

PRELIMINARY GRADING & DRAINAGE PLAN FOR:
AVILLA - POWER & ELLIOT
3309 SOUTH POWER ROAD
MESA, ARIZONA

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 1 SOUTH,
RANGE 7 EAST, GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

CIVIL ENGINEER

TERRASCAPE CONSULTING
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PHOENIX, AZ 85014

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ARCHITECT

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LANDSCAPE ARCHITECT

THE MCGOUGH GROUP
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FLOOD ZONE

FLOOD ZONE DESIGNATION "X" PER FEMA
FLOOD INSURANCE RATE MAP, MAP NUMBER
04013C2780L, PANEL 2760 OF 4425, DATED
OCTOBER 16, 2013. ZONE "X" - AREAS OF 0.2%
ANNUAL CHANCE FLOOD; AREAS OF 1%
ANNUAL CHANCE FLOOD, WITH AVERAGE
DEPTH OF LESS THAN 1 FOOT OF WITH
DRAINAGE AREAS LESS THAN 1 SQUARE MILE;
AND AREAS PROTECTED BY LEVEES FROM 1%
ANNUAL CHANCE FLOOD.

BENCHMARK

CITY OF MESA BRASS TAG IN HEAD WALL OF
SOUTHEAST CORNER OF INTERSECTION OF
POWER RD. AND ELLIOT RD. HAVING A CITY OF
MESA DATUM NAVD-88 ELEVATION OF 1327.63.

BASIS OF BEARING

SOUTH 00°48'24" EAST - BEING THE WEST LINE
OF THE SOUTHWEST QUARTER OF SECTION 7,
TOWNSHIP 1 SOUTH, RANGE 7 EAST,
OF THE GILA AND SALT RIVER MERIDIAN,
MARICOPA COUNTY, ARIZONA, PER
DOCUMENT NUMBER 2017-0404685, MARICOPA
COUNTY RECORDS.

REQUIRED RETENTION VOLUME & TIME TO DRAIN TIME

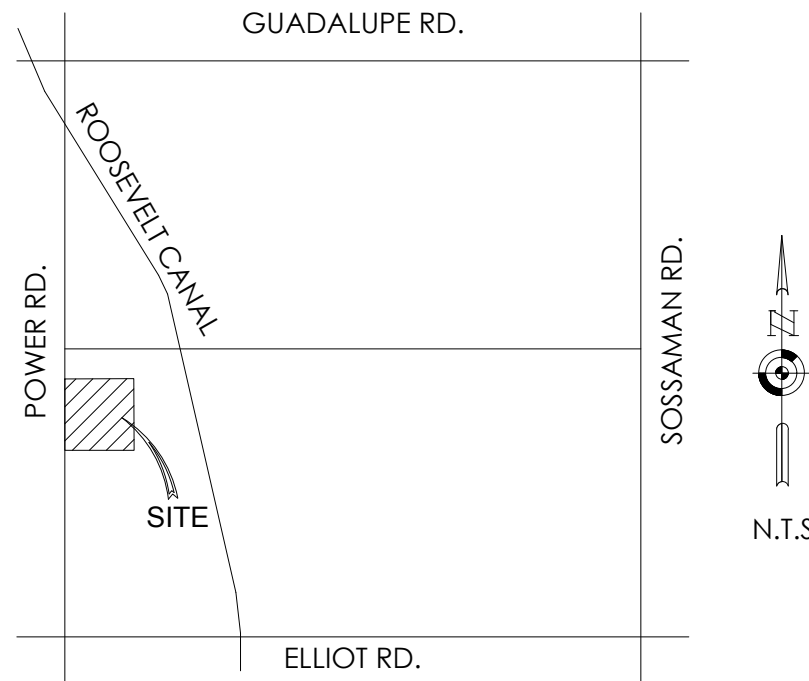
	ONSITE	OFFSITE
$V_R = C \times (P/12) \times A$	C = 0.72	0.90
C = WEIGHTED RUNOFF COEFFICIENT	P = 2.16	2.16
P = RAINFALL DEPTH (NOAA ATLAS 14) (IN.)	A = 8.28	0.94
A = RETAINED AREA (AC.)	V = 46,744	6,633
V = VOLUME REQUIRED (CF)	$V_R = 53,377$	
V_R = TOTAL VOLUME REQUIRED (CF)	$V_P = 53,800$	
V_P = VOLUME PROVIDED (CF) - 685 LF-10 DIA. CMP	DW = 4	
DW = NO. OF DRYWELLS	$T_d = 24.7$	
T_d = TIME TO DRAIN (HRS)		

* PER CITY OF MESA ENGINEERING PROCEDURE MANUAL (2017), ASSUMED DRYWELL CAPACITY IS
19,440 CF PER 36 HRS. (SECTION 806.21.5.2)
** UNDERGROUND RETENTION TANKS ARE CONNECTED & ANALYZED AS ONE SYSTEM

LEGEND AND ABBREVIATIONS

WATER VALVE
DRYWELL AND INTERCEPTOR
STORM DRAIN MANHOLE
HDPE STORM DRAIN
2x2' CATCH BASIN
2x8' CATCH BASIN
CMP TANK
GRADE BREAK
6" FIRE WATER LINE
4" DOMESTIC WATER LINE
8" SANITARY SEWER LINE
SEWER CLEAN OUT WITH COLLAR
FIRE HYDRANT

C - CONCRETE ELEVATION
EX - EXISTING
FFE - FINISH FLOOR ELEVATION
GB - GRADE BREAK
GFE - GARAGE FLOOR ELEVATION AT GARAGE DOOR
HW - HIGH WATER ELEVATION
P - PAVEMENT ELEVATION
PUFE - PUBLIC UTILITY & FACILITY EASEMENT
SF - SQUARE FEET
TC - TOP OF CURB ELEVATION



VICINITY MAP

DEVELOPER / APPLICANT

NEXMETRO DEVELOPMENT, LLC
2355 E. CAMELBACK RD., SUITE 805
PHOENIX, AZ 85016

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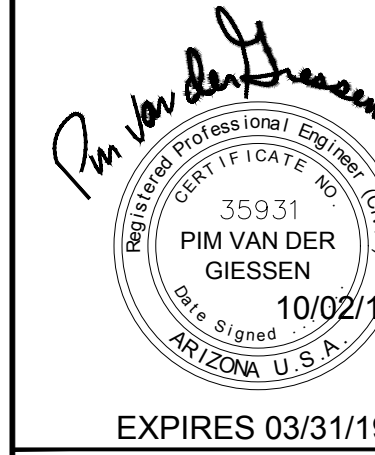
PROPERTY OWNERS

GARAGE TOWN USA, LLC
3309 S POWER RD
MESA, AZ 85212

PROJECT DATA

SITE AREA (GROSS TO CENTERLINE): ± 9.22 AC (401,488 SF)
SITE AREA (NET): ± 8.28 AC (360,505 SF)
APN: 304-05-017H
EXISTING ZONING: LIGHT INDUSTRIAL (LI)
PROPOSED ZONING: RM-2/PAD (MULTIPLE RESIDENCE)

consulting
Terrascope
civil engineering • surveying • urban planning



AVILLA
POWER &
ELLIOT

PRELIMINARY
GRADING & DRAINAGE

NEXMETRO
DEVELOPMENT, LLC

2355 E. CAMELBACK RD., SUITE 805
PHOENIX, ARIZONA 85016



DATE DESCRIPTION

08/21/18 1ST SUBMITTAL

10/02/18 2ND SUBMITTAL

CHECKED BY: DMS

DRAWN BY: KMT

TITLE:
PRELIMINARY
GRADING & DRAINAGE

SHEET No.

1 of 1

PROJECT No.
0851

