Oral History Interview

with

JOE SANDERS

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Pasadena, Cal.

By Michael R. Adamson

Adamson: Let's start with your background. Where did you study, and did you study civil engineering?

Sanders: I studied at a college. I grew up in Wisconsin and went to Purdue University and studied civil engineering, and was pretty clear from an early age that's what I wanted to do. So I had a very clear purpose and mission to get my civil engineering degree with an emphasis on construction, minor in structural engineering. I liked understanding how things went together and how to put things together and how to build things.

Fortunately, during my senior year at Purdue, my advisor, Professor Donn Hancher, who I'd come to know over a few years, had set me up with an interview with Charlie Pankow. Charlie was coming to the university to do a seminar presentation, and Professor Hancher sent me and a couple others up with an interview with Charlie before the seminar. I had my interview with him, and a week or so later we followed up. He followed up and flew me out to California, a boy from Wisconsin who had never been west of the Mississippi, and got me out to California and, over the course of the next couple months made an offer and I accepted.

I attended the seminar presentation that Charlie gave at Purdue and was fascinated with his knowledge and understanding of building and how to put buildings together and how to control or manage the building process. One of the company's early slogans or taglines was "Construction by [through] Cost Control," throughout the United States, and that was his way of conveying sort of the master builder concept, managing the whole design and construction process would yield a better result for whoever the client was. That fascinated me, and I signed on.

Adamson: When you were studying civil engineering, did you study it with a view to constructing buildings or just generally any sort of civil engineering?

Sanders: When I was at Purdue, I participated in the co-op program, where I studied alternate semesters with work periods. During those work periods, I worked for a heavy civil company based in Pittsburgh and spent five different time periods, roughly five semesters, working in Ohio, West Virginia, Kentucky, Pennsylvania, working on coal docks and coal mines, on river piers, power plants, bridge projects.

After my experience there, while I liked the building part, I didn't like the part of being out in the boonies, so to speak, while those projects were being built, and decided that I really wanted to find something that would take me to the city. Buildings were a fascination to me, and being able to work in a large city was another desire, and so that's how I ended up in the building construction business as opposed to the heavy civil infrastructure business.

Adamson: So if I get this right, basically that seminar that Charlie Pankow came to Purdue for basically short-circuited any interviewing process you had been going through?

Sanders: That's right. I had, prior to that, just my state of mind at that time, I guess, being somewhat ignorant of the buildings construction process and working in the city, I had tentatively committed to going to work for the company that I had co-oped with, and they were going to send me, I think, to Georgia to work on a dam project. So the interview with Charlie was a little bit of a surprise. I wasn't looking for it, I got it, and he was very engaging and convinced me to come out and see what the company was doing, what he was doing, and I fell for it.

Adamson: So your visit out here consisted of doing what?

Sanders: Well, attending the office, I visited one of the construction job sites, got to meet a few of the people during that interview. It was a small company but big city and decent-sized building projects. It got me excited about coming out to California to work.

Adamson: Great, Well, before we step through your career, just some bigger questions. During your career, how often did you interact with Charlie?

Sanders: Early in my career, probably not very much. But later on as I became superintendent and project sponsor, project manager, and then got involved in research

activities, also was area manager for a while, I interacted with him quite a bit. Those interactions were different depending on the positions, but he was a pretty focused guy in his expectations for you and the company and had his hand in it pretty regularly.

Adamson: And so, overall, his direct impact on your career while you were at Pankow, getting you through the ranks, how would you assess that?

Sanders: I would say that it was significant, I guess, in sort of the very basic premise of the company, sort of that master builder concept and being involved in the design as well as the construction, managing the design, managing the construction part of it with something that to this day I thoroughly enjoy. I enjoy the building part of construction, and that's where Charlie's—it seemed to me that's where his first love was as well, was that sort of overarching responsibility for the whole project.

Early on in the company's history, there was no other way, and it was just a fun environment to work in if you're a construction-minded person that's mechanically inclined and likes to figure out how to do things the best way, what makes the most sense for whatever it is that the client's needs are. Charlie was all over that in the sense of given best value usually meant lowest price to a client, delivering what they wanted as opposed to what maybe an architect designed for them and trying to listen to what the client wanted and then working on delivering that.

Adamson: Perhaps I should have saved this for the end, but I put it up front. Do you have a favorite Charlie Pankow story?

Sanders: Oh, boy. [laughs] I'm sure I do. Let me think if there's—I don't know if it's really a story. Obviously, you know, Charlie was sort of mythical figure early in my career. He was thirty years older than me, and just his stature in the industry, in the construction industry as well as, say, the concrete industry, it was just incredible how—and later in my career, when I got involved in research and trying to bring innovations into the business and working on some of the things that meant a lot to him, to keep pushing, pushing, pushing, Charlie was one that wouldn't take "no" for an answer or "can't" for an answer. He'd just keep pushing and pushing, and when you thought you'd been pushed as far as you could be pushed, he'd push some more. So mainly it's just an interaction on a level where he was a driver. He was a driven man, and even until his very last days, he was just driven to bring as much as he could to the business.

Adamson: Very good. Let's turn now to your career, more closely. This spring 1990 profile of you in the company newsletter calls your career, quote, "a classic Pankow success story," unquote. [1] Can you elaborate on what that might mean?

Sanders: Well, I think what it means is when we talk about a Pankow success story and you look at other people besides me that have hired on with the company out of school and have worked as a field engineer on projects and then worked their way up to project engineer and then superintendent, then project sponsor, and working successively up the responsibility ladder, if you will, and taking on more and more challenges and being a

[1] "Employee in Focus: Joe Sanders," *CP News* 8 (Spring 1990). The company newsletter was published under several names from 1983–the 20th anniversary of the company–to 2001.

part of the company culture, that culture again of master builder and being so integral to the how do things go together and that sort of "can do" attitude, not letting things get in the way of bringing a project to fruition, I think when people talk about the Pankow way or the Pankow attitude or the Pankow warrior, it's the concept that we're not just managing the process and taking what comes and passing that on, but you're solving the problem and moving whatever it is, the project or the problem, through to completion.

So when you bring new people into the company today, and my role now, when you bring new people into the company and you start to mentor them and bring them along and give them that, or convey that that is the attitude, that is the culture of the company, that problems are there only as challenges to be solved, and they're not obstacles that stop you in your progress, today that's a fun part of my role, is to work with people at the younger levels, but all levels with regard to that, and it was just a great experience coming up through the ranks and being mentored by others that conveyed if there's a problem, you look for the solution and we go solve it. We're not necessarily just calling somebody else up and asking what do we do.

Adamson: Is a career at Pankow an up-or-out proposition, or is there some level where you can reach and remain for the rest of your career?

Sanders: I think there's a—maybe it's a combination. Because our organization is a hands-on organization where we are a general contractor but we're also a builder, so there's multiple career paths and multiple places for people to fit in and to gain experience and to do what they love to do. If what they love to do is to be a

superintendent and to manage the highly challenging technical structural concrete portion of a project, then there's those opportunities for them. If they're into project management, then there's that opportunity.

The history of the company has been, to the greatest extent possible, is to bring good people in and then give them opportunity to move through and up the ranks or to move to where they want to move to, to give alternate paths and alternate choices. It's almost like a family where you're trying to attend to the needs of the people that are the company. I think the culture, the culture's very important to the people that have been here for a while, and the culture is very important for the people that have been here for a while to pass on to others and to raise them up.

So I'd say there's a lot of opportunity. Obviously, in today's world where we've gotten into more things than just what Charlie's basic fundamental approach to business was, but it's still sort of the core of what we do. We have a Special Projects Division now, which is smaller projects. We have our Large Project Division. We have design/build opportunities. It's trying to continue to grow the company to give people as much opportunity as possible.

Adamson: If I look at the list [provided to Adamson by Sanders before the interview] of sample projects you worked on and the positions you were in, can you say anything about in general how you got assigned to these projects? Is there a system to it?

Sanders: Well, there's a system to it. I'd like to think that when these opportunities came up, the challenges, I was a fairly young project engineer on 10560 Wilshire project,

I'd been with the company for just a short period of time, and then got assigned that responsibility with field engineers working for me on a twenty-two-story condominium tower. That was a huge challenge, but then very rewarding and a good team of people to work with there.

The 411 East Wisconsin opportunity was a great challenge working in Wisconsin in the middle of the winter, devising schemes and construction techniques that allowed us to continue construction through the dead of winter in Wisconsin. It gets cold there. That was a big challenge, but it was very rewarding.[2]

Then when I look at, say, the Gateway Center, MTA Headquarters, first off, they were very large projects.[3] They were highly political. I felt like my selection to be involved in those was something that I was going to do my best to ensure that those that had made my assignment there would not regret having made my assignment there. I think those were good opportunities for us as a company in general. I think we made a lot of those opportunities and helped embellish the reputation of the company during that time.

Adamson: Using what you just said as a point of departure, of projects being highly political, from the point of view of Pankow's involvement and your involvement on those projects, how does Pankow personnel handle the political end of a project like Gateway Center or the MTA?

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[2] For more on this project, see "Project of the Quarter: 411 East Wisconsin Building," *CPI News* 3 (Winter 1985); Brad Inman, "The Appeal of Design Build," *Urban Land* 46 (November 1987): 21–5.
[3] For more on this project, see Steven M. Nakada, "Gateway Center: Design That Sells Transit," *Urban Land* 57 (May 1998): 78–9; Richard Simon, "Urban Jewel or Height of Folly?" *Los Angeles Times*, 24 September 1995, B1.

Sanders: Well, working with the MTA, it's highly political. We had a board that I reported to that managed the Gateway Center Project that was composed primarily of politicians, people with political aspirations, and from my perspective, the focus of the project is building the project in accordance with its schedule and its budget. Some of the politicians had other aspects of it that they were concerned about that we also had to work to to try to achieve in terms of incorporation of various minority businesses or disadvantaged businesses or local hiring practices, all of those. So that was really my first introduction to construction as more than just pouring concrete and pounding nails. It was a huge challenge. By huge challenge, I mean, it was more than what we were accustomed to, but I think, looking back, we accomplished all the goals that the MTA had set out in front of us to accomplish with regards to the budget and the schedule and those other incorporation of different members of the community, if you will, into the project. I think it worked out. It worked out very well.

Adamson: One of the reasons I asked that is in talking to other Pankow people, as a builder and contractor it seems in the political sense that oftentimes Pankow would get involved after some of the preliminaries had been dealt with on land use and some of those decisions—To follow up, if a project is political in the sense of dealing with the MTA, do you or Pankow people get involved earlier than on a—nothing's purely a private project, but on a project like that when you're dealing with an agency, do you have to get in up-front earlier than usual?

Sanders: On a private development, usually our relationship with the developer is such that you'd get involved at the various earliest stages when property is identified or desire for a certain project in terms of footage or whatever is—so many condos, so many square feet is put together. Usually we're at the table before there's much more than a few sketches of a building and trying to understand what the economic and schedule goals are and helping guide the design process to achieve that.

On the MTA Project, it really didn't work out to be that much different. We got involved through a private developer as a public-private joint development. We got involved from the private developer brought us in and sat at the table with the designers, some of whom are my best industry friends to this day, and helped mass the project. Not that I have great design ideas, but you have construction ideas, you have constructability ideas, you have the economics of massing ideas, what's more expensive, what's less expensive, how do we do this, how do we do that. That project in itself, from that perspective, sort of epitomized the Pankow approach, to sit at the table and collaborate with the different designers, not stepping on the design, but collaborating with them and to understand what the owner's goals are and then to try to figure out ways to try to turn them into reality.

So that project and the Metropolitan Water District Project both went that way. They were public-private partnerships, and got to sit at the table very early on and to be an integral part of the team, and both of those were pretty good successes. In fact, the MWD, I just got a call from them yesterday [17 September 2008]. They want us to attend their ten-year anniversary of moving into their building.

Adamson: That's great. I want to jump back to 411 East Wisconsin for a second. But just now, in looking at this sheet you sent me, in a very compressed period of time, '86 and '87, you were project sponsor, superintendent, assistant estimator, and superintendent again. These seem to be sort of simultaneous, or was there a progression there?

Sanders: Well, there was a progression, not necessarily a career path progression, but in our business, as in most, you have times where work is plentiful and times maybe where you're in a heavy period of procuring work or attempting to procure work, and so you serve in whatever capacity you can serve at.

In Milwaukee, for instance, at 411 East Milwaukee, for the last year of that project, I was the only Pankow person left in Milwaukee. We were building out the interiors of that building, and I was there. I had a few local people that I hired, but I was the sole Pankow representative. Then after that was done, moving back to southern California, I, as a superintendent, finished up a building in Orange County that the other superintendent had been moved off to start another job, so I moved in, finished that job. That job ended, I moved into the office and helped out as an assistant estimator for a while and then moved out to another project as superintendent, the Brea Mall Project.

Adamson: I do want to get to that in a second, but as I interviewed Dick Walterhouse last week, he said he was brought on as project engineer for the parking structure.

Sanders: At 411, yes.

Adamson: At 411. I assume, then, you were the building project engineer?

Sanders: Right. Right.

Adamson: So you're both there at the same time?

Sanders: Yes.

Adamson: Essentially doing two separate projects, or was it coordinated?

Sanders: It was coordinated in that the office tower and the garage were side by side, separated by a seismic joint, construction joint. I guess there was no seismic joints in Milwaukee. So, yes, we worked side by side. The garage construction occurred during a certain portion of the tower. The tower was roughly a two-year, twenty-seven-month schedule, and the garage maybe was ten months. So he was there for the garage construction portion.

Adamson: Is it typical to have two project engineers on the same site?

Sanders: Yes. It depends on the size of the project. If you have a thirty-, forty-, fifty-million-dollar project, these days that might be a one project engineer project. If you have a hundred-million-dollar or a hundred-and-fifty-million-dollar project, then that might be two project engineers, maybe three, depending on level of complexity of the

structure. So my role now is to try to staff those projects into size of staff, the capability and the numbers of people on that job to meet the needs of the project.

Adamson: You're the first person who has indicated that they worked on the Capitol Court Target.

Sanders: That was in Milwaukee.

Adamson: In Milwaukee. Was that an add-on or a reconfiguration of the mall or how did that work?

Sanders: Well, that was kind of a side job for me while I was on 411 East Wisconsin. In my last year there, I was managing the interior build-out of 411 at the same time I was the project manager for Capitol Court Mall Target renovation, the same developer who was building the 411 building. Same developer that we worked for there also owned Capitol Court Mall and was renovating an old Gimbel's department store into a Target. So we provided an onsite staff for that project, and then I was the project manager for that at the same time.

Adamson: So when you're renovating an existing building, I know now there's a Special Projects, but had there been a Special Projects Division at that time? Was that something that—

Sanders: Probably. Probably that would have been a Special Projects job and maybe even the interior build-out of 411 East Wisconsin, we built out floors for some law firms and for IBM, and those might have been Special Projects projects.

Adamson: So Brea Mall is an example of the several renovation expansions Pankow's done.[4] In most cases, the articles I've read touted the fact that the mall stayed open while the renovations or the expansion took place.[5] Was this one of those cases?

Sanders: This was one of those cases, yes, the mall remained opened. This was both a renovation of the existing center and adding. We added on space, approximately doubled the size of the mall and also added three parking structures over the course of a couple-year period there to expand the retail space, the retail capability of the mall.

Charlie had a great way of maintaining these relationships with developers. The developer of Brea Mall, Corporate Property Investors, we did a little bit of work at Westminster Mall. Brea was the first large project that we did for them, and then we did work in Santa Rosa. We did work at Roosevelt Field Mall on Long Island. We did work at Walt Whitman Mall on Long Island for Corporate Property Investors during a five- or six-year time period.

Adamson: I guess the goal in the eighties was to refurbish these malls—

[4] "Project of the Quarter: Brea Mall," *CP News* 7 (Summer 1989).
[5] See, for instance, Norm Husk, "Tyler Mall Expansion: Keeping Tenants Happy during Construction," *Urban Land* 51 (March 1992): 26–9; "Pankow Wraps up Roosevelt Field Mall-Phase III," *Single Source* (Spring 1997).

Sanders: Yes. It's about time to do it again. I was at Brea Mall the other day. It's about time to do it again. [laughs] Every twenty years.

Adamson: In the design or the consulting with the developer as to what they want to do, what did Pankow bring as far as ideas are concerned about how the end result is actually going to end up in more business?

Sanders: Okay, well, as far as when you get—let's talk about Brea Mall, for instance. What we would bring to the table is the phasing, the sequencing, the constructability, how do I keep this open at the same time as we're building this. Or if I take out this parking lot, I need to have parking so I need to have this garage built first before I can take out this parking lot. So you put together and you kind of scheme through the whole thing. You look at what's the end result and now how do we still get there and still meet all of the criteria of the retail stores for parking during the course of construction, and how do you meet the—usually these projects are initiated based on some leasing activity that might have occurred. Maybe a major department store wants to get in on it by a certain date, and you're always working around the Christmas season, and you've got to be open by October 1st or November 1st or whatever the magic date is. So there's a lot of sequencing and coordination that would go into: How do you meet all of that criteria on a shopping center project?

Adamson: When you're doing these renovations in the 1980s, was there a lot of case examples of how these renovations have resulted in a higher customer base and therefore

higher leasing? What was the confidence level of the developer that this was going to work?

Sanders: As I said earlier, most of these are triggered by—the Brea Mall renovation was triggered by the desire of—well, I don't know if it was desire, but the developer bringing in Nordstrom department store to the table. So when Nordstrom comes, Nordstrom makes certain demands, and because Nordstrom's there, the developer feels like they can provide more or smaller tenant space and draw more people to the center and generate more revenue.

Adamson: Just one other observation from looking at the sum total of the projects you sent me is that when you were in California, you seemed to be down south. I think Dean and/or Dick were saying about how they were yo-yoing up and down. So you spent most of your time or all of your time in southern California?

Sanders: When I was project-based, yes, other than the stint in Milwaukee.

Adamson: What was the most important thing you learned from your time working in the field at the project level?

Sanders: The most important thing I learned? Well, I learned, I think, early on when you first come out of school, you feel like things are very technically driven, and the ability to work, get work done, seems like it should be very logically oriented and that it is devoid

of the personalities of the people you're dealing with, and as you gain experience in the field and working with people, many different people of many different capabilities, you discover that the management of the job, there is some technical aspect to it, but it's far more people management and organization of people and building teams and collaborating with people than it is just writing down schedules or dictating necessary results, that the ability to achieve things depends a lot on how you interact with the other people.

Adamson: What would you characterize as your management style and your project management approach?

Sanders: How would I characterize that? [laughs]

Adamson: My point of departure is the profile in the company newsletter characterized you as very efficient, but low-key. You make the tough assignments look easy, but the truth is you were very good at what you do.

Sanders: I would say what I just said, you come to realize over time that, at least from my perspective, the best way to get the best things done, or to get things done in the best manner, is to find ways to collaborate and to draw other people into the problem-solving that needs to be done to help other people bring their talents to the table. I would say that that's how I fancy my style. How it might be perceived, I don't really know, but you can

think it through, but then you also have to bring people into it and utilize or incorporate their talents and their points of view on how something gets done.

Adamson: Again, a project-based question: Many of the articles I read talk about innovation on the job site. Taking your personal experience, give me an example of innovation on one of your job sites that stands out.

Sanders: Well, okay, as far as, say, we were talking about sequencing a little bit ago, we were talking about the Brea Mall, but on the Gateway Center Project, that project covered, I forget how many acres now, but seven or eight acres of ground, and there were some pretty significant phasing issues that were thrown at us regarding maintaining certain streets at all times, maintaining freeway on-ramp at all times, even though we were building under the street and under the part of the current freeway off-ramp and had to relocate the freeway off-ramp. And we had to develop phasing and not extend the overall project schedule. So the innovation, while it's not necessarily a construction technique, but we were able to put together a phasing plan for this large million-and-a-half-square-foot parking structure, four levels of parking structure that covered nearly the entire site, went under the city street, had the city street go back on top of it, had a freeway ramp, come back on top of it. We were able to accommodate all of that phasing and not have the freeway ramp closed, ever.

We had to move it from one spot to another to keep it open and not have the street closed, not prevent access across the site. We were able to come up with all of that, and when you do those kind of things and they're significant, a little bit of trepidation about

whether they will actually work the way you imagined them. But in the end they did, and that involved not just my own thinking, but working with the city Department of Public Works and getting them to buy into what we were doing, and having it all come together was a great feeling. I think just bringing that, if you want to call it, sort of innovative approach to the job was very, very satisfying, very rewarding.

One other innovation, it's hard not to talk about my career or even the Pankow career, without talking about the Paramount Building and the precast hybrid frame project or the precast hybrid frame system that was utilized on that project, and just all of the immense amount of detail and thinking that had to go into making that project come together and then come off the way you imagined it coming off, and the people that we assembled for that team and how we were able to produce a project where you kept thinking of all of the disasters that could happen, or if we failed to consider this or we failed to consider that, what might have happened on that project. But in the end, a lot of people working hard, that was a very innovative structural system in a building put together in a very innovative way, and in the end it was very successful building construction project.[6]

Adamson: The structural side of it aside, if you look back ten, twenty, thirty years to the interiors, insides of the buildings, in terms of client satisfaction, would you say that Pankow buildings wear well, or has there every been a case where you've automatically said, well, we can do a renovation just like the mall people are doing?

[6] On the precast hybrid moment-resisting frame system and its use on the Paramount building in San Francisco, see, for instance, Larry Flynn, "Framing the Moment," *Building Design & Construction* 42 (August 2001): 32–4; Laurie A. Shuster, "Keeping It Together," *Civil Engineering* 70 (March 2000): 44–7.

Sanders: Well, I think if you look at it—you mentioned the malls. Malls are very much a—not being the designer, I guess just commenting on it, malls are meant to hit the design themes of the day, and, inevitably, just like clothes, twenty years from now, it's going to be something different, and malls need to be dressed up periodically so that they stay current.

As far as other buildings, I mentioned that MWD has called and wants us to attend their ten-year anniversary. There's a project that we as a company and individually, very, very proud of how that project turned out, how it came together, how it has performed over the years, from a lack of warranty perspective or lack of defects in the construction of the buildings, is a great testament, I think, to a well-built, well-designed building that people want us to come back and share in their celebration.

Adamson: I was thinking, too, in terms of a lot of the articles I read on the early projects in the sixties and early seventies were hotels in Hawaii, and those sorts of things. I've seen a lot of the buildings in California, but if I were to go to Hawaii and look at some of those early buildings, have they been redone in any form or fashion since then?

Sanders: Well, in the last several years I've been traveling to Hawaii every month as part of my responsibilities to manage our operations over there, and just sort of standing back and not even thinking about who built buildings, buildings are built in Hawaii in the sixties are of a much lower quality than buildings that are built today. Maybe some of it is the construction technique, and some of it is just the design and what they were designing for at the time versus what they're designing for now.

The Waikiki Landmark Building, that one there [points to picture on wall], is a much higher-caliber quality building than buildings that were built in the early sixties and seventies. The building that we're currently building over there, the Allure condominium, thirty-two-story condominium project, is also a higher-caliber building, higher design quality than buildings that were built years ago. So you're designing to fit a certain market. The market in Hawaii has changed over the years. It was if you were traveling as a tourist years ago, some of the darn things almost fit the tropical environment, I guess. Maybe you didn't have high expectations, and those were barely met. Now it's quite a bit different there, so that is a part of our business that we continue to participate in, is renovation of older buildings in Hawaii to bring them current and to meet the needs of today's travelers or hotel guests.

Adamson: Sure. Fair enough. This is a bit longwinded, so bear with me. In writing in the company newsletter in the early nineties [actually, in the eighties—see note], Dean Stephan stated that Pankow's major competitive advantage was, quote, "its ability to deliver a high-quality project within a short period of time for an attractive predetermined price. The foundation of this capacity, this ability," he argued, "was the fact that Pankow people worked on many different types of projects, many types of buildings, and different types of structural systems."[7] So this seems to explain innovation within the company is happening from the ground up; that is, an accumulation of expertise at the project level. Is that a fair reading of what you think Dean was saying at that time?

[7] Dean Stephan, "Working with 'The Best,'" *CPI News* 2 (Spring 1984).

Sanders: Well, you develop knowledge and experience within the company, and then you have to retain it and utilize it. The knowledge and experience is retained within the people, and you keep the people and then you give them opportunity to utilize that knowledge and experience on future projects. In order to do what he's saying there, there's been a shift in our business from when Charlie first entered the business to today. If you go back to when I graduated from college, 1979, I don't believe there were very many construction management programs in colleges in the country. If there was one, I don't know if there was one or not. But now there's a bunch of construction management programs. So construction has gone from the civil engineering realm where builders built buildings, they also built dams or roads or that, but builders built buildings, to the construction management side of things where construction managers manage the construction process, and that management involves a lot of—maybe not as much paper in this electronic era, but it's a lot of paper processing as far as management, and it's not called construction or it's not called building management, it's just construction management. So you're a manager and you're not a civil engineer. We do hire still some civil engineers, but the CM [construction management] programs, construction management programs, most of the schools that we go to—Purdue, for instance—has a construction management program as well as a civil engineering program and we hire from both.

So in order to do what Charlie did in his early years, you needed to have building experience and building knowledge of how buildings go together, how you structure something, how base facings or slab thicknesses or cantilever capabilities or just whatever it is related to a building—today you can graduate from a CM program and not

know very much about that. You know how to process a request for information, or you know how to process a submittal, get it from somebody, pass it on to somebody else, get it stamped, send it back. That part of the business has changed dramatically in forty years.

So our culture hasn't changed completely. We've changed somewhat. You have to. You have to change with the times. You can't go back. You can't stay rooted in the past, but you can stay rooted in those concepts of being a builder and bringing building knowledge to the team. If a developer is assembling a team to create a project and they have specific goals in mind, they may have no idea how to put something together to meet their goals. That's what we bring to the table. You have an architect who can make it look great, but you also have to meet a budget or everybody is wasting a lot of time. So it gets harder and harder to hold onto that culture in today's environment and where the business goes, as technology takes more and more of that, or attempts to minimize the building knowledge and to emphasize that the technology is what builds the buildings or the management process is what builds the buildings. Charlie was a great huge believer that people built buildings, and the people with knowledge and experience were what he was after, and he was going to bring those people into this company and keep them there.

Adamson: That's a good segue to my follow-up, which is if we were to go up the company ladder, what have the top managers or what has the company done to put in place processes or systems to ensure that this "multiplicity of experiences" is firm-wide at any given point in time and through time continues at that level to maintain the company's competitive advantages?

Sanders: Well, the one thing that we cannot lose from the company or we would become like so many others where you're a manager, is the one thing we can't lose, is the ability to self-perform certain aspects of the work. Self-performing the structural concrete work has been a hallmark of the company for many, many years, and it still is. It becomes difficult in the project procurement process. There's so much of this CM, construction management, approach out there that that sometimes there's an effort to work against those firms that try to be the builders, to bring the value to the buildings. Sometimes that value isn't able to be appreciated by a lender or somebody else that is controlling the process. So we need to hang onto that very basic self-performing work.

Charlie was a huge proponent of precasting work and precast concrete work and our ability to precast concrete work on job sites. We have moved a little bit away from that, and we've developed our own subsidiary that does precast concrete work, but there are a few of us that would say that we've lost something by doing that. We've compartmentalized the knowledge, and now that knowledge is no longer spread throughout the company, or people at an entry level don't have an opportunity to work on that specific aspect of a project on a project site, and they won't learn it.

If people work on projects where they are not involved in the actual forming and placing of concrete from an engineering perspective, then they won't know how it goes together. They won't understand how buildings get built and what leads to cost efficiencies or cost inefficiencies. Then when you're sitting at a table with an architect and an owner, you start to have less to bring to the table. Why am I there? I'm only

there because maybe I can provide a schedule, maybe a little bit of an estimate, but I really can't bring the building knowledge to the table.

Adamson: What is your favorite Pankow building?

Sanders: My favorite?

Adamson: Not necessarily one you worked on, but just the one to look at or walk around in.

Sanders: Well, there's several that are favorites, and you come to know and love usually the ones that you've worked on because you know every nook and cranny of them, and you know where you put your heart and soul into certain aspects of them or you solve some significant problem or there's some story about how this came to be the way it was. But I guess from my perspective, I worked on it, and I was project manager, but Gateway Center was just a tremendous experience because of the size, the complexity of the project, all of the great people that I had the opportunity to work with on that project, and the interaction with those people. Plus the challenges of working with the MTA and some of the politicians on that project. The current mayor of L.A. [Antonio Villaraigosa] was on the board of that project when we built that project, and we had to report to that board every month. So it caused me to look at my role in the process a lot differently than what I had in the past, and it caused me to interact with many more designers and

consultants than I had in the past, and it was a great, very satisfying experience to be a part of that kind of team.

Adamson: Great. Now we can turn to your office-based positions. Just briefly, as assistant estimator, did you work with Bob Law?

Sanders: I worked with Bob Law as the assistant estimator. That time period was relatively short. I believe it was about six months in between stints as superintendent at South Coast Executive Centre and then superintendent at Brea Mall and came in the office, and that was in the early computer days, and trying to get all our records on computer.

Adamson: So the estimation process for each project, in terms of time and effort, how much is involved? I assume you worked on more than one project in the short time you worked as estimator?

Sanders: Yes. So when you estimate a project, some of it is sort of the lifeblood of our company is knowing what costs or productivities have been in the past and how we keep track of that information and draw on it to estimate future work, in addition to analyzing whatever the various aspects of a future project might be. You have the past to look back at and see how you might have done there.

So we have our self-perform work, which requires a lot of that productivity analysis. We have our subcontracted work where we're calling up subcontractors and

meting with them and getting prices to do certain work from them. Different types of estimates take different amounts of time to pull together. Very conceptual estimates don't take that much time, and contract estimates that are very detailed and thorough would take several weeks to pull together, maybe a month or more, even.

Adamson: How do you ensure that the job you've estimated is in the bank, available for the next person to draw on to estimate in the future?

Sanders: Well, the jobs we build, which in the one sense, are really the only estimates that you can count on, those are things that actually happened that we keep track of that information. We keep a database of our self-performed work productivities as well as estimates for various categories of other subcontractor work that occurred on that project, and we draw on it. We also recognize that every job is different and needs to be tested against the market to see what market prices are. But we have a database. We also go to the market.

Adamson: Over time is there a model that's become—Dick Walterhouse mentioned there's now an IT department.

Sanders: Well, there's now an IT department, right. Well, the IT department doesn't do that. What they do is they maintain the network and the server bank. Now our servers are offsite somewhere and you keep growing and IT is kind of the money pit. You just keep throwing money at it to stay up with the current technology. But the technology

doesn't really—the estimating is done by people that understand the estimating and, again, how buildings go together, and so the organization of that information is what's key. What technology has done is allowed us to share it much quicker and faster. Of course, the demands of clients are that much higher as well, because you can't put together an estimate very shortly, and they want it in a very short period of time. They want it in a very short period of time, and so you keep chasing your tail, you keep looking for that, "Well, I'm going to gain some free time because I can do things faster," and it never works that way.

Adamson: I was thinking in terms of terms of tracking inflation or—are there differences between San Francisco and L.A.?

Sanders: Okay. Well, there are certain indexes that get published, and there's no slam-dunk way to be entirely accurate. Index is very similar, say, to the consumer price index or something like that for different regions. There are a couple organizations that put out construction indexes that we use to try to track that kind of stuff. But for the stuff that's really important, we base it on productivity, which is somewhat irrespective of cost. It's based on man hours of time that it takes somebody to do something, and, obviously, technology can impact that by giving you another way to do it, but it's still a productivity-based database and not a cost-based database on that self-performed work.

Adamson: On the bio you sent me, in your capacity as director of engineering and other positions, you say that you had responsibility for researching new and innovative building technologies.

Sanders: Right.

Adamson: You mentioned the Paramount.

Sanders: Right.

Adamson: Do you want to elaborate on that and then add any other things?

Sanders: Well, the Paramount was a significant technology because of how it created a structural frame of a building in a way that hadn't really been done before, using post-tensioning cables and precast beams and columns, and that system was applied on right around ten buildings. We've got one or two under consideration currently. It's still a current technology, but we applied it to Westside Media Center. There were two buildings there. We applied it to Pacific Plaza. That was a major office building. We applied it to two parking structures at Stanford University. One of the earlier ones was out at Roosevelt Field Mall, parking structure in Long Island. We've recently applied it to the Ontario Events Center Arena [Citizens Business Bank Arena] through our precast entity.

During that time, during my stint there as director of engineering, besides going out and getting immersed in some of these industry associations, and this was at the very early days of sustainability and what was called interoperability at the time, and now maybe goes by the name of building information modeling, the lean concepts, all of those things back in the late nineties, early two thousands, were sort of emerging concepts. So I spent a lot of time working with that.

But as well as the precast, we had three or four of these precast buildings, so it's really what prompted us to set up our MidState Precast entity is that we had all these projects come to realization in the same time frame, and they all required precast elements that were fairly technical in their configuration and the sleeves and ducts and other things that were imbedded inside of them and sizing and shape and all of that. So the precast entity, and I spent a lot of time with those guys getting that up and running and meeting the needs, sometimes competing needs, of our projects for precast, to meet their schedules.

Adamson: I infer from what you said to me that you work not only within the company on these innovations but through the ACI [American Concrete Institute], DBIA [Design Build Institute of America], and other institutions.

Sanders: Right.

Adamson: How does that work? Or how did you work through those institutions to do this sort of thing you're talking about?

Sanders: Since most of the innovations that we like to—an area that we pursue mostly in innovations is the concrete structural framing or precast industry innovations, and the major industry association for concrete construction is American Concrete Institute, and Charlie was a past president of the American Concrete Institute, so was Dean Stephan. Tom Verti was president here a couple years ago. I've been involved in ACI for probably close to ten years and have been heavily involved in their Research Committee. I chair their Research Committee currently. Research on all materials and structural framing and reinforcing concepts, so the research covers a whole gamut of different types of things. Obviously the things that are of most interest to us are those that can be immediately translated into buildings out in the field, whether it's a design concept or a physical framing idea. So I have spent and still spend a fair amount of time with ACI and my involvement in research.

Adamson: You mentioned the establishment of construction management curricula at universities. Was Pankow directly involved at that level of establishing education programs?

Sanders: Well, we have tried to be involved in the—we have been involved in the advisory councils of various civil engineering schools or construction management schools over the years as these programs, especially CM programs, have proliferated. You're still interested in what are we getting when they graduate, what kind of education have these people had, and so you try to ensure that they have certain basic foundational

skills, whether it's detailing, drawing or surveying, in the old days, different skills that you want your new hires to possess when they hit the field.

So in that sense, yes, we've been involved in Purdue, Cal Poly-San Luis Obispo, Cal State-Long Beach, Stanford, UC-Berkeley, been involved in those schools on their Advisory Councils or with members of the faculty. We hire interns. So we've become pretty integrated with how they're training their students and what we'll end up with when we hire them.

Adamson: Very good. Shifting gears once again a bit, what has changed most about the company since you've hired on?

Sanders: What has changed most? Well, there's certain things that have changed in the industry. We've already talked about the CM. Technology has changed our business, and technology has changed it in a couple different ways, from my perspective. One is that technology has made it easier—maybe not easier, but it's made us able to do more work faster. I don't really consider that easier, but you can run faster now because you have technology, and whether that means communicating or drawing or processing of information, everything moves at a faster speed.

There's also more ability for more people to know what's going on in more areas quicker, and in some sense that has slowed down the process because I think people have a weak link in the—they're the strength in the process, but they're also the weak link. If there was a decision that just required two people thirty years ago, now because you can notify more people, it might require ten people to be aware of the situation. I'm sure you

can imagine that, getting ten people to come to a conclusion is a lot harder than getting two to come to a conclusion. So our business has become faster in the sense of information flow, but not necessarily faster in terms of producing buildings. I think those two things relate to each other.

Then the CM process has, to some degree, tried to sort of muscle out the design/builders or the self-performed work aspect of our business, but I think it's had its period where it was laying claim to being the process of choice, to now having lost a little bit of favor, and things like design/build and integrated project delivery have become more in favor. Industry struggles with how to collaborate more and how to have projects turn out more reliably in terms of cost and schedule, and we're going down a lot of different tracks as an industry looking for that solution or solutions to that particular problem.

Adamson: Did Charlie see Special Projects as something whose time had come, or was it something he had not thought about earlier, or was it something he probably might have resisted twenty years earlier, or what was his take on it when it sort of started to develop?

Sanders: Charlie had probably a relatively narrow view of what the company's mission was and where our area of expertise was, and in good times when there were opportunities to deliver what we offered as a company to our various clients, then times were very good, but if the economy was such that those opportunities were slim, then we were in a little bit of a famine. I think the Special Projects came about because there was a desire to try to even out the ups and downs a little bit, to provide a division of the

company that could more reliable procure and produce work from a dollar value, a reasonably reliable dollar value year after year that would provide a base from which to operate the rest of the company. And to a very large degree, that is what has happened. So the Special Projects group tends to a lot of small projects and provides a reliable base that gives the rest of the company the opportunity to continue to do sort of what Charlie would consider to be the mission of the company.

Also, the project procurement process, even for a large projects, has evolved over time, and so we've tried to become more diversified in response to the market, but also for the same reason we formed Special Projects is to try to even out the ups and downs. Anybody that's alive today knows that there's been some big ups and there's going to be some big downs, and as a business you're trying to survive, not overreach during the busy times and have enough work to do during the slow times.

Adamson: As regional manager and senior vice president, what can you say about Pankow's strategy of the past five or so years, and what main prospects are going forward strategically?

Sanders: Strategically, I think the prospects going forward are better than they've ever been, and it's the second generation leaders of the company, all of whom were here when Charlie was still alive. I think there's the realization that we need to diversify, that in order to continue to grow as a company, in order to deliver the types of services that we're most fond of delivering, we need to deliver other services as well, so that we're exposed to more clients, that we have greater penetration into the markets in order to

cause our clients out there, our future clients, to think of us when they have opportunities that maybe we think are in our sweet spot. We have to do other things as well, and we've set ourselves up to try to do a lot of that, to try to do a lot of that stuff. What that does is it evens out the ups and downs. It provides more different opportunities for more people. It gives people different places where they can work and challenge themselves and do whatever it is that they like doing, and it gives us as a company a broader client base. We have clients, we've always had clients that have done big projects and little projects, and now we're able to serve, and have been able to serve them at those multiple levels. We don't need them to just bring the big projects to us; we can work with them on the smaller ones as well.

Adamson: I know for brief periods of time there were offices in San Diego, maybe Seattle.

Sanders: Yes.

Adamson: But for the most part, you've had offices in southern, northern California, and Hawaii.

Sanders: Yes.

Adamson: Is there any thought to expanding, for lack of a better word, inward, other parts of the company, or has that been talked about in the last, let's say, decade?

Sanders: Oh, yes, it's been talked about, and in the past, we've also—again, maybe following developers, we've looked at opening an office in Chicago when I was in Milwaukee, because we had a developer that was trying to put together a project there. We, for a while, pursued a project with a developer in Atlanta, and we've worked around the country for developers, and at times we've thought about opening offices in different cities. We had an office in San Diego for a short time, but it takes a while to build a client base anywhere you go, and the type of builder that we are where we're relationship-based, almost all of our work is negotiated. There's always competition, but it's almost all negotiated where it's not sort of bid-day scenario. You're trying to provide value, and you can't do that in just one instant. You have to do that over time. So it takes time to build up that knowledge and awareness of you as a company in any region you would go into. Certainly southern California is our base of operations. We've been in the Bay Area for many, many years, and Hawaii almost from the beginning as well.

For the Special Projects group, there has been talk about opening additional offices. That's a group that could go into some areas, and as long as we're not stretching too far and maybe with knowledge of the area or with a client or two, you could start to develop a body of work that we could handle.

Adamson: Very good. Well, to wrap things up, I have a few questions that are more specific to Charlie, and this may be just restating what you've said already. But what made Charlie Pankow a successful builder and businessman?

Sanders: He was just driven, driven to provide value, and he had this sort of "never say die" attitude about how to pull something together, and it was almost like if somebody else couldn't do it, those were the opportunities that he wanted, those are the challenges that he wanted, and having that better idea, working on a better idea how to frame a building or how to construct a building. Slip-forming was a big technique that we used on, you know, twenty buildings in Hawaii in the seventies and eighties and even to the nineties. Just finding ways to put up buildings faster, provide more value, and slip-forming and the precasting were keys to finding ways to reduce the labor, to reduce the on-site labor at times, to kind of even out the workflow on a job site, that's what precasting would do. The slip-forming technique sort of evened out the workflow as well because it was continuous operation.

He was just driven to find better ways. Even in his very later years, he just kept pushing on. If you didn't have a specific idea, he would push you or me or anybody for, you know. "We have to think of a better way to do this. We can do this. How are we going to go about doing it?" It was just a drive that never quit.

Adamson: I know from others that Charlie delegated a lot of the work and management to others. Was it the people he put in place or their response to what he charged them with doing, or something else or all of it, that made Pankow a successful organization?

Sanders: I think it's a combination of those. I think the people he put in place, the people he brought on board and that he retained. He had a standard that you had to live up to, and at some level in the organization, if you didn't live up to that standard, maybe

it was time to move on. But if you did, there was plenty of opportunity. It was good opportunity. He was just a driving force early on in the organization, and maybe he sort of epitomized sort of that "greatest generation" kind of approach to business, a brilliant man in his own way, and motivated a large number of people to be the best that they could be.

Adamson: Then what would you say is the best way of understanding Charlie Pankow's, and by extension, the Pankow firm's contributions to the building industry? What is Pankow known for today that you could either attribute to the company or to Charlie Pankow?

Sanders: I think Pankow is known for promoting the—a couple things come to mind here. Promoting the concrete industry, for one. Promoting the utilization of concrete and research within the concrete industry. One simple observation that you can make, if you drove around L.A. in the early eighties, any building over a few stories in height was quite likely a structural steel building. You drive around L.A. today, and quite a few of those high-rise buildings are structural concrete buildings. Now, that's not all due to Charlie, but I think it's due to the promotion of the industry, his desire to be actively involved in the concrete industry and be a leader in research. He was heavily involved in ACI and then American Society of Civil Engineers in terms of research.

Another aspect that I think people connect Pankow with is the design/build, the concept of design/build, and that may have morphed or may be morphing today into something like integrated project delivery, but design/build has its own concepts and

attributes about how you manage and design the construction process of the building, the single source responsibility. That was the Pankow way of how to put a project together. Design/build and precast and anything that would save time and money on a project—precast and slip-forming—that was what Charlie was all about.

Adamson: How will the firm sustain the kind of company that Charlie Pankow created after all of you who worked with him and knew him personally have retired?

Sanders: Well, that's a challenge. I think that's a challenge for any organization. You take on the character of your leader or leadership team, as the case may be. Obviously, when Charlie was here, we were very much influenced and characterized by him and what people thought of him and how he was perceived in the industry. But in the later years, most of the work, certainly the day-to-day work was being done by the leadership team, sort of the informal leadership team of senior managers of the company, and that's become more formalized now. Some of the values should be with us for a very long time.

There are people that we're raising, and it's the responsibility of us to raise people, to develop those same characteristics and to embed them in the culture, embed the culture in them, that will continue the legacy of Pankow for many years to come. It may be the times have changed, the world has changed, but some of the fundamental concepts of how to deliver buildings, the industry still struggles with how to do it. There's all these stories about broken buildings and busted budgets and all of that kind of stuff out there, and so the solutions are not yet known.

Some of the concepts that Charlie has brought to the process have been very, very successful and have been some of the most successful ways of delivering buildings that have been brought forth by anybody in the industry. The design/build concepts, Charlie wasn't—integrated project delivery or building information modeling or those concepts weren't there. Design/build was the way to single-source responsibility, making people accountable for what they do.

Then there's some question about whether collaboration is the way or accountability is the way, and how do you marry those two concepts together on project after project after project. It's going to be an interesting time for our industry to see if some of these concepts will, in fact, truly work, or if they work with only a very select group of people on a select group of projects.

Adamson: That's all the questions I have. I'm sure I haven't exhausted all the questions, or I may have skipped over something. But if there's anything I brushed over or if there's anything you want to add just off the top of your head, please do so.

Sanders: Well, I would say this. My time here, Charlie has given me a great opportunity, the company has given me a great opportunity to be associated with the Pankow name. When you go out into the various aspects of the industry that we're involved in, that name means a lot to people out there, and it's a challenge for us now to ensure that that continues to mean a lot for the years to come, that the magic or the mystique associated with that name doesn't die out with time. We didn't really touch on the Charles Pankow Foundation and the legacy that Charlie has left us with that, the ability to continue to

promote his ideas in design/build or in research activities, that that should continue for many, many years to come. Hopefully, there will be people after me, me now, people after me, that will be involved in that organization that will continue to push and to promote and to keep driving those areas of the business forward.

Adamson: What is the Foundation doing that the company can—or isn't focused on? How do you see the Foundation doing what you're saying?

Sanders: Well, the Foundation was created by Charlie upon his passing, actually before his passing, and funded with his resources from his times in the business and dedicated to promoting concrete research in a way that is—it's very difficult for a company to do that. Company has bottom-line responsibilities. A foundation has the ability to use its resources to—that's its sole purpose is to promote and fund research and in the areas that were Charlie's major focuses over his fifty-, sixty-year career, the design/build and concrete and precast industry. Those are the company's loves as well, so it's not hard to get people excited about those kind of activities. But here's a foundation that's dedicated solely to doing that, with an advisory council. An advisory council has some very big-name engineers and architects from the industry on it and promoting this research, and it's a great way to continue the Pankow name, to continue Charlie's legacy, way beyond his passing.

Adamson: Very good. I thank you for your time.

Sanders: Thank you.

[End of interview]