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# **TRAFFIC IMPACT ANALYSIS**

# Prepared for: TEXAS DEPT OF TRANSPORTATION

Prepared by: Chambers County

November 2019 Thoroughfare EW 4

## **EXECUTIVE SUMMARY**

The Texas Department of Transportation requested a traffic impact analysis for the proposed Chambers County proposed thoroughfare EW4 that will be constructed across SH 99 Grand Parkway at the pre-established break in access denial locations which is approximately 1.70 Miles South of SH 565. A limited traffic impact analysis was prepared to determine the potential volume of traffic generated by the proposed development at this location. The key findings and recommendations of the study are summarized below:

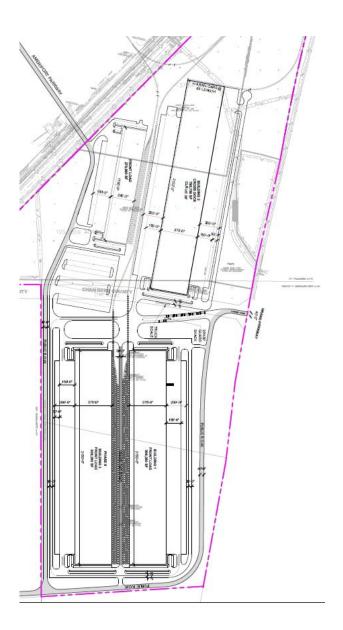
### **Key Findings**

The need for EW4 is due to several factors. The first factor is the demand for land that is available within the industrial area of Chambers County. Chambers County Improvement District 1(CCID1) to the South still has a large amount of potential, however land surrounding CCID2 is disappearing quickly. An additional factor is that these properties are somewhat landlocked without the construction of thoroughfare EW4. FM 1405 and a nearby parallel railroad track lie to the West of the properties. The proximity of FM1405 and the railroad would make a grade separation difficult and expensive for the CCID. To the South is the NRG Canal. To the North is another canal and CCID2 Ameriport railyard and other development. For the properties East of SH 99 are sand pits in excess of 25 FT deep that block access to FM 2354. The result is the need to construct the previously approved thoroughfare EW4. It is estimated that 95% of all industrial traffic is exporting materials to the port.



Note: Yellow is EW4. Red is Rail expansion. Black represents anticipated Warehouses.

The picture below shows the anticipated development East and West of SH 99. The County recently officially approved the new alignment for EW4 as a County Thoroughfare. Essentially Ameriport will be extended to the South and then East and finally North to the EW4 location on the East side of the property. As discussed earlier, 95% of truck traffic is exporting materials by way of the ports including barge terminals along Cedar Bayou to the South. It is anticipated that all of the trucks for the new development will use EW4 as an exit to SH 99 and travel south to the Ports. Ameriport also believes about 50% of existing traffic that now uses Ameriport Parkway @ FM 565 will utilize EW4 instead.



Ameriport is already developing property to the North of the West leg of EW4. The property consists of 144 acres that will have 4 industrial buildings totaling 1,560,000 SF and is anticipated to generate an ADT of 1950 vehicles per day along with 470 temporary vehicles during construction phases. The facilities will begin to open in late 2020 and be fully complete sometime in late 2021. Additional property buildout is expected over the next 5 years.

Attached is the AmeriPort development plan on the remaining 150 acres south of the CWA Canal, which fronts 99. Below is a table of traffic counts performed at AmeriPort Parkway and FM 565 on Feb 13, 2019:

	Vehicle Turning Movement Count Wednesday, February 13, 2019				
	Left	Straight	Right	U-Tum	24-HR Total
Exit AmeriPort Pkwy	1133	10	770	2	1915
Enter AmeriPort Pkwy	832	N/A	1083	N/A	1915
Peak HR Totals	Inbound	Outbound	Total		
6:30 - 7:30	307	40	347		
16:30 - 17:30	48	270	318		

These numbers have increased significantly even since February as many of our new building tenants have ramped up their businesses in 2019. It is anticipated that as 50% of those vehicles would use the E-W Connector road to 99. Also, AmeriPort plans to aggressively build-out its remaining acres of undeveloped land in the next 2 years. The building construction breakdown is as follows:

Ameriport Projections: This does not include recently purchased property to the South.

Construction Schedule:		
2019 Starts (Under Construction)	344,950	SF
2020 Starts	1,271,130	SF
2021 Starts	450,800	SF

It is estimated that there will be an additional 467 exiting vehicles during the PM Peak for the industrial development as a result of future construction. All of that is anticipated to use E-W #4 as it is located along 99 and almost 100% of vehicles are export vehicles going to the port.

Other properties West of SH 99 including Jennings, TGS and additional planned industrial property will follow with construction within the near future. Estimates for these approximate 400 acres in properties include 4,200,000 SF of industrial buildings, ADT of 5,500 vehicles per day and up to 1300 additional vehicles during the construction process.

The large property to the East of SH 99 is approximately 87 acres of property. The owner is currently evaluating the best use but it is anticipated to be industrial. The property will not need detention so 100% is development property. It is estimated that up to 2,000,000 SF is possible and would generate an ADT of 2,500 vehicles per day and up to 500 additional vehicles during the construction phase.

The total build out for the properties along EW4 both East and West of SH 99 totals approximately ADT of 9,950 vehicles per day. An additional ADT of 2,270 vehicles per day would be present during the construction phases. The % trucks for these facilities are anticipated to be 90%. That totals 8,955 Trucks per day and 995 2-axle vehicles per day.

The current toll rate for SH 99 is \$4.08 for trucks and \$1.36 for 2-axle vehicles. It is anticipated that the facility would operate 5 days a week or 260 days per year. Since the properties are essentially land locked without the construction of EW4, it is anticipated that 100% of vehicles will use EW4 for ingress and egress of the facility. The Truck ADT 8,955 X 260 days X \$4.08 = \$9,499,464 toll revenue per year. 2- Axle ADT 995 X 260 days X \$1.36 = \$351,832 toll revenue per year.

### Summary

Chambers County is planning to construct permanent County Road access points for thoroughfare EW4 by the end of 2019. It is anticipated that the buildout of the properties East and West of SH 99 will generate up to 9,950 vehicles with up to 8, 995 being trucks per day. The potential toll revenue for these properties is approximately \$10,000,000 per year. The proposed grade separation cost of the EW4 intersection is \$18,000,000. The toll revenue would easily pay this off within 2 years.