

TRAFFIC IMPACT ANALYSIS (TIA) REVIEW MEMO

Date: September 14, 2020. Review of Report Dated August 18, 2020

Subject: Anclote Harbor Traffic Impact Analysis (TIA) Review Comments

City of Tarpon Springs, Florida

American Project No: 5169367

American Consulting staff reviewed the subject TIA and offer the following comments. Also see attached redlines.

1. General Comment - Provide this TIA in report format if possible. Include Table of Contents, since there are so many Tables and Figures, to make it flow. Also confirm if this report will be sign-sealed by a Florida PE with Traffic Engineering specialty?
2. Delete references to the preliminary meeting with Arpita Guha and replace with Methodology Meeting and follow up discussion held on July 16, 2020 and August 7, 2020, with Patricia McNeese, Mo Gopalakrishna and Linda Hess (American Consulting Professionals).
3. Under Trip Generation, only PM peak hour is discussed. Elsewhere in the report AM Peak Hour analysis has be done. Revise narrative
4. "Table 1: Project Trip Generation", is not the same as what was provided in the Approved Methodology. Include the Daily Trips and AM Peak Hour Trips, that was provided in the Methodology.
5. Under "Existing Traffic Conditions" section, reviewer suggest that since 2019 traffic volumes are higher, why not use 2019 volumes for all locations instead of increasing the 2020 volumes that are impacted by COVID-19 lower traffic volumes? If 2019 volumes are used, apply the 2% annual growth factor for 3 years between 2019 and 2022. Reviewer leaves it up to Designer on which way they want to proceed.
6. Under "Existing Traffic Conditions" section, replace references to peak-season factor (SF) with Peak Season Conversion Factor (PSCF).
7. Under "Project Trip Distribution and Assignment" section, the distribution percentages are not adding up to 65% from Live Oak intersection to the south. See redlines on Figure 2.
8. Under "Project Trip Distribution and Assignment" section, include a north arrow to the exhibit - "Offset Left-Turn Median Opening Example". Include a larger drawing to show the lengths of all proposed turn lanes (NBR right at site driveway, NBU turn lane lengths, SBU turn lane length, median opening width, provide any transition distances from site driveway, along US 19 north and south leading to the U turn lanes, etc.) in the drawing.

9. Under the Roadway Capacity Analysis, indicate clearly the existing year 2020 and Future Year (opening year) 2022 both in the narrative and in Table 2.
10. Under the Roadway Capacity Analysis, In Tables 2 and 3, confirm if the 2% annual growth rate was added to the background peak hour volumes for 2 years from 2020 through 2022, the opening year? Provide a spreadsheet with your resubmittal.
11. Under Table 2, based on comments made on Figure 2 (Project Traffic Distribution Percentages). Confirm if Project Traffic Assignment in Tables 2 and 3, will change and update the tables.
12. Under Tables 2 and 3, Per Approved Methodology, all the Roadway Segments listed are indicated as significantly impacted roadways with project traffic representing 1% of greater of Max service volume of LOS D. Add a column with the percentage.
13. In Tables 2 and 3, LOS D Service Volumes are exceeded along US 19, with the PM peak hour traffic volumes. Confirm with FDOT if they accept LOS D optimization result (per footnote no.3) in lieu of any needed capacity improvements. Also confirm with FDOT if there are any planned roadway widening improvements. If not developer would need to make improvements to improve operations and safety.
14. Under "Project Access Analysis" section, include any access approval letters from FDOT for site driveway and median openings as part of the Appendices in this report.
15. Under "Project Access Analysis" section, please address the approved methodology requirement, "The two median openings (immediately north and south of the site) will be analyzed for the anticipated queue and turn lane length required. The analysis will include the number of anticipated trips heading north or south which utilize the median openings." Include the 95th percentile Queuing obtained from software (for peak hour analysis) so there are no rear end crashes for any potential spillbacks into the adjacent through lane. Include the required storage (L) based on posted speed along US 19, per FDOT Standard Index 711-001 (11 of 13). Include in the Conclusions section in this report as to what operational and safety improvements are being recommended, since WB right turning cars out of the site driveway have to cross three NB lanes of traffic to access the U turn median opening north of the site and may not have sufficient transition distance.
16. Under "Intersection Analysis" section, in addition to V/C ratios, add LOS for each of movements and overall intersection LOS and corresponding delay in vehicles/second. Mention if LOS D thresholds can be met with any countermeasures to improve the operation of the movements/overall intersection. When would the improvements be needed and who will address operational improvements? Revise narrative under Intersection Analysis, and corresponding Table 4.
17. General Comment - Include a LOS chart with LOS A thru F with corresponding delays so City staff and laymen can understand the operations. Also include the thresholds for V/C (volume/capacity) ratio (such as what is acceptable and what is failure), so it is easily understandable to City council and anyone reviewing this report.

18. Under Tables 4 and 5, show the analysis years for - 1) Existing Conditions, 2) Background Conditions, 3) Total Conditions. Include a footnote at the bottom of the table as to what data each one includes. E.g. Total Conditions = Existing Conditions + background Conditions. Explain what background conditions include. E.g. Existing 2019 traffic + Annual growth factor.
19. On Page 8, above Table 5, the narrative references PM peak hour analysis and refers to Table 5 (which says AM Peak hour). Please confirm, if it is AM or PM analysis?
20. On Page 8, after the paragraph for site driveway intersection analysis, include a Chart for Site Driveway Analysis for build out year 2022, with vehicular delay in seconds. With the intersection driveway failing during PM peak for WB right turn (outbound), what safety countermeasures are proposed to improve operations and enhance safety?
21. On page 9, the site analysis driveway (NB right turn lane) recommends 405'. Please confirm if this storage would satisfy 95th percentile queuing to avoid into spill back into adjacent through lane.
22. Include On-Site Parking Analysis and Site Plan for City's review. Is all parking on-site? Include parking per code.
23. Under Multi-Modal Analysis, can the Multi-Modal Map be further refined to show clearly what is existing and what is being proposed? Include any relevant dimensions in feet for multi-modal improvements. Revise Legend and map accordingly.

For any questions or concerns, please reach out to Patricia McNeese at the City to coordinate a Teams Meeting with reviewer Mohan Gopalakrishna, PE, PTOE.