

GRADING AND DRAINAGE PLAN
A PORTION OF THE SOUTHWEST QUARTER OF SECTION 27,
TOWNSHIP 1 NORTH, RANGE 6 EAST OF THE G.&S.R.B.&M.,
MARICOPA COUNTY, ARIZONA

DEMOLITION NOTE

SEE ARCHITECT'S PLANS FOR ITEMS TO BE REMOVED

CONSTRUCTION NOTES

- 1 2" AC ON 6" ABC.
- 2 CONCRETE VALLEY GUTTER PER MAG 240 (MODIFIED TO 2' WIDE).
- 3 SAWCUT, REMOVE AND REPLACE EXISTING PAVEMENT IN KIND (2" AC OVER 6" ABC MIN).
- 4 6" VERTICAL CURB & GUTTER PER MAG 220-1 TYPE A.
- 5 CHAIN LINK FENCE PER ARCHITECT'S PLANS.
- 6 20' ROLLING GATE PER ARCHITECT'S PLANS.
- 7 2' CURB OPENING WITH 120 SF OF 8" THICK RIPRAP (D50=4") TO BOTTOM OF BASIN.
- 8 "U" SHAPED HEADWALL PER MAG 501 WITH SAFETY RAILING PER C.O.M. DTL M-65 WITH 25 SF OF 8" THICK RIPRAP (D50=4").
- 9 RETROFIT EXISTING DRIVEWAY PER C.O.M. DTL M-40.03.
- 10 4" EXTRUDED CURB.

STORM DRAIN NOTES

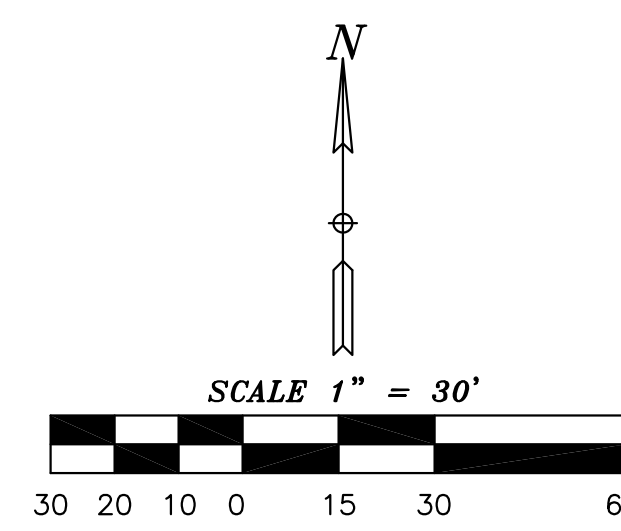
- 1 125' LONG, 10' DIA. (3"x1" CORRUGATIONS, GALVANIZED, 16 GAUGE) UNDERGROUND RETENTION TANK (INV=80.0 NORTH AND INV=79.5 SOUTH.) INSTALL 1/4" SOLID STEEL PLATE AT EACH END (WELDED). ALL JOINTS IN UNDERGROUND PIPE SHALL BE WATER TIGHT MANUFACTURED JOINTS. UNDERGROUND RETENTION STORAGE TANK SYSTEM TO BE INSTALLED PER MAG SPEC 621.
- 2 ACCESS MANHOLE DRAIN PER DETAIL #1 SHEET 4.
- 3 12" STORM DRAIN.
- 4 18" STORM DRAIN.
- 5 CATCH BASIN PER MAG STD DTL 535.
- 6 SUMP PUMP PER DETAIL SHEET 4. PUMP DESIGNED FOR 28 GPM @ 16' OF HEAD.
- 7 2" SCH 80 PVC FROM SUMP PUMP TO CATCH BASIN. CONNECT PVC TO CATCH BASIN. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES ALONG PATH PRIOR TO CONSTRUCTION.

RETENTION CALCULATIONS

OFFSITE AREA DRAINAGE TO EXISTING RETENTION BASIN = 375100 SF
 ONSITE DRAINAGE AREA = 311457 SF
 C(OFFSITE) = 0.85
 C(ONSITE) = 0.90
 PRECIPITATION AMOUNT = 2.15" (0.18")
 VOLUME REQUIRED = (375100(0.85) + 311457(0.90)) * 0.18" = 107846 CF
 ABOVE GROUND UNDERGROUND
 VOLUME PROVIDED = (34032 SF + 21968 SF)*3.5' + 130' * 78.54 SF = 108210 CF
 RETENTION TO BE BLEED OFF TO EXISTING CATCH BASIN ON SOUTHERN AVENUE

LEGEND

- TC TOP OF CURB
- C CONCRETE
- G GUTTER
- GR GRADE
- INV INVERT
- LF LINEAR FEET
- P PAVEMENT
- EX EXISTING
- SY SQUARE YARDS
- ◆ GRADE BREAK



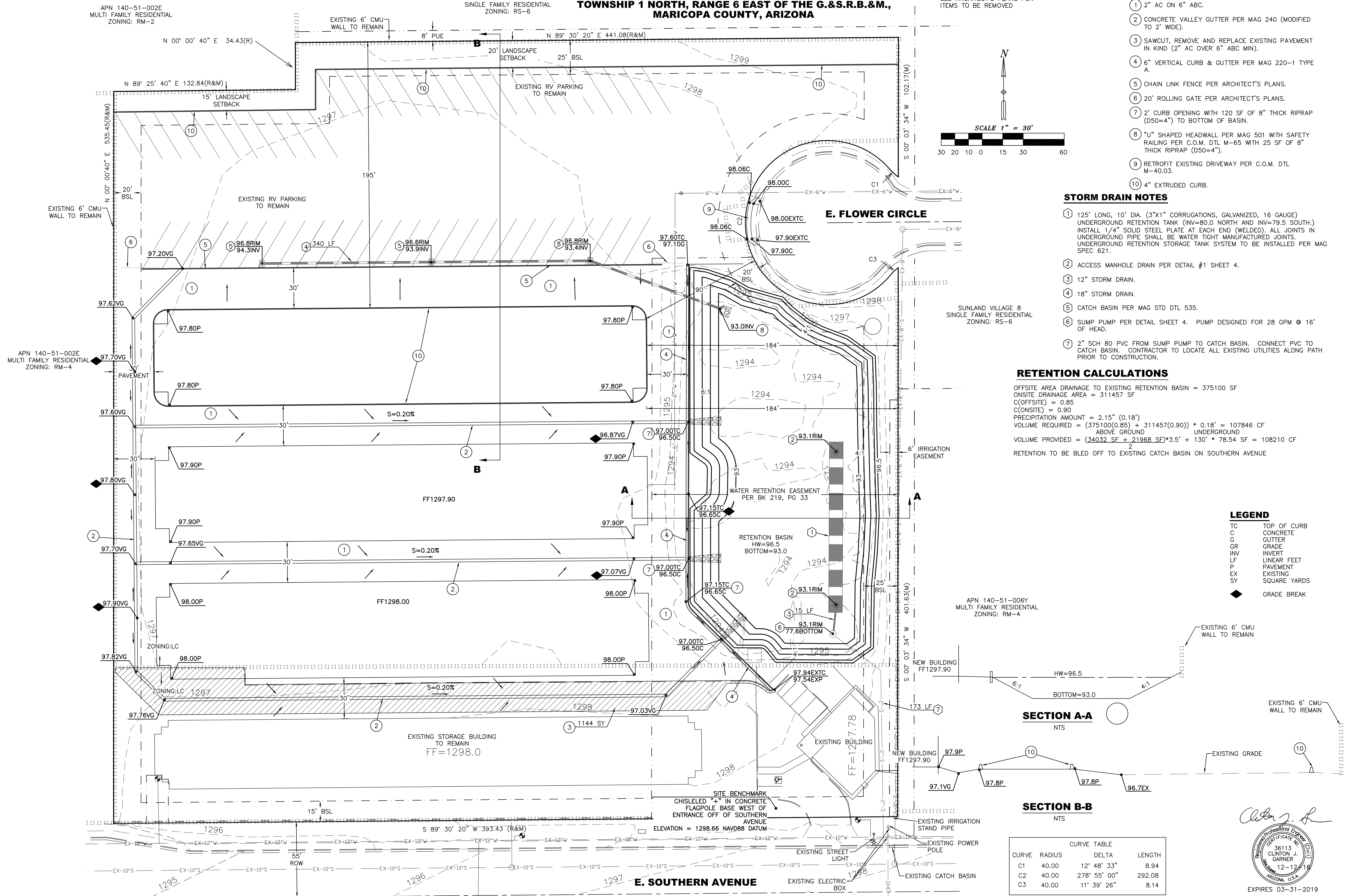
APN 140-51-002E
 MULTI FAMILY RESIDENTIAL
 ZONING: RM-2

SUNLAND VILLAGE 8
 SINGLE FAMILY RESIDENTIAL
 ZONING: RS-6

SUNLAND VILLAGE 8
 SINGLE FAMILY RESIDENTIAL
 ZONING: RS-6

APN 140-51-002E
 MULTI FAMILY RESIDENTIAL
 ZONING: RM-4

APN 140-51-006Y
 MULTI FAMILY RESIDENTIAL
 ZONING: RM-4



CURVE TABLE			
CURVE	RADIUS	DELTA	LENGTH
C1	40.00	12' 48' 33"	8.94
C2	40.00	278' 55' 00"	292.08
C3	40.00	11' 39' 26"	8.14



JOB NUMBER	16-030	I-STORAGE	DATE
DRAWING	GD16030	GRADING AND DRAINAGE PLAN	REVISION
DATE	12-12-16	APN 140-51-721	A B C
SHEET	2	4550 E. SOUTHERN AVENUE	A B C
OF	4		

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EXPIRES 03-31-2019