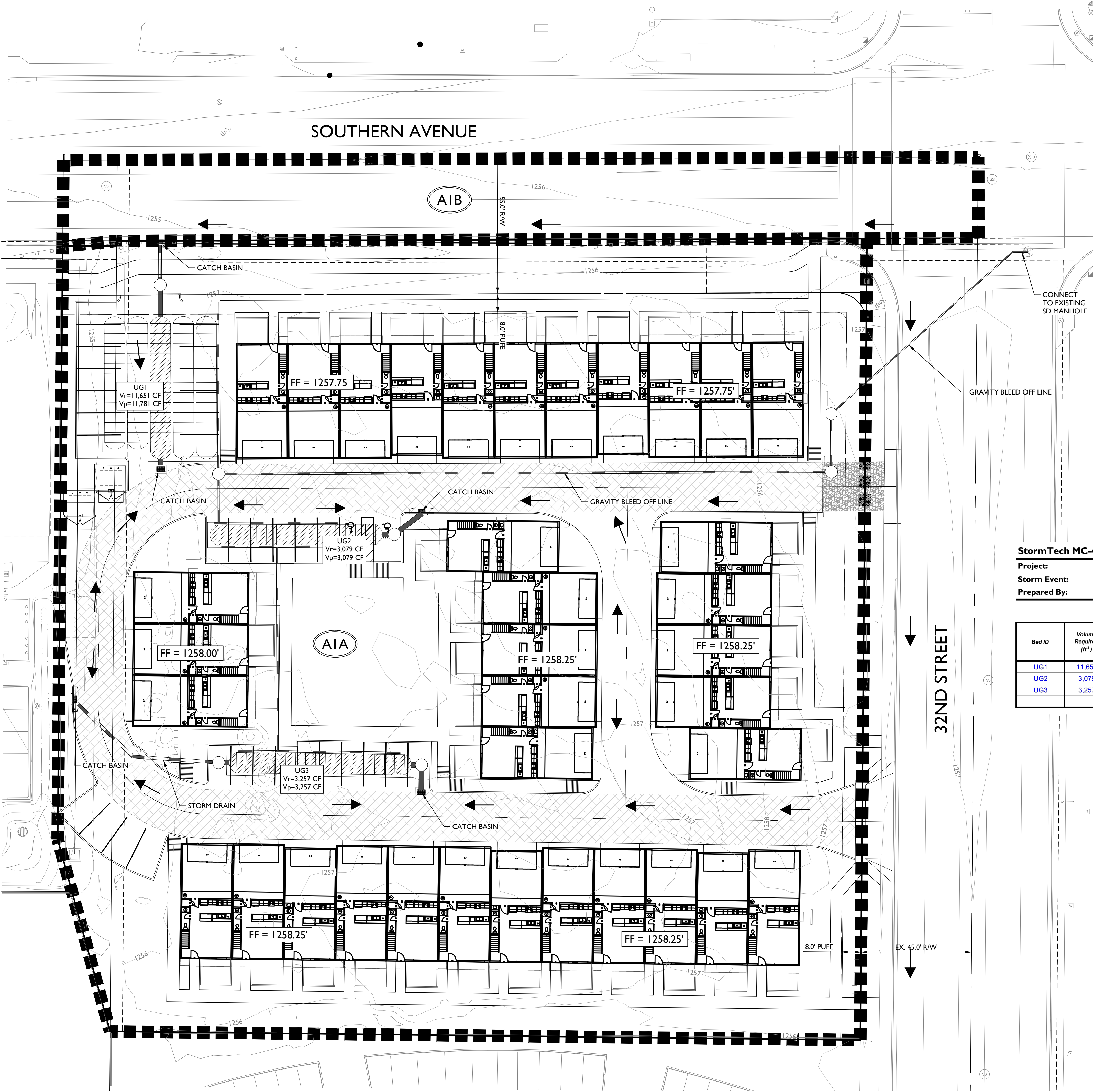
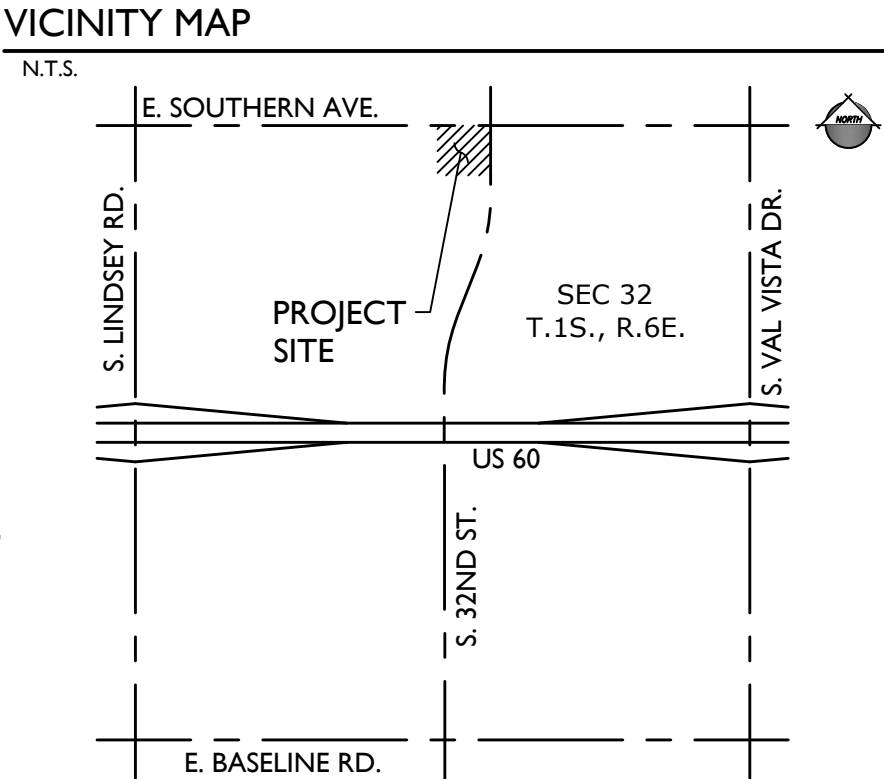




- LEGEND:**
- DRAINAGE FLOW ARROW
 - AIA DRAINAGE AREA LABEL
 - BI DRAINAGE RETENTION BASIN LABEL
 - DRAINAGE AREA BOUNDARY
 - ISOLATED ROW FOR FIRST FLUSH
 - UNDERGROUND RETENTION BASINS



Retention Calculations

Project:	Southern and 32nd
Storm Event:	100-yr 2-hr
Prepared by:	Kyle Millett, PE
Date:	5/6/2022

$V = C \cdot A \cdot P / 12^{(1)}$
Where:
V = Runoff Volume
C = Runoff Coefficient
A = Drainage Area
P = 2.20 in

Volume Required and Summary

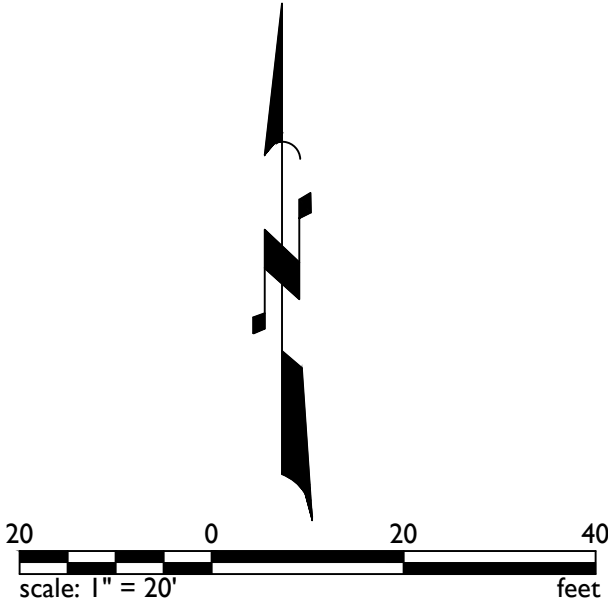
Basin ID	Sub-Basin ID	Sub Basin Area Description	Contributing Area (ft ²)	C =	Volume Required, V _r (ft ³)	Volume Provided, V _p (ft ³)	Estimated Water Depth (ft)
UG1	A1A	Onsite	105,373	0.82	15,841	11,781	
UG2	A1B	Southern	12,321	0.95	2,146	3,079	
UG3						3,257	
		Total	117,694	0.83	17,987	18,117	N/A

StormTech MC-4500 Underground Storage Volume Provided

Project:	Southern and 32nd
Storm Event:	100-yr, 2-hr
Prepared By:	Kyle Millett, PE
Date:	5/6/2022

Bed ID	Volume Required (ft ³)	Number of chambers	Number of End Caps	Area (SF)	Stone above (in)	Stone below (in)	Void in stone	Volume in chambers (CF)	Volume in End Caps (CF)	Volume of excavation (CF)	Amount of stone (CF)	Volume in stone (CF)	Total Volume (CF)	Check
UG1	11,651	63	10	2,793	12	9	40%	6,710	357	18,853	11,786	4,715	11,781	OK
UG2	3,079	16	2	746	12	9	40%	1,704	71	5,036	3,260	1,304	3,079	OK
UG3	3,257	17	2	788	12	9	40%	1,811	71	5,319	3,437	1,375	3,257	OK

- NOTES:**
- THIS PLAN IS PRELIMINARY, FINAL STORM DRAIN ROUTING TO BE DETERMINED WITH FUTURE PLANS.



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EPS GROUP

Southern and 32nd
Mesa, AZ

Preliminary Grading Plan

Project:

Revisions:

Call at least two full working days before you begin excavation.

ARIZONA

DESIGNED BY: KYLE MILLETT

DESIGNED BY: KYLE MILLETT

Job No.
21-0517

Sheet No.
1 of 1