



September 3, 2021

To: **City of Scottsdale
Development Services**

Re: **4141 N Scottsdale Rd.
Scottsdale, AZ 85251
LDG Project #21072283
QS # 17-45**

This drainage narrative and related civil engineering design have been developed in accordance with the current Maricopa County and City of Scottsdale drainage ordinances, standards and policies.

The project site is currently a fully developed office building and an underground parking structure. The property is located at the northeast corner of Scottsdale Road and Indian School Road. The project will consist of the construction of additions to the existing office complex, existing office building improvements, a new driveway entrance for ingress and egress to and from Scottsdale Road and miscellaneous site improvements.

There is an existing onsite underground storm water retention system, which is connected to an existing dry well. There are multiple existing area drains that will be adjusted to the final grades as depicted on the proposed grading and drainage plan. The project does not introduce additional impervious surfaces and therefore no additional post development runoff will leave the site.

Based on our research at the FCDMC library, the site is within the watershed designated in Lower Indian Bend Wash Area Drainage Master Study, South. The study area covers approximately 27 square miles located primarily within the Phoenix, Scottsdale, Tempe and Paradise Valley. The area is fully developed with mainly residential and some commercial corridors along major roadways. Based on the results of the FLO-2D model developed as part of the Lower Indian Bend Wash, South, the maximum discharge within the Scottsdale Road right of way is approximately 13 cfs and runs in southerly direction. The flows in Indian School Road are estimated at approximately 8 cfs and run west to east. The flows are contained within the roadways right of way and no offsite flows impact the subject project.

Site is located in Flood Zone "X" (shaded) according to Flood Insurance Rate Map (FIRM) #: 045012, Panel 2235, Suffix L, dated September 18th, 2020, as published by FEMA. The FIRM Panels defines Zone "X" as follows: *"Areas of 0.2% annual chance flood; Areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; Areas protected by levees from 1% annual chance flood."*



LIBW, South FLO-2D Model

In conclusion, the project has the potential to collect, convey, and discharge runoff effectively while meeting the County and City standards. The proposed improvements do not impact the drainage conditions of the downstream properties and the existing City infrastructure and will not result in changes to the existing drainage patterns or magnitudes.

Respectfully Submitted,



Nick Prodanov, PE, PMP
Principal
Land Development Group, LLC