



DRAINAGE STATEMENT

**LINCOLN MEDICAL OFFICE
7125 E. LINCOLN DRIVE
PARADISE VALLEY, ARIZONA 85016**

Prepared By:
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This statement and attachments are being submitted as a Drainage Statement to support the proposed development of the Lincoln Medical Office at the SW corner of E. Lincoln Drive and Scottsdale Road, within the SE ¼ of Section 10, Township 2 North, Range 4 East, Gila and Salt River Meridian, within Paradise Valley, Maricopa County, Arizona.

This property is designated as Zone D, areas in which flood hazards are undetermined but possible per the Flood Insurance Rate Map (FIRM) Community Panel No. 04013C1770L, dated October 16, 2013.

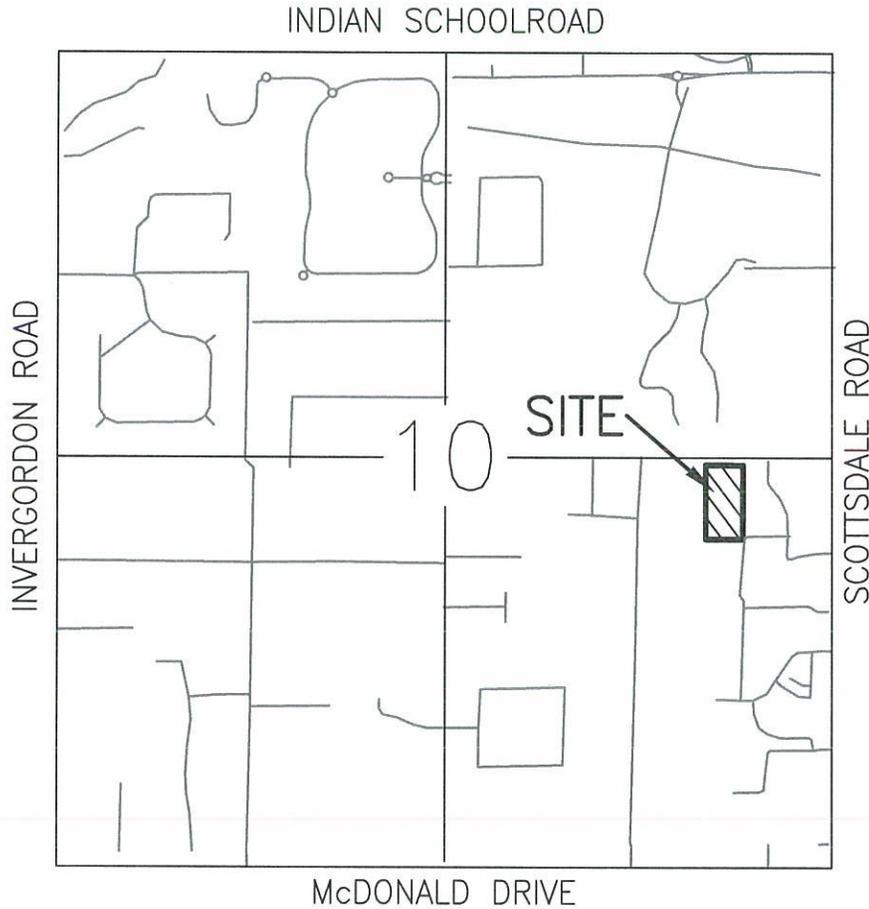
The subject property comprises of 2.14 acres of currently developed land. This drainage statement has been prepared primarily as documentation for the provision of storm water retention in conformance with Paradise Valley Drainage Standards.

At this time, the site is fully developed as a medical plaza which is slated to be demolished and a new medical office facility is to be constructed. The site was developed prior to any retention requirements and therefore does not retain any runoff onsite. In order to determine the required retention for the proposed project using today’s floodplain regulations, the difference between the pre and post runoff conditions will be compared to the first flush volume. The greater of the two will be used.

It has been determined the post condition requires 340 more cubic feet than the existing condition while the first flush requirement is 3,876 cubic feet. Therefore, the first flush governs and the proposed project will be required to retain 3,876 cubic feet onsite.

Due to the limited availability of open landscape area, a 50 foot section of 10 foot diameter pipe will be used as an underground storage system and a drywell will ensure the storm water will dissipate within a 36 hour period.

See attached conceptual layout.



N.T.S.

VICINITY MAP

SEC. 10, T. 2 N., R. 4 E.



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CIVIL DESIGN GROUP

4650 E. COTTON CENTER BLVD.

SUITE 240

PHOENIX, AZ 85040

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EXHIBIT A VICINITY MAP



EXHIBIT B
FIRM MAP

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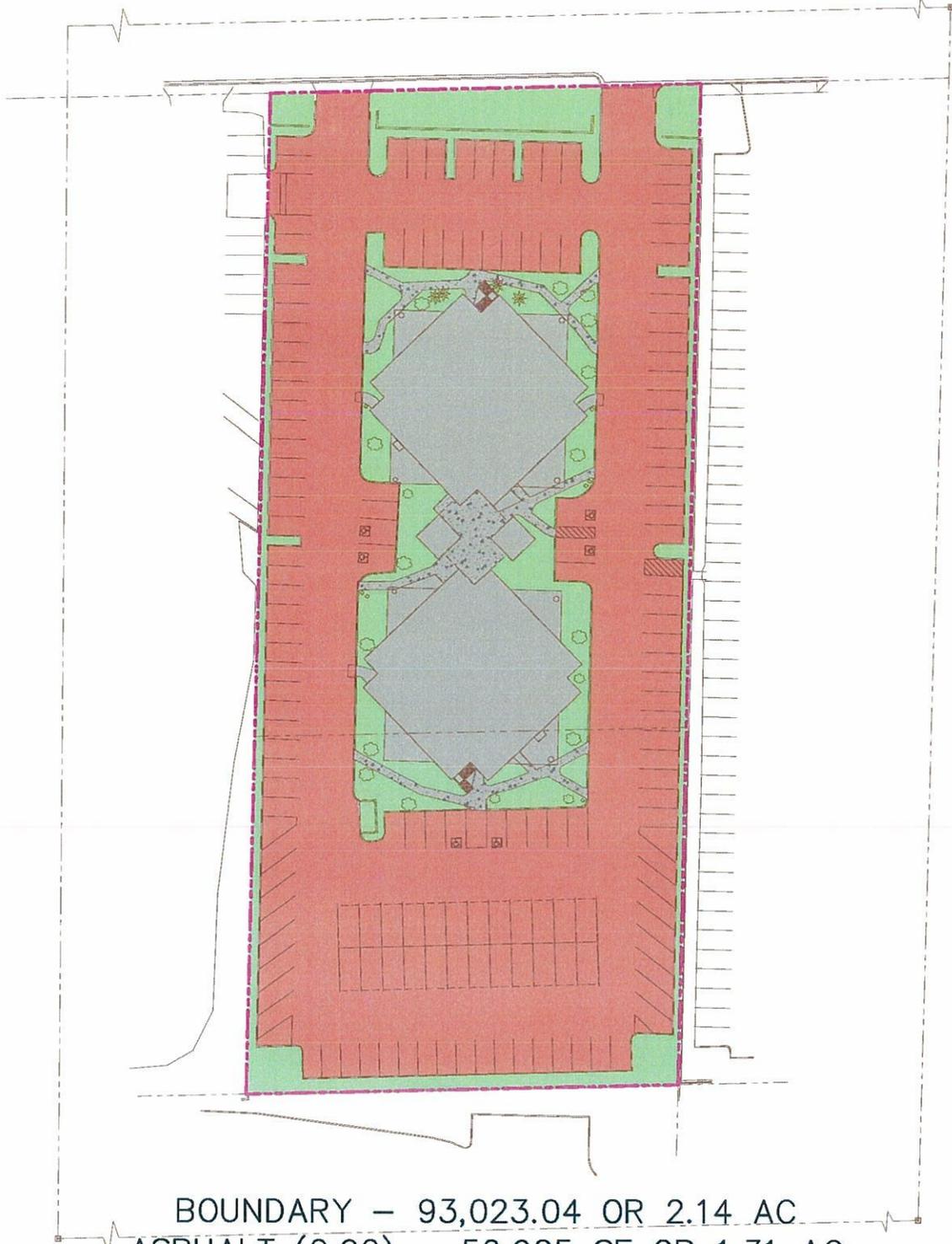
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PRE CONDITION

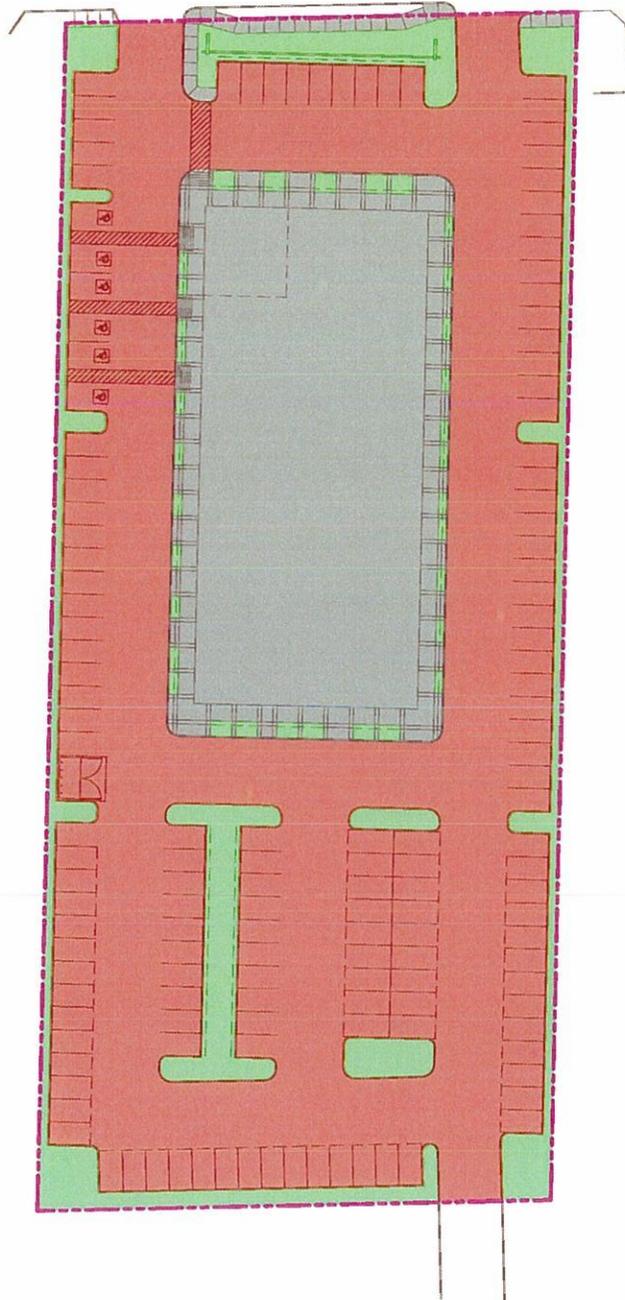


BOUNDARY - 93,023.04 OR 2.14 AC
ASPHALT (0.90) - 56,925 SF OR 1.31 AC
CONCRETE (0.95) - 19,325 SF OR 0.44 AC
LANDSCAPE (0.50) - 16,773 F OR 0.39 AC

$$C \text{ (WEIGHTED)} = \frac{(56,925 \times 0.90) + (19,325 \times 0.95) + (16,773 \times 0.50)}{93,023} = 0.84$$

$$\text{VOLUME REQUIRED} = 0.84 \times (2.19/12) \times 93,023 = 14,260 \text{ CF}$$

POST CONDITION



BOUNDARY - 93,023.04 OR 2.14 AC
ASPHALT (0.90) - 57,633 SF OR 1.32 AC
CONCRETE (0.95) - 23,729 SF OR 0.54 AC
LANDSCAPE (0.50) - 11,661 SF OR 0.27 AC

$$C \text{ (WEIGHTED)} = \frac{(57,633 \times 0.90) + (23,729 \times 0.95) + (11,661 \times 0.50)}{93,023} = 0.86$$

$$\text{VOLUME REQUIRED} = 0.86 \times (2.19/12) \times 93,023 = 14,600 \text{ CF}$$

PROJECT/SUBJECT: _____ PROJECT #: 181290

PREPARED BY: EPA DATE: _____ SHEET NO. _____ OF _____

FIRST FLUSH

$$V = C \times P/12 \times A$$

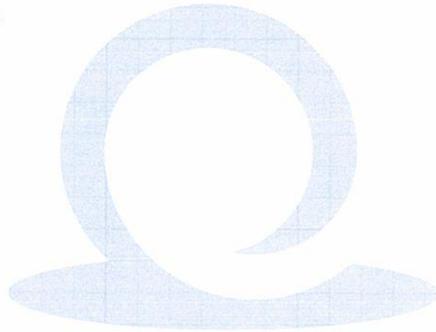
$$C = 1.0$$

$$P = .5''$$

$$A = 93,023 \text{ SF}$$

$$= 1.0 (.5/12) (93,023)$$

$$= 3,876 \text{ CF}$$



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