

WTC 'Make Amazing Happen' with Anne Ellis

[00:00:00] **Angela Gardner:** Hello everyone. This is Women Talk Construction and I'm Angela Gardner, one of your co hosts, and I'm here with Christi Powell.

How are you doing today, Christi?

Christi Powell: Really good. How are you?

Angela Gardner: I'm great. I'm great. Except, you know, for a little bit of sinus problems, but I'll make it. And then we have an amazing guest with us, Anne Ellis, and we cannot wait to share more about her. Now, Christi is going to introduce her because she has met her.

And we're just so honored to have her on. So I'll let you take it from here, Christi.

[00:00:40] **Christi Powell:** Okay. Anne, it's so great to see you again and kind of in person, right?

[00:00:46] **Anne Ellis:** Likewise.

[00:00:47] **Christi Powell:** So honored to have met you at the National Institute of Building Sciences. Um, we went to an event. Actually, I got to sit in on a board meeting, which was really cool for me.

Just to hear the conversations that you were having. I don't think that I was in the. Full blown board meeting. I think we were discussing how to plan an event, so I wouldn't be invited to a full board meeting. But it was really cool to see Anne Ellis in action. And she is the first female chairman of the board, chairwoman, chairman of the board of directors for the NIBS, which is National Institute of Building Sciences.

It was pretty exciting to see her command the room in a way that wasn't overbearing and gentle. I loved that. I loved seeing your competence and humility all in one place. It's a hard balance to have, but Anne sure does have it crafted down to a fine art. And, um, I just love who she is. And I felt very honored.

I almost had a fangirl moment because I really did want, you know, the, the more I got into the construction industry, I was older, but I always thought that, you know, if I went back to school, I'd want to be an architect and, or an engineer if I got a do over. So it was really honoring to me to be able to meet Ann and just watch her in action.

And. I just can't thank you enough, Anne, for what you do for women in the industry and also what you've done for the National Institute of Building Sciences group. Um, that organization is amazing. So without further ado, and please tell our audience just a little bit about you and your background, because we have a lot of young people that listen to our podcast and we want them to know that they can do what

[00:02:31] **Anne Ellis:** you do too.

Oh, thank you, Christy and Angela, and it's, I'm so honored to be here today. I just can't tell you, um, It's a mutual love, right? All my sisters in the construction industry. So I'm 1st generation college and my family, which I think is very, very common in the engineering and in the architecture professions construction is just because it's tangible.

I think it's really attractive to those of us that are 1st generation. And, um, without a preconceived notion of what a career might look like, uh, that's somewhat of a preplanned career. So, in high school, I was really good in math and I just thought I would maybe be a math teacher. I, I didn't know. And my church group advisor was a mechanical engineer when I was, you know, Getting ready to apply for college, he said to me, what do you want to do?

And I said, well, I don't know, but I'm good in math. You're going to be an engineer over to the house and he sat down with my parents and he laid it out. And my parents were so impressed that he came over. So I think that really speaks to the power of an individual. One person.

[00:03:49] **Christi Powell:** Right. One person can change the trajectory.

[00:03:53] **Anne Ellis:** Right. He took time out of his personal life to come over and sit down with my mom and dad and me. And of course, my mom and dad said, you're going to go to engineering school. And it was a time when they were looking for women to come to engineering school. So the doors were open to me. It doesn't mean there were many women.

Yes, I was usually most of my career. I've been the only woman in the room in academia. I, I was 1 of few, but I was so fortunate to have great professors to in particular that mentored me. And, um, really set my, my career path for me, and I'll be forever grateful to both of them. I graduated. I went to, I, I became a structural engineer working in practice.

So, uh, my specialty was tall buildings. Predominantly reinforced concrete, and I ended up going to work for the concrete and cement industries, representing their interests in the development of codes and standards and and amplifying. Innovation into codes and standards, and then I went back to the for profit world and worked for 2 mega companies, both global.

Operating in many countries and the 2nd, 1 is the name probably well known a calm and I was with a calm on their upward trajectory. We got as big as 100,000 employees operating in 154 countries and with annual revenues of 20Billion dollars. And I served in many roles, but my final 2, before I left a comp, 1 was a director of enterprise sustainability and then director of global innovation to amazing jobs.

I got so enamored with working with the innovators. I said. I really want to do this full time. I left AECOM, I hung a shingle, and I've had the privilege of doing that for the past eight years. Nice. Let me also say, I've been a very tireless industry volunteer. Yes. So in addition to my day job, I spend a lot of my after hours advancing, uh, the industry through organizations like the National Institute of Building Sciences.

Awesome.

[00:06:19] **Christi Powell:** Well, now do you see why I was fangirling at Anne after I got to meet her? That's pretty stinking amazing. One of the things that really is highlighted in my mind is the fact that you saw those tall buildings and the need for innovation there, and you decided to like, take it on. To work on the codes and the standards so that those buildings can be built better and last longer.

I love innovation, so I'm always thinking of better ways to do things. So when I heard your story when I met you the first time and then you reiterated it again today, I'm so glad that you did. I think that's a really good thing for our listeners to really think about. It doesn't matter where you are, where you came from.

It matters that you are looking forward and you're trying to make things better, right? No matter what role that you're in. I think that's one of the most important

things that we can tell the next generations of people. Not just women. Um, all, all of the people, yeah, everyone,

[00:07:20] **Anne Ellis:** you know, this is a neat industry because if, if you're, um, a creature of habit and you like to do things the same way, you have a chance.

Yeah. Really rich career in construction and architecture. But if you're like me and you're very future forward and you'd like to keep pushing the envelope, there's a huge, huge pathway in this industry as well. Yeah.

[00:07:46] **Christi Powell:** There's really a plethora of things that you can choose. Yes.

[00:07:50] **Angela Gardner:** So many. Well, I'm going to kick off the questions, but before I do, I feel like.

I just need to say a few more things about Anne because she's so cool. She's recognized worldwide in the field of concrete. She is a co author of Concrete Design and Construction. And she talked about being on a lot of, you know, getting involved. Well, she is definitely that. She's an elected honoree, um, membership of the American Concrete Institute.

Correct me if I'm wrong about any of this Anne, but and a fellow of the American Society of Civil Engineers and an honorary fellow of the Institute of Concrete Technology, UK. We like to say these two and because a lot of times, some of our listeners, they don't realize about all these organizations out there.

They have no idea. And now they do, they get to hear your story. What is your extensive experience in the engineering construction industry? What do you see as the most significant opportunities? And challenges facing the architectural engineering construction sector in the coming years, particularly in technology, sustainability and innovation.

[00:08:59] **Anne Ellis:** Well, foundational to all of that to the success in all of those arenas and more, we are pivoting from telling people how to do something. And in lieu of that, telling them what we want them to do. Okay, so, for many, for many, many decades, you know, when, when you wanted to build a building. You were very specific about the materials that you wanted to use.

You were very, uh, specific about, you know, the shapes, the sizes Mm-Hmm. Of materials that you were going to use in this building. And you would show it

all on drawings and, um, you'd be very, very specific in your project specifications on everything, you know, right down to the bolts and the screws. Well, now we're pivoting to a time where people are coming in and saying, you know, what they want to have built.

And they, they don't care about the rest, right? They say, I, I, I want to build a house and I want it to be fully functional in 50 years. And I don't care what the weather conditions are that hit it. Right? Right. So we're pivoting from a time of prescriptive expectations to performance expectations. And I think that's what this century is going to be about.

So I think it's incredibly exciting. It opens the doors for these new conversations. It's seeding and inspiring innovation. It's helping to eliminate some of the friction around the sustainability connection. And wow, technology is just going to take us places. I can't even begin to imagine. I have not heard that

[00:10:43] **Christi Powell:** yet.

It almost makes me wanna live another 50 years just to see where it's gonna be. You know what I mean? I mean, I don't that I wanna live that long, but you know what I'm saying. ? Yes.

[00:10:53] **Anne Ellis:** Christie. It's so funny, some of the people that I've known for a long time in this space, we turned to each other and we'll say, oh, wouldn't you like to be coming outta school right now?

Yes, yes. Wouldn't you? You know, wouldn't you like to be joining the trades right now? I think about that all the time. Yeah. When you think about automation and robotics and you know, all of this exciting thing, all the exciting things that are happening. I mean, I, I just, I get chills. Yeah,

[00:11:17] **Christi Powell:** I do too. Every time something new comes out, I'm like, Oh my gosh, that is just awesome.

Right. Like whoever thought. That a mom would care about the inside of their home. 10 years ago. Nobody thought about, you know, what the air quality was on the inside of their home, right? And what products we put on the outside of the house. And now all of a sudden, these parents, especially mothers that I've seen are like, wait a minute, is this a clean house?

Is this environmentally greenhouse? You know, what is the air quality? Am I going to have trouble with mold? You know, this was not a conversation that you had with homeowners 10 years ago. Yeah. These

[00:11:54] **Anne Ellis:** are new performance expectations, wellness, health, sustainability, you know, digitizing your house, uh, you know, being fully electric or whatever, you know, these are all new performance expectations and, and, and for different reasons, you know, I always tell people that in the 1900s, we were just.

Striving for stand standardization, right? Yeah. I can, I can live in a, I can live in a good house in Maine and I can live in a good house in Iowa and I can live in a good house in California, right? Yeah, but now the expectations are so much more significant. Yeah.

[00:12:36] **Christi Powell:** And it's good. I think it's taken us to a better place in my opinion, but that's just me.

Yeah, I hope

[00:12:42] **Anne Ellis:** so.

[00:12:48] **Christi Powell:** 84 Lumber Company is the nation's largest privately held supplier of building materials, manufactured components and industry leading services for single and multifamily residences and commercial buildings. The company operates 310 facilities, which include stores. component manufacturing plants, custom door shops, and engineered wood product centers in

[00:13:10] **Anne Ellis:** 35 states.

[00:13:11] **Christi Powell:** 84 Lumber Company also offers turnkey installation services for a variety of products, including framing, installation, siding, windows, roofing, decking, and drywall. For more information, visit 84lumber.com.

So you've been a champion for innovation and industry advancement throughout your career. Can you share some examples of some innovative and initiatives or technologies that you believe are transforming the industry? And how do you see those advancements shaping the future of construction and engineering?

[00:13:53] **Anne Ellis:** Yeah. So, oh, there's so many. Yes, there are. So just, just

[00:13:58] **Christi Powell:** hit on one or

[00:13:59] **Anne Ellis:** two. So, so one that I think is very timely and very attractive, particular to the incoming. Leaders of our industry is embodied carbon accountability, the greenhouse gas emissions associated with what we build. Right? Right. And. It has really been driven at a grassroots level.

We've been designing for sustainability for decades, right? The architects and the engineers, they, they create these elaborate designs for sustainability. And then often, because of cost or other reasons, and there's a multiplicity of reasons what would get built might be different. Okay. And so they, they were looking for a way to impose accountability into the construction side.

And about 10 years ago, a conversation started percolating around the use of. Environmental product declarations if we had these and then we made them accessible for free 24 7, you know, maybe that would help us with accountability. But then we needed some way to get the contractors involved and a group called the carbon leadership form, which operates out of Seattle.

It's headquartered in Seattle, Washington, but now it's a big global organization. They started creating a tool called it's known as the 3 tool and it stands for embodied carbon and construction calculator that would encourage people to pop to bring their and make them accessible to this calculator or to this digital tool.

And then this digital tool would be made for free to the design community and in the construction community. Nice. And, um, and it all started grassroots and Bill Gates found out about it. Yes, of course, Microsoft in that part of the country, and when they were doing their campus modernization project, they said, we'll pilot the use of that tool.

Nice. That started in 2019, 2020. and now that tool's being referenced in policy and regulation all around the country. Does it make you stumped? I know, and it all started with a grassroots movement by some really aspirational young people. And I just think that's a super cool example. Yes.

[00:16:27] **Christi Powell:** Awesome. Thank you for sharing that.

What great knowledge for our audience to hear, you know, things that they don't even consider. Right. A lot of times we're just going about our business. We go to work, go home, and we don't even consider some of these things that you've been able to see and hear and understand that's made a big impact on our industry.

[00:16:46] **Anne Ellis:** Yeah. Thank you. I, I, I feel like when you get involved with organizations like NIBS, like the American Concrete Institute, like the American Society of Civil Engineers, I always call these. positions of privilege, you know, because, because you see further, um, you have enhanced visibility into what's going on.

And I tell you what is bubbling up from that next generation is really

[00:17:11] **Christi Powell:** extraordinary. It is extraordinary. Enhanced visibility. I love that. Yeah.

[00:17:16] **Angela Gardner:** I love that you shared how technology and construction collaborated together to create this amazing idea to come to fruition. I mean that, and that shows you that construction is many other things than just construction.

[00:17:34] **Anne Ellis:** Absolutely. And Angela, you, you're speaking to one of my favorite topics and that is what is the successful formula for bringing innovation forward? Absolutely. Absolutely. You know, and we think, Oh, it's always just a subject matter expert, right? You know, maybe somebody in the field with a great idea or somebody in the design office with a great idea, but to really scale innovation, you need three things.

You need that innovative problem solver and it may start. It might start with somebody in the field, right? Right. And then you need, you need to have an entrepreneur with them to help them understand how to take that to market. So it's that, and then you need the subject matter expertise about, you know, from the field.

The engineering and construction world that understands we're operating in a regulated environment and what it's like to bring new ideas forward in a regulated environment. And if you have those three things together, your chances of success are greatly increased.

[00:18:36] **Christi Powell:** Yeah. Oh, I

[00:18:38] **Angela Gardner:** love it. I'm glad you added that.

That's awesome. So as someone who has held a leadership role in a global Fortune 500 company, you have extensive experience in driving operational excellence and implementing growth enabling programs. What strategy, here's the question, what strategy do you believe are crucial for companies in AEC sector to achieve sustainable growth and operational excellence in today's dynamic business environment.

If you can remember all that, you get an A plus.

[00:19:13] **Anne Ellis:** Okay. It's a good

[00:19:16] **Christi Powell:** question, but it's a lot of words.

[00:19:18] **Anne Ellis:** Yeah. Yeah. Okay. So. All right, most of our, most of our industry are small, are fueled by small companies or medium sized companies. Right? And what is key to growing a really big company? Right? And it's funny, I work with a lot of medium sized companies now with aspirations for a variety of reasons to get big.

And the real key number 1 is having leadership because you can have a small company and it'd be run by great managers. Right? But when you, when a company gets bigger, you need leadership number 1 and number 2, the big challenge is scalability. How do we scale trust? How do we scale growth? How do we scale opportunity and how do we scale fill in the blank?

Right? Right. Right. And then all of a sudden, when you sit down and you have those conversations, you realize, oh, my gosh, I need more. Different kind of talent than I had before. I need to invest in process. I need to invest in awareness, building great communications, good educational. My people, I have to invest in my people, right?

You know, it's not just technical development. It's not just how to do their job. But I need to, you know, help them develop professionally for all these other business. And that's where the rubber meets the road. It does. Yeah.

[00:20:46] **Angela Gardner:** Absolutely. I like that awareness building. I hadn't heard that one before yet.

Yeah. Yeah. Yeah. And that's

[00:20:52] **Anne Ellis:** why I think, you know, you see companies, Oh, I'm going to ask them, you know, the people who write proposals to do, to do communications. Look, 84 Lumber, they have an amazing marketing and communications department that knows how to speak to Americans, you know, it's business to consumer.

It is, that is a superpower, a muscle that very few companies have in our space. And yet we need it. Yes, we do. Maybe not at the scale, because a lot of our businesses are business to business and not business to consumer. But

[00:21:30] **Christi Powell:** it still is an awareness. Like, I'm really glad that you mentioned that because the construction industry, I feel like they don't see, sometimes they don't see the value in marketing and awareness, right?

Because we've been so focused on being in the field and getting things done. Yes. And I get that because I did that for years too. But at the same time, this next generation of workers, the innovators, the problem solvers, the entrepreneurs, their first reach, we have a friend named Camber Bowden who runs the video pro know their first reach when they consider going to work somewhere.

is Instagram. It's LinkedIn. It's Facebook. If you are not on those platforms and you are not showing these young people how good you are as a company, you're losing out on probably some of the best talent there is in the country.

[00:22:19] **Angela Gardner:** Or even involved in the community, right? Right. I mean, community involvement

[00:22:23] **Christi Powell:** is huge for them.

Oh yeah, that's

[00:22:25] **Anne Ellis:** really huge to young people. Yes.

[00:22:26] **Christi Powell:** Yeah. Yeah. Yeah. They want to know what you're giving back, right? And that's what you're doing.

[00:22:31] **Anne Ellis:** Yeah, absolutely. Our social media stars are few and far between, especially in our industry. Yeah, but they play such a vital role, you know, connecting, you know, bridging us, making a connection with, with that whole future workforce.

Hi,

[00:22:56] **Christi Powell:** don't forget. Womentalkconstruction. com has a forum of community where we all get together and talk about what's going on in our lives. We have workforce development opportunities, scholarships available. If you have them, please post them there. Um, we also have jobs, whether you need a job or whether you want a job filled, that's the place to be.

And our network of amazing people are there to help make connection.

Yeah. And thank you for mentioning 84 because we do care. You have one of the best. Marketing teams, I feel like, and I might be a little biased, but I think we have the best marketing team on the planet. That's just me. So thank you for mentioning that. So we got a couple more questions. If you're up for answering these hard questions, you're doing a great job.

So you've been on a lot of advisory boards and you've served on a lot of roles. And a lot of that was volunteer. What are the key insights and perspectives you've gained from collaborating from diverse industry leaders and how do the interactions influence your outlook on the future of the engineering and construction industry?

So, you have been around a lot of people from a lot of different walks of life in the boards that you've served on and advisory councils and whatever that happens to be. And these organizations. How does that look in the future? How does, how does the interactions and the influence look for the engineering and construction future?

[00:24:28] **Anne Ellis:** Okay, so a lot of us are attracted to these industry associations because we can affect change. We can, it affords us an opportunity to work collaboratively and bring forward new ideas and. You know, our industry does not have. Big name brand companies, right? Right. There's a fee for lumber, right? Yeah. But for us to affect change, we have to come together as an industry.

And often we do it, you know, like, when I go to the American concrete Institute, I'm with all my, my concrete brothers and sisters, right? You know, when I go to the American Society of civil engineers, I'm with my fellows, my brother and sister civil engineers when I go to the structural engineering institutes, my brothers and sisters, structural engineers.

But when I go to something like NIVS, now you've got everybody around the table, you've got the design, you've got the builders, you've got the owners, you've got the code officials, you know, you've got the facility managers, you've got government officials, government officials, people up and down the supply chain.

And all of a sudden you hear their perspectives on the same problems. And what's so cool is when we, when we can figure out a way to problem solve together, and it's not always easy because everybody has their own perspective, right? That, you know, they say diversity and problem solving is messy. Yeah, it's messier sausage making than if everybody's had shared experiences.

But wow, when you come out the chute, you've got much better sausage, you know, because you have considered not only all the opportunities is viewed through these different eyes, but you also learn about hurdles, things that can be friction to the system. And if you consider them early on, they're easier to overcome.

So I, you know, I have just learned so much more and then, you know, it helps with empathy building people that you thought might be your enemy project. You really begin to understand their perspectives.

[00:26:41] **Christi Powell:** And it helps with communication, right? You're you've surrounded yourself with a lot of people who don't think exactly the way you do.

[00:26:48] **Anne Ellis:** Right. Oh, yeah. They have a different vernacular, or they have a different motivation for being there. You know, a government official is often in the room for a very different reason than maybe a materials supplier, you know, who has commercial interests on the table. And the government official may have societal interests, but it's a, it's a matter of finding that overlap of interest and focusing on, on that overlap rather than the differences.

[00:27:17] **Christi Powell:** I really love the education that happens at those tables. Yeah. You know, just hearing the perspectives of every diverse conversation really helps you to put a better spin on what your thought process might have been before you walked in the door. Absolutely. Right. And it changes, right? It changes based on, Oh my gosh, I didn't think about that.

Oh, I didn't realize it was affecting the government sector that way. Oh, I didn't realize that the residential builders and the homeowners are being affected by this one little change. And I think that is just, um, so educational.

[00:27:55] **Anne Ellis:** And in addition to that, what might seem like insurmountable to me, a building code of the owner may say, that's not a big deal.

This is how you solve that problem. And you're like, Oh, yeah, you know, it's just bringing in those different experiences and perspectives.

[00:28:17] **Christi Powell:** What a great conversation. So, you know,

[00:28:19] **Angela Gardner:** I really wish I would have known about National Institute of Building Sciences. I've been in this industry forever and

[00:28:26] **Anne Ellis:** oh, well,

[00:28:26] **Christi Powell:** you late.

It's never too late. Exactly.

[00:28:29] **Angela Gardner:** I love everything y'all are saying. So finally, with your deep knowledge in the industry issues or challenges. What advice would you offer to the next generation of professionals aspiring to make an impact in the AEC sector, particularly in regard to navigating the complexities of technology adoption, sustainability, and business innovation?

You've kind of touched on this. But maybe I don't know, you can give them a few tips, you know, okay,

[00:28:57] **Anne Ellis:** so no, I love this question. I do because we've got all these digital natives, right? Coming, coming into the industry. And they see again, it's this diversity of perspective and problem solving, and they have the know how and the super powers that.

My generation totally lacks, we think we understand it, but nothing compared to a digital native. And I encourage all of my business clients today to do something called reverse mentoring.

[00:29:31] **Angela Gardner:** Yes. I love it.

[00:29:33] **Anne Ellis:** We love that. And that is sit down with these digital natives right out of, you know, their training, whether it's a trade school or an engineering program or whatever.

They've been playing with the latest and greatest future forward technologies, pick their brains about it, you know, ask them to brainstorm with you, ask them to explain it. And I think when you do that, when you combine their. Their digital native experiences with the opportunities that we have in our industry for effectiveness, efficiency, new and better ways.

I just think it's going to be amazing. So I would encourage. Anybody who has driven by any kind of job site. Slowly or goes and peeks through the fence. You know, I did that. Yeah. Yeah. I would encourage them to give our industry a consideration and particularly if you like technology, because we are so hungry for that knowledge.

Yeah.

[00:30:38] **Christi Powell:** And we are, I feel like our industry was a little behind, but it seems like we've caught up pretty quickly, um, just in the last couple of years. Thank you so much. And for being on today and just sharing all your vast knowledge, I could talk to you forever about. All the things that you've done and, and what you've accomplished, but also just your passion behind our industry and how you want to support it so well.

And we just can't thank you enough for your service to our industry. Just so people know, Ann Ellis has her own company called Ann Ellis LLC. And we'd love for you to tell our audience how to get ahold of you if they need consulting or they just want to connect with you. To find out more about you or maybe follow you on social media, we let our audience know how to

[00:31:26] **Anne Ellis:** find you.

Yeah, the easiest way is you can find me on LinkedIn and reach out to me. I, I always love to meet new friends and, um, and new brothers and sisters in this industry and look at what, what we can do together. I believe, you know, we have the same saying it a calm internally go out and make amazing happen.

[00:31:53] **Christi Powell:** Nice. Oh, yeah. I like that. Make amazing happen. I think we just found the title of your podcast.

[00:32:00] **Anne Ellis:** Thank you.

[00:32:02] **Christi Powell:** Because you are making amazing happen.

[00:32:04] **Anne Ellis:** Yes. And my thanks to, to both of you for this platform. But also for representing, you know, it's really important for the audience to see that the industry includes people of all different shapes and sizes and perspectives and

[00:32:23] **Angela Gardner:** we're doing it

[00:32:24] **Christi Powell:** together.

Right? We are. We are changing the perception together. Thank you. And thanks. Have a great day. And hopefully we'll talk to you again soon.

[00:32:34] **Anne Ellis:** Look forward to it. Well,

[00:32:41] **Christi Powell:** that's all for this episode. Thank you so much for listening to the Women Talk Construction Podcast with your hosts, Christy Powell

[00:32:47] **Anne Ellis:** and Angela Gardner. See you next time.