Engineering has reviewed the plans for the Massengill's Garden Center project submitted October 31, 2019 for TRC review and have the following comments:

- 1. This project is proposing the construction of on-site newly constructed impervious surface area in excess of 10,000square feet, therefore the project is subject to full stormwater review and will require a SW permit for the redevelopment of the site. Please submit a fully executed Stormwater Management Permit Application Form, a \$1,000 Engineering Review fee, one full set of design plans, calculations and any other supporting documentation to Engineering for further 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 30 days right now. Please factor this into your submittal schedule.
- 2. Please replace the 'No Permit Required' approval stamp with the "Stormwater Management Plan Approval' stamp.
- 3. Please list in addition to the amount of existing on-site newly constructed impervious area, the amount of on-site newly constructed impervious surface to be removed, the amount of on-site newly constructed impervious surface to remain to Project Information Table on sheet DEMO-1. This information should match the information entered in the SW Application Form.
- 4. As a condition of redevelopment, the proposed redevelopment must provide stormwater controls that are equal or better than the previous development. While the project is proposing an overall net reduction in impervious surface with a reduction in the amount of gravel, there is an increase in rooftops, concrete and asphalt. Replacing gravel with asphalt, concrete and rooftops does not meet the intent of "equal or better." Please provide some type of stormwater control measure that will help meet this requirement.
- 5. All driveways shall be the standard "ramp" type except where no curb exists in the vicinity of the proposed driveway, a flat slab type shall be installed. The Oleander driveway shall be the ramp type. The French Road and Park Avenue driveways shall be the flat slab type. See the City detail for commercial driveways.
 - The flares on the Oleander driveway need to extend to the rear of the sidewalk section of the driveway apron. Also, the curb and gutter should terminate at the curb returns and not extend to the sidewalk.
 - Show the sidewalk section going thru the Oleander and French driveway aprons.
 - The Park Avenue driveway can have 13'x13' flares (45 degree diagonal). A sidewalk section will not be required since there is an MUP being constructed.
 - Coordinate with Traffic Engineering and Construction Management for the appropriate markings and signage at the Park Avenue MUP crossing. Add the Multi-Use Path and Typical Curb Ramp on MUP details.
- 6. Oleander is a major thoroughfare, therefore the driveway must have a 75-foot property line offset. A variance request must be submitted to the City outlining the reason(s) the technical standard cannot be met.
- 7. The French Road driveway must have a 6-foot property line offset. A variance request must be submitted to the City outlining the reason(s) the technical standard cannot be met.
- 8. The proposed MUP is hatched to denote concrete. The MUP is to be asphalt.
- 9. The impervious numbers in the Project Information Table needs to be consistent from sheet to sheet.
- 10. Runoff is not allowed to sheet flow over public sidewalks or MUPs. The grading plan looks to concentrate runoff from a large portion of the site and direct it over the MUP into the Park Avenue roadside swale. Please revise how the runoff gets to the roadside swale.
- 11. Where will runoff that is collected on the western side of the site ultimately drain?

- 12. Provide spot grades at all driveway entrances to better illustrate how they will tie into existing grades.
- 13. Provide spot grades along both sides of the public sidewalk and MUP demonstrate compliance with City-required cross and longitudinal slopes.

Please call or email if there are any questions. Thank you.