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**Company Affiliations:** C. D. Howe Company, Lamba & Associates

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**Summary:** President of Lamba & Associates Pritam Lamba discusses his long career in grain elevator engineering in Thunder Bay and across Canada. He begins by sharing the story of being hired as an engineer by C. D. Howe Company while on his honeymoon in Montreal. He describes the Port Arthur office, some of his colleagues, major projects on elevator construction and upgrades, and his rapid move up to vice-president before the company was sold. He recalls his first impressions of terminal elevators and their dusty conditions, as well as the major shift in the 1970s in dust control upgrades due to government regulations. Lamba discusses setting up his own company, Lamba & Associates, to continue specialty work in the grain industry, particularly with dust control equipment design, upgrades, and retrofitting. He also recounts his involvement in various elevator demolitions, like Westland D and Pool 6. Other topics discussed include the shift in grain movement to the West Coast, C. D. Howe Company's international projects, interactions with local contractors, the scattered locations of grain elevator drawings, the disrepair of abandoned elevators, and other elevator equipment automations.

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Time, Speaker, Narrative
NP: It's Nancy Perozzo, and this interview is taking place on February 16, 2016. It is likely our last interview for the Voices of the Grain Trade project, which I think puts today's narrator as number 215. We're very pleased. We've been trying for years to have Pritam be available for an interview. So, what I will do is--. And the interview is taking place at his office on Camelot Street in Thunder Bay. I'll have Pritam introduce himself and just talk briefly about how you became connected with grain elevators.

PL: Okay. My name is Pritam Lamba. I migrated to Canada in 1966. As a matter of fact, I came here with my wife on an extended honeymoon without realizing that I wasn't going to go back to England. That's where I had my engineering education. I graduated from University of Strathclyde, which used to be the National College of Science and Technology, from Glasgow. Then we went-- I was visiting my friend in Montreal, and right on St. Catherine Street I got stopped by a gentleman and asked if I was new to Canada and new to that city, and I said, "Yeah." And he said, "Well, we're looking for engineers, would you be interested?" I said, "No." Well, I don't know, for some reason or other he convinced me that it was a good idea to at least give my information. I had very little of it in the way of my degrees and whatnot.

I didn't realize that I was standing right in front of the Manpower and Immigration office, so he took me upstairs, took all the particulars. I told him that I only had one paper saying that I graduated. That's all. And he was quite satisfied with that, and then all of a sudden, he says, "Well, what about just having a medical?" And I said, "Look, I'm not interested in having a job here." He said, "Well, it'll only take two, three minutes." So, I did. Anyway, two days later, my friend—whose address I had given—received five or six interviews for me. And that's where it all started.

Went to first one and they said, "Are you qualified to work in Canada?" I said, "I don't know." And so, he says, "Well, go to the PEO office," or Professional Engineers Office. So, I went there and right in about two minutes they gave me a piece of paper saying that I was qualified to work in Canada. Boy, it went so fast it made my head turn. And then I had a couple of interviews. The second one was C.D. Howe, and they had the office on St. Catherine, so we just walked over there. The guy was very sharp, I guess probably from Glasgow also. Once he found out that's where I graduated from, right away he looked at me—and my wife was standing beside me—he says, "Where are you staying?" I said, "With friends." And he said, "No, no, we're going to book you in a hotel."

So, there you are. We got a surprise of our life, given a bridal suite at Queen Elizabeth Hotel, where I stayed there for two weeks [laughing] until the cost was going high. He called me, and he says, "Well, have you made up your mind Mr. Lamba?" I said, "No, not yet." Well, he says, "Expenses are high." I said, "Well, I can move into my friend's place." "Oh, no, no. Don't do that. But anyway, come and see us." So, I went there and had explained to me what the job would entail and where the job would be. And they said, "It's in the north." And I said, "Well, I'm well aware of north. I come from north in India, and I graduated in Great Britain in the north. So, north doesn't frighten me. That's fine." "It'll be Port Arthur. C.D. Howe Port Arthur. That's where we have an opening." And I said, "Fine." I accepted that.

**[0:05:28]**

And probably around 9:30, 10:00 there was a coffee time and people were curious what I had done. So, I told them, “I’m going to Port Arthur.” That very big reaction was, “That’s a boondock, nobody lives there! Eskimos are there!” And, oh boy, was it a shock of my life. But then anyway, I’m adventurous, so I said, “Okay.” I broke that news to my wife. She had no idea what snow would be like because there was no snow in Montreal at the time—it was sometime in October. So, two weeks later we ended up in Port Arthur—the city anyway—and it was three feet of snow in October. My wife was in sandals, and we had no overcoats because they were all packed. We had no idea that we’d be ending up in the snowbanks. But then anyway, that’s where our journey started. C.D. Howe, of course, was a pioneer in the grain elevator business. I started with them October of 1966. I spent 29 years almost with them.

NP: Can you recall the name of the fellow who interviewed you, C.D. Howe in Montreal?

PL: Yeah, that’s right.

NP: Who was the fellow there? The one who persuaded you to come north?

PL: [Laughing] I can’t remember the name, Nancy. But he was head of the mechanical department, that I know. Very sharp individual. I don’t know what I said or what I didn’t say that I got hired on the spot. But it was good. I had no issues once we got here. We found an apartment, and people were just wonderful; hospitality, both outside and within the office, was so great. I think the biggest thing that happened was they, at that time, had a big job in Vancouver building and elevator, or designing an elevator, and I became part of it. The beauty was that they had, at that time, hired a number of engineers, and we were all the same age group—one, two years out of school. So, it was very comfortable starting my career. And everybody was just wonderful.

NP: Tell me a little bit about the office here—where it was, who was heading up the office, who were some of the people you might remember that you started with, or worked with?

PL: Well, the office was located on 94 Cumberland Street, right across from the liquor store—that’s what we used to call it. Right on the waterfront you can say. Some of the people I worked-- I mean, of course, the manager at that time was called Byers. He’s passed on since. And the assistant manager at that time was Syd Halter. Then we had a number of civil, structural, mechanical, electrical individuals. Some of them are still fairly active in their lives. One of them I have maintained contact with all these years has been Don Smith. We worked together for a number of years, and even at these last few years, he’s been helping out on the structural side of it.

**[0:10:16]**

We have another person who, sometime in the '90s, became a manager and his name was Craig MacDonald. He's retired or semi-retired. Then in 1995, or 1994, a gentleman by the name of Bill Reist became the president, and I was given the post of vice-president at the time. I guess everybody says, "Before you fall, you get to the top." So that's exactly what happened. I didn't have--. I think maybe probably not even '94—it must be '92—1992 that I became the vice-president. And '95 the company was bought out with another company who had more interest in paper mills and mining, and I guess they had very little heart on grain business. And the grain business at that time was coming down, or the activity was less and less.

So, we were asked to leave and that's where—to my surprise actually—all my clients came for rescue in a way. I don't know, I use the word *rescue*. But then they went--. They opened up an office for me because they didn't want me to stop working. So, here I was given the computer, free space to work in, and I took all the mechanical guys that were available at that time and started Lamba & Associates.

NP: And who was with you at Lamba & Associates?

PL: Terry Foreman, Mike Shuslawy, Yves Labrecque, Warren Dove, and many others in transition that came. At one time we had about 16 people working both here and in the field. I don't recall all the names. But our office was in Canada Malt because two years before we had built a new space for them, and their whole office was given to us with few computers to start that business with.

NP: Can I go back and just ask you who bought out C.D. Howe?

PL: Oh, boy.

NP: Was that V. B. Cook?

PL: No, no, no. It was an outside company.

NP: No, that was a competitor. Oh, okay.

PL: I'm trying to think. It might come out, I'll probably give you the answer later, yeah. Well, it was bought out by one company and then bought out by another company.

NP: There's been quite a switch over in a lot of the companies in the past 20 years.

PL: Change, yeah. At that time, I think especially in Thunder Bay, paper mills were on the low ebb, mining wasn't very active, grain business was down, and so there were takeovers. Quite a few takeovers at that time, yeah.

NP: Now, you talked about the customers who wanted to make sure that they had someone qualified to work on the elevators. So, you mentioned Canada Malt. Were there other companies that you did a lot of work for?

PL: Well, Canada Malting, and Manitoba Pool at that time they called it United Grain Growers [UGG]. So, Manitoba Pool, UGG, and Canada Malt indicated to me that their business would be exclusively given to me. I think they stood by that word because most of the work that was going on at that time was upgrades and renovation, and we did most of it. But then, all of a sudden, in I think it was '97, '98, Manitoba Pool wanted to build some country elevators. So, we got to build four country elevators. That was quite a challenge because prior to that most of my work was in the pollution control. Then, all of a sudden, we had to more or less give a turn-key design and build projects. We are quite proud of it, as a matter of fact, very proud.

**[0:15:51]**

NP: Do you recall where those elevators were built?

PL: One was Letellier, the other one was Binscarth. The two other ones, I don't recall the names. So, these were the two first ones built and the other two were taken over by somebody else at that time to finish them off. But we started them, yeah.

NP: Now, as far as the design of those elevators was concerned, were there models to work from? Or was the design something that you worked on from scratch?

PL: I think you always--. Both, I would say. I think C.D. Howe had worked on a number of country elevators, so we had the basic design. But then, generally, you will find that the requirements of the owners are the ones which dictate. And, of course, one was built as a country elevator—a concrete one, that was Letellier—and the other one was at Binscarth which was actually steel silos. So, we had two different styles of elevators, and there was some innovation over there, from our perspective. Both worked out pretty good.

NP: What would the innovations that come to mind?

PL: Mostly, I think, in the receiving end, shipping operation, and, of course, at that time, pretty good designers for pollution equipment. Both these elevators were given the most modern pollution control equipment, which was really the filters, even though these were located in the country. But I think our clients were forward-looking, and we insisted that in a few years' time there would be stricter regulations, even in the countryside, because what was happening, more and more was being built around those areas and less and less of farming was being done. So, we knew that sooner or later they would be asked to sort of meet the stricter requirements. So, then I built right at that time.

NP: So many directions to go in. So, before I get too far away from C.D. Howe, I want to go back and just talk a little bit about C.D. Howe and what you might remember about the company. You had mentioned that the first job that you worked on was an elevator in Vancouver. Who were the owners of that elevator, do you recall?

PL: Saskatchewan Wheat Pool.

NP: And where in Vancouver was--?

PL: North Vancouver.

NP: Okay. Now, would this have been your first experience with terminal elevators?

PL: That's correct.

NP: I want you to think back to your first visit to a terminal elevator here.

**[0:19:54]**

PL: Very good. I think it was very interesting. I think biggest challenge, not for me as much as it was for the management, every time we had coffee, they used to look at me more often than not, and I was wondering. So one day I asked, I said, "Well, is there any concern?" They said, "Yeah. We're trying to find out how we can get a hardhat made to fit your turban because you have to go in the field and construction is always going on overhead. You have to protect yourself." So, I said, "That's fine. Whenever you are ready to send me to the field, but I have a few conditions." By that time, I knew what a toque looked like, and I said, "Well, it's a sign of respect. I don't leave my turban anywhere. But if I don't have a car and I have to go out of town, I need a car of my own so that I can leave my turban inside and wear a toque, and then put a hat on top of it." It worked very good. I think everybody was amazed. They say necessity is the mother of invention. so that's how I started.

I remember going to Saskatchewan Wheat Pool 7 at that time and everybody was looking at me because I had a toque, and then on top of that, and the beard. In those days, the elevators were very dusty because the pollution control equipment was there, but the standards were not high enough to sort of contain the dust as much. It was only in the '70s, early '70s, that Ministry of the Environment came with more stringent requirements that all this air that is being picked up from inside—dirty air—has to go through filters, which were at that time classed as 99.9 percent efficient. Because I think the neighbourhood was complaining because there were plumbs of dust from the top of the elevator which would extend a long way because of the height of the stacks. So, fortunately you could say—or unfortunately—we got 80 percent of the work in Thunder Bay doing the pollution. So, that's where, once I entered into it, I don't remember doing much other work than just dust control.

NP: From the perspective of your initial training in Glasgow, what would have been the closest type of structure that would have matched up with an elevator's mechanical systems?

PL: I would say nothing, really. It was something very different. I worked in London in mostly, I think, it's a cable company. They used to make submerged repeaters because at that time they were putting line under the sea. So, it was a telephone company that I worked for, and it was just very simple. We used to make submerged repeaters to enhance the signal from--. So many miles after that you put a repeater in so that it would enhance the signal. So, all the way maybe probably 100 repeaters before you get to the other side. Mostly design was all on paper. We never went out for any, what do you call, field work. So, I think this was different. But our education, especially in Glasgow, was such that we were building—it was a co-op system—we were building parts for airplanes, so we had an idea what most of the mechanical parts looked like.

**[0:25:31]**

But when we came over here it was something very different. But it wasn't very difficult to adapt. It's on-the-job training. You looked at other people and how they did, used your own initiative. The funniest part of the whole thing was when I came in '66, '68, the manager, or actually my senior engineer, left. And so, without a title, I was actually looking after the office with a few—but I say office, the mechanical department—with a few technologists and draftsmen. I had the authority, but they were teaching me. It was quite a combination. You learn very fast when you see that you have nobody on top to guide you. It was very interesting.

NP: And what about just the physical structure itself, the elevator, how--. Can you recall how you initially reacted to being inside an elevator? Inspecting the systems?

PL: Yeah, two things I found. One thing is hugeness of the structure. Secondly, in wintertime, it was colder inside than it was outside because of the concrete. The other thing was, of course, moving machinery and a lot of safety requirements and all that. So, you had to be very careful what you wore. The third--. The striking thing was, like I said, I have long hair and beard, and the dust I had to wash every day, two or three times, in order to get the dust out of my system. And also, I think, when I first started in that direction, we had to do some sampling to find out what was coming out because the Ministry of the Environment put standards through. We had to prove to them what was coming out and what we would do would meet the standards. I remember on the trackshed roof, which is really the shed over the rails where they unloaded grain, maybe 30, 40 cyclones around you, and they were all spewing dust because cyclones are normally about 65 percent efficient. So 35 percent of the dust would still be coming out. Even I could recognise after we finished testing, I looked into the mirror, and it was just dust. That was quite challenging and [inaudible] but that was our work. I had to accept it.

NP: You obviously weren't afraid of heights.

PL: No, not really. I can't recall anytime going up to the top of the elevator and being afraid. Mind you, in those years, there were very few safety ropes, and you had to be careful. But now, of course, you're in construction and you have to have all kinds of railing. It's much more safer than it was 50 years ago.

**[0:30:00]**

NP: So, when you think of the different elevators—and a lot of them would be operating at the time in 1966, that was before they started decommissioning them--.

PL: Yeah, my recollection, if I remember right, I went to give a paper on pollution control and use of filters and plans in the United States—at that time I remember there were 22 operating elevators. I also recollection is that we were shipping out anywhere between 18 to 22 million tonnes of grain. I remember projecting at that time that it would go up to 30 million tonnes. Now, as you know, the amalgamation in 1970 of Port Arthur and Fort William into Thunder Bay made this port the largest grain port in the world. My recollection is that a few years later there was a shift of grain movement more towards the west, going to China and the east to India rather than Europe. So, I think with that shift Thunder Bay lost quite a bit of its grain business. Eventually, from 18 to 22 million tonnes it dropped down to 15 and then 10 and then it was 8. The lowest I have seen is 5.8 million tonnes. So, it's a big change since I started in the grain business in 1966.

NP: But at least the grain is going through one of your elevators out west.



PL: Oh, yeah. Certainly, oh yeah. As a matter of fact, yeah, you can say some of these companies when they found out the shift was that side, they started putting more money on--. They already had the elevators over there, but they started renovating and upgrading their plants so that they could take a larger amount of grain. So now, actually, you'll note that there's more money being spent on the West Coast to upgrade those elevators to accept that higher amount of grain. And it will continue for quite a while. I know Churchill elevator might probably find a decline, which will help Thunder Bay elevators, but other than that I think Vancouver is the area where most grain would go from.

NP: Now, who was your competition in grain elevator business in Thunder Bay?

PL: At that time, it was, I think, just V. B. Cook. There was another small company, Larry Ede, who actually came from V. B. Cook. He was an electrical engineer and started doing a little bit of pollution control. But I think in the '70s there was far more work in the way of controlling the pollution in this area. So, all the elevators, say in 1974, started working on three-, four-, five-year projects because the Ministry of the Environment gave them time because it's very expensive and does not bring much revenue. So, any upgrades of that kind it was more or less something that would not increase their throughput. It was more for safety. The biggest concerns at that time, I think, was a few of the elevators in the States had blown up. And even, I know, there was a couple of them in Argentina that we visited afterwards where two of the elevators had blown up. I think that was a big concern and, of course, to have people who are finding that their lungs were getting all dirty.

**[0:35:47]**

NP: To just finish off this upgrade in the '70s, that was when the elevators along the Kam River, then, started to be decommissioned. And what part did the dust control program have in that?

PL: Partly, yeah, I think the first few elevators that got decommissioned, I think, the reason very well had been the cost of upgrading those elevators to meet the new challenges or requirements by the MOE [Ministry of the Environment]. Beside the fact that they were old and to keep up with the flow of grain would have been very expensive.

NP: Can you recall the first one to come down?

PL: The one I remember that I was involved in was West--. Western? I think Westland--.

NP: Westland D?

PL: Yeah, Westland D. Because I know that was an implosion of that elevator.

NP: Or Empire? The Empire was 1970 or '71.

PL: Okay, I wasn't involved in that one, but Westland I was involved. Empire, yes, you're right. I think maybe probably at that time we were pretty much involved in other business, and I don't remember who oversaw that elevator coming down.

NP: The two that were in the turning basin near what was then Great Lakes Paper Mill, there were two elevators there. There was one called--.

PL: Ogilvie?

NP: No, further down, near the--.

PL: Number 4 and 5?

NP: Further. So, past Paterson, up near Great Lakes Paper. It was Northwestern at one time, and one was initially called the Electric, or I think Purvis owned it at one point.

PL: Yeah, well--.

NP: I'm just trying to find out when the first one came down. Somebody is interested in knowing, and the first I can find is Empire.

PL: What I remember, of course, the Westland elevator. You're right about Empire, I remember that one, but I wasn't really involved too much. But any one before that I got no idea.

NP: So, what was your involvement with taking down the elevator then? How--?

PL: We were involved in hiring somebody to do that implosion and then supervise that.

NP: And it was an implosion?

PL: Yeah. Because I have pictures of it somewhere and the whole thing came down and it was just a structure of mangled steel.

NP: And where did the stuff go, do you know? I'm interested in where these elevators, the rubble, ended up.

PL: Well, you know, there was a few companies over there salvaging steel. I'm sure as far as concrete was concerned, they somehow used it up and—what do you call the word—reuse it in some form or other. But steel was taken down, and cut apart, and recycled somewhere. But Pool 6, I know at that time the restrictions were very high that nothing could go in the water, even though I think some of it did end up in the water. But that was another one that I remember that we worked on. But other than that, there are still a few elevators they are eyesores, but they are standing there because it has become very expensive to tear down the elevator.

**[0:40:24]**

NP: Did you have a favourite elevator?

PL: That's a good question, yeah. I wouldn't say really a favourite, but most of the elevators that I worked on was Saskatchewan Wheat Pool 7, Manitoba Pool 1, and United Grain Growers [UGG]—both Elevator M and Elevator A. So, if I remember right, I think the last work we did before it got sold out to other companies was United Grain Growers, UGG A elevator. That was a big job. I think, if I remember right, \$10 to 15 million worth of renovation—pollution plus some changes in the machinery that was done.

NP: And was that the UGG in Current River?

PL: Yeah, that's right, yeah.

NP: You mentioned that there was a job that was done with Canada Malt, what did that job entail?

PL: Again, that was mostly pollution control because my involvement was--. But when we went down as our own company and we were stationed over there, we had some renovation of the turning machines and beds and thinks like that.

NP: The turning machines? What are those?

PL: The turning machines. The ones that the malt is made. They turn the grain for--.

NP: For drying purposes?

PL: Drying, fermentation, and all that. So, we had a little bit more work done, and we did the work in the pellet plant. And so did we work, I think, in the pellet plant at UGG also. Now, I think, most of our work is with Viterra, which used to be Saskatchewan Wheat Pool. We are involved in all their pollution control work from east to west. Big project is going on in the west, and also we had recently finished a project in Saskatoon. We're also working on country elevators in Moosejaw, and of course Saskatchewan Wheat Pool elevators—or Viterra elevators—in Thunder Bay.

NP: You'd mentioned that you had gone to visit a couple of elevators in Argentina. C.D. Howe had an international group, did they?

PL: Yeah.

NP: And what can you tell me about where they operated, where elevators were designed?

PL: I think the first one, actually, it was 1967, or somewhere around there, that we showed some interest in India. One of our guys was sent there and for some reason seemed to like that place, and he opened up a company, Howe India. So, I think our offices were all the way across from Vancouver, Thunder Bay, and Montreal. These were the local offices. And then there was office in India, and we did quite a bit of work, as a matter of fact. Howe India still exists out there today. The president of the company at the time, of, say '95—when we were taken over by another company and grain business was finished with—he moved on to India and took care of the business there. His name was Steve Rossler. He's done very well for himself over there.

**[0:45:46]**

NP: Where was he originally from? The office here or the office--?

PL: Oh yeah, from Montreal office. He was in Montreal office.

NP: And did they build in Argentina, C.D. Howe?

PL: I think C. D. Howe was involved in design and building, to the best of my knowledge, a couple of elevators. Then we went there for bidding on--. As a matter of fact, when I went there, the idea was to have a consortium with the local company and bid on a couple of jobs, but we were not successful.

NP: Who ended up building, do you know?

PL: No. I've got no idea.

NP: Who were the competition? American builders or--?

PL: Oh, there were Germans, Americans, French. Oh yeah, all kinds of people were there at that time. But it was a big undertaking, and things were done differently.

NP: Done differently in what way?

PL: [Laughing] I'd rather not say it, but it wasn't easy, put it this way, to get a project unless you knew somebody. That's the kind of a thing that goes on everywhere in the developing countries. It's not what you know, it's who you know that makes a difference.

NP: Yeah. I can recall talking to some people who marketed grain for Canada, and they said when you do business in certain countries there are practices that are--.

PL: Yeah, it is very different. We have had projects from Montreal—I wasn't involved—in Iraq and Iran and a few other--. Taiwan, I think they were also in Taiwan. I think we built a nuclear reactor, if I remember right, and that was also done for Montreal. In 1967 after we finished the grain elevator in Vancouver—'67 or '68—there was little work because we had built up such a big staff. So, I had to go to Vancouver, to Montreal, to work for six months to a year. And at that time, I was involved in the Vancouver building, or designing, a coal terminal. A Ridley coal terminal. So, I got an exposure on that one also. But other than that, most of my time was spent in Thunder Bay.

NP: What was your favourite project out of all the projects you did related to the grain industry?

PL: I think I would say almost every project that I took on was a favourite in the sense it was challenging. I had the good fortune of having a very good designer team with me, and we were the initiators of innovative design for hoods and things like that. I think that's why--. And we were not afraid to try things out. We were very lucky that I was able to convince my clients that the best way to do is to try. So, we made prototypes, and that helped us design things that nobody else could come close to. I think that may be part of the reason that 90 percent—or almost 100 percent later on—the pollution business was given to us.

NP: Are those innovations things you could patent, or no?

**[0:50:23]**

PL: No, I didn't do that. No.

NP: Could they be? I guess--.

PL: Could they be? Yeah. They could be. No, I had no intention. I know lots of people ask that question, "Why don't you? Why don't you?" And I said, "Well, it's not worth it." Every time we came up with something new because of the lack of--. These elevators were built in early 19--. And at that time, they had no vision or feeling that what would come next in the '70s and '80s. They were not designed to accept some of the pollution control equipment, so I think from that perspective it was--. Every job was a challenging job. I still remember I had to convince my colleagues over here is to--. "Oh, it's very tough. We don't know what to do." And I said, "Well, that's why we are here for, because people won't ask us to do the job if it wasn't tough. They could go to a contractor and get these things done." Because they are coming to a design. It's a necessary evil. People are used to getting the contractors. So, when we started this kind of business, they realised that a design team was important for their work as well as the quality of work that they would get. So, I think, yeah, I would say that every job was a different job. Every job was a challenging job. And we were successful because the clients cooperated with us all the way and helped us to do some prototypes.

NP: Who would have been hired to actually do the physical work, then, of installing the pollution control? What contractors would you have worked with?

PL: Well, generally, we are a professional engineering design team. Once we create a design, we make the specifications and all the drawings, then we go out for bids. There were a few contractors at the time who bid on the jobs and then all we would do is supervise. You can call it project management—to make sure that it is built to our design. Because once it's a competitive bid, the contractors would like to cut corners and make some money, but it was hard when we had a team of people watching over them. It worked out pretty good.

NP: Were there companies in town that had that expertise?

PL: Yes. I think you probably know Simon-Day Company, Thunder Bay Northland. And there were smaller companies, they just fizzled out. There were, at times, companies brought from outside, and I know EllisDon came once. Then there was another company from Manitoba, Sawatzky. They were here. But mostly I think the work was done by Simon-Day.

NP: Are they still around?

PL: No. Very few people now. I think there's smaller companies. I'm trying to think the name. Oh, Nu-Tech Metals. So, they are the ones who are doing most of the piping work in town.

**[0:55:11]**

NP: And did they disappear just because the work dried up?

PL: That's correct. There was very little work. The shift was towards the west. At that time, some country elevators were being built, so they moved there and, of course, Vancouver. Some of these people actually opened up offices in Vancouver and helped out there. Yes, generally speaking, it was lack of work in town that drove them away. So did engineering companies. I think V.B. Cook got more and more involved in paper mills and mining and completely left the grain business. Sometimes I ask myself why I'm working over here at age 80 years—only because there aren't very many people doing this kind of work.

NP: And it's still a challenge?

PL: Oh, it's always a challenge. Oh yeah. Like I said, my work is always a challenge because every time we go to a new elevator to work in, even though the equipment is very similar, it's the early designs which make it more challenging to fit into. Retrofitting is always a challenge, and most of my work is retrofitting. I haven't seen any job where we could probably say, "Okay, well pull out guys, pull out the drawings and copy that." That doesn't happen very often.

NP: Speaking of drawings, one of the disappointments that I have with the elevators closing down during the time that I've been involved—which is starting about early 2000s—is the disappearance of drawings. Is there a central location of the drawings of the old elevators that are not operating anymore?

PL: That's a good point. No. Unfortunately not. I think, if at all, V.B. Cook might have a few, but I think most of the drawings are with us. Most elevators that we have worked on--. It was very unfortunate that when we started our company, we were just sort of working on a number of elevators, and we didn't have the desire to bring everything from C.D. Howe. And at that time, after we left, the grain group, even though it was more or less dismantled, the president—local president—Bill Reist was still working over

there on certain projects, and so he looked after the drawings. There was another structural guy who started on his own, JML Engineering. Somehow instead of us getting all those drawings, he got some of them.

NP: Is he still around?

PL: Yeah, he's still around on the waterfront. Now, he hasn't been involved much. He went more of paper work and mining again, so I don't know what he's doing with those. But most of the drawings were destroyed unfortunately, sad as it may seem. Whatever we could bring that we were working on we brought, and the ones that we were not working on, we never felt the necessity to bring them over. In that fellow's wisdom, they left Thunder Bay as a base of their business, the new company that took over.

NP: Which new company was that? The one that took over C.D. Howe?

PL: No, that was not C. D. Howe that was--. Oh boy, I'm bad with names. One of my members might remember. I'll probably get you the name shortly. I didn't even know that some of these drawings were destroyed after they were destroyed. And that's a very sad affair.

**[1:00:26]**

NP: So, do you think that there might be a way that a group like ours, the Friends of Grain Elevators, could get a group together that might be able to piece together drawings that--.

PL: That's a good possibility.

NP: And get them copied and saved?

PL: Before--. I mean that--. Somehow, somebody has to initiate all the companies that were involved—which is V.B. Cook, now under a different name, JML Engineering—and something can be done. We had some of these drawings made into fiche, small--.

NP: Microfiche?

PL: Microfiche. But they are all scattered all over. It'll be a shame because I know after I leave, I can't see anybody really--.

NP: I think it's this generation. If we don't get this generation ferreting things out, it's the dump.



PL: This is what was happening. I'm holding onto whatever I have.

NP: Yes, and that's, with the marvels of being able to copy things these days, people can keep the ones that--.

PL: That's right, yeah. Exactly. It's an expensive way, but it's a history. You need to--. One of these days, those elevators themselves might have some drawings of their own, but I found that for whatever reason—we worked on a number of grain elevators while they were being bought out and things like that—they didn't really take care of their drawings. Many times it is bought out by somebody, and we have to go and work over there without the drawing. "Oh, they used to be here, but I don't know where they are." So--

NP: And UGG M was one of the ones where they had a wonderful set of drawings. I think we might have even gone with you, and then they were vandalised and just destroyed.

PL: And it's gone beyond, the revitalisation of it, because it's been badly dismantled from the inside.

NP: And most have, I would think.

PL: No. Elevator 1, which is right beside it on the other side of the water, that's in a good shape. UGG now, A, is operating by Richardson's, so that is in a good shape. But Pool 4, they are gone beyond repair. UGG M is gone beyond repair. I can't see anybody doing anything to those elevators.

NP: Yeah. And Pool 2?

PL: Well, Pool 2, even when I came, it was standing over there as an abandoned elevator in the '60s. I think that's one elevator they maintained—or kept, not maintained, they kept—as a memento for this city and it had been sitting there for a long time. It's not in a bad looking shape, at least there's nobody went in there to start taking concrete pieces out like it happened to Pool 6. That became an eyesore. And so is Pool 4. 4A and 4B are eyesores, right at the moment. But 2 has been standing there--. I think somebody should have some sense and maybe probably paint it with a mural, if they want to keep that. That's a landmark. I remember we were trying for Richardson because that had a very bright colour. So, from the Rotary Club we tried to sort of, "Next time when they paint, we'll have a mural put on." But it wasn't entertained very well. But I think that that probably would be one project that somebody can take over and do that, become a very good landmark.

**[1:05:40]**

NP: I'll talk to you offline about that. With the dust control over the time of your career, has there been major advances in the technology?

PL: Not lately. Not in the last two years. I think once the filters were developed, which are 99.9 percent efficient, there hasn't been a new technology except--. You know, there are always odds and ends they are improving on for removal of bags, for changing bags—it's more or less facilitating the servicing of them.

NP: So, the technology from 1966, when you started, to now, filters, a major improvement. What about the physical structure or the venting or any of that? Were there major advances?

PL: Venting of what?

NP: Well, just venting the air into the filters and that whole--?

PL: Well, the dust control part. Grain is moving through the plant. Every time there is a transfer of grain from one area to another there is dust produced. The innovation design, which is always being developed, is the capturing of that dust more efficiently. So, I would say that it's always evolving as far as the hoods are concerned. Now, that's an ongoing process. Other than that, it's just a matter of collecting the dust and sort of exhausting it through the filter. The only other, I think, work that is being done is to protect the explosion. There are means and ways of improvement on trying to cut down on the explosions. First thing is, of course, you collect the dust. Secondly, you make sure that that fine dust does not go back into the plant. So, there are ways to [inaudible] up some kind of dampers to make sure at the time we shut it off that it isolates the plant from the equipment—making sure all the equipment is put outside and things of that kind.

But there's always the National Fire Code, and National Fire Protection Association with them. They're always coming up with new regulations which we have to adopt to. That becomes a challenge because I think most of the time, you'll find that they are written by, no doubt, professionals, but very little knowledge of the environment that they are writing on. So, they just go to industry, and many of times it becomes a challenge because industry wants their equipment. And so they come up with, "Okay, you need this and you need that thing." We are the applicators, and sometimes we find that it doesn't make sense. So it's a challenge all the time. I would say probably anything that's coming along now in the pollution control is more of a safety.

**[1:10:12]**

NP: Safety in what sense?

PL: To avoid explosions.

NP: Ah. Were there any explosions from 1966 to now that--?

PL: No, I think--. Well, yeah. In the United States there had been a few explosions, and part of the reason--. I remember when I gave a paper, we were ridiculed because they are our big brothers. One thing we did differently was that we made sure that the fine dust didn't migrate back into the plant. Now, they didn't have that, and I remember saying something and, oh, there was a big laugh. "What do Canadians know?" It was only ten years later that—after they had few explosions—that they followed what we were trying to tell them at that time, which is to make sure that once the dust is picked up and is filtered through the system, it doesn't communicate back, because fine dust is far more devastating than heavy dust. That's why I think even when there were cyclones and hardly 60 percent of the dust was captured—I mean, it was dusty all over the place—but they never exploded because it needs a very fine dust to create a mixture of fire and dust to explode.

NP: Do different grain products produce different kinds of dust as far as fineness is concerned?

PL: Well, generally speaking, the dust is the same. They maybe probably shed more dust, like barley probably would shed more dust, peas would shed more dust when they [inaudible] them. But dust is dust. Grain dust is classed as grain dust.

NP: Well, as usual, I don't follow along with the questions because you answer them as you go along anyways. But what I will do is take a look here and see the ones that at least give you an opportunity to add to them if you want. What might surprise people most about the work that you do?

PL: When you say surprise how do you mean?

NP: Just find it, "Hm. Never thought of that," or, "Oh, that's interesting."

PL: Well, I think the biggest satisfaction we get out of it, I make it a point that after I have finished the work, I talk to their operators and take them around and show them the new operation, and I say, "Look. This is what you have gotten." "Oh, it's beautiful. We never had--." "Okay, fine. Now keep that picture in mind. Tomorrow, if anything happens and you have dust, it's not the design, it's maintenance. So, very important for you to maintain that." And I also emphasise to all the grain companies that,

“Anytime you have any condition where it has changed from what we delivered to you, don’t hesitate to call us. It’s not very expensive for me to send somebody over there and have a look. I’d rather that than you start fiddling with it and all of a sudden you find it’s gotten worse.” So, I think that was another good point that we made to clients when we were--. They still do things differently, but after they run into a situation, they can’t solve it, they come to us anyway.

**[1:15:10]**

NP: A few instances where you roll your eyes probably?

PL: Yeah, oh yeah. [Laughing] That’s right.

NP: Now there’s questions here like, “How has the industry changed over the years?” We’ve pretty much covered that.

PL: Yeah, they have a cleaner environment, more safety standards, people take care of their equipment. I think maintenance has become a very good tool with the elevator people because they do realise that preventative maintenance goes a long way, rather than wait until it’s broken and then do it. Because it affects their grain movement, time down is very important. So, what these people do now is all the maintenance is done during wintertime when they’re down. Most of the installation is also done in wintertime. Installation is done all around the year, but most of it, where there has to be a disruption because of changes, is done in wintertime—anytime between December and March.

NP: Significant events? So, precisely, the question says what are your most vivid memories of your work life? Stories or incidents.

PL: Vivid memories of my--. Well, like I said, when I first started, and I had to sit with 50 cyclones spewing directly on me. That was something I would never forget, but I still stayed on because that was my work. That was one thing. Secondly is after I finished doing the design work and installation and walk through the plant. It’s beautiful to say that now you can see from one end to the other. That’s something beautiful, you know, when the guy looks at it, “Yeah, I can see. I never actually saw the other end of the door.” So, those are vivid memories. I don’t know. People used to say once I--. I used to give lot of lectures on what we do and why we do it, and what the new designs are for, what they should be looking for. And I remember one guy remarked, and he says, “I’ve had two glasses of water, and I’m sitting down listening, and you’re talking, and you haven’t had a sip of water yet.” It made you feel good about that you used to have a captivating audience at times. That made me feel good. In any industry when you feel wanted, you feel good about it.

NP: What are you most proud of?

PL: Well, cleaning up all the elevators. That was a big challenge. And secondly, I think my big pride came when we built country elevators. That's something that--. I don't know, I wasn't an entrepreneur, I wasn't a kind of a leader—or at least I felt I was a follower—but then when it was put on my shoulders, I quickly rose to that challenge, and we did a good job.

NP: Now, this is sort of a broad question. What is your sense of the role that you and your company, or companies that you worked for, played in Canada's success as an international grain trader? So, you're beavering away here in Thunder Bay, how's that helping Canada be an international success in grain trading?

**[1:20:10]**

PL: Well, we are in Thunder Bay, but we have worked all across Canada nationally, and are still working on nationally. I think if not myself in that role, C.D. Howe obviously were the pioneers in the grain industry, and I think their expertise was sought by many different parts of the world. They have been in India, they have been in Iraq, they have been Argentina, they have been China. So, I would say internationally, yes, it has impacted, whatever we did in a small town like Thunder Bay. I would say that most of the dust control design actually came out of this little town and has gone all across the country.

NP: And dust control—if you have healthier workforce--.

PL: Environment, yeah.

NP: A more efficient workforce. If nothing else, they don't have to clean as much, and they can get on with other things.

PL: That's correct. And that's another hazard when you're cleaning because you're disturbing dust. So, the less you have to clean--. Now, of course, they have vacuum cleaners, at one time they used to do it by broom. Now they have vacuum cleaners, so most of the elevators now have vacuum cleaners that they can just--. Central vacuum cleaners, kind of a thing. They can clean it very efficiently. Original elevators used to have floor sweeps at each point 10, 15 feet away. The guy would sweep it close to that, to open the door, and it [inaudible]. But that was in the '70s when we started talking about controlling dust inside and outside. It became known that the fugitive dust while you were cleaning was worse than the normal working conditions.

NP: The what kind of dust?

PL: Fugitive.

NP: Fugitive.

PL: That dust coming out, you called it fugitive because it shouldn't be there. [Laughing] The guys working these, moving from place to place, probably won't inhale as much, but when he's sweeping, he's right there, and he'll be inhaling. Even with all the protection that they had, it was not very healthy. So, we had to stop that and that's we had the vacuum cleaning systems that were put in.

NP: One of our interviews, early interviews, was with a fellow whose grandfather worked in the grain industry and—I think and his father—and he talked about something called--. What did he say? An elevator cough. That you would go into the bar after a day of work, and you could tell which person worked in the elevators.

PL: To clean the lungs. Yeah, you could, yeah.

NP: What did you say about lungs?

PL: Clean the lungs and wash it with beer. This was very common because you inhale so much of it. We used to go to international conventions, and they sometimes bring you the pictures of inside and see how it is dark with dusty air.

NP: So, what would it cause? Like what--. Lung disease of some sort?

PL: No, no. I haven't heard of anybody, at least I don't remember anybody, dying of lung disease because of dust. There may be probably complications over a period of time, there may be chronic cough and things like that, but not like asbestos which was probably over years choking them. Yeah.

**[1:25:09]**

NP: Are there any questions that I should have asked you that I haven't?

PL: No, I think we have covered--.

NP: The waterfront?

PL: [Laughing] Covered the waterfront very well, yeah.

NP: You mentioned early on that you have pictures. So, have you kept pictures throughout your career of--?

PL: Yeah, I mean, we have before and after kind of pictures in our archives. I don't know where I have because we moved two or three times.

NP: You actually have an official archives?

PL: No, not really. Only thing what I have in my office here. I mean we just put it in main disk so that if anything happens, we don't lose that.

NP: Anything that you think would be of interest to the Friends of Grain Elevators? And let's just say our main interest is to let people know about the kind of work you do, how things have changed over time. So, other than those sort of initial drawings which have, I think, really good historical importance--.

PL: You can say historically things haven't changed drastically, you know? The grain is received, moved, elevated, stored, brought back, and shipped. So, I think the only big change--. I mean it depends. Instead of being flat belts they are now curved belts—when I say curved, they are deep troughs—it's easier to contain the dust in them. At one time, belts were uncovered. Now, wherever it is possible, the belts are covered wherever it is practical to keep the pollution down. Everything is really towards improving the working conditions more than--. I mean there are definitely in the way of fans, movement, designs have been different—so making more efficient, less power requirements, things like that. All those things are going on. Same thing as people have started using more screw conveyors, which are enclosed rather than open belts. So there have been few changes, but I wouldn't say they have been drastic changes.

NP: Fine-tuning.

PL: Yeah, Fine-tuning, yeah.

NP: Where are the screw conveyors? Are they being used in large elevators too? Or is it mainly--.

PL: Oh, yeah. There are, the term used is screw conveyor, you can use--. Mind you, you have to be very careful, you know, there is more deterioration of grain. People don't [inaudible] themselves except where people have been toying with the idea of doing it.

Also, they are enclosed conveyors, belt conveyors, enclosed belt conveyors. They have been toying with that idea. They are used in the United States quite a bit. They have drag conveyors that move grain, they push the grain rather than screw it. There have been some standards put in, new innovations brought in, and all this sort of--.

But mostly you find that it's to control pollution. Mostly you will find that it's all being done because, as I said before too, pollution control is very expensive to put in. So, instead of million dollar they'll spend on pollution control and then maintain it, some people decided, "Okay, I'll use an enclosed conveyor belt." It may not be that much pollution, but some people find that the grain is deteriorating more than they thought, so they stay away from it. But that's a happy medium they have to find.

**[1:30:05]**

NP: Almost experimental stages too, to put it in and--.

PL: Yeah. I think it's beyond experimental, but some like it some don't. The power requirement. Most of these countries, you'll find that power is very expensive, so certain moving equipment is going to be more costly in power.

NP: Just one final question, then. When you're talking about these improvements and efficiencies and so on, how would you compare--. The elevators in Thunder Bay are all, at least parts of them, are all very old but retrofitted, and then you have the newer facilities out on the West Coast. Is there a huge difference in efficiency of being able to move the grain?

PL: Oh, yeah. I would say so, yeah. I think the newer elevators, they are being designed in such a manner that bigger belts, more grain moving at any time. Wherever they can make sure that less manpower is being automated and things like that. At one time the trippers used to be the guy that used to ride on that, now they're all automatic. All these things--.

NP: The trippers?

PL: Trippers, yeah.

NP: Tell me about trippers.

PL: Well, I mean the storage here—you're going to store from workhouse, it goes into the annex, and then to the next annex. Well, every time, actually, you move from one area to another, you trip it to the next belt. It will go in there. Then as you go along, and the bins are all over the place, so the tripper has to sort of fill this bin and then this bin and then this bin. At one time, the guy used



to stop it and do it manually. Now it is all automatic. The trippers are designed in such a manner that they have all kinds of electrical controls and gadgets that they would spot the bin and dump it and it's all done remotely. Those are the improvements that are coming on. They are the efficiencies there because otherwise it would depend on the man, of course, such slowness.

NP: Does that put Thunder Bay at a disadvantage or--?

PL: No, I would say that we have done automation here too. Oh, yeah. In order to survive they had to do that. I don't think the grain movement to the west is because of lack of efficiency over here. Some elevators may be more efficient than the others depending on how much money they have to pour in. So, no I wouldn't say it's so hard. The newer elevators definitely will start with more efficient equipment and system than--. But these are retrofitting all the way along.

NP: Well, thank you very much.

PL: You're very welcome.

NP: I'm so pleased that we finally got the interview. It was a good one.

PL: Well, I hope you got what you were looking for. [Laughing]

NP: I did. I did. Thank you very much.

PL: I wasn't very sure whether I would be able to deliver, but so far so good.

NP: Very good, thank you.

**End of interview.**