APPENDIX

K. DRAINAGE WELL DESIGN – REASONABLE ASSURANCE REPORT

K. DRAINAGE WELL DESIGN – REASONABLE ASSURANCE REPORT

K.1 REASONABLE ASSURANCE REPORT

Submit a Reasonable Assurance Statement, in a report form, to the Department for review and approval.

- 1) The report should provide a reasonable assurance that the buoyant stormwater discharge into a Class G-III aquifer (total dissolved solids **greater** than 10,000 mg/L) via the drainage well(s) has a minimum potential to:
 - i) Due to buoyancy, rise into a preferential pathway in a Class G-II aquifer system [Underground Source of Drinking Water (USDW) total dissolved solids less than 10,000 mg/L)]
 - ii) Impact any surface water bodies in the vicinity of the project via groundwater discharge
 - iii) Cause mounding that may rise into USDW and/or manifest on a land surface as a spring due to pressurization of the wells that are located nearby or receive stormwater flow from a building roof at elevation + XXX feet.

The report should be signed and sealed by a Florida Licensed Professional Geologist/ Engineer with hydro-geological expertise to:

- Document the existence of sufficient confining strata above the base of the well casing, to minimize the potential of injected buoyant stormwater to rise into a G-II aguifer system.
- Show the injected stormwater has minimum potential to impact any surface water bodies in the vicinity of the project that may be affected via groundwater discharge.
- Show the pressurization of the well due to its location at elevation + XXX feet or receiving stormwater flow from a building roof elevation + XXX feet will not cause mounding that may rise into USDW and/or manifest as a spring on a land surface.
- 2) The report may be submitted at this time or its submission may be deferred until the stormwater drainage well(s) construction permit has been issued. However, it must be submitted for Department review and approval prior to the Department's authorization to use the stormwater drainage well(s).

- 3) Indicate whether you wish to submit this report before or subsequent to Department issuance of a stormwater drainage well construction permit. The Department strongly advises the former option to most efficiently achieve the operational authorization of the well(s).
- 4) Note that no fluid should be discharged into the stormwater drainage well(s) without written authorization from the Department to use the well(s).
- 5) Issuance of a well construction permit does not obligate the Department to authorize the use of well(s), unless the well(s), information required by the permit, and this report qualifies for an authorization.