Julie --

WD: Yeah.

F: -- and to our group here. And then you can -- we'll pick up next week.

WD: We'll go from there.

F: Yeah.

WD: All right.

F: OK, Bill. Thank you so much.

WD: Thank you.

[The remainder of the tape consists of the team's discussions of logistics, subjects, and interviewers for future sessions.]