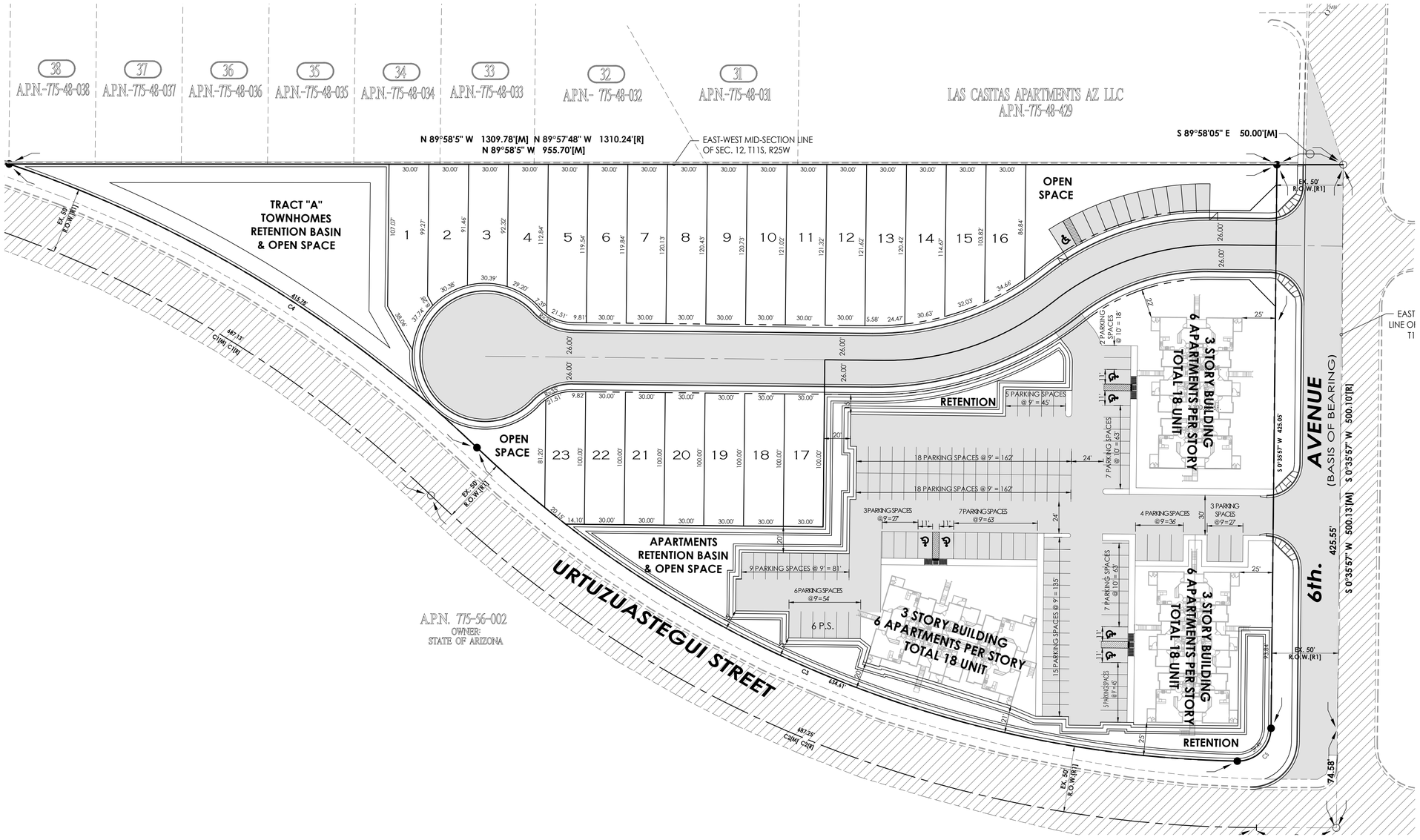

PROJECT ANALYSIS

PROJECT AREA FOR TOWNHOMES = 3.13 AC.
PROPOSED ZONING R-2 (10 UNITS PER ACRE)
ALLOWABLE UNITS = 3.13 X 10 = 31.3 SAY 31 UNITS

PROPOSED UNITS = 23 TOWNHOMES **THEREFORE OK**

PROJECT AREA FOR APARTMENTS =2.79 AC.
PROPOSED ZONING R-3 (20 UNITSPER ACRE)
ALLOWABLE UNITS = 2.79 X 20 = 55.8 SAY 55 UNITS

PROPOSED UNITS =54 APARTMENTS & 1 OFFICE = 54 **THEREFORE OK**

PARKING ANALYSIS:

PARKING REQUIRED = 2.0 PARKING SPACES /2 BEDROOM UNIT

PARKING REQUIRED = 54 UNITS X 2.0 P.S./UNIT = 108 PARKING SPACES

FOR EVERY 10 UNITS 1 GUESS PARKING IS REQUIRED;
TOTAL UNITS 54 UNITS / 10 UNIT/PS = 5.4 SAY 5 PARKING SPACES

TOTAL REQUIRED : 108 + 5 = 113 PARKING SPACES

PARKING PROVIDED = 115 PARKING SPACES THEREFORE OK.

OPEN SPACE CALCULATIONS

PROJECT AREA : 136403.84 = 3.13 AC

5% OPEN SPACE REQUIRED = 136403.84 = 3.13 AC SF X 5% =6,820 SF

OPEN SPACE PROVIDED : AREA RETENTION BASIN # 1 = 18,314.77 SF

TOTAL AREA OPEN SPACE PROVIED : = = = = = = = = = = 18,314.77 SF

18,314.77 SF > 6,820 SF, **THEREFORE OK**

DRAINAGE REPORT TOWNHOMES

1.- DRAINAGE REPORT

DRAINAGE AREA # 1

USING THE RATIONAL METHOD
Q= CIA = PEAK RUNOFF (VOL.)
(C) PEAK RATE RUNOFF = 0.43
(I) INTENSITY OF RAINFALL = 1.22 IN / HR
(A)DRAINAGE AREA = 136403.84 = 3.13 AC
Q= (0.43)(1.22)(3.13) =1.64 CF
TOTAL RUNOFF = 7,200 (1.642) = 11,823 CF

STORAGE VOLUME PROVIDED AREA # 1
RETENTION BASIN
TOP AREA = 18,314.77 SF
BOTTOM AREA =10179.96 SF
DEPTH = 3.0 FT.
VOL. PROVIDED = $\frac{(18314 + 10179)\ (3)}{2}$ = 28,493 CF

TOTAL VOL. PROVIDED = 28,493 CF

FACTOR OF SAFETY = $\frac{28,493\ CF}{11,823\ CF}$ = 2.40

17,523 CF > 11,520 CF THEREFORE OK

DRAINAGE REPORT APARTMENTS

1.- DRAINAGE REPORT

DRAINAGE AREA # 1

USING THE RATIONAL METHOD
Q= CIA = PEAK RUNOFF (VOL.)
(C) PEAK RATE RUNOFF = 0.43
(I) INTENSITY OF RAINFALL = 1.22 IN / HR
(A)DRAINAGE AREA = 139528.03 = 3.20 AC
Q= (0.43)(1.22)(3.20) =1.68 CF
TOTAL RUNOFF = 7,200 (1.68) = 12,096 CF

STORAGE VOLUME PROVIDED AREA # 1
RETENTION BASIN
TOP AREA = 20,562 SF
BOTTOM AREA =11,084 SF
DEPTH = 1.5 FT.
VOL. PROVIDED = $\frac{(7,869 + 3,813)\ (1.5)}{2}$ =17,523 CF

TOTAL VOL. PROVIDED = 17,523 CF

FACTOR OF SAFETY = $\frac{17,523\ CF}{11,520\ CF}$ = 1.52

17,523 CF > 11,520 CF THEREFORE OK

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CONCEPT DESIGN

URBAN BORDER TOWNHOMES PHASE I
URBAN BORDER APARTMENTS PHASE II

PRELIMINARY
NOT FOR CONSTRUCTION

Notes:

Scale: AS SHOWN	Date: OCT 2025
Drawn: Staff	Job #: VnV25-500
Design: Vna.	

Sheet 1 of 1