The Pointe at Wolf Creek Resort

Storm Water Runoff

November 3, 2021

This memo is intended to summarize the existing versus proposed storm water runoff from the area on and around parcel 220160034. The site is south of Worldmark Phase 2 and north of the Wolf Creek Golf Course.

Predeveloped Storm Water Runoff

The existing site consists of about 3 acres of vegetation / dense grasses and scattered trees along. The site generally slopes from northeast to southwest. The existing storm water runoff from the site drains on to the golf course and eventually to the existing secondary water pond located about 200 ft south of the property line. Much of the existing runoff flows over the grass and eventually into the pond. There is an existing ditch along a portion of the southwest property line that diverts some of the existing runoff to a culvert that also drains directly into the pond. The existing predeveloped storm water runoff from the site drains to the existing pond.
In addition to the existing storm water runoff from the proposed site, areas from Worldmark also runoff through storm drain pipes and into the existing pond. Some of the existing springs and runoff from the existing Worldmark property (east of the Pointe property) run through existing storm drain collection and through a measuring device before flowing to the existing pond on the golf course.

Proposed Storm Water Runoff

The proposed 3-acre site will be improved with 3 buildings and associated parking lot and sidewalk. The proposed site will remain about 32% landscape area. Drainage from the site will be collected by the proposed storm drain system of pipes and boxes. The storm drain system includes a proposed detention system and control structure to restrict the release of storm water at a rate of 0.1 cfs per acre. The proposed release rate is 0.3 cfs. The storm water release is restricted by orifice plates on the control structures. This restricted release rate is intended to mimic the predeveloped release rate currently leaving the site and flowing into the pond. The proposed detention system is sized to restrict runoff to match the predevelopment runoff rate.

Per discussion with Dee Staples, with Wolf Creek Irrigation, the storm water runoff that leaves the Pointe Site through the detention system will not be sent through the measuring device. Instead, it will be directed to the existing pond prior to the measuring device.

Ryan Christensen, PE
Gardner Engineering

Accepted by:

Dee Staples (Date) 11 Nov 2021

Dee Staples (Wolf Creek Irrigation)