FDOT alumna Alice N. Bravo has changed her gears ...

After nearly seven years with the Florida Department of Transportation, Alice N. Bravo is switching gears. In her role as chief design engineer for the Port of Miami Tunnel projects, she is designing the largest tunnel in the state, an estimated $800 million project that will create jobs and move freight faster.

“I’m used to being in the business of making things happen, but this is a little different,” she said. “In the past, I was working on large-scale projects that were designed to last for decades, but now I’m working on a project that will have a direct impact on people’s daily lives.”

Bravo is a 2003 FDOT alumna and has been with the department for 10 years. She is currently leading the design team for the Port of Miami Tunnel project, which will improve access to the Port of Miami and provide a new route for cargo ships.

The tunnel will be approximately 4,500 feet long and will run beneath the Miami River. It will connect the north and south sides of the city, providing a direct path for cargo ships to access the port.

“This is a very exciting project for me,” Bravo said. “I’ve always been interested in infrastructure projects, and this one is especially important because it will help Miami stay competitive in the global marketplace.”

The Port of Miami Tunnel project is one of many that Bravo has been involved in during her time at the FDOT. She started her career with the department as an intern and worked her way up to her current position.

“Bravo has been a valuable asset to our team and has brought a lot of experience and expertise to the Port of Miami Tunnel project,” said FDOT Director of Design Engineering John D. Thomas. “We are confident that she will lead our team to success.”

The Port of Miami Tunnel project is expected to be completed in 2023.
...to steer Miami’s Department of Capital Improvements

work committees in the mission of MacArthur Causeway, where they’re going to be purchasing the street where the homeless encampment will be introduced.

Q: There’s been some concern from some leaders about traffic, or problems trying to access the city’s amenities like the Children’s Museum and Jungle Island. What can you tell them?

A: The concern is valid. The project manager, they’ve developed a plan that is sensitive to the needs of traffic, and they’re proactive in finding out how they can use the flexibility that they have to maximize whatever impact, if any, on MacArthur Causeway.

They have flexibility as to when they bring materials in. They plan to bring their excavated materials out through a conveyer belt to a spot to not have new road traffic introduced. So a lot of the issues that the Basin is bringing up the contractor has actually built into their plan.

Q: The Museum Park project—have you had a chance to be briefed on the city’s role and what’s up next?

A: I got a very preliminary briefing. The city’s portion of the project is the park and the whole area south of the museum buildings itself.

The design I think is fairly well developed for the park. So, I guess the next phase is identifying when the museum buildings will go forward and how the park goes forward, if they’re funded and move forward on a time frame to match.

Q: How might budget constraints affect your departments?

A: Most of the projects are moving forward with the proceeds of funds from various funding sources, so someone working on the project is actually being funded by that project, not from a general reserve.

We’re a small portion of the city’s general revenue budget.

Q: What’s it like working with a whole new group of leaders? What’s the atmosphere at the city now?

A: As I see there’s a lot of energy. There’s new administration, new mayor, four of the five commissioners are new, so it’s great when you have a fresh approach and everybody looking to see how you can provide the maximum benefit for the residents.

Q: What’s the strategy for bringing projects on line and budget?

A: The key is to get some of the projects up and running. You plan the design stage,想法 you plan the construction phase, you have very extensive reviews to make sure that once you get into construction, you don’t have any problems.

The whole purpose of the design phase is to make sure you get it right and you minimize the cost that the project’s going to require.

By doing your homework during the design phase and identifying utilities, making sure you address permitting issues, that’s how you ensure that you don’t encounter problems in construction.

Q: Is that what’s happening with the stadium project?

A: Yes. The design has to be finalized before there’s a groundbreaking.

Q: Have you had a chance to sit down with the county or the contractors?

A: I think that will be next week. How many staffs do you have working under you here? It’s between 50 and 60.

Q: And how does that compare to DOT?

A: In DOT there was about 152 but there were different responsibilities. There’s a city-wide network of staff that are involved in that, and here we essentially don’t perform that function, or there’s a different department that handles it.

But what we do is that in this role the folks that supervise the construction are also under me, which is different than DOT.

Q: Do you know about the trolley project?

A: Yes. The trolley project is going to be something great for the city. It’s funded with different sources. There’s money from the state for the trolley acquisition itself, and then the half-cent sales tax that the county passed, a portion of that that comes to the city that will help fund the operations in addition with the transit development grant from the state.

DOT has now services that we’re going to pursue.

Q: When will we see our first trolley here?

A: I’m not sure yet. We have to receive the routes and see the different trial results and areas. We want to make sure that the system that’s put forward is sustainable, so there are some evaluation steps that need to happen.

Q: You told us you met the commissioners this week. Have they expressed any of their priorities in terms of what they hope to see coming out of your department?

A: I don’t know that we’ve had a chance to really discuss specifics. It’s been more of a meeting to tell them my philosophy and my approach to providing a reliable product.

Q: And what message have you been sending them?

A: The goal is to provide cost-effective, quality projects on a schedule, on budget, and keep people informed as to the progress of those projects, and have a dependable process.

Q: How do you have a chance to come up with concrete goods? Is there any one thing that you really plan to focus on or hope to see within the next six months here?

A: I really want to install a process where the line item is set out for the project and the timeline is set in which the projects are delivered, and the same thing for the budget.

So how we move that forward: that’s something that has to transcend everybody in this group. It has to be not only the group’s goal but the goal tied to the performance of every individual.

Q: Will you have much interaction with the state?

A: I think so. There are many state projects that are within the City of Miami. I plan to be involved. They’re considering this study for the future commuter rail on the FBC corridor.

They’re thinking on the finishing stages of the I-395 study. When that project moves forward, obviously, we’ll certainly be involved in that.

Q: In terms of your engineering training, how does that give you an edge in this role? Have you also a manager?

A: Management skills are important, but you also have to be able to evaluate the quality of the product that’s being put out. A lot of times in development, there are compromises and decisions that have to be made to get it done.

That’s where engineering really comes into play, in making those decisions to make sure that the project is deliverable and that it’s going to provide the intended benefit.

Having the right experience makes sure you don’t discount the final product.

Q: Tell us about your community involvement.

A: I am on the board for the Girl Scout Council of South Florida. That’s a role I really like because the Girl Scouts provide benefits to the community.

My favorite program is called STEM, and it’s science, technology, engineering, and math. The jobs in those fields are growing 40% faster than the non-STEM jobs, and those are the roles that are in demand.

So providing the gate background in these areas really helps give them a leg up in the future knowing that’s something they can excel in.

Q: Do you have any hobbies?

A: As I like activities with my kids, taking them to the park, bicycling, shopping, the beach.

Q: Tell us about your family.

A: I am married. I have a 5-year-old boy and a 3-year-old girl, Auden and Emma. I am a baseball player, Wannacutus. I am an official, my fans are spelled backwards. Ronnie, I thought, oh, Auden backwards—that’s-Mahia.