

**Interview of Mr. Rick Rainone- conducted by Kristin Waugh**

*What part did you play in the creation of Century?* I was the owner's representative construction project manager. I was involved in the designing process, the bidding process, and the construction process.

*Could you describe the original vision of the school?*

The original vision of the school was documented in the educational specification and I think it was well done, it was clearly defined, and it was defined well enough that we could actually build a building that met those design standards.

*In your opinion, has this vision been met, surpassed, or unrealized?*

I believe that the vision was surpassed. I think that Century High School is incredible. It's a great high school, it was a great project, and I think that the building serves the district and its students and it meets the expectations for being a great building for learning.

*Are there any specific areas that have been surpassed, or just in general?*

Well, specifically, I think one of the design concepts was what I believed was called a cluster of classrooms so the teachers could work as a team. They have offices to work together and spend time together planning. I think the library is a great area and a great area for learning. I also believe that having a nice auditorium is a nice asset to the school for the drama and music departments. I really think it worked well for the standard classrooms, the elective classrooms. I just think everything a school needs is included in this building.

*In what ways has the original design been altered?*

One of the challenges on this project was the site is a bit small for a high school, so we really had to work hard to make everything fit, and that was a challenge. The other issues I think we overcame are how you have a large building and make it feel like a smaller building. How do you move so many people around, so I think those are some of the things that we overcame.

*With the smaller budget, how did you decide what to change? Because with the original bill that wasn't passed, we would have had more.*

Right, what we had to do was we had to find a way to maximize what we got for construction dollars. We looked at a bidding strategy that maximized what we would buy. We looked at a contracting strategy that would maximize what we could buy. Then we made sure that when we built it, we avoided some of the standard delays and cost impacts related to weather and site conditions. In general, I think we pushed hard to make schedule. We pushed hard to get a big bang for our construction dollar. I think those two things worked together to give us the size of the building that we ended up with. We actually ended up adding some classrooms as we had gone through the bidding process that were needed that we didn't know we could afford.

*How did the architectural goals reflect the intellectual and social goals of century?*

The architects of the district worked very hard as they developed the education to put in writing how the building was to serve the educational process. It related to size, it related to connectivity, it related to the environment, there's a lot of natural light in this building, so I think the architects listened really well to what the district wanted, and then their design reflected it. I think we were very happy at the end of the project when we looked back at it and said does the project meet the goals of the educational specifications of those who worked on it. We felt that it did, so I think the architects did a very good job.

*Could you explain the bidding process?*

The bidding process for this project, we used a contracting method called C.M.G.C, which is an abbreviation for construction manager general contractor. We bid the project in phases. We bid the site in one package separately to one contractor. We bid the building as a package through a group of contractors. And we bid the last part of the site, which was the landscaping, to yet another contractor. What we tried to do was make sure we minimized the overhead expense and maximized the building that we bought, and there were times that the bid came in high and we had to roll up our sleeves and create an alternative strategy the design some and we bid a little different than the normal lump sum competitive bid process that you normally use.

*In what way is it different?*

It allows you to select your construction manager versus just taking the low bidder. By using that process that we actually get a team member and not someone we have to compete with on cost. We also are able to specify what that team member's job is, so that when we hire them, they already know what their job is. It's a good process; we use it a lot here in the Hillsboro School District. It's been very successful not only at Century High School but other projects to be done.

*What method was used to select this location?*

I wasn't involved in that. I know that Orville Alleman and Joe Rodriguez were very involved in the property decisions, but the property was already decided when I came onto the team.

*According to the planning notebook, the main 7 goals included: Orient program areas - - around interdisciplinary concepts, develop a clear sense of entry, maximize natural light, anticipate change, provide for school, community, and business interaction, use materials that are cost effective, durable and create an image of value, and plan for flexibility.*

*However, the facts included a fixed construction budget, site, size, topography and access from west side, water quality swell to filter storm water runoff, deadline (school opening Fall 1997) and regulatory agency requirements. How did you accomplish these goals while incorporating these facts?*

We had a great team and we knew that we needed to solve problems as soon as they were identified. So when we ran into a challenge, like the documentation required to get a permit, we just rallied and did what was necessary, and I think when we look back at the success of this job, we repeatedly did that. Whatever the challenge was, the team rallied, and looked at the options to solve the problem, and picked a solution and then effectively implemented the solution so that the project was able to stay on time, on budget, and be consistent with the goals and objectives of the educational system.

*Were any of the challenges particularly difficult?*

In the construction business, all decisions impact cost and schedule, so what was particularly difficult was that we could never lose sight of the fact that if we didn't make a decision, it would impact cost and schedule. One of the things that I was proudest of the team for is they made the decisions on or before the date it was critical to make the decision. Very few times did we actually have to recover. We actually made decisions on schedule or ahead of schedule so that the schedule never suffered because of lack of decision, and in the public process, that's uncommon. Most of the time, decisions take a long time to make. I think the Hillsboro School District is in excellent order because they made the decision in a way so that the project could move forward.

*What logic was used in creating rooms specifically designed for teen mothers?*

I wasn't involved in that discussion or decision.

*The original plan called for pods and strands; do you know why this was changed or how that effected construction?*

No, you'd probably have to talk to the district and the architects.

*In what ways was your design made to 'anticipate change' and develop versatile spaces for maximum flexibility?*

We tried to create spaces that were large enough that they could be used for a lot of different things. We tried to use a lot of spaces so that one space was close to another space that would need to be used by the people using that space. It's always a challenge on a tight budget, because what you find out is you don't have the budget to build something as large as you need to, so you just have to whittle a little bit here and a little bit there. And the end is a good product, but I believe that from the beginning to end of design, we constantly had to cut about 10% out of spaces just to stay on budget, and it's just one of the processes we had to deal with. I still think we had a great product even though we didn't have the money to make it larger.

*How did you create safe and efficient traffic flow and activity zones for evening use?*

It was very important to the design process, for example, the gym, and the parking was well lit so it was safe for people to park and then get to the gym and get back out. The same design concepts were utilized for the auditorium. The large spaces that are generally used by the public a lot were purposely placed near the parking lots so that people could get in and get out and enjoy the event and were close to where they parked.

*Why did you make teacher offices interdisciplinary?*

That was a district decision, so we just fulfilled what they had asked.

*From my resources, I see the maximization of natural light was an important aspect in the building. Why is this and how did you accomplish it?*

It begins with how the building is orientated. How does the building set up the site, what direction does it face, where are the classrooms, where the natural light comes from, where the sun is at that point in time, the public places like the corridor and entry. A great deal of attention was paid on if there were enough windows so there would be a lot of natural light. I think if you go through the building today, you can see that that worked.

*Do you know what the six regulatory acts called for?*

No I do not.

*I actually have a list of these.... These are the six acts; do you know what these were?*

Oh yes, thank you for showing me this. All projects are built in compliance with codes and ordinances. We have city codes, state codes, and federal codes to comply with, and then local ordinances. The codes have to do with safety or the building. And ordinances typically have to do with land use issues related to traffic flow, pedestrian flow, and just general safety of pedestrians. As I look at the other ones, uniform building code, mechanical code, fire code, a relatively new code for us is the Americans with disabilities act, and so the architect has to design the building in compliance with all of those ordinances and codes, and the city actually inspects the job, the design process, and the construction process to find out if we complied with all those. Quite honestly, it's a bit of a challenge to make sure the building complies with so many codes and ordinances, but I think we accomplished that.

*Did you anticipate our large student body exceeding the 1800 capacity?*

At the project level, we didn't. I just know that this area has grown a lot. At the project level, we were given design standards and a student population to make sure the building complied with. But Hillsboro has grown a lot. We're currently building Liberty High School to take some of the pressure off of that, but I'm not sure anyone could have predicted the growth that we're going through. I just know that Hillsboro School district continues to pass the bonds and build the schools to deal with it.

*What recommendations would you make for areas like the gym that are having problems now, when they want to have assemblies, that now interfere with fire codes because of the population? Did you anticipate that?*

Yeah, it's a big problem. The gym is a large public space, and there's a lot of codes that influence the design and use of that space. Technology has changed a lot and for say exiting, you have to watch your corridors and how you get people out in the event that there's a problem. It's a challenge in a large space like that to comply with everything and maybe we should look at how we can make it better so that you can have all the things that you want.

*Is it true that the boy's locker room has 3 extra team rooms? I saw that in one of the designs, I don't know if that actually got accomplished...*

I don't think... the locker room complex is designed in a way that it could be jointly use. There are doors that connect the team rooms to both locker rooms. I believe if you study the design, you'll see that there is a lot of space in the complex that is usable for the boys or the girls and just the way it was set up.

*Was Century a "green school?" Why/why not?*

The green technology was pretty new at that time, so they didn't have the green standards then that we do now. I know that we were thoughtful about the materials that we used. We were thoughtful about how we constructed the building, we were responsible environmentally. But some of the green standards are new and are being implemented in designs now.

*Is it being used with Liberty High School?*

We actually signed an agreement with Portland General Electric that we would build the school above the standard energy requirements so that way we're building it above the code. For the design process, we studied a lot of the construction materials that were available and We're not using woods, we're using a lot of resources that don't effect lumber, trees, so we're being a high standard there, but the Green Standards were just being designed when we worked on Century.

*In what ways are the plans from Century being utilized again with Liberty High School?*

The classroom in proportion to the building, we're trying to build classrooms that are very similar to these so I think the architect has use the terms of the particular parts. The configuration or the parts is a little different because of the site and geometry of the site. But if you were to look at the parts independently, the science rooms are about the same, the computer rooms are about the same, so we took all the parts, organized them differently, but they'll be very similar in terms of what's there.

*What was the most challenging part of building Century?*

From my perspective, since I was responsible for budget, schedule, and issue resolution, it was challenging from being there from the start to end was how tight the budget was. It was something we had to deal with every day. The next most challenging thing was to continue to solve problems as a team. When the challenges occur, and when stress is

involved, it's real easy to get angry with one of the team members. And what we did was always remind ourselves that we are a team and we needed to solve problems as a team. At the end of the project we had to look back and say the team did a good job. The ongoing challenge was the budget, and just on the tough days, remembering that we're a team and we're going to solve the problem as a team. And to stay focused on that.

*So would you say there was a good rapport between the team?*

Yes, I would. We've had an event at the end and we all agreed we wished we could start another project together the next day, so I think we stayed with it right to the end, and some of the team members are still working together on other projects.

*Were there any times where you just wanted to give up?*

I'm not the type of person who gives up. There were times when the reality of the issues just meant you had to work a little harder, think a little harder, find a better solution, but giving up was never really an option.

*What were the best times of building Century?*

The best times were we established milestones in this business, and in the schedule that we have both for the project and construction. It was like a celebration every time we made a milestone. It was an opportunity to celebrate success and then get on with construction. So from my perspective, it was just the number of milestones that we met either right on schedule or ahead of schedule. It gave us a lot of opportunity to celebrate minor successes, which ended up being a great success.

*Is there anything now you wish you would have thought of before during construction?*

Yeah there are always as you look back. One of my professional philosophies is meeting at the end of every project. Small projects, large projects, we still have a lessons learned discussion. As we look back, it would have been nice to have that wonderful brick that's on the front of the building on the back, that's something I wish we could have done differently.

*How did you originally become involved with this project?*

The district selected my firm to help them. We went through a formal selection process. I personally enjoy building schools so I was excited to be part of the team. Hillsboro has been a great place to work and work on projects but we went through a formal selection process and it was competitive, and we had to beat out the competition to be selected on the team.

*What type of background do you have in construction?*

My education started with engineering but I've been managing projects for about 25 years and have been doing some school projects specifically for about 11 years now. I have a lot of management expertise and have been doing it for some days it feels like a long time.

*Do you believe that the vision has been fulfilled?*

I believe that my role is to manage the process to achieve the visions created by the district and the architect and I think we accomplished that.

*How many team members were involved and how many other people were involved?*

I think the core team there was probably 15 people on the core team that were actively involved from start to finish. There were peaks where there were probably 50 people involved. But there was always a core team of at least 15 members from the district team, my company and then members from the construction company. So there were about 15 key team members from start to finish.

*How much did it end up costing total?*

I don't remember the total number because of some of the furniture costs, we could get that for you if you would like. If I quoted a number off the top of my head, I'd probably be wrong.

*Was it below the budget?*

We were right on budget.

*Security measures, like I know there have been a lot of things like school shootings, did you consider that when you were building the school?*

Some of the tragedies that have occurred at schools hadn't happened yet when we were in the designing process, it was designed in a way that site lines were easy. For example it was designed in a way that the teacher's offices can observe other things like the computer labs. It was designed in a way that the front office has a site line to the front door. It was designed in a way that the locker rooms where the instructor's office has clear view of what's going on in the locker room. So even though some of the tragedies hadn't happened yet, they were designed in a way that the site lines would increase security and increase safety.

*How much of the planning process were you involved in?*

I went to all the meetings, and I enjoyed them but during the planning process it's really the two key players in that process are the owners and the architect. I facilitated some things to finding solutions, I provided recommendations from time to time, and so I was happy to be on the team in that process, and it helped me know what they wanted to do and what they wanted it to build it to be like. So I got to know the actual design and actual construction and what the districts goals were.

*Is there anything else that you would like to add?*

It was a great project, I still think that it's a great school and I think that all high schools, there's some things about Century High School that other high schools should look at and consider when they're doing their design and construction.

*By looking at other schools, did you incorporate aspects of schools around us like Hilhi or Glencoe or any of that?*

Yeah, we did a lot of site visitations so we went to other buildings with members on the design committee, and we looked at things we didn't like and things we did like, so we would incorporate what we liked and incorporated what we didn't like. So yeah there were a lot of site visits to discover that. Ok?

*Ok, well I think that's about it.*

All right.

*Thank you very much.*

You're very welcome.

*That was very...(tape ends)*