Drainage Reports

Abbreveated Water & Sewer Need Reports

Water Study

Wastewater Study

Stormwater Waiver Application

Final Drainage Report
For
Andante Law Croup
Scottsdale, Arizona

SITE PLAN
APPROVED
BY THE CITY OF SCOTTSDALE PLAN REVIEW DEPARTMENT

47-DR-16 | | 1/10/17
PLAN CHECK NUMBER | STAFF INITIALS | DATE

CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND ANY AND ALL DEVIATIONS WILL REQUIRE REAPPROVAL

Registered Professional Engineer (Civil)
CERTIFICATE NO.
42104
LARRY M.
TALBOTT
Date Signed 12/21/16
ARIZONA U.S.A.
Expires 3/31/17

December 2016

Prepared by:
Hunter Engineering
10450 N. 74th Street, Suite 200
Scottsdale, AZ 85258

47-DR-2016

FINAL DRAINAGE REPORT

FOR

ANADANTE LAW GROUP

SCOTTSDALE, ARIZONA

PREPARED FOR

LGE CORPORATION

740 N. 52ND STREET

PHOENIX, ARIZONA 85008

PREPARED BY

RUSSELL SCHULTE

HUNTER ENGINEERING, INC.

10450 N. 74TH STREET, SUITE 200

SCOTTSDALE, AZ 85258

(480) 991-3985

December 2016

H.E. PROJECT NO. LGEC215

TABLE OF CONTENTS

1.0 INTRODUCTION

This final drainage report has been prepared under a contract from LGE Corporation, developer of the Andante Law project. The purpose of this report is to provide a drainage analysis, required by the City of Scottsdale, to support the development. Preparation of this report has been done according to the procedures detailed in the City of Scottsdale's *Design Standards & Policies Manual.*

This development project is located on the northeast corner of North 69th Street and East 1st Avenue, Scottsdale Arizona. The site is in lots twelve (12) and thirteen (13), block one (1), Taylors Addition to Scottsdale, according to the plat of record in the office of the Maricopa county recorder in Book 22 of maps, page 3. Also, being in the northeast quarter of Section 27, Township 2 North, Range 4 East of the Gila and Salt River Base and Meridian. Figure 1, in Appendix A, illustrates the location of the project site in relation to the City of Scottsdale street system. Access to the site is provided off of North 69th Street and the alley along the south side of the development. The net site area is approximately 0.302± acres.

The project site is bound by North 69th Street to the west, East 1st Avenue to the south, an existing vacant lot to the east and an existing asphalt paved alley to the north. Lots 12 & 13 will be combined via the plat process through the City of Scottsdale. This project proposes the demolition of two existing single family homes and appurtenances within Lot 12 & 13 respectively, the construction of a new multistory commercial office building including supporting onsite utility infrastructure, parking garage, hardscape and landscape areas, a new concrete alley entrance from North 69th Street, removal & replacement of the existing curb, gutter and sidewalk along the east side of North 69th Street, and the construction of a new concrete drive entrance from East 1st Avenue. See the Conceptual Grading and Drainage Plans located in Appendix A of this report.

2.0 EXISTING DRAINAGE CONDITIONS

2.1 FEMA Designation

The current FEMA Flood Insurance Rate Map (FIRM) for this area, map number 04013C2235L (Effective date October 16, 2013) shows the project site in Zone X. Zone X is defined as, "*Areas determined to be outside the 0.2% annual chance floodplain.*"

2.2 Offsite Flows

There is potential for minor sheet inflow along the north frontage from the existing alley. This minor potential inflow currently appears to pass through the project site, south to East 1st Avenue. The vacant lot to the east primarily flows south to 1st Avenue and does not affect the site hydrology. The site is protected by North 69th Street to the west and East 1st Avenue to the south. Offsite storm water is conveyed south along North 69th Street and east along East 1st Avenue.

2.3 Onsite Flows

As mentioned in section 1.0, Lots 12 &13 are currently fully improved single family residential parcels. The existing ground cover consist of the homes themselves, hardscape areas of various dimension, and landscape areas with trees, small shrubs, short grasses, and decorative rock. The majority of the surface drainage generated from within lots 12 & 13 flows from north to south at an average slope of 0.3-1% and eventually outfalls to East 1st Avenue. A portion of the site drainage flows west and eventually outfalls to North 69th Street.

3.0 PROPOSED DRAINAGE CONDITIONS

3.1 Extreme Low Outfall and Proposed Finish Floor

The site extreme low out fall is located at the southeast corner of the site at an elevation of 1265.97±. The proposed improvements will maintain the existing outfall location and elevation.

The proposed building finish floor has been set approximately 1.18' feet above the extreme low outfall at an elevation of 1267.15.

3.2 On-site Drainage Conveyance

It is proposed that this site qualifies for a storm water storage waiver. The site is under ½-acre in size and historically discharges runoff onto North 69th Street, East 1st Avenue without providing any storm water retention. A Request for Storm Water Storage Waiver has been included in Appendix C of this report.

All on-site storm water within the site will be conveyed via overland flow. The majority of the developed site will generally drain from north to south and eventually out fall to East 1st Avenue. The balance of the site will eventually outfall to North 69th Street.

This project will comply with the City of Scottsdale Design Standards & Policies Manual for development of the site.

3.3 Hydrologic Analysis

The hydrologic analysis for this study has been prepared using the City of Scottsdale's *Design Standards and Policy Manual* and the Flood Control District of Maricopa County, *Drainage Design Manual for Maricopa County, Arizona, Hydrology, August 2013. Drainage Design Manual for Maricopa County, Arizona, Hydraulics, August 2013.* Peak rainfall intensities reflect the NOAA Atlas 14 rainfall data, as approved for use by Maricopa County and the City of Scottsdale. See the NOAA 14 tables located in Appendix B.

The following establishes the Rational Method equation and the basic input data required:

$Q = CIA$
Where:
Q = Peak Flow (cfs)
Cw = The weighted runoff coefficient relating runoff to rainfall
I = Peak rainfall intensity in inches/hour, lasting for T_c
A = The contributing drainage area in acres
T_c = time of concentration, (hr)

The total pre and post development Q100 peak flows generated by the site are 1.00 cfs and 2.04 cfs respectively. The peak flow calculations for the 10-year (Q10) and 100-year (Q100) storm events are shown in Appendix B of this report.

3.4 NPDES Compliance

During construction, this project will provide BMP's such to be in compliance with NPDES. An *Authorization to Discharge Letter* from ADEQ will be obtained and be duly submitted with the Improvement Plans.

4.0 CONCLUSIONS

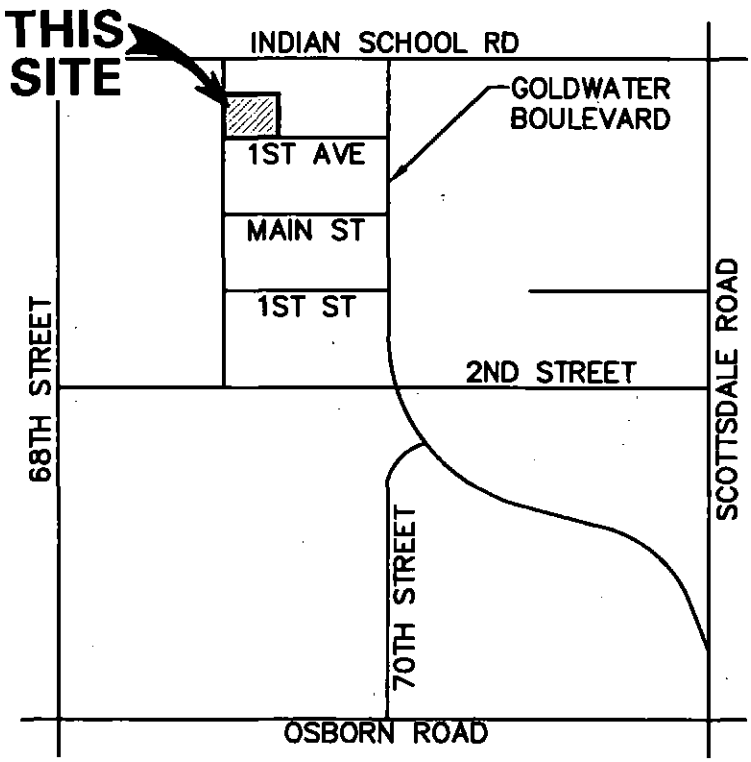
Based on the results of this study, it can be concluded that:

- The drainage improvements have been designed according to requirements put forth in the City of Scottsdale's *Design Standards & Policy Manual.*
- Offsite flows pose no significant impact to the site.
- The proposed finished floor elevation is a minimum 1-foot higher than the extreme low outfall for the site and meet the City of Scottsdale and FEMA requirements for Flood Hazard Zone X.
- The additional flow generated from this development will be assimilated into the City of Scottsdale street drainage system and the existing drainage facilities.

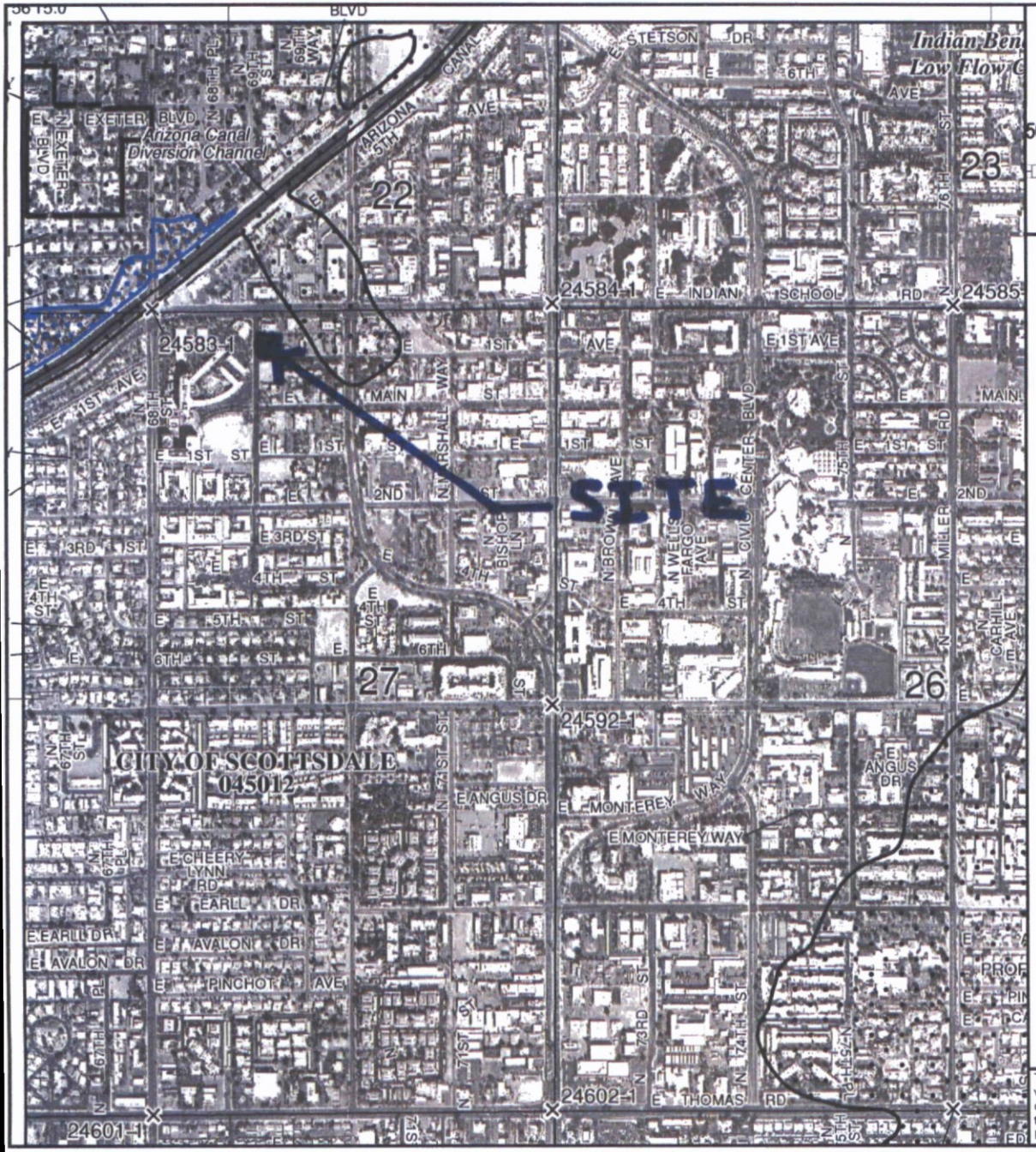
5.0 REFERENCES

1) City of Scottsdale's *Design Standards & Policy Manual* as accessed from the City of Scottsdale website at http://www.scottsdaleaz.gov/ on May 1st, 2012.
2) Drainage Design Manual for Maricopa County, Arizona, Volume I, Hydrology, 1992.
3) Drainage Design Manual for Maricopa County, Arizona, Volume II, Hydraulics, 1991.

APPENDIX A
FIGURES



VICINITY MAP
FIGURE 1



MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METE

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 2235L

FIRM

FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA

AND INCORPORATED AREAS

PANEL 2235 OF 4425

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MARICOPA COUNTY	040037	2235	L
MESA, CITY OF	040048	2235	L
SCOTTSDALE, CITY OF	045012	2235	L
TEMPE, CITY OF	040054	2235	L

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
04013C2235L

MAP REVISED
OCTOBER 16, 2013

Federal Emergency Management Agency

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

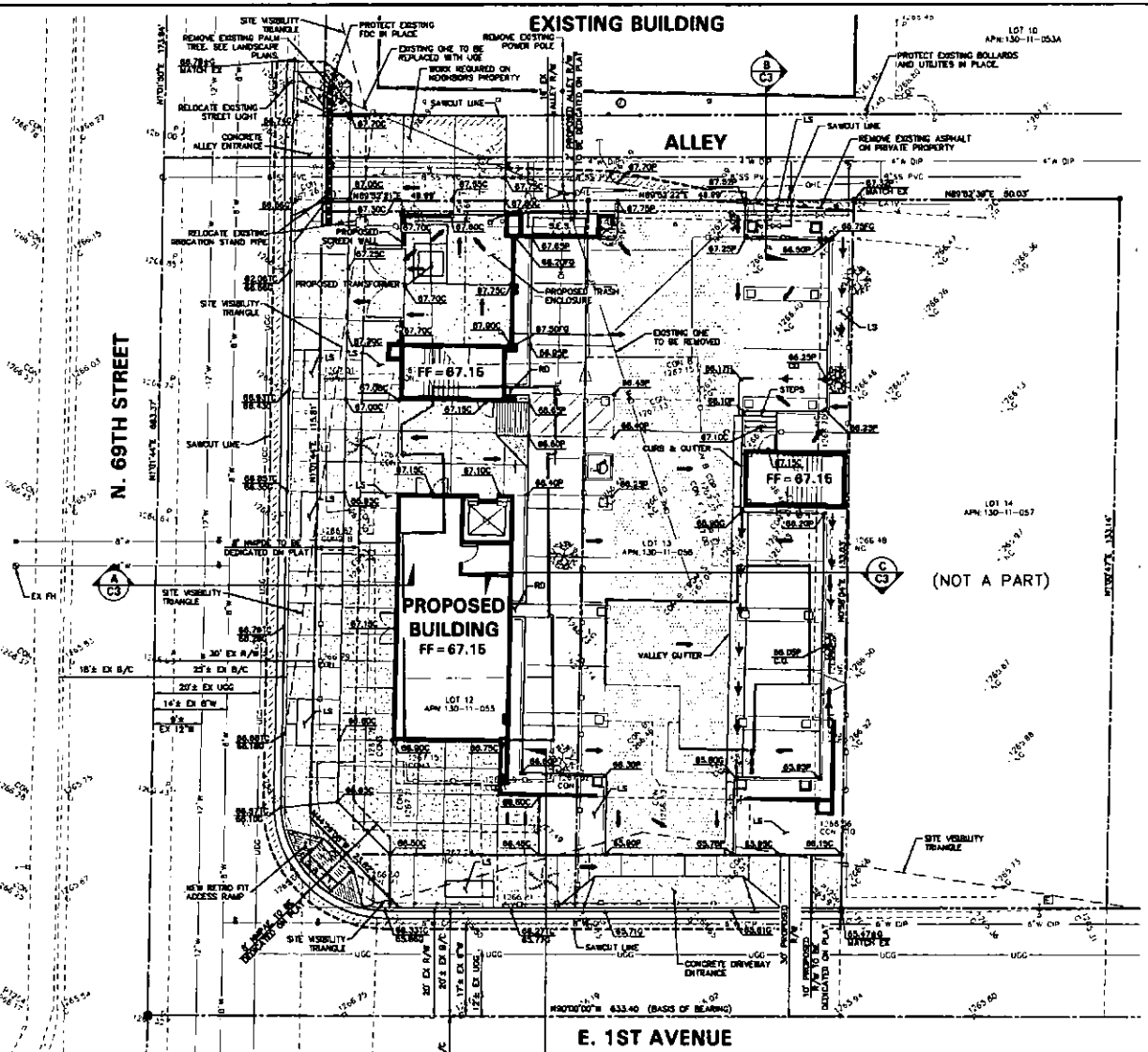
A — A	Cross section line
23 — 23	Transect line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
$^{42}75^{000m}$N	1000-meter Universal Transverse Mercator grid ticks, zone 12
6000000 M	5000-foot grid ticks: Arizona State Plane coordinate system, central zone (FIPSZONE 0202), Transverse Mercator
DX5510	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORIES

Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
April 15, 1988

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
December 3, 1993 September 30, 1995 July 19, 2001 September 30, 2005

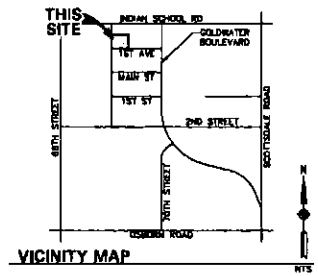


CONCEPTUAL GRADING AND DRAINAGE PLAN

FOR

ANDANTE LAW GROUP

N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA



VICINITY MAP

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FAX:(480) 966-9001
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CIVIL ENGINEER

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PHONE: (480) 991-3985
FAX: (480) 991-3986
CONTACT: LARRY TALBOTI, P.E.

LEGEND

CENTERLINE	
RIGHT-OF-WAY	
PROPERTY LINE	
EXISTING EASEMENT	
SEWER LINE	
WATER LINE	
SAWCUT LINE	
PROPOSED EASEMENT	
PROPOSED FLOW ARROW	
PROPOSED IRRIGATION PIPE	
PROPOSED SPOT ELEVATION	42.25P
SECTION CALLOUT	1 / C3
EX	EXISTING
LS	LANDSCAPE AREA
NMPAE	NON-MOTORIZED PUBLIC ACCESS EASEMENT
R/W	RIGHT-OF-WAY
RD	ROOF DRAIN LEADERS
UGE	UNDERGROUND ELECTRICAL

NOTE:

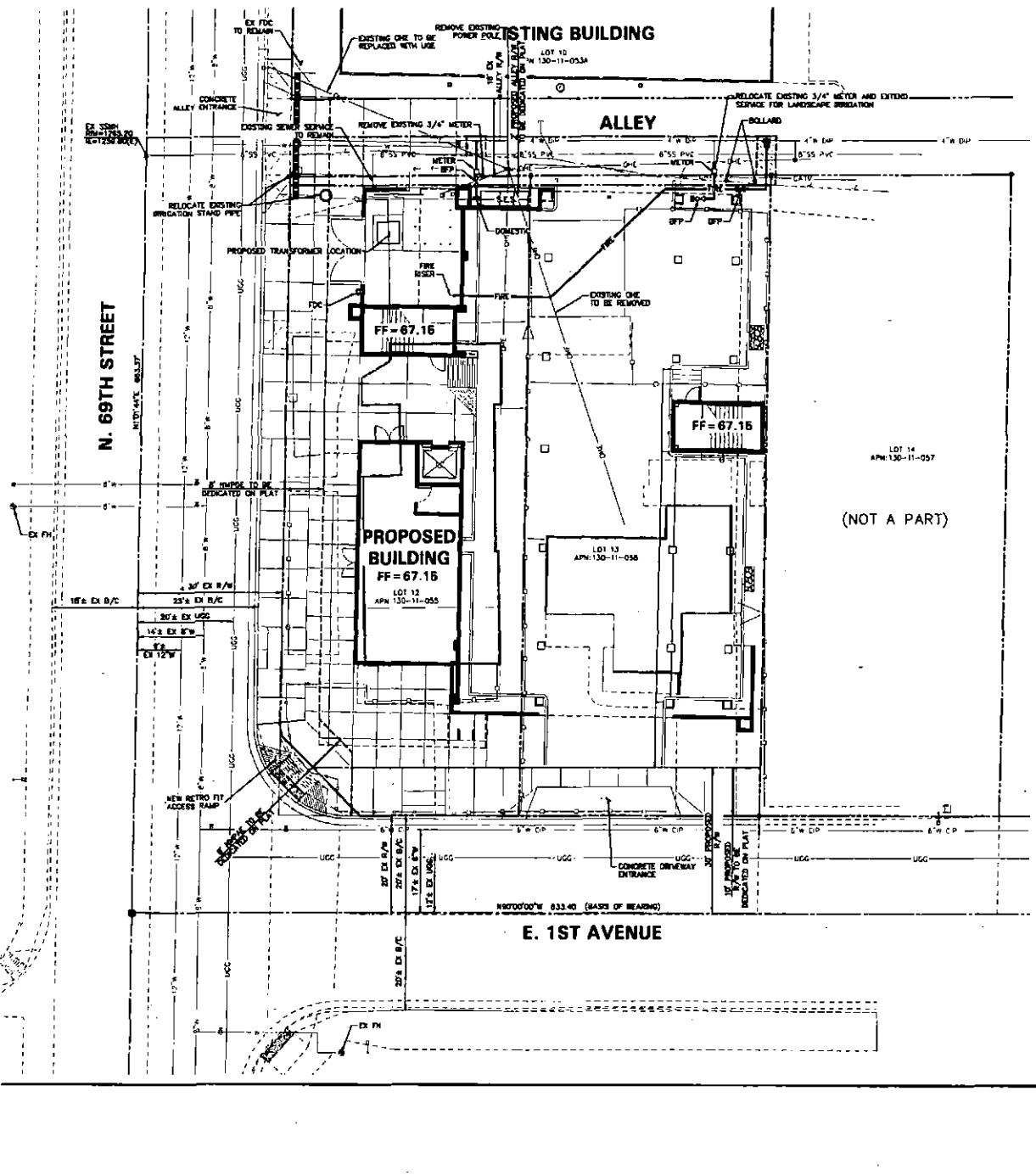
1. OVERHEAD POWER LINES IN ALLEY TO BE REPLACED WITH UNDERGROUND POWER LINES.
2. LOTS 12 & 13 TO BE COMBINED ON PLAT.

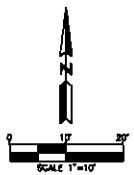
CONCEPTUAL GRADING AND DRAINAGE PLAN FOR ANDANTE LAW GROUP

HUNTER ENGINEERING CIVIL AND SURVEY

C1

CONCEPTUAL UTILITY PLAN
FOR
ANDANTE LAW GROUP
N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA





PROPOSED LEGEND

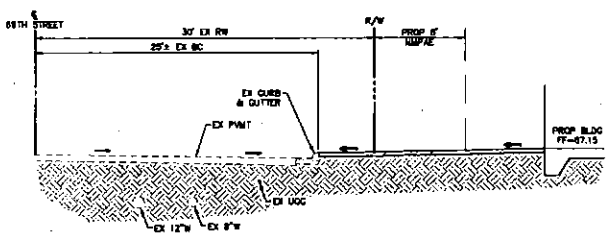
RIGHT-OF-WAY LINE	
EASEMENT LINE	
SEWER LINE	8"S
WATER LINE	12"W
BACKFLOW PREVENTOR	
FDC	
FIRE HYDRANT	
WATER VALVE	
WATER METER	
TAPPING SLEEVE, VALVE AND BOX	

EXISTING LEGEND

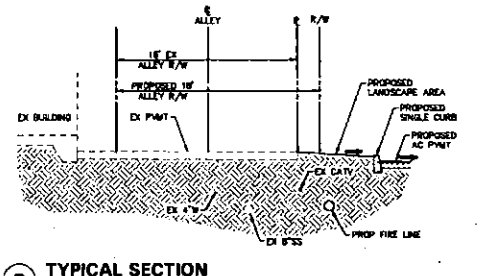
CENTERLINE	
PROPERTY LINE	
RIGHT-OF-WAY LINE	
EASEMENT	
EDGE OF PAVEMENT	
WATER LINE	12" ASP W
SEWER LINE	12" VCP SS
CHAIN LINK FENCE	
WATER VALVE	C
FIRE HYDRANT	
SANITARY SEWER MANHOLE	
SIGN	

CONCEPTUAL UTILITY PLAN
FOR
ANDANTE LAW GROUP

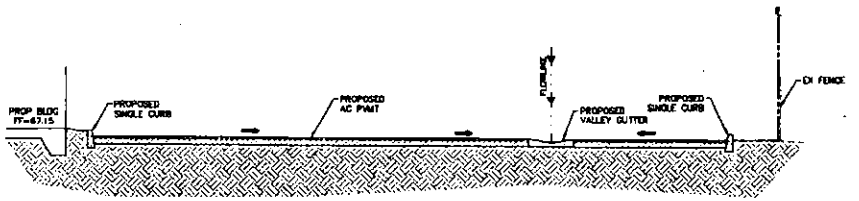
CONCEPTUAL TYPICAL SECTIONS
FOR
ANDANTE LAW GROUP
N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA



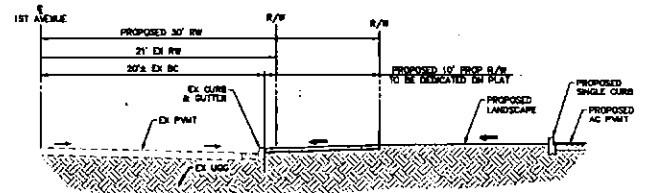
A TYPICAL SECTION NTS



B TYPICAL SECTION NTS



C TYPICAL SECTION NTS



D TYPICAL SECTION NTS

HUNTER ENGINEERING — CIVIL AND SURVEY

CONCEPTUAL TYPICAL SECTIONS FOR ANDANTE LAW GROUP

N.T.S.

APPENDIX B
CALCULATIONS

NOAA Atlas 14, Volume 1, Version 5
Location name: Camp Verde, Arizona, USA*
Latitude: 34.4°, Longitude: -111.7°
Elevation: 4370.37 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.242 (0.206-0.285)	0.313 (0.266-0.367)	0.424 (0.358-0.496)	0.513 (0.432-0.599)	0.640 (0.534-0.745)	0.744 (0.614-0.864)	0.855 (0.698-0.995)	0.975 (0.786-1.14)	1.15 (0.908-1.35)	1.29 (1.00-1.52)
10-min	0.369 (0.313-0.433)	0.476 (0.405-0.559)	0.645 (0.545-0.755)	0.780 (0.657-0.912)	0.974 (0.813-1.13)	1.13 (0.935-1.31)	1.30 (1.06-1.51)	1.48 (1.20-1.73)	1.75 (1.38-2.05)	1.97 (1.53-2.32)
15-min	0.457 (0.388-0.537)	0.591 (0.502-0.693)	0.799 (0.676-0.935)	0.967 (0.815-1.13)	1.21 (1.01-1.41)	1.40 (1.16-1.63)	1.61 (1.32-1.88)	1.84 (1.48-2.14)	2.17 (1.71-2.54)	2.44 (1.90-2.88)
30-min	0.616 (0.523-0.723)	0.795 (0.675-0.933)	1.08 (0.911-1.26)	1.30 (1.10-1.52)	1.63 (1.36-1.89)	1.89 (1.56-2.20)	2.17 (1.77-2.53)	2.48 (2.00-2.89)	2.92 (2.31-3.42)	3.28 (2.55-3.88)
60-min	0.762 (0.647-0.895)	0.984 (0.836-1.16)	1.33 (1.13-1.56)	1.61 (1.36-1.89)	2.01 (1.68-2.34)	2.34 (1.93-2.72)	2.69 (2.19-3.13)	3.07 (2.47-3.57)	3.61 (2.85-4.23)	4.06 (3.16-4.80)
2-hr	0.894 (0.777-1.03)	1.14 (0.985-1.31)	1.50 (1.30-1.73)	1.80 (1.55-2.08)	2.24 (1.91-2.58)	2.60 (2.19-2.99)	2.99 (2.49-3.44)	3.41 (2.81-3.93)	4.03 (3.24-4.65)	4.54 (3.59-5.26)
3-hr	0.977 (0.863-1.12)	1.24 (1.09-1.41)	1.59 (1.41-1.82)	1.90 (1.66-2.16)	2.33 (2.02-2.65)	2.68 (2.31-3.05)	3.07 (2.61-3.49)	3.50 (2.93-3.99)	4.12 (3.38-4.72)	4.63 (3.73-5.34)
6-hr	1.20 (1.07-1.35)	1.50 (1.34-1.69)	1.86 (1.67-2.10)	2.18 (1.94-2.45)	2.64 (2.32-2.96)	3.01 (2.63-3.37)	3.41 (2.94-3.83)	3.84 (3.26-4.32)	4.44 (3.71-5.03)	4.95 (4.05-5.63)
12-hr	1.49 (1.33-1.67)	1.85 (1.66-2.08)	2.27 (2.03-2.54)	2.62 (2.34-2.92)	3.09 (2.74-3.44)	3.46 (3.05-3.86)	3.85 (3.36-4.29)	4.23 (3.67-4.74)	4.79 (4.09-5.40)	5.26 (4.43-5.97)
24-hr	1.82 (1.65-2.01)	2.28 (2.06-2.52)	2.85 (2.58-3.13)	3.31 (2.99-3.64)	3.94 (3.54-4.32)	4.43 (3.97-4.86)	4.94 (4.41-5.42)	5.47 (4.84-6.00)	6.18 (5.43-6.80)	6.74 (5.87-7.43)
2-day	2.17 (1.94-2.42)	2.71 (2.43-3.03)	3.39 (3.03-3.79)	3.95 (3.53-4.40)	4.71 (4.19-5.26)	5.32 (4.71-5.93)	5.95 (5.24-6.63)	6.60 (5.78-7.35)	7.49 (6.49-8.37)	8.18 (7.04-9.18)
3-day	2.33 (2.10-2.58)	2.91 (2.63-3.23)	3.65 (3.29-4.05)	4.25 (3.83-4.71)	5.09 (4.56-5.63)	5.75 (5.12-6.35)	6.43 (5.71-7.11)	7.15 (6.31-7.90)	8.12 (7.10-9.01)	8.90 (7.71-9.90)
4-day	2.49 (2.26-2.75)	3.12 (2.83-3.44)	3.91 (3.55-4.31)	4.56 (4.12-5.01)	5.46 (4.92-5.99)	6.17 (5.54-6.77)	6.92 (6.18-7.59)	7.70 (6.84-8.45)	8.76 (7.71-9.65)	9.61 (8.38-10.6)
7-day	2.90 (2.63-3.20)	3.63 (3.29-4.00)	4.52 (4.10-4.99)	5.25 (4.75-5.79)	6.26 (5.64-6.89)	7.05 (6.32-7.76)	7.88 (7.03-8.67)	8.72 (7.75-9.62)	9.89 (8.69-10.9)	10.8 (9.41-12.0)
10-day	3.23 (2.93-3.53)	4.03 (3.66-4.42)	5.00 (4.54-5.48)	5.76 (5.23-6.31)	6.79 (6.14-7.44)	7.58 (6.84-8.30)	8.38 (7.54-9.19)	9.19 (8.23-10.1)	10.3 (9.15-11.3)	11.2 (9.85-12.3)
20-day	4.15 (3.80-4.50)	5.17 (4.74-5.62)	6.32 (5.79-6.87)	7.18 (6.57-7.79)	8.28 (7.56-8.98)	9.08 (8.28-9.85)	9.87 (8.96-10.7)	10.6 (9.61-11.5)	11.6 (10.4-12.6)	12.3 (11.0-13.4)
30-day	4.96 (4.53-5.43)	6.18 (5.64-6.77)	7.55 (6.89-8.26)	8.58 (7.82-9.37)	9.88 (9.00-10.8)	10.8 (9.84-11.8)	11.8 (10.6-12.9)	12.6 (11.4-13.9)	13.8 (12.4-15.1)	14.6 (13.1-16.1)
45-day	5.96 (5.45-6.55)	7.44 (6.80-8.17)	9.11 (8.33-9.99)	10.4 (9.49-11.4)	12.0 (11.0-13.2)	13.2 (12.0-14.5)	14.4 (13.1-15.8)	15.6 (14.1-17.1)	17.1 (15.4-18.8)	18.1 (16.3-20.0)
60-day	6.81 (6.26-7.41)	8.50 (7.82-9.25)	10.4 (9.53-11.2)	11.7 (10.8-12.7)	13.5 (12.3-14.6)	14.7 (13.5-16.0)	15.9 (14.5-17.3)	17.1 (15.5-18.6)	18.5 (16.8-20.1)	19.5 (17.6-21.3)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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Pre Weighted Runoff Coefficient Calculation

Cw=[(C1*A1)+(C2*A2)+(C3*A3)...+(Cn*An)] / Total Area

Project: LGEC215 Calc'd By: rls

Date: 12/21/2016 Chck'd By: lmt

C_1=	0.50	Landscape	LA1=	0.008	Acres
C_2=	0.50	Landscape	LA2=	0.009	Acres
C_3=	0.50	Landscape	LA3=	0.016	Acres
C_4=	0.50	Landscape	LA4=	0.109	Acres
C_5=	0.85	Landscape	DRA1=	0.015	Acres
C_6=	0.95	Hardscape	HA1=	0.107	Acres
C_7=	0.95	Hardscape	HA2=	0.038	Acres
			Total=	**0.302**	Acres

Cw= **0.73**

Post Weighted Runoff Coefficient Calculation

Cw=[(C1*A1)+(C2*A2)+(C3*A3)…+(Cn*An)] / Total Area

Project: LGEC215 Calc'd By: rls

Date: 12/21/2016 Chck'd By: lmt

C_1=	0.50	Landscape	LA1=	0.002	Acres
C_2=	0.50	Landscape	LA2=	0.002	Acres
C_3=	0.50	Landscape	LA3=	0.002	Acres
C_4=	0.50	Landscape	LA4=	0.001	Acres
C_5=	0.50	Landscape	LA5=	0.003	Acres
C_6=	0.50	Landscape	LA6=	0.009	Acres
C_7=	0.50	Landscape	LA7=	0.008	Acres
C_8=	0.50	Landscape	LA8=	0.001	Acres
C_9=	0.95	Hardscape	HA1=	0.274	Acres
			Total=	**0.302**	Acres

Cw= 0.91

Stormwater Storage Calculations

Pre Development 'Cw' Value	=	**0.73**
Post Development 'Cw' Value	=	**0.91**
Post Development 'Cw' Value	=	**0.91**
Pre Development 'Cw' Value	=	**0.73**
Difference between Pre & Post 'Cw' Value	=	**0.17**

Vr=C*R*A*43,560, C=0.17, D=2.99

Stormwater Storage 'Cw' Value	=	**0.17**
R	=	**2.20** inches
A	=	**0.302** Site acres
Stormawater Storage Vr	=	**422** cubic feet

NOAA Atlas 14, Volume 1, Version 5
Location name: Scottsdale, Arizona, USA*
Latitude: 33.4933°, Longitude: -111.9321°
Elevation: 1261.93 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	2.20 (1.85-2.68)	2.88 (2.42-3.49)	3.91 (3.28-4.74)	4.70 (3.91-5.66)	5.77 (4.73-6.92)	6.60 (5.33-7.88)	7.44 (5.90-8.87)	8.30 (6.48-9.89)	9.46 (7.18-11.3)	10.3 (7.69-12.3)
10-min	1.67 (1.40-2.03)	2.18 (1.84-2.66)	2.97 (2.49-3.60)	3.58 (2.98-4.31)	4.39 (3.59-5.27)	5.02 (4.06-6.00)	5.66 (4.49-6.74)	6.32 (4.93-7.52)	7.19 (5.47-8.58)	7.87 (5.86-9.40)
15-min	1.38 (1.16-1.68)	1.81 (1.52-2.20)	2.46 (2.06-2.98)	2.96 (2.46-3.56)	3.63 (2.97-4.36)	4.15 (3.35-4.96)	4.68 (3.71-5.58)	5.22 (4.07-6.22)	5.95 (4.52-7.09)	6.50 (4.84-7.76)
30-min	0.930 (0.780-1.13)	1.22 (1.03-1.48)	1.65 (1.38-2.00)	1.99 (1.65-2.40)	2.44 (2.00-2.93)	2.79 (2.26-3.34)	3.15 (2.50-3.75)	3.52 (2.74-4.18)	4.00 (3.04-4.77)	4.38 (3.26-5.23)
60-min	0.575 (0.483-0.700)	0.753 (0.635-0.915)	1.02 (0.857-1.24)	1.23 (1.02-1.49)	1.51 (1.24-1.81)	1.73 (1.40-2.07)	1.95 (1.55-2.32)	2.18 (1.70-2.59)	2.48 (1.88-2.95)	2.71 (2.02-3.24)
2-hr	0.333 (0.284-0.398)	0.432 (0.368-0.516)	0.578 (0.492-0.687)	0.690 (0.580-0.818)	0.842 (0.700-0.992)	0.960 (0.787-1.13)	1.08 (0.872-1.27)	1.20 (0.954-1.41)	1.37 (1.06-1.61)	1.50 (1.13-1.77)
3-hr	0.241 (0.204-0.290)	0.309 (0.264-0.374)	0.407 (0.345-0.489)	0.484 (0.407-0.578)	0.592 (0.491-0.703)	0.678 (0.554-0.803)	0.768 (0.616-0.909)	0.862 (0.680-1.02)	0.992 (0.759-1.17)	1.10 (0.818-1.30)
6-hr	0.146 (0.126-0.172)	0.185 (0.161-0.217)	0.237 (0.205-0.278)	0.279 (0.239-0.325)	0.335 (0.284-0.389)	0.380 (0.317-0.439)	0.427 (0.350-0.493)	0.474 (0.381-0.548)	0.539 (0.423-0.625)	0.590 (0.452-0.686)
12-hr	0.081 (0.071-0.094)	0.102 (0.090-0.119)	0.130 (0.113-0.150)	0.151 (0.131-0.175)	0.180 (0.154-0.208)	0.203 (0.172-0.233)	0.226 (0.188-0.260)	0.249 (0.205-0.287)	0.280 (0.225-0.324)	0.304 (0.240-0.355)
24-hr	0.049 (0.044-0.055)	0.062 (0.055-0.070)	0.080 (0.072-0.091)	0.095 (0.084-0.107)	0.115 (0.101-0.129)	0.131 (0.115-0.147)	0.148 (0.128-0.166)	0.165 (0.142-0.185)	0.189 (0.161-0.212)	0.207 (0.175-0.233)
2-day	0.026 (0.023-0.030)	0.034 (0.030-0.038)	0.044 (0.039-0.050)	0.053 (0.047-0.059)	0.064 (0.057-0.072)	0.074 (0.065-0.083)	0.084 (0.073-0.094)	0.094 (0.081-0.106)	0.108 (0.093-0.122)	0.120 (0.102-0.136)
3-day	0.019 (0.017-0.021)	0.024 (0.021-0.027)	0.031 (0.028-0.035)	0.037 (0.033-0.042)	0.046 (0.040-0.051)	0.053 (0.046-0.059)	0.060 (0.052-0.067)	0.068 (0.058-0.076)	0.078 (0.067-0.088)	0.087 (0.073-0.098)
4-day	0.015 (0.013-0.017)	0.019 (0.017-0.021)	0.025 (0.022-0.028)	0.030 (0.026-0.033)	0.037 (0.032-0.041)	0.042 (0.037-0.047)	0.048 (0.042-0.054)	0.054 (0.047-0.061)	0.063 (0.054-0.071)	0.071 (0.059-0.079)
7-day	0.009 (0.008-0.011)	0.012 (0.011-0.013)	0.016 (0.014-0.018)	0.019 (0.017-0.021)	0.023 (0.020-0.026)	0.027 (0.023-0.030)	0.030 (0.026-0.034)	0.034 (0.030-0.039)	0.040 (0.034-0.045)	0.045 (0.037-0.050)
10-day	0.007 (0.006-0.008)	0.009 (0.008-0.010)	0.012 (0.011-0.013)	0.014 (0.013-0.016)	0.018 (0.015-0.020)	0.020 (0.018-0.023)	0.023 (0.020-0.026)	0.026 (0.022-0.029)	0.030 (0.026-0.034)	0.033 (0.028-0.037)
20-day	0.004 (0.004-0.005)	0.006 (0.005-0.006)	0.007 (0.007-0.008)	0.009 (0.008-0.010)	0.011 (0.009-0.012)	0.012 (0.011-0.013)	0.013 (0.012-0.015)	0.015 (0.013-0.017)	0.017 (0.015-0.019)	0.018 (0.016-0.021)
30-day	0.003 (0.003-0.004)	0.004 (0.004-0.005)	0.006 (0.005-0.006)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.009-0.012)	0.012 (0.010-0.013)	0.013 (0.011-0.015)	0.014 (0.012-0.016)
45-day	0.003 (0.002-0.003)	0.003 (0.003-0.004)	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.007)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.008-0.011)	0.011 (0.009-0.012)
60-day	0.002 (0.002-0.002)	0.003 (0.003-0.003)	0.004 (0.003-0.004)	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.005-0.006)	0.006 (0.006-0.007)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.008 (0.007-0.009)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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Hydrologic Design Data Record Rational Method
Predevelopment

Project: HUNT001 Calc'd By: rls
Date: 12/21/2016 Chck'd By: lmt

Location:	LA1=			Area:	0.008	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.01**	**0.02**		**0.03**	**0.03**	cf/sec

Location:	LA2=			Area:	0.009	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.01**	**0.03**		**0.03**	**0.03**	cf/sec

Location:	LA3=			Area:	0.016	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90			7.44	in/hr
Discharge	**0.02**	**0.05**			**0.06**	cf/sec

Location:	LA4=			Area:	0.109	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.16**	**0.32**		**0.36**	**0.41**	cf/sec

Location:	DRA1=			Area:	0.015	acres
Runoff Coefficient:		0.85	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.04**	**0.08**		**0.08**	**0.09**	cf/sec

Location:	HA1=			Area:	0.015	acres
Runoff Coefficient:		0.95	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.04**	**0.08**		**0.09**	**0.11**	cf/sec

Location:	HA2=			Area:	0.038	acres
Runoff Coefficient:		0.95	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.10**	**0.21**		**0.24**	**0.27**	cf/sec

Hydrologic Design Data Record Rational Method
Post Development

Project: HUNT001 Calc'd By: rls
Date: 12/21/2016 Chck'd By: lmt

Location:	LA1=			Area:	0.002	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.00**	**0.01**		**0.01**	**0.01**	cf/sec

Location:	LA2=			Area:	0.002	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.00**	**0.01**		**0.01**	**0.01**	cf/sec

Location:	LA3=			Area:	0.002	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity		5.90		6.60	7.44	in/hr
Discharge		**0.01**		**0.01**	**0.01**	cf/sec

Location:	LA4=			Area:	0.001	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.00**	**0.00**		**0.00**	**0.004**	cf/sec

Location:	LA5=			Area:	0.003	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.00**	**0.01**		**0.01**	**0.01**	cf/sec

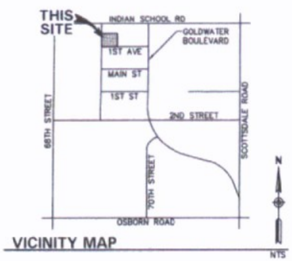
Location:	LA6=			Area:	0.009	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity		5.90		6.60	7.44	in/hr
Discharge		**0.03**		**0.03**	**0.03**	cf/sec

Location:	LA7=			Area:	0.008	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.01**	**0.02**		**0.03**	**0.030**	cf/sec

Location:	LA8=			Area:	0.001	acres
Runoff Coefficient:		0.50	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.00**	**0.00**		**0.00**	**0.004**	cf/sec

Location:	HA1=			Area:	0.274	acres
Runoff Coefficient:		0.95	Time of Conc, Tc:		5	min
Frequency	**2**	**10**	**25**	**50**	**100**	**Years**
Intensity	2.88	5.90		6.60	7.44	in/hr
Discharge	**0.75**	**1.54**		**1.72**	**1.94**	cf/sec

EXISTING CONDITIONS EXHIBIT
FOR
ANDANTE LAW GROUP
N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA



VICINITY MAP
NTS

DEVELOPER
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CONTACT: FRANK PETTIT

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CIVIL ENGINEER
HUNTER ENGINEERING, INC.
10450 N. 74th STREET SUITE 200
SCOTTSDALE, ARIZONA 85258
PHONE: (480) 991-3985
FAX: (480) 991-3986
CONTACT: LARRY TALBOTT, P.E.

LEGEND

■■■■■■■■	AREA BOUNDARY
DRA 0.00AC	DIRT ROAD AREA
HA 0.00AC	HARDSCAPE AREA
LA 0.00AC	LANDSCAPE AREA

WEIGHTED RUNOFF 'C' CALCULATION

$CW=[(C_1*A_1)+(C_2*A_2)+(C_3*A_3)+(Cn*An)]$ / TOTAL AREA

$C_1=0.95$ .... HARDSCAPE AREA .... $A_1=0.145$ ACRES
$C_2=0.50$ .... LANDSCAPE AREA .... $A_2=0.142$ ACRES
$C_3=0.85$ .... DIRT ROAD AREA .... $A_3=0.015$ ACRES

CW=0.73 TOTAL=0.302 ACRES

NO.	DATE	REVISION	BY

PURPOSE: CONCEPTUAL PLANS

DESIGN BY: LMT
DRAWN BY: MM
CHECKED BY: LMT

HUNTER ENGINEERING CIVIL AND SURVEY
10450 NORTH 74TH STREET, SUITE 200
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

42104 LARRY M. TALBOTT
Expires 3/31/2017

EXISTING CONDITIONS EXHIBIT
FOR
ANDANTE LAW GROUP
N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA

ARIZONA811

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

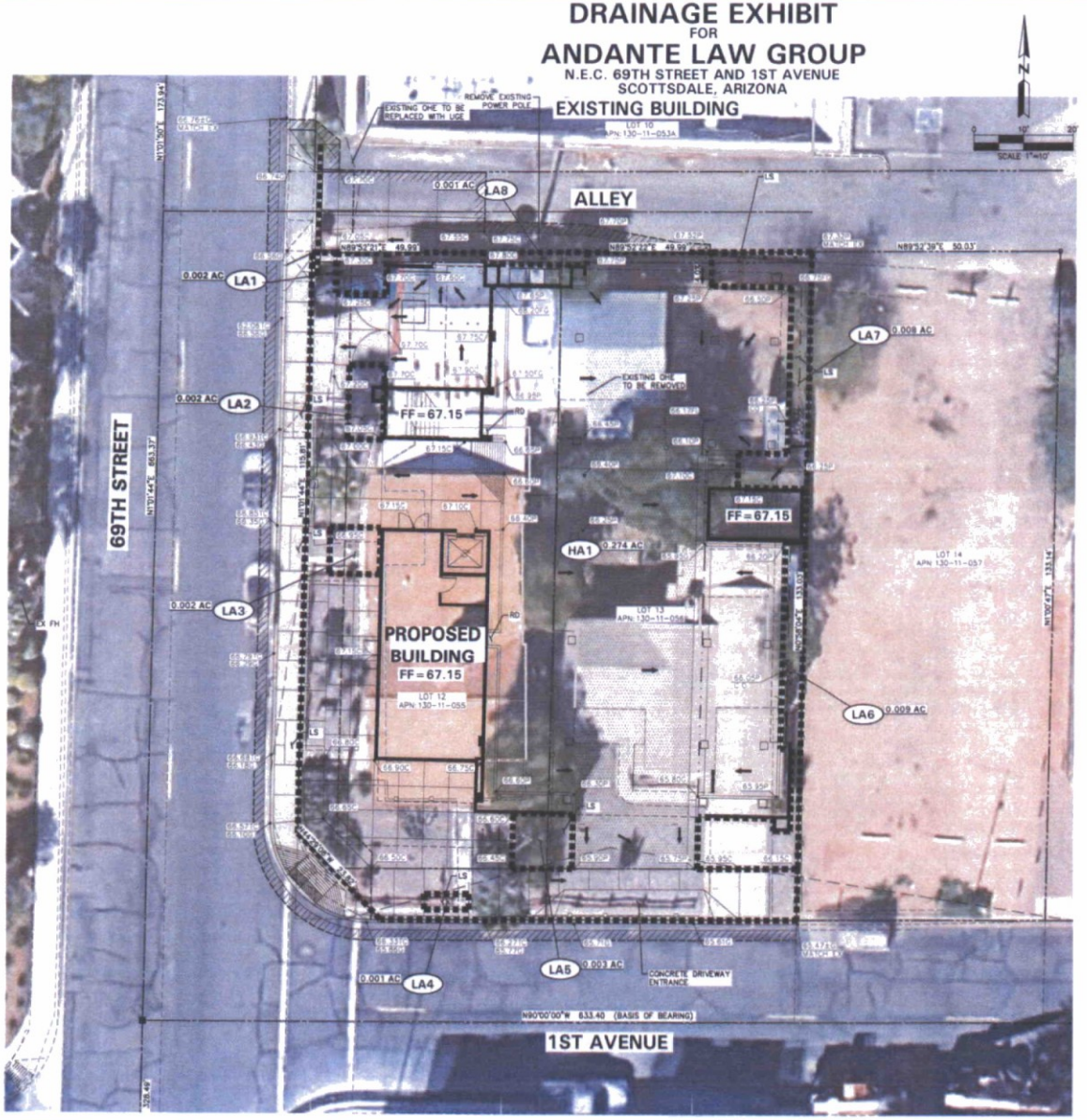
HE JOB NO.: LGEC215

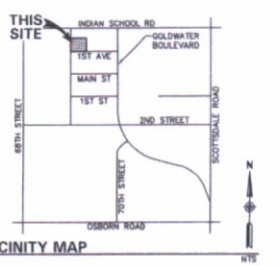
SCALE 1"=10'

SHEET C1

1 OF 1

DRAINAGE EXHIBIT
FOR
ANDANTE LAW GROUP
N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA





VICINITY MAP

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LEGEND

23.00P	PROPOSED SPOT ELEVATION
	PROPOSED FLOW ARROW
	DRAINAGE AREA BOUNDARY
HA 0.00AC	HARDSCAPE AREA
LA 0.00AC	LANDSCAPE AREA

WEIGHTED RUNOFF 'C' CALCULATION
$C_W=[(C_1*A_1)+(C_2*A_2)+(C_n*A_n)]$ / TOTAL AREA

C_1=0.95 ..... HARDSCAPE AREA. ..... A_1=0.274 ACRES
C_2=0.50 ..... LANDSCAPE AREA. ..... A_2=0.028 ACRES

C_W=0.91 TOTAL=0.302 ACRES

NO.	DATE	REVISION	BY

PURPOSE: CONCEPTUAL PLANS

DESIGN BY: LMT
DRAWN BY: MM
CHECKED BY: LMT

HUNTER ENGINEERING
CIVIL AND SURVEY
10450 NORTH 74TH STREET SUITE 200
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

52104 LARRY E. TALBOTT
Expires 3/31/2017

DRAINAGE EXHIBIT
FOR
ANDANTE LAW GROUP
N.E.C. 69TH STREET AND 1ST AVENUE
SCOTTSDALE, ARIZONA

ARIZONA811

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

JOB NO: LGEC215

SCALE: 1"=10'

SHEET: C1

APPENDIX C
STORMWATER STORAGE WAIVER

Request for Stormwater Storage Waiver

City of Scottsdale Case Numbers:

631- PA - 2016 ____ - ZN - ____ ____ - UP - ____ ____ - DR - ____ ____ - PP - ____ PC# ____

The applicant/developer must complete and submit this form to the city for processing and obtain approval of waiver request ***before submitting improvement plans***. Denial of the waiver may require the developer to submit a revised site plan to the Development Review Board.

Date 10/4/2016 **Project Name** Andante Law Group

Project Location NEC 69th Street & 1st Avenue

Applicant Contact Larry Talbott **Company Name** Hunter Engineering, Inc.

Phone 480-991-3985 Fax 480-991-3986 E-mail ltalbott@hunterengineeringpc.com

Address 10450 North 74th Street, #200, Scottsdale, AZ 85258

Waiver Criteria

A project must meet at least one of three criteria listed below for the city to consider waiving some or all required stormwater storage. **However, regardless of the criteria, a waiver will only be granted if the applicant can demonstrate that the effect of a waiver will not increase the potential for flooding on any property.** Check the applicable box and provide a signed engineering report and supporting engineering analysis that demonstrate the project meets the criteria and that the effect of a waiver will not increase the potential for flooding on any property.

If the runoff for the project has been included in a storage facility at another location, the applicant must demonstrate that the stormwater storage facility was specifically designed to accommodate runoff from the subject property and that the runoff will be conveyed to this location through an adequately designed conveyance facility.

☒ 1. The development is adjacent to a conveyance facility that an engineering analysis shows is designed and constructed to handle the additional runoff from the site as a result of development.

☑ 2. The development is on a parcel less than one-half acre in size.

☐ 3. Stormwater storage requirements conflict with requirements of the Environmentally Sensitive Lands Ordinance (ESLO).

For a full storage waiver, a conflict with ESLO is limited to:

- Property located in the hillside landform as defined in the city Zoning Ordinance
- Property in the upper desert landform that has a land slope steeper than 5% as defined in the city Zoning Ordinance
- Property within the ESL zoning overlay district where the only viable location for a stormwater storage basin requires blasting

This full waiver only applies to those portions of property meeting one of these three requirements.

Partial waivers are available for projects or portions of properties within the Environmentally Sensitive Lands Zoning Overlay District, not meeting any of the three full waiver criteria above, if post-development peak discharge rates do not exceed pre-development conditions, based on the 10- and 100-year storm events.

By signing below, I certify that the stated project meets the waiver criteria selected above as demonstrated by the attached documentation.

Engineer

12/21/16
Date

Planning, Neighborhood & Transportation Division

7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 • Phone: 480-312-2500 • Fax: 480-312-7781

Request for Stormwater Storage Waiver

City of Scottsdale Case Numbers:

63 - PA - 2016 ____ - ZN - ____ ____ - UP - ____ ____ - DR - ____ ____ - PP - ____ PC# ____

CITY STAFF TO COMPLETE THIS PAGE

Project Name _____

Check Appropriate Boxes:

☐ Meets waiver criteria (specify): ☐ 1 ☑ 2 ☐ 3

☑ Recommend approve waiver.

☐ Recommend deny waiver:
- ☐ None of waiver criteria met.
- ☐ Downstream conditions prohibit waiver of any storage.
- ☐ Other:

Explain: _____

☐ Return waiver request:
- ☐ Insufficient data provided.
- ☐ Other: _____

Explain: _____

Recommended Conditions of Waiver:
- ☐ All storage requirements waived.
- ☐ Post-development peak discharge rates do not exceed pre-development conditions.
- ☐ Other:

Explain: _____

☑ **Waiver approved per above conditions.**

☐ **Waiver denied.**

Floodplain Administrator or Designee — Date: 1/10/17

Planning, Neighborhood & Transportation Division
7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 • Phone: 480-312-2500 • Fax: 480-312-7781

Request for Stormwater Storage Waiver

City of Scottsdale Case Numbers:

62 - PA - 2016 ____ - ZN - ____ ____ - UP - ____ ____ - DR - ____ ____ - PP - ____ PC#_____

In-Lieu Fee and In-Kind Contributions

In-lieu fees are only applicable to projects where post-development peak discharge rates exceed pre-development levels, based on the 10- and 100-year storm events. If the city grants a waiver, the developer is required to calculate and contribute an in-lieu fee based on what it would cost the city to provide a storage basin, sized as described below, including costs such as land acquisition, construction, landscaping, design, construction management, and maintenance over a 75-year design life. The fee for this cost is $1.87 per cubic foot of stormwater storage for a virtual storage basin designed to mitigate the increase in runoff associated with the 100-year/2-hour storm event. The applicant may submit site-specific in-lieu fee calculations subject to the Floodplain Administrator's approval.

The Floodplain Administrator considers in-kind contributions on a case-by-case basis. An in-kind contribution can serve as part of or instead of the calculated in-lieu fee. In-kind contributions must be stormwater related and must constitute a public benefit. In-lieu fees and in-kind contributions are subject to the approval of the Floodplain Administrator or designee.

Project Name Andante Law Group

The waived stormwater storage volume is calculated using a simplified approach as follows:

$V = \Delta CRA$; where
V = stormwater storage volume required, in cubic feet,
ΔC = increase in weighted average runoff coefficient over disturbed area ($C_{post} - C_{pre}$),
R = 100-year/2-hour precipitation depth, in feet (DSPM, Appendix 4-1D, page 11), and
A = area of disturbed ground, in square feet

Furthermore,

$V_w = V - V_p$; where
V_w = volume waived,
V = volume required, and
V_p = volume provided

R = 2.2
ΔC = .17
A = 0.302
V = 422
V_p = 0
V_w = 422

☑ An in-lieu fee will be paid, based on the following calculations and supporting documentation:
In-lieu fee ($) = V_w (cu. ft.) x $1.87 per cubic foot = 789.14

☐ An in-kind contribution will be made, as follows:

_____

_____

_____

☐ No in-lieu fee is required. Reason:

_____

_____

Approved by:

Floodplain Administrator or Designee

1/10/11
Date

Planning, Neighborhood & Transportation Division
7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 • Phone: 480-312-2500 • Fax: 480-312-7781