DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/05)

PROJECT TITLE: <i>Lots 2-A, 2-B, 2-C & 2-D –Lands of De</i> ZONE MAP/DRG. FILE # J-12/13 DRB#: <u>NA</u> EPC#: <u>NA</u> WORK ORDER#: <u>NA</u>	lla Sanchez,,
LEGAL DESCRIPTION: Lot 2 Lands of Della P. Sanchez	<u> </u>
CITY ADDRESS: 230 Tohatchi Trail NW	
ENGINEERING FIRM: _ GUY JACKSON & ASSOCIATES, LLC	CONTACT: <u>GUY JACKSON, PE</u>
ADDRESS: 10522 FLORENCE AVE. NE	PHONE: 235-1426
CITY, STATE: <u>Albuquerque, NM</u>	ZIP CODE: <u>87122</u>
OWNER: Melcor Zamora	CONTACT: <u>Guy Jackson</u>
ADDRESS: 2000 Eastridge Dr. NE	PHONE: 505-294-3737
CITY, STATE: <u>ABQ, NM</u>	ZIP CODE: <u>63069</u>
ARCHITECT: NA	CONTACT: NA
	PHONE: <u>NA</u>
ADDRESS: <u>NA</u> CITY, STATE: <u>NA</u>	ZIP CODE: <u>NA</u>
SURVEYOR: High Mesa Consulting Group.	CONTACT: <u>Chuck Cala</u>
ADDRESS: 6010 Midway Park NE	
CITY, STATE: <u>ALBUQUERQUE, NM</u>	PHONE: 345-4250 ZIP CODE: 87109
CONTRACTOR: TBD	CONTACT:
ADDRESS:	PHONE:
ADDRESS: CITY, STATE:	ZIP CODE:
TYPE OF SUBMITTAL: CHE	CK TYPE OF APPROVAL SOUGHT:
	SIA/FINANCIAL GUARANTEE RELEASE
X DRAINAGE PLAN 1 st SUBMITTAL X	PRELIMINARY PLAT APPROVAL
DRAINAGE PLAN RESUBMITTAL	S. DEV. PLAN FOR SUB'D APPROVAL
CONCEPTUAL G & D PLAN	S. DEV. FOR BLDG. PERMIT APPROVAL
X GRADING PLAN	SECTOR PLAN APPROVAL
	FINAL PLAT APPROVAL
	FOUNDATION PERMIT APPROVAL
CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT	BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM)
ENGINEER/ARCHITECT CERT (TCL)	CERTIFICATE OF OCCUPANCY (TEMP)
	GRADING PERMIT APPROVAL
ENGINEER/ARCHITECT CERT (AA)	PAVING PERMIT APPROVAL
OTHER (SPECIFY)	WORK ORDER APPROVAL
	OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	
XYES	
COPY PROVIDED	
SUBMITTED BY: <u>GUY JACKSON, PE</u>	DATE:7-23-12

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- 1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.



July 23, 2012

Shahab Biazar, PE Senior Engineer, Planning Department Hydrology Development & Building Services PO Box 1293 Albuquerque, New Mexico 87103

Re: Lots 2-A, 2-B, 2-C & 2-D –Lands of Della Sanchez, Albuquerque, NM (Zone Atlas Map J-12/13). DRB Project # 1007971

Dear Shahab:

Attached for Preliminary Plat approval are the following:

- One (1) drainage information sheet
- One (1) copy of the master drainage & grading plan
- One (1) copy of the drainage calculations/spreadsheet

Please review the following responses to your comments received July 18, 2012. *Comment 1) Please identify any offsite flows entering the proposed drainage basins. It appears that flows may enter the property from Tracts A & B, Lot 1, Lot 7 as well as Lots 8-A & 8-B.* Response: I spoke with Chuck Cala PS (High Mesa Consulting Group) and he explained that obtaining access to the rear and side yards of the adjacent properties was not in crew's best interest, because of dogs and undesirable access conditions. He also mentioned that the topography on these adjacent properties appears to be virtually flat and that the grades at the property lines on the east and south were "mounded at the fence lines". I visited the site on 7/19/2012 and attest to his opinion. I did however, review the AGIS contours that were available for the adjacent sites and created "potential offsite basins" that include all of the basins that you referenced (*Tracts A & B, Lot 1, Lot 7 as well as Lots 8-A & 8-B.*) I also included a portion of the MRGCD ROW to the north to their fence line that does appear to drain into the subject property. With this said, I have revised the grading & drainage master plan and calculations to indicate these potential offsite basins.

Comment 2): Include the existing and proposed spot elevations labels in the legend. Response: Concur -these have been added as requested.

Comment 3) Top of curb, flowlines and proposed spot elevations are not visible on the plan. Please enlarge the text size.

Response: Concur – The texts of these elements were enlarged as requested.

Comment 4) Add the legal description on the plan.

Response: Concur – The description has been added to the plan as required.

Mr. Shahab Biazar July 21, 2012 Page 2

Comment 5) Show the elevations for the existing contours.

Response: Concur – the elevations have been shown on the existing contours. Note that all of the existing contours within the property are at the elevation of 4958.

Finally, I'm in hopes of getting on the DRB agenda for next week (8/1/12). If at all possible, would you please consider reviewing this before the end of Tuesday (7/24) so that I can make the application by noon on 7/24? Anything you can do would be greatly appreciated. Note that I'm submitting these materials via e-mail and will follow up with an official re-submittal on Monday morning (7/23/12).

Please contact me if you have any questions or comments. Sincerely,

GUY JACKSON & ASSOCIATES, LLC

Guy C. Jackson, PE *President* 10522 Florence Ave. NE Albuquerque, NM 87122 505-235-1426 **Drainage Summary**

1/16

Drainage Summary

Project: Project Numbe: Date: By: Zamora Subdivision 07/20/12 GJA

Site Location

Precipitation Zone

2 Per Table A-1 COA DPM Section 22.2

Existing summary

Basin Name		Basin1	Off Lot 7	Off Lot 8,9	Off Lot 1 TA&B	Off MRGCD	TOTAL
Soil Treatment (acres)							
Area "A"		0.32792	0.00	0.00	0.00	0.33873	0.67
Area "B"		0.00	0.00	0.00	0.00	0.00	0.00
Area "C"		1.31168	0.01676	0.02393	0.047521	0.00	1.40
Area "D"		0.00	0.01676	0.02393	0.047521	0.00	0.09
	TOTAL	1.63960	0.03352	0.04786	0.095042	0.33873	2.15
Excess Runoff (acre-feet)							
100yr. 6hr.		0.14	0.00	0.006	0.013	0.015	0.18
10yr. 6hr.		0.06	0.00	0.00	0.01	0.00	0.08
2yr. 6hr.		0.02	0.00	0.00	0.00	0.00	0.02
100yr. 24hr.		0.14	0.005	0.007	0.014	0.015	0.18
	TOTAL	0.35	0.01	0.02	0.04	0.03	0.46
Peak Discharge (cfs)							
100 yr.		4.63	0.13	0.19	0.37	0.53	5.85
10yr.		2.37	0.08	0.12	0.23	0.13	2.92
2уг.		0.79	0.04	0.06	0.12	0.00	1.00
-	TOTAL	7.78	0.25	0.36	0.72	0.66	9.78

Proposed summary

Basin Name		Basin2ADev	Basin2BDev	Basin2CDev	Basin2DDev	BasinOFF	TOTAL
Soil Treatment (acres)							
Area "A"		0.0172167	0.00	0.130850	0.046028	0.00	0.19
Area "B"		0.00	0.00	0.00	0.00	0.00	0.00
Area "C"		0.31346	0.36213	0.3663	0.399721	0.00	1.44
Area "D"		0.07136	0.08133	0.04340	0.104921	0.0733	0.37
	TOTAL	0.40204	0.44346	0.54055	0.55067	0.0733	2.01
Excess Runoff (acre-feet)							
100yr. 6hr.		0.04	0.05	0.05	0.06	0.01	0.21
10yr. 6hr.		0.02	0.02	0.02	0.03	0.01	0.11
2yr. 6hr.		0.01	0.01	0.01	0.01	0.00	0.04
100yr. 24hr.		0.05	0.05	0.05	0.06	0.02	0.22
	TOTAL	0.12	0.13	0.13	0.16	0.04	0.58
Peak Discharge (cfs)							
100yr		1.35	1.52	1.56	1.82	0.34	6.59
10yr.		0.77	0.87	0.81	1.03	0.23	3.71
2yr.		0.32	0.37	0.30	0.43	0.14	1.56
	TOTAL	2.43	2.76	2.67	3.29	0.71	11.86

Existing hyd.

GJA,LLC

Civil Engineering

Zamora Subdivision PROJECT PROJECT NO. DATE BY

07/20/12 GJA

DPM Section 22.2 - Hydrology Part A-Watersheds less than 40 acres. January, 1993

INSTRUCTIONS

Spread sheet requires three input areas (dark cells):

>A.1 Precipitation Zone Location

>A.3 Land Treaments
 Values from the tables are automatically placed using "if" statements.
 Table values should be checked for correctness for each use.

SUMMARY

Location	Basin1	Off Lot 7	Off Lot 1	Off MRGCD	TOTALS	
Precipitation Zone Land Area	2 1.64	2 0.03	2 0.10	0.34	2.15	acres
Excess Precipitation Volum <i>e</i> >>> 100-vear 6-hour (design)	0,14	0.00	0.01	0.01	0.18	acre-ft.
10-vear 6-hour	0.06	0.00	0.01	0.00	0.08	acre-ft.
2-vear 6-hour	0.02	0.00	00.00	0.00	0.02	acre-ft.
100-year 24-hour	0.14	0.01	0.01	0.01	0.18	acre-ft.
Peak Discharge Rates (DPM) >>> 0100 (design)	4.63	0.13	0.37	0.53	5.85	cfs
	2.37	0.08	0.23	0.13	2.92	cfs
02	0.79	0.04	0.12	0.00	1.00	cfs

Existing hyd.

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ALCULATION	
PUT AND CALC	
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INPUT AND CALCULATIONS						
LOCATION >A.1 PRECIPITATION ZONE (from Table A-1)	Basin1 2	Off Lot 7 2	Off Lot 1 C	Off MRGCD 2	5	
>A.2 DEPTHS (from Table A-2)	n e rendemente de la compañsión de la comp	a ser and the second and a second	na da seran an ing a ga aga aga aga aga aga aga aga aga	n yang dari dari dari dari dari dari dari dari	TOTALS	and a second
100-YEAR STORM (P60)	2.01	2.01	2.01	2.01	2.01	inches
100-YEAR STORM (P360)	2.35	2.35	2.35	2.35	2.35	inches
100-YEAR STORM (P1440)	2.75	2.75	2.75	2.75	2.75	inches
10-YEAR (P360) (Calculated: P360*RPF10)	60.2	arang Silaja Sirang	2.29 20 20	8-50 2457 2492	1.0 1.0 1.0 1.0	inches
2-YEAR (P360) (Calculated: P360*RPF2)		C di Citi Que	8% 65 7	20° 2		inches
>A.3 LAND TREATMENTS (A)						بلاحدة ويتبارك والمحالية والمحالية والمحالية والمحالية والمحالية والمحالية والمحالية والمحالية والمحالية والمح
Treatment A	0.33	0.00	0.00	0.34	0.67	acres
Treatment B	0.00	0.00	0.00	0.00	0.00	acres
Treatment C	1.31	0.02	0.05	0.00	1.40	acres
Treatment D	0.00	0.02	0.05	0.00	0.09	acres
Total Area	1999 1997 1997	0.02	010		2.4	acres
>A.4 ABSTRACTIONS	See A.5	See A.5	See A.5	See A.5	See A.5	
		and the second se			a construction of the second	

Existing hyd.

Page 3

CALCULATIONS FOLLOW

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Treatment A		1.56	1.56	1.56	1.56	1.56	cfs/acre
Treatment B		2.28	2.28	2.28	2.28	2.28	cfs/acre
Treatment C		3,14	3.14	3,14	3.14	3.14	cfs/a
Treatment D		4.70	4.70	4.70	4.70	4.70	cfs/acre
Q10	 Q100 (Sum QI*AI)			12 (2) (2)		100 100 100	cfs
	1) 1) 1)	## ## ## ## ## ## ## ## ## ## ## ## ##		 			
10-year		06 U	e e c	ar v	0C 0	ac v	
I reatment A		U.38	0.38	0.38	0.38	0.35	crs/acre
Treatment B		0.95	0.95	0.95	0.95	0.95	cfs/ac
Treatment C		1.71	1.71	1.71	1.71	1.71	cfs/acre
Treatment D		3.14	3.14	3.14	3.14	3.14	cfs/acre
Q10	Q10 (Sum QI*AI)		0.08	\$2. \$	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	2 B 2	cfs
	61 11 12 12 12 12 12 12 12 12 12 12 12 12					1) 1) 1) 1)	
2-year							
Treatment A		0.00	0.00	0.00	0.00	0.00	cfs/acre
Treatment B		0.08	0.08	0.08	0.08	0.08	cfs/acre
Treatment C		0.60	0.60	0.60	0.60	0.60	cfs/acre
Treatment D		1.86	1.86	1.86	1.86	1.86	cfs/acre
02	 Q2 (\$um QI⁺AI)	1997 - 19	\$Q'Q	1997 1997 1997	0.00	40° \$	cfs

Proposed Hyd.

GJA,LLC Civil Engineering

Zamora Subdivision 07/20/12 GJA PROJECT Z PROJECT NO. DATE 0 BY G

DPM Section 22.2 - Hydrology Part A-Watersheds less than 40 acres. January, 1993

INSTRUCTIONS

- Spread sheet requires three input areas (dark cells): Location
 - >A.1 Precipitation Zone
- >A.3 Land Treaments
 Values from the tables are automatically placed using "if" statements.
 Table values should be checked for correctness for each use.

SUMMARY

Location	Basin2ADev	Lot Z よ Basin2BDev	Basin2CDev	Basin2DDev	BaeinOFF	TOTALS	
Precipitation Zone	2	2	2	2	2	2	
Land Area	0.40	0,44	0.54	0.55	0.07	2.01	acres
Excess Precipitation Volume							
>>> 100-year 6-hour (design) 🗙	Sen = 0.0429	0.0485				0.21	acre-fi
10-year 6-hour	0.02	0,02		ł	1	0.11	acre-ft
2-year 6-hour	0.01	0.01	0.01	0.01	0.00	0.04	acre-ft.
100-year 24-hour	0.05	0.05				0.22	acre-ft
Peak Discharge Rates (DPM)							
>>> Q100 (design)	1.35			1.82		6.59	cfs
, Q10	0.77	0.87		1.03	0.23	3.71	cfs
02	0.32		0.30	0.43		1.56	cfs

Proposed Hyd.

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INPUT AND CALCULATIONS							
LOCATION >A.1 PRECIPITATION ZONE (from Table A-1)	Basin2ADev 2	Basin2BDev 2	Basin2CDev 2	Basin2DDev 2	BasinOFF 2	2	
						TOTALS	
>A.2 DEPTHS (from Table A-2)		K) c	V r	e۷ د د	40 e	5	
100-YEAR STORM (P360)	2.35	2.35	2.35	2.35	2.35	2.35	inches
100-YEAR STORM (P1440)	2.75	2.75	2.75	2.75	2.75	2.75	inches
10-YEAR (P360) (Calculated: P360*RPF10)			2.27	1.11			inches
2-YEAR (P360) (Calculated: P360*RPF2)		A. Straff	20 yr	23 (2) 2		2017	inches
>A.3 LAND TREATMENTS (AI)			o na se popular e e por e den anne e e o den de la compañía de la compañía de la compañía de la compañía de la	an en se se ren a general de constante de Maria anno en segura de antes de constantes	an their sufficient in the spin of a state and do not have a suffrage	TOTALS	فالمحاجبة والأخذية والمحاجز والمكاوم المحاجبة والمحاجبة
Treatment A	0.02	0.00	0.13	0.05	0.00	0.19	acres
Treatment B	0.00	0.00	0.00	0.00	0.00	0.00	acres
Treatment D	10.0	0.08	0.04	0.10		0.37	actes
Total Area		0.44	 	9.9 9.9	£.07	2 0 2	acres
•	H H H H H H H H H H H H H H H H H H H				 	41 41 11 11 11 11 11 11 11 11 11 11 11 1	
>A.4 ABSTRACTIONS	See A.5	See A.5	See A.5	See A.5	See A.5	See A.5	anales a second a second and a second and a second second as a second second second second second second second

Proposed Hyd.

G-hour 0.53 0.13 1113 <	from Table A-8						TOTALS	
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1.13 0.13 0.13	Treatment B	0.78	0.78	0.78	0.78	0.78	0.78	L C L
2.12 2.12	Treatment C	1.13	1.13	1.13	1.13	1.13	1.13	inch
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1.34 1.34 <th< td=""><td>Treatment D</td><td>0.40 0.43</td><td>0.57</td><td>0.52</td><td>0.57</td><td>0.52</td><td>0.52</td><td></td></th<>	Treatment D	0.40 0.43	0.57	0.52	0.57	0.52	0.52	
0.00 0.00 <th< td=""><td>Treatment D</td><td>1.34</td><td>1.34</td><td>1.34</td><td>1.34</td><td>1.34</td><td>1.34</td><td>inch</td></th<>	Treatment D	1.34	1.34	1.34	1.34	1.34	1.34	inch
T 200 T (0) T (0) <tht (0)<="" th=""> <tht (0)<="" td="" tht<=""><td>WEIGHTED E (Sum EI*Ai/A)</td><td></td><td></td><td></td><td>200 00</td><td></td><td>94 1 7</td><td>inch</td></tht></tht></tht></tht></tht></tht></tht></tht></tht></tht></tht>	WEIGHTED E (Sum EI*Ai/A)				200 00		94 1 7	inch
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0.02 0.03 0.03 <th< td=""><td>Treatment A</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>00.0</td><td>00.0</td><td>inch</td></th<>	Treatment A	0.00	0.00	0.00	0.00	00.0	00.0	inch
0.15 0.15 <th< td=""><td>Treatment B</td><td>0.02</td><td>0.02</td><td>0.02</td><td>0.02</td><td>0.02</td><td>0.02</td><td>inch</td></th<>	Treatment B	0.02	0.02	0.02	0.02	0.02	0.02	inch
0.79 0.79 <th< td=""><td>Treatment C</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>inch</td></th<>	Treatment C	0.15	0.15	0.15	0.15	0.15	0.15	inch
E-100 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10 E-10	Treatment D	0.79	0.79	0.79	0.79	0.79	0.79	inch
(5.2) 2.42 2.42 2.42 2.42 4.45 275,7 1.46,15 3.05 8.15 8.15 8.15 275,7 1.46,15 3.05 8.15 8.15 8.15 2.52,7 1.46,15 3.05 8.15 8.15 2.52,7 1.46,15 3.05 8.15 8.15 2.55 1.46,15 3.15 1.46 8.15		02 17 1	A NA A A	1 - A 	1994 1994 1997	14 6 87	1000	inch
251. 1 140. 1 201. 201. 2 10.	VOLUME V2:6h (E*A)				14.25 E	1, 25%	∂	acre
		n An An An An An An An An	1.464	化合金数化	に行ったいが	042 Q 543	14. 1999 A.	¥.
0.85 0.02 7.65 5.05 0.05 8.00	Salaraha Bayana			}	,			and in the second second second
	100-year 24-hour VOLUME V100:24h							
	(V100-6h+Ad*P1440-P360)/12)	200 C		2.00		A. 7	() 6	acre

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Irom Table A-9	an man a sur chun a sharacan ann an	والمتعادية والمراجعة والمراجع	אראיז אין איז	באראשאל אורך "אלירה דייוקרי די נושירים ביי הבעלי אוריון ערים יין אלאנויה ירי איירע לענוע או	And the second se	
100-year					Ē	TOTALS
Treatment A	1.56	1.56	1.56	1.56	1.56	1.56
Treatment B	2.28	2.28	2.28	2.28	2.28	2.28
Treatment C	3.14	3.14	3.14	3.14	3.14	5.14
Treatment D	4.70	4.70	4.70	4.70	4.70	4.70
Q100 (Sum Qi*Ai)				297 S	(決約)(5) (本)(1)(1) (本)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)	\$\$? \$
10-year	na se se a constructione de la construcción de la construcción de la construcción de la construcción de la cons	ووجارتها والأخار والمارجان والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع المراجع والمراجع والمراجع	والمراجعة والمحمد والمراجعة	בין שאיר איין אייר אייר אייר אייר אייר אייר א	nin da antina da anti	ar var A. A. summing an an A. A. gan day, "A A-A-A darphic to the sum beauty
Treatment A	0.38	0.38	0.38	0.38	0.38	0.38
Treatment B	0.95	0.95	0.95	0.95	0.95	0.95
Treatment C	1.71	1.71	1.71	1.71	1.71	1.71
Treatment D	3.14	3,14	3.14	3.14	3.14	3.14
Q10 (Sum Qi*Ai)	2.X. 61	28°9	2000 - 2000	3.00	***	200- 36., 37., 37., 57.,
			路和市山山北 化用剂口和的品用户路径	A H H H		
2-year	لمكاف ومراجع الإسرامية المراجع مراجع مراجع المراجع المراجع المراجع المراجع المراجع المراجع والمراجع المراجع	مخمه محرف والجرار والمحرف المحرفين المحرفين المحرفين والمحرفين والمحرفين والمحرف	ور وجو من ما همه في المحمد الم	And the second	and a second	a rinna a hanna a hann a dha a ta a ta a ta a ta a ta a ta a t
Treatment A	0.00	0.00	0.00	0.00	0.00	0.00
Treatment B	0.08	0.08	0.08	0.08	0.08	0.08
Treatment C	0.60	0.60	0.60	0.60	0.60	0.60
Treatment D	1.86	1.86	1.86	1.86	1.86	1.86
	11 200 11		1977-19	25 Q.T.	5 12	227

NAME OF PROJECT / CALCULATION SHEET NO 10/16 ZAMORA SUBDIVISION OF DATE COMPUTED BY: 3.0 REFERENCES 4.0 ASSUMPTIONS 5.0 CRITERIA / REQUIREMENTS 2.0 PURPOSE .0 SUBJECT IDENTIFY/ADDRESS THESE ELEMENTS 9.0 ATTACHMENTS 6.0 SKETCHES 8.0 CONCLUSIONS 7.0 CALCULATIONS SUPERSEDES CALC TITLE CHECKED BY: DATED: **REVISION #** HYPROLOGY ATOTAL 1,6396 AC HAMMERHEND ! ATOT : 0,0733AC A(LOTZA): 2600# =.0507AL (819.) 24 1 0.4 1104 AL A(LOT28): 593# = 0.0136AL (1990) - ZA (HAMMERHEND) : 0.0597A .0133AL 24Not: 0.35134AC FROM SPREMOSHEET! ZAQ(519) = 0.28cfs ZBIDT: 0.40924AL ZAX(819) = 353ct - ZB(HAMMERHEND) : 0.0136 AC ZBNET 0,39564AL ZBQ(192) = 0,06 cts ZO+(192) = 8365 UNDEVELOPED CONDITION : ATOT = 1,6396 AC 20% ; 0.321924 80%0C: 1,31168AC 1.6396AC / DEVELOPED CONDITION' ZABT 0.35134 ZBOT 0.355644 ZCM070,4097ZAL ZD 6.40%4AK INP -0.0546(2377#14D) -0.0579AL(2500\$PAD) -0.0434AL(18000PAD) -.0574AL(2500 \$PAD) 0,2067AL 0.338ZAL 0.3663AL 0.3522A 70 IMP 15,5470 (16%D) 14.51% (15%D) 10,59% (10%D) 14.01% (14%D) 90 PERN 84,4570 (8970C) 85,597 (8570C) 89,47 (9070C) 85,987 (864.C)

WF	IP	20	T	ì		DF PROJE	CT / CAL	ECKED BY:	JOB	/TASK NO.			SHEET N OF DATE:	°. 16	,
DENTIFY/ADDRESS HESE ELEMENTS	6.0 SKET	CHES	2.0 F	_	CALCULATI		ERENCE				ED BY:		RITERIA / REQ		12
		ADD LOTS BAESA	N N	J T T	ADD MEACE (1)	- N - 1	Developed offs				2001 2007 2007	Lot - TRACTS		5	BASINS
				0,017216	0112116		ITE BASIN	14,755	(1) <u>5002</u>	7050(1) 5100(2)		4140	2005 2005	1460	AMEA(甲)
				, 7			B			0,35873		0,09504	0.0 + 7865	0.03352	
	0,36213 0,08133	56520 . 56230 .	.3382 .0514	0,31546 0.07136	.01676 .01676	.2967 .0546	A V			0. 3327 S(100 k)		· 0.04752 (Soz)	(402)265 2010	0.014.76 (5023)	LAND TREATER I
										8		(هرد) ا 221 م.م	0.02395(50%)	0.01676(502)	CAND THENT P

1777	D —		NAME OF PROJECT	/ CALCULATION				S⊦	HEET NO.	16
WH	Pac		COMPUTED BY:	CHECKED BY	JOB/TAS	K NO.			- 101 TE:	/12
NTIFY/ADDRESS 1	.0 SUBJECT	2.0 PURPOSE	3.0 REFER	ENCES	4.0 ASSU	MPTIONS	5.0	CRITERIA	REQUIREMEN	
	6.0 SKETCHES	7.0 C	ALCULATIONS	8	.0 CONCLU	SIONS	I	9.0 ATT	ACHMENTS	
VISION #	SUPERSEDES C	ALC TITLE				CHECKE	D BY:		DATED:	
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				Ø.0 73 73 73	0.10 4921	<i>i</i> 047521	.0574	0,0454	,0434	D

NAME OF PROJECT / CALCULATION SHEET NO 13/16 OF ZAMOLA SUBDIVISION COMPUTED BY: JOB/TASK NO. DATE CHECKED BY: 60 2.0 PURPOSE 3.0 REFERENCES 4.0 ASSUMPTIONS 5.0 CRITERIA / REQUIREMENTS .0 SUBJECT IDENTIFY/ADDRESS THESE ELEMENTS 6.0 SKETCHES 7.0 CALCULATIONS 8.0 CONCLUSIONS 9.0 ATTACHMENTS REVISION # SUPERSEDES CALC TITLE CHECKED BY: DATED: 100YR-10DAY STURM (REVISED 7/21/12) ZONE ATLAS J-12/13 (C-9) PG C-7 PPM ZZ.Z F1440 = Z1611 Pio = 10,0 - (24.9/(Fi440)).4) (24W) (Figure C-3) 22.2 = 10-24.9/3.81 P360 = Zizir (FIGURE C-Z) (6hr) = 3.47" 22.2 HIODAY = V360+ [AD+ (Pio-P360) /12 in/S+] A-9, Pg A-8 ZEIZ LOTZA: VIO = 0.0429 AL-FT+ 0.07136 (3.47-2.2) /12in/st = 0.0429 + 0.00755 = 0.05052 AL-FT = Z, 198CF LOTZB: Vio = 0.0485 AC-FT + 0.08133 (3.47-2.2)/12in/3+7 =0.0485 + 0.008607 = 0.057/074C-FT Z.4886F LOTZC: VIO = 0.0479AL-FT + [0.04340 (3.47-Z.Z) /1Zim /5+7 ACAD/REV-SHT.DWG/04-24-06 = 0,0479 + 0,004593 = 0.052493AL-FT = Z, 287 CF LOTZD: V10 = 0.0582 AC-FT+[0.104921 (3.47-2.2) /12in/5+] = 0.0582 + 0.01/104 = 0.069304AC-FT = 3,019CE

NAME OF PROJECT / CALCULATION SHEET NO. ZAMORA SUBDIVISION 14/16 OF COMPUTED BY: CHECKED BY: JOB/TASK NO DATE: 7/12/12 3.0 REFERENCES 5.0 CRITERIA / REQUIREMENTS SUBJECT 2.0 PURPOSE 4.0 ASSUMPTIONS IDENTIFY/ADDRESS THESE ELEMENTS 6.0 SKETCHES 7.0 CALCULATIONS 8.0 CONCLUSIONS 9.0 ATTACHMENTS DATED: **REVISION #** SUPERSEDES CALC TITLE CHECKED BY: FOND CALCS LOT ZA WEST POND! AREM VOL EL EVOL Ö 138 955 0 956 331 234.5 234.5 957 581 456 690 +1= = (A1+A2)わ===(138+331)(1)= 234.5 t== = (A1+A2) ====(331+581) 1'= 456 c> TOT YOL PROVIDED! 690.5 CH EAST POND: EL AREA VOL ZUOL 55.5 686 0 0 56.5 1095 890.5 890.5 57.5 1557 1326 ZZ16.5 ACAD\REV-SHT.DWG\04-24-06 オ= = = (686+1095)1'= 890,5 ヤシ= 七(1035+1557)(1)=1326とう TOTAL YOL PROVIDED: ZZ16.5 CF (7RAND TOTAL YOL PROVIDED: 290705 HOL REQ: 1875 c5 YOL PROVIDED > YOL REQUISED / 10045-10-DAY 2198 CF

NAME OF PROJECT / CALCULATION SHEET NO ZAMORA SUBDIVISION 15/16 OF COMPUTED BY: CHECKED BY: JOB/TASK NO DATE: SUBJECT 2.0 PURPOSE 3.0 REFERENCES 4.0 ASSUMPTIONS 5.0 CRITERIA / REQUIREMENTS IDENTIFY/ADDRESS THESE ELEMENTS 6.0 SKETCHES 7.0 CALCULATIONS 8.0 CONCLUSIONS 9.0 ATTACHMENTS SUPERSEDES CALC TITLE **REVISION #** CHECKED BY DATED: LOTZB ELEV ARZA VOL EVOL 1152 65.5 780 0 0 56.5 966-57.5 1365.5 +1= + (+152+1579)(1)= 966 1366CF +2= = = (1579+206) = 136515 1820CF 2433 TOTAL HOLPROVIDED! 33315 , HOL REQ: 2106FT3 LOT ZC YOL PROVIDED > YOL REA / 10041-10doy WEST ELEV AREA JOL EVOL 55.5 138 0 0 234.5 Z34.5 56,5 331 57,5 690,5 581 456 HI= = = (138+331) 1'= 234.5 サマ= = = (331+581)2 = 456 N: \ACAD\REV-SHT.DWG\04-24-06 4705=690,5CF EAST ELEV AREA VOL SVOL 0 55.5 464 0 56.5 760 612 612 57.5 1112 ¥1= = (469+760) 1' = 612 YOL PENIDED > VOL REQUIRED tz= = (760+1112)1'= 936 4+0T = 1548CF 228765 HTOT PROVIDED = 690,5+1548 = 2338,5CF, HEER ! 2000CF. 100-41-10day

NAME OF PROJECT / CALCULATION SHEET NO. ZAMORA SUBDIVISION 16116 OF COMPUTED BY: CHECKED BY: JOB/TASK NO DATE: 3.0 REFERENCES 4.0 ASSUMPTIONS SUBJECT 2.0 PURPOSE 5.0 CRITERIA / REQUIREMENTS IDENTIFY/ADDRESS THESE ELEMENTS 6.0 SKETCHES 7.0 CALCULATIONS 8.0 CONCLUSIONS 9.0 ATTACHMENTS DATED: **REVISION #** SUPERSEDES CALC TITLE CHECKED BY OT ZD EVOL ELEX AREA VOL 971 55.5 0 0 56.5 1388 1179.5 1179.5 57.5 2304.5 1862 1625 41=== (971+1388)1'= 179,5 H2= ± (1388+1862)1'= 1625 FOT PROVIDED : ZEOA. SCE VEED : Z178CE-10041-10DAY LOT ZD (REVISED) ELEN AREA VOL EVOL 55,5 1388 56.5 1862 57.5 2392 ¥= ±(1388+1862)1'= 16256F ACAD/REV-SHT.DWG/04-24-06 ★== = (1862+2392)1'= Z127CF STOT PROVIDED: 3752 CF VZEA: 3019CF 10046-102ny YOL PROVIDED 7 YOL REQUIRED /