

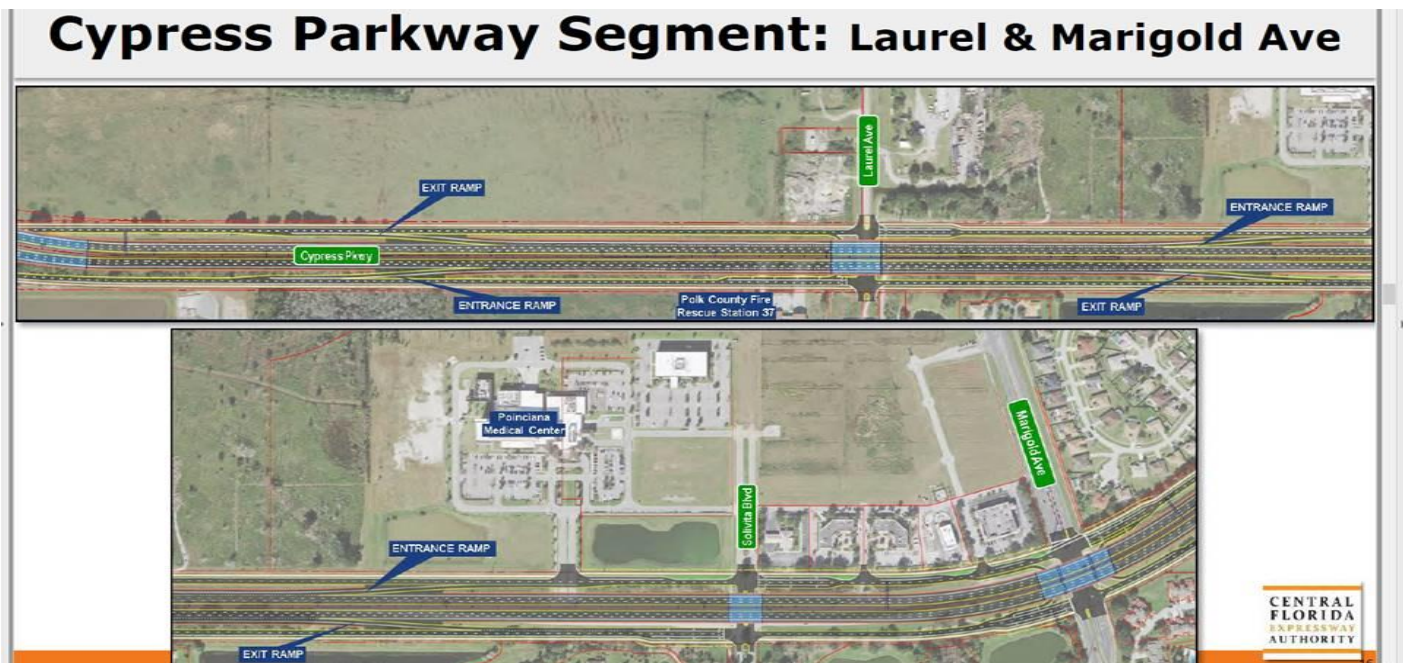


Keith's Comments Regarding CFX Aug 24 Presentation

I really appreciated the presentation given by CFX on Aug 24, 2021 regarding the status of the Southport Connector project. In my opinion this project will be one of the most important traffic projects for Poinciana's future. My comments are related to the Cypress Parkway segment of the project. The reason for my comments is that since I moved to Poinciana in 2008 I have lived with the Cypress Parkway traffic congestion problems for the past 13 years. My friends from both Polk and Osceola County can attest to the fact that we have done everything possible within the power of the two counties to address this situation and nothing has been able to solve the problem. I view the Southport Connector project as a once in a generation if not forever opportunity to solve this problem for a very long time to come.

I am neither a traffic engineer nor a construction engineer so I will defer to the expert opinions of the CFX people to tell me what is feasible. I do have to live with the Poinciana traffic situation on a daily basis so I do consider myself somewhat of an expert.

I will use the charts provided by CFX in the Aug 24 presentation to help make my points.



Cypress Parkway between Poinciana Parkway and Marigold

Current Traffic Count = **15,900**

For the Cypress Parkway segment between Poinciana Parkway and Marigold I find the configuration provided by the above picture to be quite good. By providing on/off ramps located to the west of the Laurel Overpass you will allow traffic from the West of Poinciana to access the toll expressway lanes very conveniently. Solivita traffic should they choose, would be able to easily access these lanes by exiting Solivita from either the Solivita West gate of the Solivita Poinciana Parkway gate. According to the latest traffic counts provided by Polk County, Cypress Parkway today sees about 16,000+ vehicles per day which represents a 40% growth in traffic volumes from 4 years ago. With the current building taking place in Solivita Grande plus the new Haines City housing construction taking place on CR 580 I see those traffic volumes continuing to increase at that rate.



Cypress Parkway between Marigold and Doverplum

Current Traffic Counts

Cypress Parkway = Marigold North – **19,199**

Marigold South - **18,782**

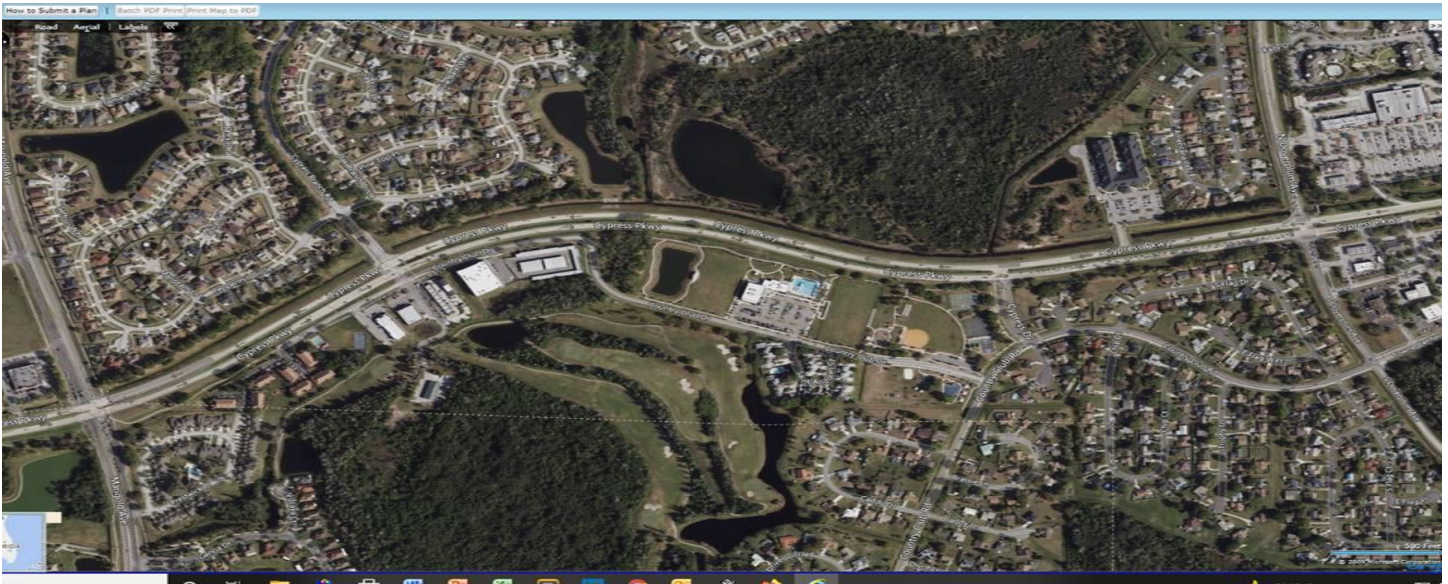
Cypress Parkway East of Marigold – 46,375

For the Cypress Parkway segment between Marigold and Doverplum I recommend that the entrance and exit slip ramps be moved to the west between Marigold and Cypress Branch as opposed to between Cypress Branch and Cypress Drive as shown in the above map.

The reason for doing this is that it will allow a larger volume of traffic to access the expressway toll lanes earlier and avoid creating a major red light intersection bottleneck at Cypress Branch.

As can be seen from the numbers above the Marigold intersection sees 15,900 counts coming from the west, 19,199 coming from the north and 18,782 count coming from the south. The majority of this traffic volume turns to use Cypress Parkway east of Marigold. During rush hours today traffic gets backed up at the Cypress Branch intersection towards Marigold in the morning rush hour and between Doverplum and Cypress Branch in the evening. Compared to the Marigold intersection, the traffic on Cypress Branch entering Cypress Parkway is quite smaller. By moving the slip ramps west between Cypress Branch and Marigold you give the 46,375 traffic volume the option to fly over the Cypress Branch intersection as opposed to being stuck waiting for the red light intersection.

The map below shows an overhead view of the Cypress Parkway segment today between Marigold and Doverplum.



The distance between the Marigold overpass and Cypress Branch overpass is only slightly shorter than the distance between the Cypress Branch overpass and the Cypress Drive Overpass. I drove and measured the distance on my car odometer and they both showed .3 mile each. I am not a road construction engineer but if technically possible, placing the slip ramps in this new location will significantly improve the Poinciana traffic congestion problem and provide more incentive for a higher traffic volume opting to use the express toll lanes because it would allow three intersections to be flyovers as opposed to only two in the trip between Marigold and Pleasant Hill.

Cypress Parkway: Pleasant Hill Road



Cypress Parkway Between Doverplum and Pleasant Hill

Current Traffic Counts

Doverplum North - **22,140**

Cypress Parkway Doverplum to Pleasant Hill - **58,171**

Doverplum South - **5,975**

For the Cypress Parkway segment between Doverplum and Pleasant Hill I recommend that the entry and exit slip ramps be moved from the location west of Pleasant Hill as shown in the Aug 24 map to the east end of the new Reedy Creek Bridge providing entry and exit from the express lanes to an improved Southport Dr as opposed to Pleasant Hill.

Today according to the latest Osceola County Traffic Counts there are **58,171** counts per day crossing the 6 lane Reedy Creek Bridge connecting Cypress Parkway to Pleasant Hill. Prior to the Reedy Creek Bridge towards the west Cypress Parkway is a 4 lane highway. The traffic count far exceeds the state recommended capacity for that type of highway.

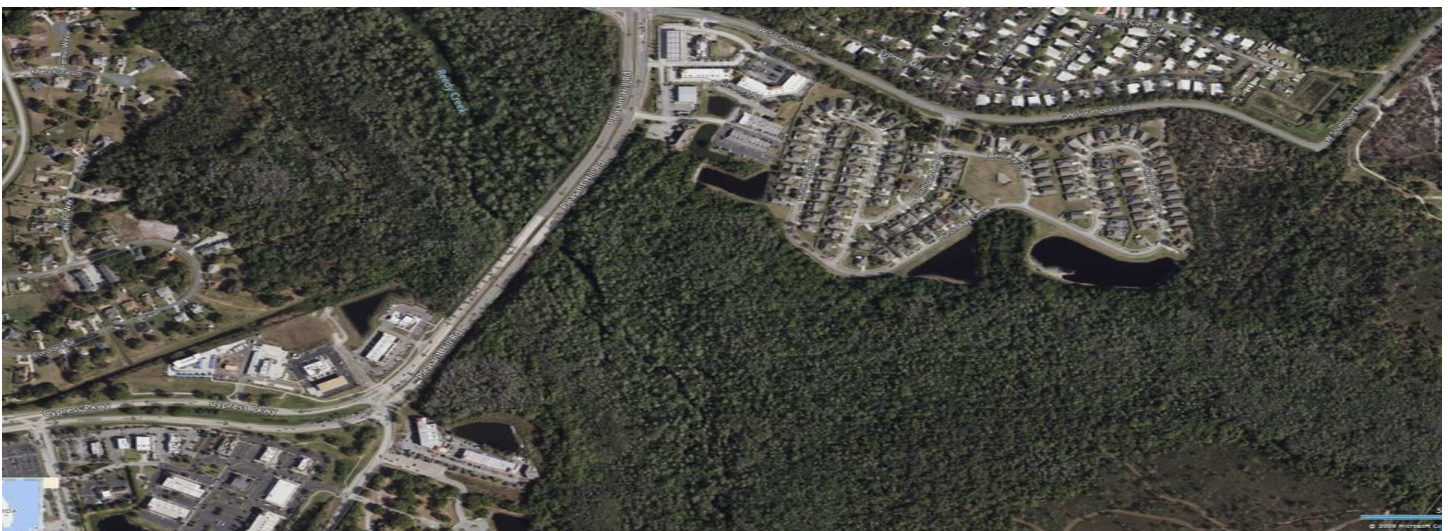
The CFX slide presented on Aug 24 shows entry and exit slip ramps located between Reedy Creek and Doverplum intersection to the west. While it might be expected that some of the **58,171** traffic count might opt to continue to Florida Turnpike as opposed to going north on Pleasant Hill the majority of traffic is expected to continue heading north toward Pleasant Hill during morning rush hour and come south from Pleasant Hill in the evening.

According to the CFX Aug 24 map this **58,171** traffic count will have to make a left hand turn going through the intersection under the new bridge at Reedy Creek in the morning rush hour and make a right hand turn heading south from Pleasant Hill in the evening. This proposal will do nothing to improve the local traffic situation but in fact make it worse.

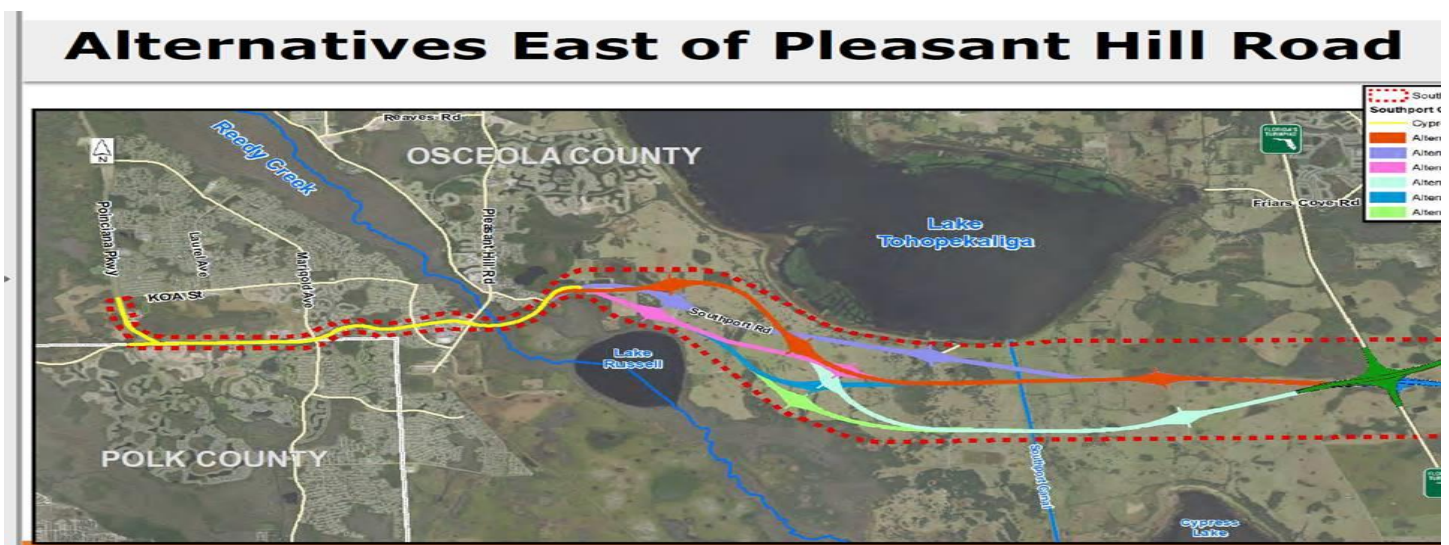
The map presented on Aug 24 shows an eastbound exit slip ramp off from the toll lanes and a westbound entry slip ramp. This will do nothing for the people living in the subdivisions along Pleasant Hill and Poinciana Blvd that might want to use the Southport Connector to get from Poinciana to the Florida Turnpike or St. Cloud. This represents a population of a small city that would be discouraged from using the Southport Connector.

By moving the on/off slip ramps from the west side of Reedy Creek Bridge to the east side of the new Reedy Creek Bridge and allowing entry and exit from both directions this will offer the advantage of lessening the congestion at the original Reedy Creek Bridge and also allow the residents of the Pleasant Hill and Poinciana Blvd subdivisions to have access to and from the Southport Connector.

Below is an overhead picture of what the Cypress Parkway intersection with Reedy Creek Bridge and Pleasant Hill looks like today.



My proposal would be to construct a cloverleaf intersection on the land at the east end of the new Reedy Creek Bridge.



This intersection would allow Southport Connector traffic using the express lanes through the center of Poinciana to get to Pleasant Hill and Poinciana Blvd without adding to the current traffic bottleneck at Reedy Creek Bridge thus decreasing the traffic congestion at that choke point. Southport Rd would have to be expanded from 2 to four lanes between the toll road and the Pleasant Hill/Poinciana Blvd intersection but the cost for doing that construction would be more than paid for by the increased volume of toll road traffic going through the center of Poinciana. Poinciana traffic wanting to go to Pleasant Hill would be able to exit the toll road heading east and make a right had turn onto Pleasant Hill. Poinciana traffic heading east would have to go through the red light intersection if they wanted to head up Poinciana Blvd just like they do today. In the evening that would be reversed with westbound Pleasant Hill traffic wanting to use the toll lanes making a left turn at the Pleasant Hill/Poinciana Blvd intersection and the Poinciana Blvd traffic going straight thru the intersection.

In addition, residents of the Pleasant Hill and Poinciana Blvd subdivisions would now have access to get on the Southport Connector eastbound to head for the Florida Turnpike or St. Cloud. The additional costs to create this eastern on/off alternative will more than pay for itself by the increased traffic volumes that will result from making the Poinciana thru traffic entrance and exit easier plus the additional Southport Connector traffic volumes coming from allowing eastbound subdivision traffic that could not access the Southport Connector before.

An additional benefit would be for the Cypress Parkway Commercial Businesses located in Poinciana.

Below is a close-up of what the proposed Southport Dr Intersection might look like. Expressway traffic through Poinciana would no longer add to the local lane traffic congestion at the old Reedy Creek bridge and intersection. Instead it would enter and exit the expressway lanes from Southport Drive.

Proposed Southport Intersection



The maps shown in the Aug 24 presentation show a westbound entrance slip ramp to the Southport Connector toll lanes between the Reedy Creek Bridge but no westbound exit ramp until between Doverplum and Cypress Branch. Likewise there is no eastbound entrance ramp to the toll lanes east of Doverplum. The

long term development plan for Osceola County shows major housing developments south of Lake Toho. These houses are going to need access to places to shop. By adding on/off interchange for the Southport Connector at the intersection of Southport Dr and the Southport Connector all these housing developments can easily access the businesses currently located on Cypress Parkway and Pleasant Hill to meet their commercial shopping needs.

Let's look at the traffic volume implications for the three segments described.

Cypress Parkway between Poinciana Parkway and Marigold

The latest numbers provided by Polk County show a traffic count for the Solivita section to be 15,900 cars per day. By placing the on/off slip ramps west of the Laurel overpass traffic from the west direction heading for Pleasant Hill/Poinciana Blvd or Florida Turnpike can get onto the express lanes and fly over the Laurel, Solivita Blvd, Marigold, Cypress Branch, Cypress Drive and Doverplum intersections. Traffic from Turnpike or Pleasant Hill/Poinciana Blvd can enter the express lanes and fly over the same intersections when heading west. Without a crystal ball to tell the future it is difficult to exactly predict the impact of adding this new capability but by calculating traffic impact by percentages of 20%, 40% or 60% of the local traffic opting to use the Solivita express lanes we can calculate the improvements.

Projected Toll Lane Traffic Count

20% = 3,180

40% = 6,360

60% = 9,540

Cypress Parkway between Marigold and Doverplum

The Marigold Segment between the intersection of Marigold and Doverplum on Cypress Parkway with a count of 46,375 represents the highest local traffic volumes on Cypress Parkway segment. You have high traffic counts coming from CR580 to the west, Marigold to the north and Marigold to the south all trying to get onto Cypress Parkway heading toward Doverplum. There is also a lot on new construction taking place north of Solivita west of the Poinciana Parkway and on Polk CR580 causing these traffic volumes to increase. If at all possible it is recommended that on/off slip ramps be located between the Marigold Intersection and Cypress Branch overpass. This would allow eastbound or westbound traffic using the express lanes to avoid the intersections at Cypress Branch and Doverplum plus the on/off traffic at Cypress Drive by Vance Harmon Park. There is a lot of traffic flowing through both the Cypress Branch intersection and coming from Cypress Drive but not nearly as much as coming from the Marigold intersection. By allowing the Marigold intersection traffic to avoid the Cypress Branch intersection you will make the expressway tolls much more attractive to a higher volume of traffic that you would pick up by moving the on/off slip ramps farther east from Cypress Branch. Again without the crystal ball you can calculate the traffic impact of various percentages of Marigold Segment traffic choosing to use the toll expressway lanes as opposed to the local lanes.

Projected Toll Lane Traffic Count

20% = 9,275

40% = 18,550

60% = 27,825

Cypress Parkway Between Doverplum and Pleasant Hill

The worst intersection in Poinciana is the intersection of Doverplum and Cypress Parkway. During rush hour traffic can be forced to wait as many as two or three red light cycles to get thru the intersection. Then once all that traffic gets through the intersection it all must cross the existing Reedy Creek Bridge to get to Pleasant Hill or Poinciana Blvd. The situation is reversed for westbound traffic. The addition of the express toll lanes will improve the local traffic backups at the Doverplum intersection by reducing the east/west Cypress Parkway local thru traffic depending on the percentage vehicles opting to use the toll lanes as opposed to the local lanes. The bottleneck slowdowns at the Reedy Creek bridge for local traffic can be improved even more by installing the on/off slip ramps for the Doverplum traffic on the east end of the new Reedy Creek Southport Connector bridge rather than on the west side of the bridge. Today the total traffic crossing the Reedy Creek Bridge at that chokepoint is **58,171** vehicles per day. By locating the on/off slip ramps on the east side of the expressway bridge whatever expressway traffic wanting to use Pleasant Hill/Poinciana Blvd will no longer have to share the old Reedy Creek Bridge with all the local traffic but instead be able to exit and use Southport to get to the Pleasant Hill intersection. At the Pleasant Hill Intersection traffic wanting to continue on Pleasant Hill can make a right hand turn while Poinciana Blvd traffic can simply go through the intersection. This positioning of the expressway on/off slip ramps will significantly improve the Poinciana local traffic situation.

Because there will not be any eastbound on slip ramps or westbound exit slip ramps added for this segment the Southport Connector project is not expected to improve the Poinciana traffic congestion for this segment other than the traffic reduction improvements provided by the previous two segments. I recommend that CFX consider adding an entry/exit slip ramp between Doverplum and Pleasant Hill so that Poinciana Traffic wanting to use Southport Connector from Doverplum North or South (28,115 current count) towards Florida Turnpike and St. Cloud can use the new toll road.

Summary of Poinciana Local Traffic Improvements from Building Southport Connector

The traffic calculations for the three zones of the Cypress Parkway segment show that with the construction of the Southport Connector project the Poinciana drivers can decide for themselves the benefits that the added expressway toll lanes can provide to relieve the Poinciana local traffic situation. The addition of the on/off slip ramps at the locations suggested provide the Poinciana drivers the ability to take advantage of the additional traffic capacity added by the project or not depending on whether or not they choose to pay the price.

Depending on the percentage of vehicles who choose to use the expressway lanes instead of the local traffic lanes (between 20% and 60%) the number of east/west cars each day at the Marigold intersection can be

reduced from 15,600 to between 12,720 and 6,360. The east/west traffic crossing the Doverplum intersection can be reduced from 46,375 to between 37,100 and 18,550. The Pleasant Hill Reedy Creek Bridge bottleneck can be reduced from 58,171 to between 48,896 and 30,550.

Two factors will impact whether or not Poinciana local traffic opts to use the express lanes on the Cypress Parkway Segment as opposed to the local lanes. Ease of getting on and off can be addressed by the locations for the on/off slip ramps. The second factor will be the toll expense to use the lanes. Assuming the current CFX rate of \$.14 per mile it should cost approx \$.70 per two axle vehicle to use the toll lanes the full length of the Cypress Parkway segment (5 miles). That would assume a single toll gantry located on the Doverplum segment. If separate toll Gantrys could be installed one for the Solivita segment and one for the Doverplum Segment then the cars using the full Cypress Parkway segment would be charged the full \$.70 per trip and the cars using the Doverplum segment only would only be charged \$.50 to avoid the Poinciana local traffic congestion to get from the Marigold intersection to Pleasant Hill. The cost for adding the second toll gantry would more than be covered by the additional traffic opting to get onto the express lanes on the Marigold segment because of the lower toll.

Based on my calculations which I have presented here it appears that the construction of the Southport Connector Cypress Parkway segment not only offers the potential for significant improvements to the local traffic situation but also by adding the additional uninterrupted flow lanes through the center of Poinciana on the Cypress Parkway segment offers the only possible solution to the Poinciana local traffic problems.

Summary

My recommendation is that CFX try to enhance their current plans for the addition of on/off slip ramps for the Cypress Parkway section of the Southport Connector to include my traffic congestion improvement suggestions. While my recommendations may be more of an engineering challenge and more costly than the original plans the improvements from the Poinciana traffic congestion problems will be worth the additional expense. The addition of the on/off ramps east of the new Poinciana Parkway bridge will make it much more feasible for the residential subdivisions on Poinciana Blvd and Pleasant Hill to access the Southport Connector as well as those future subdivisions planned for South of Lake Toho to access the shopping and businesses located and planned in the Cypress Parkway and Pleasant Hill sections of Poinciana. The addition of on/off ramps between Doverplum and O Pleasant Hill will facilitate the traffic entering Cypress Parkway from Doverplum to use the Southport Connector to travel to Florida Turnpike which the current configuration will not allow. Truly a Win/Win situation for the business case for building the Southport Connector and the issues facing the Poinciana Community today.