Engineering has reviewed the TRC submittal for the Cape Fear Solar Systems project and offers the following comments:

- 1. This project is proposing the construction of on-site newly constructed impervious surface greater than 10,000 sf, therefore the project is subject to full stormwater review. Please submit the Stormwater Management Permit Application, \$1,000 permit application processing fee, one full set of design plans, calculations, and any other supporting documentation to Engineering for review. Please also submit a digital copy of the entire submittal package. Additional comments will be made once the full engineering submittal is reviewed. Please note our review times are approximately 20 25 days right now. Please factor this into your submittal.
- 2. All stormwater control systems must be designed to treat the stormwater runoff from all surfaces generated by one and one-half (1-1/2) inches of rainfall for water quality purposes.
- 3. The City has determined regardless of density classification or location the minimum control for safety of life and property to be the control of the post-development peak discharge rate of the two (2)-year, ten (10)-year, & twenty-five (25)-year storms to not exceed the pre-development peak runoff discharge rate for the same storms.
- 4. Piped collection systems shall be designed for the 10-year storm event and analyzed for the 50-year frequency storm event to check the system for flooding. Assign an appropriate tailwater for HGL analysis.
- 5. Provide a geotechnical report showing infiltration rates and SHWT for each infiltration trench. Note: Multiple boring tests may be needed for each trench due to size.
- 6. Include Inlet drainage area maps with the analysis or within the plan set. Please make sure each drainage area is labeled and quantified.
- 7. Provide wetland Jurisdiction Determination (JD) once completed.
- 8. Provide Bottom of Wall / Top of Wall spot elevations for retaining wall. A cross section profile would be very helpful.
- 9. With the amount of infiltration trenching provided is there a need for additional SCM located along Dawson Street outfall? This SCM will need a minimum 15' setback from the Anderson property line.
- 10. Sidewalks will need to coordinate tie-in locations with commercial driveway aprons. Sidewalks cannot tie into driveway flares.
- 11. Provide SCM details including weir boxes, cross sections, elevations...ect.
- 12. What condition is the 24" RCP outfall pipe in? Will it need any maintenance?
- 13. A variance request will be needed for 50' driveway width at property line
- 14. A variance request will be needed for greater than 62' driveway tie-in at edge of roadway (2<sup>nd</sup> St.).