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Nancy Knight 1803 E. Lipan Cir. Fort Mohave, AZ 86426 Telephone: (951) 837-1617 nancyknight@frontier.com

THE 2019 OCT 18 PM 3: 24

Plaintiff Pro Per

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA IN AND FOR THE COUNTY OF MOHAVE

NANCY KNIGHT

Plaintiff.

and

GLEN LUDWIG and PEARL LUDWIG, Trustees of THE LUDWIG FAMILY TRUST; FAIRWAY CONSTRUCTORS, INC.; MEHDI AZARMI; JAMES B. ROBERTS and DONNA M. ROBERTS, husband and wife; JOHN DOES 1-10; JANE DOES 1-10; ABC CORPORATIONS 1-10; and XYZ PARTNERSHIPS 1-10.

Defendants.

Case No.: **CV 2018 04003**

MOTION FOR LEAVE TO AMEND RECONSIDERATION OF DISMISSAL OF COUNT ONE DATED AUGUST 27, 2019

ADDITIONAL NEW EVIDENCE IN SUPPORT OF ONE SUBDIVISION **KNOWN AS TRACT 4076**

Honorable Judge Jantzen

In accordance with rule 7.1 (e) Motion for Reconsideration, Plaintiff seeks reversal, in whole or in part, for Dismissal of Count One of her Complaint. As cited in the powers of superior court section 12-911 (A) (5) and (C), the court may, and for good cause shown, modify or reverse a decision in whole or in part and on motion of a party, the superior court shall make findings of fact and state conclusions on which judgment is based.

MEMORANDUM OF POINTS AND AUTHORITIES



The main purpose of this Amended Motion for Reconsideration of the Dismissal of Count One is to append the August 2019 Supra Exhibit 1, with the additional evidence found in a Final Grading Report, Hydrology Reports and Drainage Studies for Desert Lakes Golf Course and Estates Tract 4076 Subdivision (hereinafter ("Desert Lakes").

Supra exhibits provided to the Hon. Judge Carlisle, prior to the April 2018 Oral Argument decision to dismiss Count One, taken together with the new evidence provided to this Court, is a preponderance of evidence that is persuasive given the multiple sources of licensed professionals that worked on this project for the creation of the Tract 4076 Subdivision.

This evidence also supports Plaintiff's claim that the project was a Master Planned Community and not just a Planned Community of residences. A Master Planned Community is broader in scope. The Desert Lakes Tract 4076 Master Planned Community was planned and developed with estate homes, a golf course, lakes/ponds, clubhouse and parking lot, and a sewer treatment plant. Arizona Department of Real Estate Public Reports refer to the Master Planned Community as having no common areas.

The Desert Lakes Covenants, Conditions, and Restrictions (hereinafter "CC&Rs") are intended to protect the business interests of the privately held ownership of the golf course as well as the interests of all of the owners of the Desert Lakes estate lots/homes. Judicial resolution in support of the rights of all property owners, regardless of what phase of development is associated with their property ownership, is critical to the long-

term intent and protection from loss in values from self-serving interests of violators of the Desert Lakes CC&Rs. The United States Supreme Court supports this contention.

From the *Cornell Law Review* Volume 21 Issue 2 February 1936 it states: "...The principle that one should use his own property in such a way that he does not injure that of another is to be found early in the common law...The United States Supreme Court has accepted its inheritance with reverence and respect, asserting that the maxim is a fundamental rule of justice and right."

From the Louisiana Law Review Volume 21, Number 2: from the Work of the Louisiana Supreme Court for the 1959-1960 Term February 1961. On "Action for Enforcement" "Since building restrictions are established for the benefit of the surrounding property, the right to enforce the restrictions is a real

APPENDED EVIDENCE AND DISCUSSION

right running with the land..."

Plaintiff will use alpha characters to differentiate the new evidence exhibits from the numeric nomenclature used in the August 2019 supra exhibits.

Supra Exhibit 1 displayed the October 1988 Preliminary Map of "Desert Lakes Golf Course and Estates Tract 4076" for four phases of development (Phase I to IV). Included in this Supra Exhibit were the pertinent maps for this case related to violations in Phase I and Phase II (Tracts 4076 A and B) respectively.

A prior Court in April 2018, granted Plaintiff rights to prosecute violations only in Tract 4076B under the presumption that Desert Lakes was not one subdivision but rather a number of separate subdivisions. Plaintiff, prior to finding highly supportive evidence for full rights within the entire Desert Lakes Subdivision, filed a Motion to Amend her Complaint to restore her rights to Count One for the limited violations in Phase II (Tract 4076B). Based on the preponderance of evidence presented to this court, a ruling that

Plaintiff is not limited will require a new Amended Complaint. In that instance, a new Amended Complaint will be filed for all violations cited to date including one the Plaintiff recently found of a rental property owned by Fairway Constructors, Inc. in Phase I as will be noted below with evidence as a part of this record.

The CC&Rs run with the land of which Desert Lakes Parcel VV was replatted in 1998 together with abandonment of a portion of Parcel KK from the golf course property to be joined with Parcel VV for space to create 32 lots - two of those lots are owned by the Plaintiff. As will be noted below, and found in the 1991 Drainage Study prepared for Desert Lakes Development L.P., the 1991 original intent for Phase II Parcel VV was for only 23 single family residential lots to be known as Tract 4076-E. Plaintiff's Legal Description on her property tax statement references Desert Lakes Golf Course and Estates Tract 4163 Unit E, Lots 8 and 9 Cont. The new evidence found in the 1991 Drainage Study together with the deception presented to Planning and Zoning for Mr. Varner's Resolution 98-348 application to rezone Agricultural land into 32 lots of which the maximum lot size was to be 5,775 square feet and with only a ten foot rear yard setback, all in violation of the CC&Rs, became a fraud upon subsequent buyers, including the Plaintiff.

While this fraud is not a part of this case, it is notice to the Court as additional evidence of the need for reconsideration of Defendant's objection to the Plaintiff's Wherefore, Paragraph F in the original January 2018 Complaint for "A Declaratory Judgment forgiving any CC&R construction violations that were not the fault of the purchaser of the home who unknowingly purchased a home that had been built, in error

or deliberately by any builder, as out of compliance with the CC&Rs." To this end, Plaintiff's motion for Declaratory Judgment is expected to be filed shortly after October 30, 2019 pending the opposing counsel's claim of filing yet another dispositive motion before the end of the month of October 2019.

In June 1989, the Final Grading Report for Desert Lakes Golf Course and Estates was completed. The Report was For: Bella Enterprises, Inc., Project No. 4199J048, June 19, 1989. The Introduction states: "This presents the results of tests and observations performed in conjunction with the site grading for Desert Lakes Golf Course and Estates Phase I, II, III, IV." **Exhibit A** - Final Grading Report, 2 pages

In February 1991, a Drainage Study was prepared by Holland West for Desert Lakes Development, L.P. for their proposed 23 single family residential lot replat of the 5 acre Parcel VV displayed in the 1988 Preliminary Map for Phase II. This replat was designated as Tract 4076-E in 1991. But for a series of alleged corruption practices regarding Parcel VV, the 23 lot replat would have maintained the integrity of the CC&Rs for twenty (20') foot front and rear setbacks. **Exhibit B** – Drainage Study, 4 pertinent pages: Title Page and underscored text in pages 3-5; Drainage Maps for Tr. 4076, 3 pages.

The July 1995 Desert Lakes Golf Course & Estates Drainageway Analysis states on page 2 "The purpose of this report is to analyze the specific drainage characteristics of the drainageways shown on Figure 1. The analysis will be based on the original drainage report for the Desert Lakes Golf Course and Estates Subdivision and the peak flows presented therein for each of those drainageways." **Exhibit C** – Drainageway Analysis – 3 pertinent pages from the 22 page report. Only the Title page and pages 2 and 9 are included herein with the pertinent textual evidence underscored.

New evidence for the intent of Tract names to be one-and-the-same as Phases of development was found in the Mohave County Assessor's legal description for a home owned Fairway Constructors. Parcel 226-11-147 has the following legal description: "DESERT LAKES GOLF COURSE & ESTATES TRACT 4076A PHASE 1 BLK B LOT 67 CONT 7200". The physical address of the Fairway Constructors' parcel is 5829 S. Desert Lakes Dr. This home has bay window protrusions into the five (5') foot side yard setback as noted on the 2004 plot plan B04-2934B. The tax summary indicates this home is a rental. **Exhibit D** – Property Tax Statement and 2004 Plot Plan, 2 pages.

ADDITIONAL LEGAL BASIS FOR CONSIDERATION

1) The fact that Mohave County provided an Excel spreadsheet listing all parcel numbers in Desert Lakes for Mr. Azarmi's 2016 attempted setback reductions to apply to all lots in Desert Lakes. That spreadsheet cited a total of 59 out of 220 lots as Vacant in Tract4076A Phase I alone indicating the magnitude and impact that Mr. Azarmi's proposed setback reductions would have had on this community. A total of 180 Waivers of County Liability were submitted to the Board of Supervisors from property owners throughout Desert Lakes. The lack of full disclosure regarding the CC&Rs would have placed them at risk of litigation had they followed through with building per the proposed fifteen foot setbacks. 2) The fact that Desert Lakes Golf Course and Estates was established and marketed as a master planned 300+ acre community with CC&Rs that constitute a mutuality of benefit and burden upon all property owners. 3) The fact that property owners have a constitutional right to protection of their property values. 4) The

fact that property owners have a constitutional right to safety from deteriorated metal advertising signage posted on Desert Lakes residential lots.

GRAMMATICAL CHANGE ARGUMENT

Given the preponderance of evidence that Desert Lakes Tract 4076 is one subdivision and the tracts are one-and-the-same as the Phases of development within the subdivision rather than separate subdivisions, we look to the CC&Rs for the grammatical change clause on the last page of every recorded Declaration of the CC&Rs to clarify the intent of the language used therein and the need to differentiate tract from subdivision within the language of the CC&Rs.

It is the grammatical insertion of Desert Lakes Tract 4076 before the word subdivision that needs to be assumed as though fully stated therein. From recorded Declarations in Books 1554 and 1641 respectively for tracts 4076A and 4076B, Paragraphs 21 and 22 states:

"...the necessary grammatical changes required to make the provisions herein apply - either to corporations or individuals, man or woman, - shall in all cases be assumed as though in each case fully expressed."

Grammatical deals with the integrity of the words and the meaning resting upon those words. A weak and erroneous grammatical foundation occurred when the authors of the CC&Rs did not append Tract 4076 to the word subdivision wherever it occurred in Articles I and II.

This grammatical clarification is supported by the Mohave County Road

Department maintenance notices for streets within the "Desert Lakes Subdivision"; the

joindering of all parcels in the "Desert Lakes Subdivision" as cited by Mohave County

Planning and Zoning for setback reductions that went before the Board of Supervisors in October 2016, and the Glen Ludwig ADRE Public Report dated June 1, 2014 whereby on page 9 it states "Desert Lakes Estates and Golf Course is a recorded subdivision with tract numbers 4076-A thru 4076-H that consists of 575 homes." The Mohave County Subdivision Index cites the book and page number for the Final Plats that coincide with the 1988 phases of development for the Desert Lakes Golf Course and Estates Subdivision 4076. All of which are a part of the Court record.

It is well established that Desert Lakes Development, L.P. was fully aware of the one subdivision name of Tract 4076 and that their appended letter designation to 4076 did not create separate subdivisions. This grammatical appending of Desert Lakes Tract 4076 must now be assumed as though fully expressed in order to make the provisions apply to all lot owners and to the Architectural Committee for the entire Subdivision Tract 4076. The term tract, as used in the CC&Rs, applies to specific lots within a phase of development. **Exhibit E** – Grammatical change paragraphs cited on the last page of the CC&R Declarations for Phase I and Phase II aka Tract 4076A and Tract 4076B respectively. 2 pages.

LAW AND PRECEDENTS

A part of the legal basis for a finding of fact in support of the Plaintiff for full prosecution rights in Desert Lakes is to differentiate this case from *David C. Lillard, Jr. Plaintiff-Appellant, v. Jet Homes, Inc,* April 12, 1961, Court of Appeal of Louisiana.

Plaintiff Knight's case is similar to Plaintiff Lillard's case in that both cases have no home owner association, both cases are setback violation cases, both cases claim a

"One Subdivision" right to prosecution, and both cases have Defendants disputing Plaintiff's right to prosecution due to lot ownership within units of a subdivision that resulted in dismissal.

In *Lillard v, Jet Homes*, Lillard owned lots in Coleman Park Subdivision Unit 8 that was separate and distinct from Jet Homes ownership of lots in Coleman Park Subdivision Unit 9. Unit No. 8 and Unit No. 9 were separately created by plats. Coleman Park Units 8 and 9 have common boundaries just as Desert Lakes Tract 4076A and Tract 4076B have common boundaries; however Desert Lakes was not platted as four separate subdivisions. It was platted as one subdivision and cited by a multitude of licensed professionals as Desert Lakes Golf Course and Estates Tract 4076 - Phase I thru IV.

Naturally, this 300+ acre master planned community would be built in phases; as such, the map of Phase I established the first set of estate home lots, the golf course, clubhouse, parking lot, lakes/ponds, and it also defined the location of a purchase of property outside the boundary of Desert Lakes that was adjacent to Phase I and Phase II for the sewer treatment plant.

The general plan of development was followed by Desert Lakes Development,

L.P. with consistent language for the CC&Rs for each phase of development beginning in

1989 with Tract 4076A (Phase I) lots. The separately recorded CC&Rs are not

recognizably different in nature. They are predominantly identical for all Articles and

paragraphs with the exception of lot specific characteristics and needs within the

individual phases of developments. For example, safety provisions for vehicular access

onto high traffic streets was the case for Tract 4076B that inserted an additional

paragraph number (paragraph 7) into Article II as compared to the Tract 4076A

Declaration.

The pertinent, consistent language, for Land Use in Article II, paragraph 6 defines the setback restrictions for buildings and building projections. This language and intent applies to all phases of development to be imposed upon any and all subsequent developers. From the first recorded Declaration in 1989 to the last recorded for Desert Lakes Unit H, Tract 4159 in the year 2000, a span of eleven years, the setback restrictions remained consistent.

More from the *Louisiana Law Review* Volume 21 Number 2 February 1961 Cited on "Action for Enforcement":

"When a violation of the restrictions on the property occurs, it has been indicated that those owners whose property was not affected by the violation could not bring an action to enforce the covenant. However, it would seem that property within a subdivision and subject to a restriction would be near enough to be affected in some way by a violation even though it was some distance from the place of the violation..."

The above cited "however" disclaimer is absolutely true. Plaintiff is affected by one such home with setback violations on Desert Lakes Drive. Her mailbox is among the bank of mailboxes that is in close proximity to this home and this home is a constant reminder of the corrupt building application and approval that the County claims was an error on their part. The homeowner's name listed is one opting-in for Mr. Azarmi's BOS resolution amendment. Lipan Blvd. and Club House Drive are regularly travelled streets in Desert Lakes where the Plaintiff is further affected by the knowledge of these egregious violations that needs judicial resolution for remedy.

More from the Louisiana Law Review Volume 21 Number 2 February 1961

Cited on "Remedies Available for Violation of Restrictions" "Injunction is the usual remedy sought and granted in actions concerning violations of building restrictions. In several instances owners have been forced to remove buildings that were erected in violation of a restriction or were forced to cease certain activities that were violative of a building restriction."

Defendant's building violations may be corrected with remodeling garage depths and with removal of all or a part of projecting patio covers. These are not costly restorations for Defendant Fairway Constructors who has crews for the work and ability to perform any engineering required for the cutting away of the violating portions that violate the twenty foot setback. After all, their profit from a larger building footprint was an ill-gotten gain.

More from the *Louisiana Law Review* Volume 21 Number 2 February 1961 "... It must be noted that where a violation of a building restriction is not a nuisance, this fact will not be a defense to the action for violation of the restrictive covenant... Even a general abandonment in one part of a subdivision will not disturb the validity of the restriction in another portion of the subdivision where it is still observed."

CONCLUSION

Plaintiff pleads for affirmation of rights for Count One prosecution of her January 2018 Complaint, in whole or in part, and if affirmed, rights to the additional violations in Tract 4076B that may be included in an Amended Complaint.

RESPECTFULLY SUBMITTED this 18th day of October, 2019

Nancy Knight, Plaintiff Pro Per

Manay Knyt

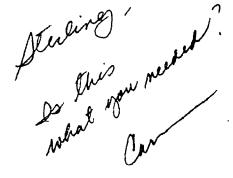
Copy of the foregoing emailed on October 18, 2019 to: djolaw@frontiernet.net Attorney for the Defendants The Law Office of Daniel Oehler 2001 Highway 95, Suite 15, Bullhead City, Arizona 86442

Amended Reconsideration of Dismissal of Count One_Additional Evidence_Oct 2019 - 12

Exhibit A Final Grading Report 2 pages

27/14 302

FINAL GRADING REPORT DESERT LAKES GOLF COURSE & ESTATES MOUNTAIN VIEW @ LIPPAN BLVD. MOHAUE COUNTY, ARIZONA





ARIZONA

Phoenix P.O. Box 21387 Phoenix, Arizona 85036 (602) 437-3737

952 East Baseline Road, No. 104 Mesa, Arizona 85204 (602) 926-2113

P.O. Box 2431

Flagstaff 2400 East Huntington Drive Flagstaff, Arizona 86001

Lakeside Route 1, Box 1030 Lakeside, Arizona 85929 (602) 368-5568

Tucson 3480 South Dodge Boulevard Tucson, Arizona 85713 (602) 748-2262

Sierra Vista 1827 South Paseo San Luis Sierra Vista, Arizona 85635 (602) 458-0364

Laughlin / Bullhead City 1610 Riverview Drive, No. 5 Bullhead City, Arizona 86442 (602) 758-8378

3737 East Broadway Road

17200 North Dysart Road, No. 13 Sun City, Arizona 85372 (602) 975-2154

(602) 774-8708

NEVADA

NEW MEXICO

8305 Washington Place, N.E.

Farmington 400 South Lorena Avenue

Albuquerque, New Mexico 87113

Farmington, New Mexico 87401

Albuquerque

(505) 823-4488

(505) 327-4966

Las Vegas 3611 West Tompkins Avenue Las Vegas, Nevada 89103 (702) 798-8050

Bella Enterprises, Inc For:

Project No. 4199J048

June 19, 1989



1610 Riverview Drive, No. 5 Bullhead City, Arizona 86442 (602) 758-8378

INTRODUCTION

This presents the results of Lests and observations performed in conjunction with the site grading for Desert Lakes Golf Course and Estates Phase I, II, III, and IV.

SITE GRADING

Building pad construction consisted of excavation from original elevations and by filling over prepared areas. The materials utilized as fill were obtained from on site sands and gravels.

Field density tests were performed in conjunction with the earthwork to determine the relative compaction achieved. results of these tests are presented on Plate A-1 through A-9. Plate B indicates the results of laboratory maximum dry density and optimum moisture relationship.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of field and laboratory tests, observation of the grading procedures, and our experience, it is our opinion that the grading contractor has complied with the recommendations of the Geotechnical Investigation report by Western Technologies Inc., Project No. 4128J402 dated February 21, 1989 and FHA Data Any future grading that would alter or affect the building pads should be performed with observation and testing by the Geotechnical Engineer.

Respectfully submitted. WESTERN TECHNOLOGIES INC.

Adam Alvirez

Engineering Technician

Steven D. Weidenhammer, Manager, Materials Engineering

Exhibit B

37 page Drainage Study Pertinent are: Title page and pages 3-5 as underscored

3 pages: Tr. 4076 maps

MOHAVE CTY PUBLIC WORKS

DRAINAGE STUDY
DESERT LAKES GOLF COURSE AND ESTATES
TRACT 4076-E
(REPLAT OF LOTS 111-122 BLOCK F)
SECTION 35, T19N, R22W

FEBRUARY 1991

PREPARED FOR:
DESERT LAKES DEVELOPMENT, L.P.
26691 PLAZA DRIVE, SUITE 210
MISSION VIEJO, CA 92691

PREPARED BY:
HOLLAND WEST, INC.
6920 SOUTH HOLLY CIRCLE
SUITE 100
ENGLEWOOD, CO. 80112



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I. INTRODUCTION

The proposed 23 lot, 5.0 acre single family residential subdivision is situated within the southwest quarter of the northwest quarter of Section 35, Township 19 North, Range 22 West in Mohave County, Arizona. It is bordered by Idpan Boulevard to the south, Lipan Court to the east, and Desert Lakes Golf Course to the north. The enclosed drawing depicts a vicinity map giving to the visual interpretation of this location.

The topography of this site is generally a knoll constructed of compacted fill. Ground cover is denuded soils with soils being generally permeable. The site is a replat of a portion of Desert Lakes Golf Course and Estates Tract No. 4076-B and all runoff due to the proposed urbanization will ultimately discharge to the Desert Lakes Golf Course. An 80 foot wide drainage parcel is?

II. INTENT

The purpose of this report is to identify major drainage that will impact the site and provide means to safely convey off-site run-off through the site. The report will also identify and route onsite flows within the site to safe and acceptable receiving lands (Per se: Desert Lakes Golf Course). The enclosed drainage map will provide general grading outlines, identify the type, size, and location of hydraulic features and structures required to provide for storm water management.

panel: 040058 24450 is enclosed and shows the site in both cone areas of 100 year - base flood elevations and flood hazard factors not determined and cone cone.

A-495

III. DESIGN CRITERIA

For basins of 200 acres or less, the Pational Method is by far the most common procedure used. This method was consequently selected for the on-site analysis for both the 10 year and 100 year storm event.

The Rational Formula is:

Q = CIA

Where:

Q = Peak run-off rate in cubic feet per second

C = Run-off coefficient

I = Storm intensity in inches per hour

A = Drainage tributary area in acres

"C" values were taken from the run-off coefficient chart shown in the appendix that follows.

Due to the limited size of the basin, the fact that land use is single family, and that receiving lands (Desert Lakes Golf Course) are available, detention/retention ponding is not proposed.

Offsite Flow

Historical flows are routed to the site via the existing Desert Lakes Golf Course. A hydrology report prepared by South Point Consultants indicated flows of:

 $Q_{10} = 1518$ cfs



Holland West performed a HEC I hydrology analysis as a check of the SPC report and determined flows to be:

 $Q_{10} = 1393 \text{ cfs}$

Qio = 3224 cfs

This is a 15% discrepancy for the 100-year storm event and a 9% for the 10-year event. For the purpose of this report Holland West, Inc. used the more conservative flows shown in the SPC report. A channel paralleling the west property line sized to accommodate the SPC 100 year flow of 3800 cfs is proposed to pass the historic flow. The specifications of this channel are located in the appendix that follows. The east bank will be armored to abate prosion and channel degradation effects.

Onsite Flow

on-site flows were calculated for the 10 year and 100 year storm event and are located in the appendix of this report. Historic flows were also calculated. The site was divided into three basins, Basins A, B, & C will discharge into the Desert Lakes Golf Course via an existing down drain at the north end of Lipan Court as shown on the accompanying drawing. Basin A will discharge via a proposed concrete run-down at the end of Lipan Circle into the proposed channel. After Interest 100 to the proposed channel. After Interest 100 to the proposed channel.

CONCLUSION

The development of this site will generate approximately 23 lots on 5.0 acres. The channelization of offsite flows will remove the 100 year flood from the buildable areas and will be used to convey

5

historic and developed runoff through the site and control flooding. Lots within the FEMA "Zone At lood plain will have to be removed by means of a letter map amendment. All drainage appurtenances are designed and detailed on the drainage plan. All offsite drainage will be diverted to the proposed channel. All discharges from the proposed site have been accounted for and are consistent with downstream designs and historical routes.

6

REFERENCES

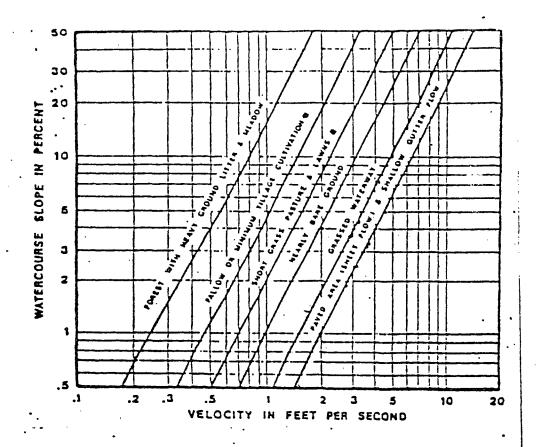
- National Flood Insurance Program. Flood Insurance Rate Map. Mohave County, Arizona (Unincorporated Areas). Panel 244 of 3450. Map Revised September 16, 1988.
- Hydrologic Design for Highway Drainage in Arizona, Arizona Highway Department. Bridge Division, Revised March 1969.
- 3. Hydrology Report Desert Lakes Golf Course and Estates Tract No. 4076-A by South Point Consultants. March 7, 1989 (Composite Report.)

A-495

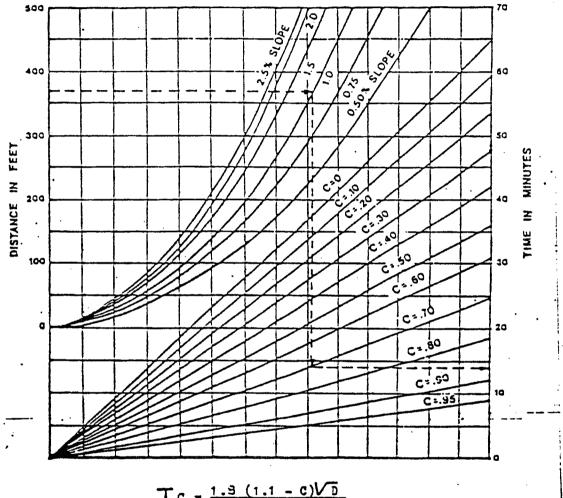
RUNOFF CO-EFFICIENTS FOR USE WITH THE RATIONAL FORMULA Q = CIA

Land Use	C Value
Paved Street or Parking Lot	0.95
Commercial Areas .	0 .90
Residential Areas (Average lot zoning)	0.45
Townhouses	0.55 .
Apartments and Condominiums	0.65
Parks and Grassed Areas (no irrigation)	0.20
Railroad Yards	0.25
Undeveloped Desert	0.35
Mountain Terrain — slopes greater than 10%	6.70
Industrial Areas	0.90
Agricultural Areas	0.20

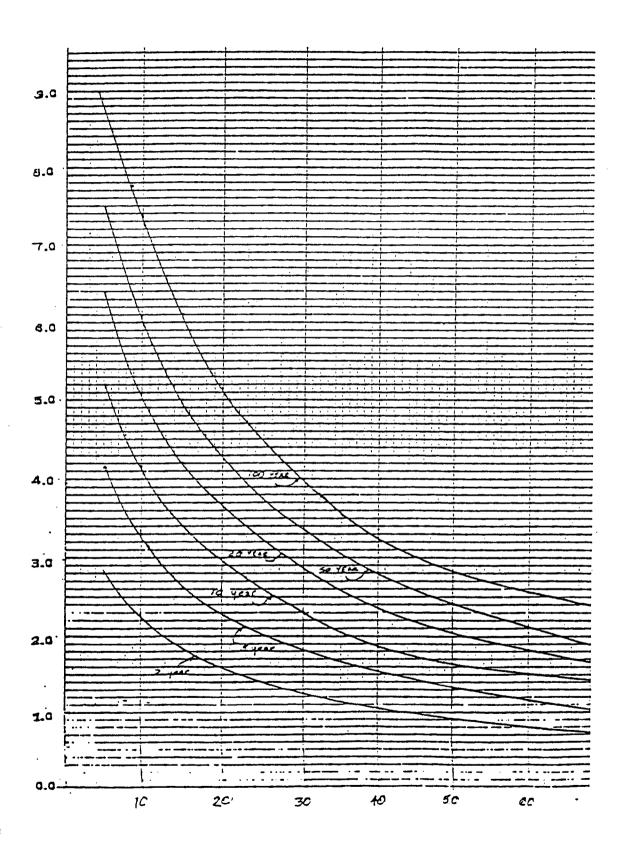
FROM STORM DRAINAGE DESIGN MANUAL CITY OF PHOENIX

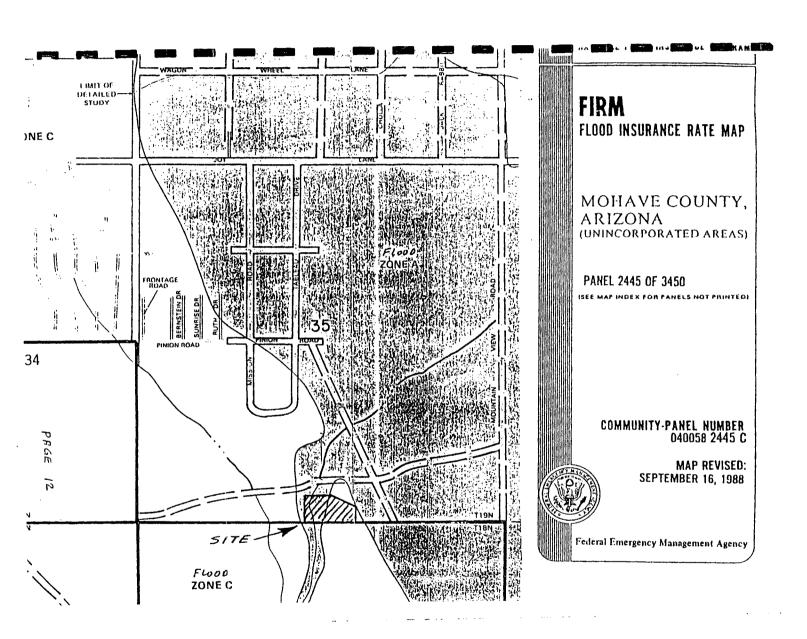


ESTIMATE OF AVERAGE FLOW VELOCITY FOR USE WITH THE RATIONAL FORMULA.



OVERLAND TIME OF FLOW CURVES







HULLAND VVES 1, IN

8920 South Holly Circle Suite 100 Englewood, Colorado 80112 203,773,0020

P.O. Box 699 1800 Highway 95, Suite 5 Bullhead City, AZ 86442 (602) 763-6996

Project	Job No
Title	
By date	Checked date
Scale	Sht of

Project Name: Title: PESERT LAKES 5 CHANNEL CALCS.

JN: 505.05

Date: 2-13-96

8:

Filename:

s= 1.00 Slope

40 Bottom Vidth of Channel

z= 4 Side Slope (z:1)

n= 0.035 Manning's n-value

i= 0.10 Depth Increment

		Table of V	lalues					
Depth	Area	Vetted	Vater		Velocity	Slape	Discharge	
		Perimeter		Number				
Y	A	¥P	A	FR	Ų	S	Q	
(ft)	(sq.ft.)	(ft)	(ft)		(fps)	(%)	(cfs)	
3.50	189.00	68.86	68.00	0.882	8.35	1.00		410
3.60	195.84		68.80	0.886	8.48	1.00		
3.70	202.76	70.51	69.60	0.889	8.61	1.00		
3.80		71.34	70.40	0.892	8.74	1.00		•
3.90	216.84	72.16	71.20	0.895	8.87	1.00	1922.29	:
4.00	224.00	72.98	72.00	0.898	8.99	1.00	2013.92	•
4.10	231.24	73.81	72.80	0.901	9.11	1.00	2107.73	
4.20	238.56	74.63	73.60	0.904	9.24	1.00	2203.72	. •
4.30	245.96	75.46	74.40	0.907	9.36	1.00	2301.90	
4.40	253.44	76.28	75.20	0.910	9.48	1.00	2402.28	
4.50	261.00	77.11	76.00	0.913	9.60	1.00	2504.87	
4.60	268.64	77.93	76.80	0.915	9.71	1.00	2609.69	
4.70	276.36	78.76	77.60	0.918	9.83	1.00	2716.75	
4.80	284.16	79.58	78.40	0.921	9.95	1.00	2826.05	
4.90	292.04	80.41	79.20	0.923	10.06	1.00	2937.61	
5.00	300.00	81.23	80.00	0.926	10.17	1.00	3051.44	
5.10	308.04	82.06	80.80	0.928	10.28	1.00		
5.20	316.16	82.88	81.60	0.931	10.39	1.00	3285.96	
5.30	324.36	83.70	82.40	0,933	10.50	1.00	3406.66	
5.40	332.64	84.53	83.20	0.935	10.61	1.00	3529.69	
5.50	341.00	85.35	84.00	0.938	10.72	1.00	3655.04	
45.30	4349,44	# 86 18 W	ESE EU	- A. (II)	a(),331	(0.18	-diction	
5.70	357.96	87.00	85.60	0.942	10.93	1.00	3912.77	
5.80	366.56	87.83	86.40	0.944	11.04	1.00	4045.18	
5.90	375.24	88.65	87.20	0.946	11.14	1.00	4179.96	
6.00	384.00	89.48	88.00	0.948	11.24	1.00	4317.13	
6.10	392.84	90.30	88.80	0.951	11.34	1.00		
6.20	401.76	91.13	89.60	0.953	11.45	1.00		
								•

* PER SEC. A-A ON PLAK

CALION					OMPL	JTED !	BY:	r. i+.	ί _{γ .}	DE 21	DATE	URM.	0-1	7-9	O	RENCE INTER
Street	Design Point	Areo	A (ocres)	С	CA	∑ CA (acres)		10	70		0	Shoe	Long.	VEL.	_∆t (min.)	
HIST.	0	SITE	9,5	0.2	1.9	-			l		7.8				10	
HIST OYEAR	(b)	SITE	9.5	0.2	1.9	-			10	7. 2	13.7	1%	600	/	10	
																• .
DEV.	()	A	4.2	0.45	1.9		4	6	10	4,1	7.6	1.0	701.	2,0	6	·.
OEU O YR	2	В	<i>5</i> .3	0.45	2.4	-	4	5	9	4.1	9.6	0.8	500	ĺυ	5	÷
									.							
PEU. 100 YK.	()	A	4.2	0.45	1.9	-	4.	5	9	7.4	já j	1.0	700	2.0	6	
DEU OO YX.	2	B	5.3	0.45	2.+	-	f	5	9	7.4	178	0.8	5 (X)	l.i)	5	
											`,					

Project Name: Desert Lakes 5
Title: v* Channel
JN: 505.05 Date: Feb. 1991

Filename:

s= 5.00 Slope

B= 1 Bottom Width of Channel

z= 1 Side Slope (z:1)

n= 0.013 Manning's n-value

i= 0.10 Depth increment

0

		Table of V	alues					
Depth	Area	Wetted Perimeter	Water Width	Froude Number	Velocity	Siope	Discharge	
Y	Å	UP	Ų	FR	Ų	S	Q	
(ft)	(sq.ft.)	(ft)	(ft)		(fps)	· (%)	(cfs)	
0.10	0.11	1.28	1.20	2.901	4.98	5.00	0.55	
0.20	0.24	1.57	1.40	3.124	7.34	5.00	1.76	
0.30	0.39	1.85	1.60	3.242	9.08	5.00	3.54	
0.40	0.56	2.13	1.80	3.322	10.51	5.00	5.89	
0.50	0.75	2.41	2.00	3.383	11.76	5.00	8.82	
0.60	0.96	2.70	2.20	3.434	12.87	5.00	12.36	
0.70	1.19	2.98	2.40	3.478	13.90	5.00	16.54	
0.80	1.44	3.26	2.60	3.518	14.86	5.00	21.39	
0.90	1.71	3.55	2.80	3.554	15.76	5.00	26.95	
1.00	2.00	3.83	3.00	3.588	16.62	5.00	33.25	

SECTION B-B PER PLAN

(i)			
	LINE	ID	12345678916
	1	ID	DESERT LAKES, FILING NO. 5, OFFSITE DRAINAGE ANALYSIS
	2	ID	SCS UNIT HYDROGRAPH METHOD
m	3	ID	10- YEAR, 24-HOUR STORM
	4	ID	HOLLAND WEST, INC.
	5	ID	NOVEMBER 26, 1990
	•	••	E A A BAA .

X	X	XXXXXXX	XΧ	XXX		X		
Ï	χ	X	X	Ĭ		XX		
X	X	X	, χ			X	10	VEDE
XXXX	XXX	XXXX	X		XXXXX	X	10	YEAR
X	X	X	X			X		
X	X	X	ĭ	X		X		
X	X	XXXXXXX	XX	XXX		XXX		

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1OB, AND HEC1KH.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE, SINGLE EVENT DANAGE CALCULATION, DSS:WRITE STAGE FREQUENCY, DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE: GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

. ,	• .	
NO.	SCHEMATIC DIA	AGRAM OF STREAM NETWORK
E SOUTH	(V) ROUTING	(>) DIVERSION OR PUMP FLOW
NO.		(<) RETURN OF DIVERTED OR PUMPED FLOW
	OS1 OFF ALSO COMPUTED AT	THIS INVATION
	G., 11600 1011 1122 117	
V.		
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8		
e.		•
(

#FLOOD HYDROGRAPH PACKAGE (HEC-1) #FEBRUARY 1981 #FEVISED OI JUN 88 #FRUN DATE 11/26/1990 TIME 14:43:23 #FRUN DATE 14:43:23 #FRUN DATE 11/26/1990 TIME 14/26/1990 TIME 14/26/1990 TIME 14/26/1990 TIME 14/26/1990 TIME 14/26/1990 TIME 14/26/1990 TIME

U.S. ARMY CORPS OF ENGINEERS
THE HYDROLOGIC ENGINEERING CENTER
609 SECOND STREET
DAVIS, CALIFORNIA 95616
(916) 551-1749
#

DESERT LAKES, FILING NO. 5, OFFSITE DRAINAGE ANALYSIS SCS UNIT HYDROGRAPH METHOD 10- YEAR, 24-HOUR STORM HOLLAND WEST, INC. NOVEMBER 26, 1990

7 IO OUTPUT CONTROL VARIABLES

IPRNT 4 PRINT CONTROL

IPLOT O PLOT CONTROL

QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN 5 MINUTES IN COMPUTATION INTERVAL

IDATE 1 0 STARTING DATE
ITIME 0000 STARTING TIME

NO 300 NUMBER OF HYDROGRAPH ORDINATES

NDDATE 2 0 ENDING DATE
NDTIME 0055 ENDING TIME
ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS

DRAINAGE AREA SQUARE MILES PRECIPITATION DEPTH INCHES

LENGTH, ELEVATION FEET

FLOW CUBIC FEET PER SECOND

STORAGE VOLUME ACRE-FEET

SURFACE AREA ACRES

TEMPERATURE DEGREES FAHRENHEIT

8 KK # OS1 # OFF-SITE BASIN OS1

3 KC OUTPUT CONTROL VARIABLES

IPRNT 3 PRINT CONTROL
IPLOT 2 PLOT CONTROL

QSCAL 0. HYDROGRAPH PLOT SCALE

SUBBACIN NUMBER BATA

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g ် ဥပ္ပ
           - SUPPACIN CHARACTERISTICS
                        11.85 & JIN AREA
                 TAREA
             PRECIPITATION DATA
                                DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
             ..... HYDRO-35 .....
                                ..... TP-40 .....
                                                                  ..... TP-49 .....
            5-MIN 15-MIN 60-MIN
                                2-HR
                                        3-HR
                                               6-HR 12-HR 24-HR
                                                                   2-DAY 4-DAY 7-DAY 10-DAY
              .03 .10 .37
                                .73
                                       1.10
                                               2.20
                                                    2.40
                                                            2.60
                                                                  .00
                                                                         .00
                                                                                .00 .00
                                         STORM AREA = 11.85
            SCS LOSS RATE
                 STRTL
                             .35 INITIAL ABSTRACTION
                 CRYNBR
                            85.00 CURVE NUMBER
                             .00 PERCENT IMPERVIOUS AREA
                 RTIMO
            SCS DIMENSIGNLESS UNITGRAPH
12 00
                  TLAG
                         3.30 LAG
                                                    ***
                                               UNIT HYDROGRAPH
                                          200 END-OF-PERIOD ORDINATES
                                                                                      247.
                   26.
                           38.
                                    51.
                                           81.
                                                    111.
                                                           141.
                                                                     171.
                                                                             203.
           13.
                                   426.
                                                     529.
                                                                                      802.
           286.
                   324.
                           375.
                                            478.
                                                             597.
                                                                      665.
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                          1045.
                                   1126.
                                           1195.
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           882.
                   963.
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           467.
                                          268.
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                   306.
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                                                                                       220.
           319.
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                   203.
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           211.
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23. 22.
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                 HYDROGRAPH AT STATION
                                          120
TOTAL RAINFALL =
                  2.55, TOTAL LOSS = 1.33, TOTAL EXCESS =
CAK FLOW
           TIME
                                    MAXIMUM AVERAGE FLOW
(CFS)
1393.
          (HR)
                             6-HR
                                      24-HR
                                                72-HR
                                                         24.92-HR
                            1093.
                                       374.
                                                 360.
                                                          360.
          16.83
                    (CFS)
                             .858
                                      1.173
                                                1.173
                                                           1.173
                  (INCHES)
                                      741.
                                                741.
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                  (AC-FT)
                             542.
                  CUMULATIVE AREA = 11.85 SQ MI
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(O) OUTFLOW

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19005	20	•	•	•	•	•	•	•	•	•		•	•	L.
)010	30	•	•	•	•	•	•	•	•	•		•		L.
)015	4C	'	•	•	•	•		•	•	•		•		
10020	50	•	•	•	•	•	•	•	•	•		•	•	١.
)025	60	•	•	•	•	•	•	•	•	•		•	•	<u>.</u> .
)030	70	•	•	•	•	•	•	•	•	•		•	•	٤.
10035	90	•	•	•	•	•	•	•	•	•		•	•	L.,
		•	•	•	•	•	•	•	•	•		•		ί.
10040	30	•	•	•	•	•	•	•	•	•		•		L.
)045	100	•	•	•	•	•	•	•	•	•		•	•	L.
.3050	110	• • • • •		• • • • •									• • • • •	L.
10055	120	•	•	•	•		•	•	•	•		•		L.
)100	:30	•	•	•	•	•	•	•	•	•		•		L.
)105	140	•	•	•	•	•	•	•	•	•		•		L.
10110	150	•	•	•	•	•	•	•	•	•		•		L.
)115	180	•	•	•	•	•	•	•	•			•		L.
0120	170	•		•		•	•	•	•	•		•	•	L.
:0125	195	•	•	•		•		•	•	•	•	ı	•	L.
10130	190	•		•	•			•	•		,	•		<u>.</u> .
)135	200		, •	•	•	•		•	•		•	•	•	L.
)140	210													L.
10145	220		•	•		•		•	•	•		·		L.
)159	230		•	•	•	•		•	•			•		L.
1155	240		•					•	•	•			. 1	L.
10200	250								•					L.
1)205	260		•									,		L.
)210	270											,		L.
19215	280							•						L.
10220	230					•						1		L.
1225	300				i									L.
1230	310													L.
10235	320													L.
1240	330					•								L.
245	340													L.
10250	350											,		L.
11255	360													L.
300	370					•								L.
305	380												. 1	L.
10310	390	-												L.
315	400						_							Ŀ.
320	410		·											 I.
10325	420													L.
)330	430	•	•	•	•	•		•		•				L.
335	446		•	•	·									L.
540	450	•	•		·	•		•						<u>.</u>
0345	460	•	•	•	•	•		•	•					
350	470	•	•	•	•	•	•	•	•	•				 L.
3 5 5	480	•	•	•	•	•	•	•	•	•	•		,	L.
0400	490	•	•	•	•	•	•	•	•	•	•			L.
405	500	•	•	•	•	•	•	•	•	•	•		· ·	-• .
410	510	•	•	•	•	•	•	•	•	•	•			
717	520				• • • • •									-• !
0415	520 530	•	•	•	•	•	•	•	•	•	•			L.
1420		•	•	•	•	•	•	•	•	•	•			
425	540	, •	•	•	•	•	•	•	•	•	•			L.
430	550	•	•	•	•	•	•	•	•	•	•			L.
0435	560	•	•	•	•	•	•	•	-					

10440	570	•						•				•		
1445													1	
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1450	590										•		. L.	
.0455														
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10500	610 .												L.	
:505	620												. L.	
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10515	640		•		•	•	•					,	. i.	
1520														
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1525	66C		•	•	•	•	•	•	•	•		•	. L.	
10530	670												. L.	
19535														
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1540	630			•	•		•		•	•		•	. L.	
J545	700		_	_	_	_	_	_	_				. 1.	
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10550	710.			. .					• • • •					
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)600														
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10605	740		•	•		•	•	•		•		ı	. L.	
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10620	770		•					•	•				. L.	
10625	780		_	_	_			_	_				. 1	
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(23)	790		•	•	•	•	•	•		•)	. L.	
J635	800					,		,					. Ł.	
10640	910 .												1	
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)650	930							•					. L.	
10555													1	
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10700	850		•	•	•	•	•	•	•	•	•	i.	. L.	
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)720	830			_		_			_				. L.	
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)725	300		•	•		i	•	,	•	•				
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)735	920		_										. L.	
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)740	930		•	•	•	•	•		•	•	•		. L.	
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)925 (0930)935)940	1140 1150 1160 1170		•	•	•		•				· ·	LLLLLI		
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)925 (0930)935)940 (0945	1140 1150 1160 1170 1180 1190		• • • •	•			•		•			LLLLLI LLLLLI LLLLLI	LLLLLLLLXX. LLLLLLLXX. LLLLLLLXX.	
)925 (0930)935)940 (0945 (0950)955	1140 1150 1160 1170 1180 1190 1200		•	•			•		•	• •	· .	LLLLLI LLLLLI LLLLLI	LLLLLLLXX. LLLLLLLXX. LLLLLLLXXX.	
)925 (0930)935)940 (0945 (0950)955	1140 1150 1160 1170 1180 1190 1200		•	•			•		•	1	· .		LLLLLLLXX. LLLLLLXXX. LLLLLLXXX. LLLLLLXXX.	
)925 (0930)935)940 (0945	1140 1150 1160 1170 1180 1190 1200 1210 .			•			•		•	• •	· .		LLLLLLLXX. LLLLLLLXX. LLLLLLLXXX.	

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11030 1270		•	•		•	•			. LLLLLLLLLXXXXX.
.035 1280								_	. LLLLLLLLLXXXXX.
.1040 129.0	•		•		•	•		•	
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RUNOFF SUMMARY FLOW IN CUBIC FEET PER SECOND TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK Flow	TIME OF PEAK	AVERAGE FI 6-HOUR	LOW FOR MAXII 24-HOUR	MUM PERIOD 72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	051	1393.	16.83	1093.	374.	360.	11.65		

MORREL END OF HEC-1 +++

SPC. REPORT = 1518 CFS

FLOOD HYDROGRAPH PACKAGE (HEC-1) #
FEBRUARY 1981 #
REVISED 01 JUN 88 #

RUN DATE 11/26/1990 TIME 14:38:53 #

U.S. ARMY CORPS OF ENGINEERS

* THE HYDROLOGIC ENGINEERING CENTER #

* 609 SECONG STREET #

* DAVIS, CALIFORNIA 95515 *

* (910) 551-1748 *

*

100 YEAR

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC! (JAN 73), HECIGS, HECIDB, AND HECIKW.

THE DEFINITIONS OF VARIABLES -RTINP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION-NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE, SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY, DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

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HEC-1 INPUT
                                                                             PAGE 1
LINE
           DESERT LAKES, FILING NO. 5, OFFSITE DRAINAGE ANALYSIS
  1
           ID
  2
                   SCS UNIT HYDROGRAPH METHOD
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                   100-YEAR, 24-HOUR STORM
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                   HOLLAND WEST, INC.
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SCHEMATIC DIAGRAM OF STREAM NETWORK

INE

(V) ROUTING

(--->) DIVERSION OR PUMP FLOW

1.

(.) CONNECTOR

(<---) RETURN OF DIVERTED OR PUMPED FLOW

8

051

***) RUNOFF ALSO COMPUTED AT THIS LOCATION

FLOCT HYDROGRAPH PHOKOGE (MCC-1) FEBRUARY 1981 REVISED OI JUN 88 RUN DATE 11/26/1990 TIME 14:38:53 #

U.S. ARMY CORPS OF ENGINEERS * THE HYDROLOGIC ENGINEERING CENTER * 609 SECOND STREET DAVIS, CALIFORNIA 95616 (916) 551-1748

DESERT LAKES, FILING NO. 5, OFFSITE DRAINAGE ANALYSIS SCS UNIT HYDROGRAPH METHOD 100-YEAR, 24-HOUR STORM HOLLAND WEST, INC. NOVEMBER 25, 1990

OUTPUT CONTROL VARIABLES 7 10

...........

IPRNT 4 PRINT CONTROL

IPLOT

O PLOT CONTROL

QSCAL

O. HYDROGRAPH PLOT SCALE

HYDROGRAPH TIME DATA

NMIN

5 MINUTES IN COMPUTATION INTERVAL

IDATE

1 0 STARTING DATE

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300 NUMBER OF HYDROGRAPH ORDINATES 2 O ENDING DATE

BHITON

0055 ENDING TIME .

ICENT

19 CENTURY HARK

COMPUTATION INTERVAL

.08 HOURS

TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS

DRAINAGE AREA

SQUARE MILES

PRECIPITATION DEPTH INCHES

LENGTH, ELEVATION

FEET

FLOW

CUBIC FEET PER SECOND

STORAGE VOLUME

ACRE-FEET

SURFACE AREA

ACRES

TEMPERATURE

DEGREES FAHRENHEIT

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OFF-SITE BASIN OSI
        ***********
           CUTPUT CONTROL VARIABLES
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                     3 PRINT CONTROL
                IPLOT
                          2 PLOT CONTROL
                QSCAL
                          O. HYDROGRAPH PLOT SCALE
          SUBBASIN RUNOFF DATA
           SUBBASIN CHARACTERISTICS
             TAREA 11.85 SUBBASIN AREA
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                            DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
  H9 0
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HAXIMUM AVERAGE FLOW

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EAK FLOW

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RUNOFF SUMMARY FLOW IN CUBIC FEET PER SECOND TIME IN HOURS, AREA IN SQUARE MILES

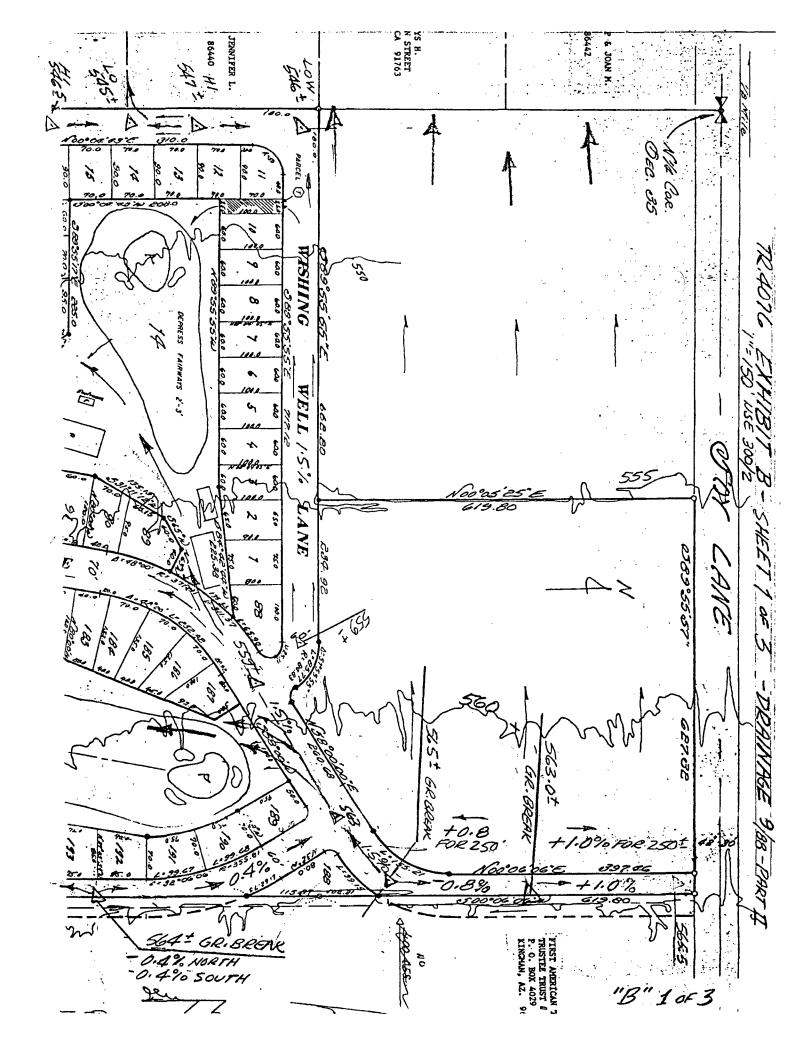
PEAK AVERAGE FLOW FOR MAXIMUM PERIOD TIME OF BASIN MAXIMUM TIME OF 6-HOUR 24-HOUR OFERATION STATION FLOW PEAK 72-HOUR AREA STAGE MAX STAGE

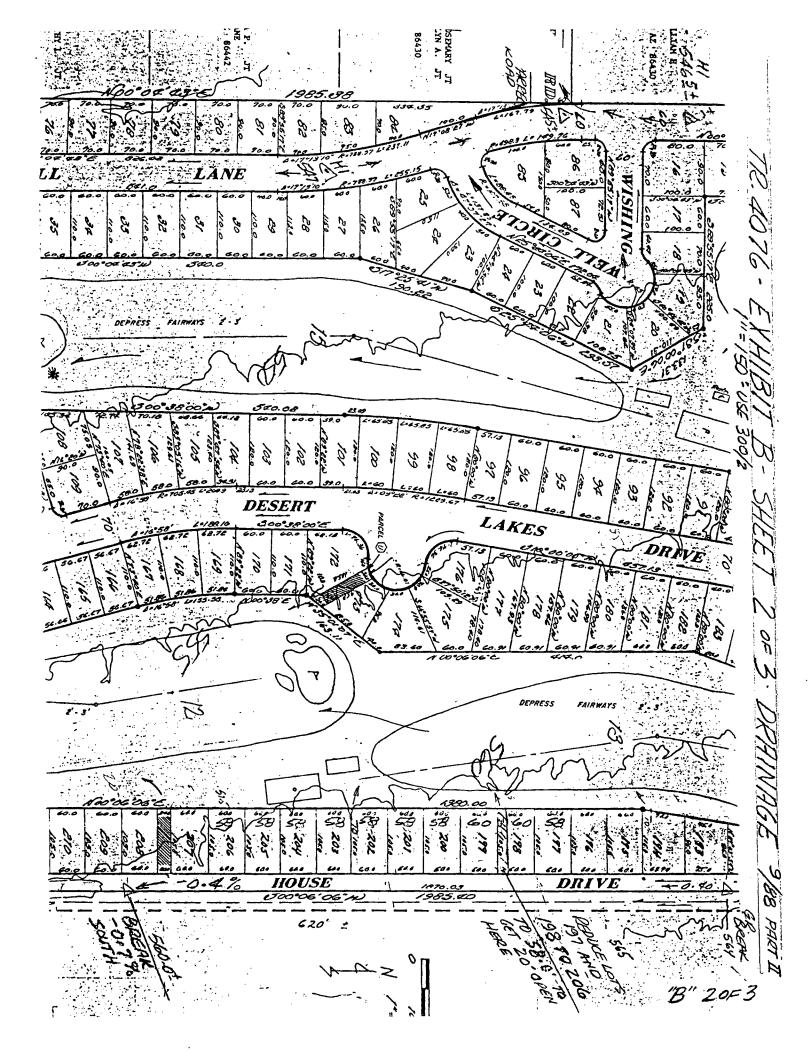
HYDROGRAPH AT 051 3224. 15.58 2277. 731. 704. 11.85

NORMAL END OF HEC-L ###

100 YEAR

SPC REPORT = 3800 CFS





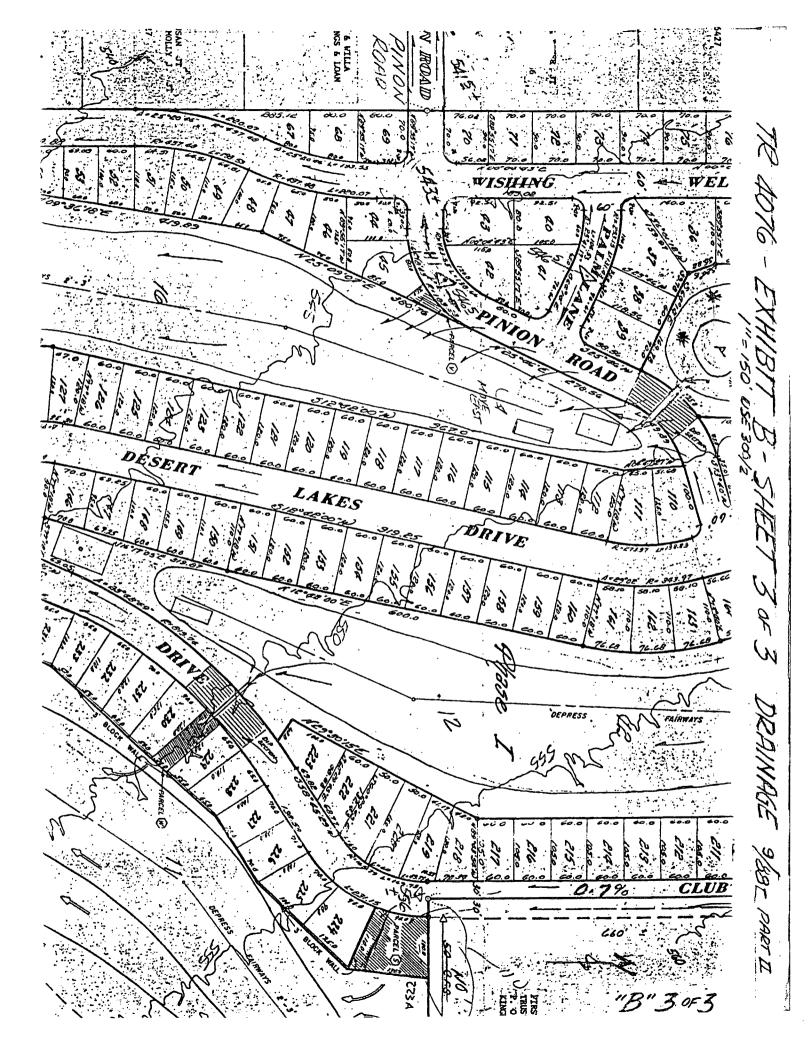


Exhibit C Drainageway Analysis 3 pages

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DESERT LAKES GOLF COURSE & ESTATES DRAINAGEWAY ANALYSIS

JULY, 1995



prepared by

RAYMOND W. STADLER 2106 North 24th Street, Suite H Phoenix, Arizona 85008 THE PURPOSE OF THIS REPORT IS TO ANALYZE

THE SPECIFIC DRAINAGE CHARACTERISTICS OF THE

DRAINAGEWAYS SHOWN ON FIGURE I. THE ANALYSIS

WILL BE BASED ON THE ORIGINAL DRAINAGE REPORT

FOR THE DESERT LAKES GOLF COURSE AND ESTATES

SUBDIVISION AND THE PEAK FLOWS PRESENTED THEREIN

FOR EACH OF THOSE DRAINAGEWAYS.

THE DRAINAGE STUDY IDENTIFIES 19 DRAINAGEWAYS
TO BE IMPROVED BY CONSTRUCTION OF A CHANNEL
CONSISTING OF MASONRY WALLS WITH ASPHALT PAVED
INVERT. ADDITIONALLY, THE CONSTRUCTION PLANS
CALL OUT ANOTHER 9 LOCATIONS FOR INSTALLATION
OF A SIMILAR CHANNEL. IN 21 OF THESE 28
LOCATIONS THE MASONRY SIDE WALLS HAVE BEEN
CONSTRUCTED, HOWEVER PAVEMENT HAS NOT BEEN
INSTALLED IN THE BOTTOM. ONE CHANNEL (PARCEL R)
IS COMPLETE WITH A CONCRETE BOTTOM WHICH ALSO
SERVES AS A CART PATH. IN PARCEL J THE WALLS
HAVE BEEN CONSTRUCTED AND THE BOTTOM HAS A 6
FOOT WIDE CART PATH WITH UNPAVED AREAS ON EACH
SIDE. IN THE REMAINING 5 LOCATIONS VARIOUS
CONDITIONS EXIST WHICH WILL BE MORE PARTKULARLY
DESCRIBED IN SUBSEQUENT SECTIONS OF THIS REPORT.

THE FOLLOWING TABLE LISTS THE 28 DRAINAGENAYS
MENTIONED ABOVE WITH THE ANTICIPATED PEAK FLOW
IN EACH, THE WIDTH OF CHANNEL AS IT CURRENTLY
LEXISTS, THE ESTIMATED DEPTH OF FLOW AND VEICLITY
BASED ON THE PEAK FLOW STATED. THE FLOW CALCULATIONS
FOR EACH DRAINAGEWAY ARE INCLUDED IN APPENDIX A

E. PARCELS A. B., G., S., BB, CC, SS, WW.

THE PARCELS LISTED ABOVE WERE IDENTIFIED IN THE DRAINAGE STUDY AS DRAINAGEWAYS AND AN ESTIMATED PEAK FLOW IN EACH WAS SPECIFIED. THE REPORT INDICATED THE INSTALLATION OF A CHANNEL ALONG THESE PARCELS CONSISTING OF MASONRY WALLS WITH AN ASPHALT PAVED INVERT.

AT THE TIME OF THIS REPORT THE MASONRY WALLS HAVE BEEN CONSTRUCTED WITHOUT THE ASPHALT PAVED BOTTOM.

ANALYSIS OF THE PEAK FLOWS IDENTIFIED IN THE ORIGINAL DRAINAGE STUDY WITHIN THE YARIOUS CHANNEL SECTIONS INDICATES VELOCITIES IN EACH CHANNEL IN EXCESS OF 5 FPS.

BASED ON THIS ANALYSIS IT IS RECOMMENDED THAT THAT THE BOTTOM OF THIS CHANNELS BE PAVED AS SPECIFIED IN THE DRAINAGE REPORT AND SHOWN ON THE CONSTRUCTION PLANS.

F. PARCEL AA

PARCEL AA WAS IDENOIFIED IN THE DRAINAGE STUDY AS A DRAINAGEWAY TO HAVE A CHANNEL HAVING MASONRY WALLS AND AN ASPHALT PAVED INVERT.

AT THIS TIME THE PROPOSED CHANNEL HAS NOT BEEN CONSTRUCTED. THE FLOW WHICH WOULD HAVE BEEN BEEN CONCENTRATED IN PARCEL AA HAVE BEEN DIVERTED TO AN EXISTING DRAINAGEWAY ALONG THE SOUTHWESTERLY LINE OF THE DESERT LAKES GOLF COURSE AND ESTATES SUBDIVISION. THIS EXISTING CHANNEL CARRIES THE FLOW SOUTH ALONG THE EAST LINE OF SEWAGE TREATMENT PLANT SITE AND RELEASES IT INTO THE HISTORICAL DRAINAGE PATTERNS TO THE SOUTH.

THEREFORE IT IS RECOMMENDED THAT THE PROPOSED CHANNEL IN PARCEL AA NOT BE CONSTRUCTED AND THE EXISTING CHANNEL BE MAINTAINED TO HANDLE THE RELATIVELY MINOR PEAK FLOW OF 36 CFS. (V=4.3 FPS)

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Exhibit D Fairway Constructors Rental Home And Plot Plan – 2 pages

Tract 4076A Phase I

Exhibit E



TREASURY

ACCOUNT #

MOHAVE COUNTY 2018 PROPERTY TAX STATEMENT Cindy Landa Cox, MBA, Treasurer (928) 753-0737



FAIRWAY CONSTRUCTORS INC 45890 S HIGHWAY 95 STE B
FORT MOHAVE, AZ 86426-6066

PARCEL#

Assessor Description: Section: 35 Township: 19N Range: 22W
DESERT LAKES GOLF COURSE & ESTATES TRACT 4076A PHASE

BLK B LOT 67 CONT 7200 SQ FT
Situs Address: 5629 S DESERT LAKES DR

THANK YOU FOR YOUR PROMPT PAYMENT

TAX RATE PER \$100 ASSESSED VALUE

R0105993	226	11147	10	621	13.	0185		
ASSES	SSMENT		VALUE IN DOLLARS	LEGAL CLASS ASSMT%	ASSESSED VALUE	EXEMPT AMOUNT	TAX RATE	TAX
TAXABLE PROPE	RTY VALUE		176,234	10.0	17,624	0	13.0185	2294.38
TAXABLE PERSO	NAL PROP V	ALUE	0	0.0	0	0	12.5185	0.00
TAXABLE PROPE	RTY VALUE	TOTAL	176,234		17,624	0		\$2,294.38
2017 TAXES	2018 TAXES	TAXIN	G AUTHORIT	Υ	Р	HONE #'S		% of TAX
330.60	347.13	MOHA'	VE COUNTY		(9	28) 753-073	35	15.13%
81.83	83.55	STATE	SCHOOL TA	X EQUALIZATION	l (9	28) 753-567	78	3.64%
384.32	382.33	MOHA'	VE VALLEY S	D #16	()	28) 768-250	07	16.66%
373.09	355.12	COLOR	RADO RIVER	UNION HS #2	(S	28) 788-140)5	15.48%
225.42	236.37	MOHA'	VE COMMUN	ITY COLLEGE	ÌS	28) 757-433	31	10.30%
545.51	572.79	FT MO	HAVE MESA I	FD	2)	28) 768-918	31	24.96%
16.79	17.62	FIRE D	IST ASSIST F	UND	()	28) 753-073	35	0.77%
45.59	47.87	MOHAY	VE COUNTY I	LIBRARY DISTRIC	et (e	28) 692-576	33	2.09%
83.92	88.12	MOHA'	VE COUNTY F	FLOOD CONTROL		28) 757-092		3.84%
3.36	3.52	MO CC	TV CID		()	28) 753-072	29	0.15%
8.39	8.81	WEST	ERN AZ VOCA	ATION ED DIST	2)	28) 753-074	17	0.38%
95.12	95.68	SECON	NDARY SD#16	BUDGET OVER	RID (9	28) 768-250)7	4.17%
77.14	0.00	CRUHS	SD CLASS A B	BONDS	()	28) 788-140)5	0.00%
0.00	55.47	CRUHS	SD#2 CLASS I	B BONDS		28) 788-140		2.42%
0.38	0.38	MOHAY	VE VALLEY IF	RRIG & DRAIN DI		28) 768-332		0.02%
\$2,271.46	\$2,294.76	TOTAL			•	•		100%

TAX

AREA

2018 TAX SUMMARY For the period of January 1 - December 31, 2017							
Total Tax	\$2,294.38						
Special District	0.38						
LESS: State Aid	0.00						
LESS: Prepay	0.00						
TOTAL DUE	\$2,294.76						

PAYABLE UPON RECEIPT

SEE PAYMENT STUB FOR DUE DATE

Mail your check with the corresponding payment stub to:

MOHAVE COUNTY TREASURER PO BOX 712 KINGMAN, AZ 86402

ADDITIONAL INFORMATION

MORE WAYS TO PAY

In Person: Check, Money Order, or Cashier's Check. Cash is accepted in person, during office hours. Your canceled check is your receipt.

<u>Credit Card or Electronic Payment</u> (processing fees will apply):

Call: 1-855-814-6451 or

Visit us Online: www.mohavecounty.us

Using Your Banks Online Banking "Bill Pay" Option: Set up a SEPARATE bill pay payee for EACH PARCEL

Instructions are available on our website:

www.mohavecounty.us

Select: Online Bill Pay Instructions

ANSWERS TO YOUR QUESTIONS

Mohave County Treasurer's Website:

- Copies of tax statements, payment receipts and payment history
- Visit us online: www.mohavecounty.us

Mohave County Assessor's Website:

- Online Address Changes
- Valuation, legal classification, and ownership/address records

Call: 1-928-753-0703 or

Visit the Assessor online: www.mohavecounty.us

FOR YOUR RECORDS 1st HALF PAID CK #	2 ND HALF PAID CK #	OR FULL YEAR PAID CK #
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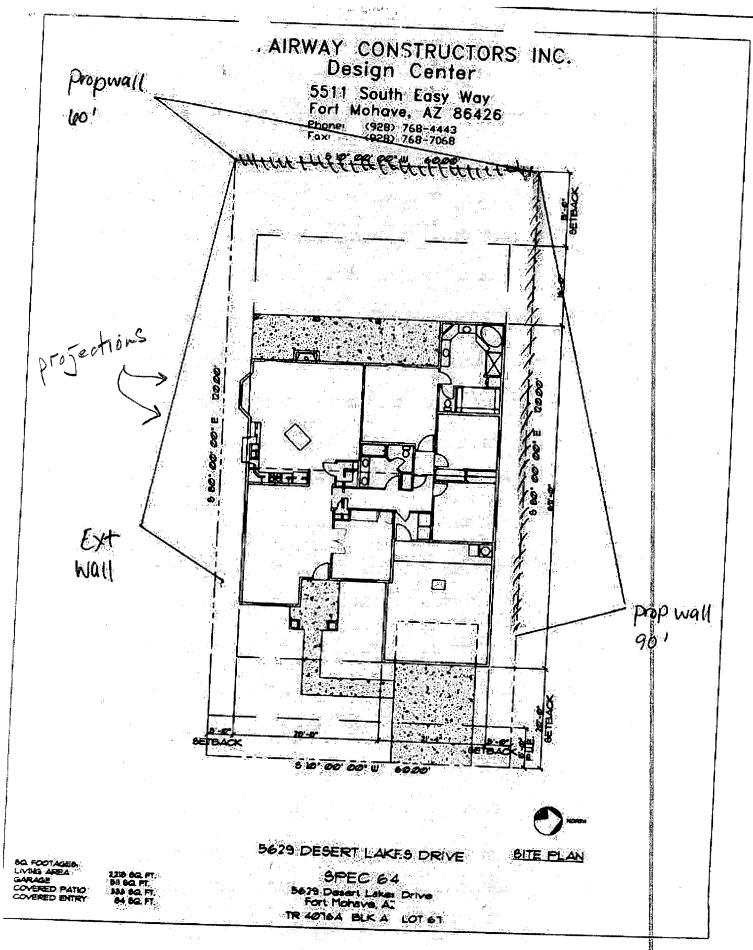


Exhibit E Pages from CC&R Books 1554 and 1641 Grammatical Changes Clause 2 pages

or provisions shall be construed as being void and of no effect as of twenty-one (21) years after the death of the last partners of Desert Lakes Development, or twenty-one (21) years after the death of the last survivor of all of said incorporators children or grandchildren who shall be living at the time this instrument is executed, whichever is the later.

The singular wherever used herein shall be construed to mean the plural when applicable, and the necessary grammatical changes required to make the provisions hereof apply either to corporations or individuals, men or women, shall in-all cases of the corporations of individuals, men or women, shall in-all cases of the corporations of individuals. assumed as though in each case fully expressed.

R-O Single Family Residential, Mobile Romes Prohibited Land Use Regulations. B(1).

> Regulations, as defined and set forth in Mohave County Zoning Ordinance shall apply to the following lots in Tract (4076-A)

> > Lots 1 - 80 Inclusive Block A Lots 1 - 74 Inclusive, Block B Lots 1 - 14 Inclusive, Block @

Lots 1 and 2 Block D/

Lots 1 - 48 Inclusive, Block E Lots 1 - 9 Inclusive, Block F Lots 1 - 14 Inclusive, Block H

Uses Permitted:

Single Family dwelling and accessory structures and uses normally incidental to single family residences, MOBILE HOMES, MANUFACTURED HOMES AND PREFABRICATED HOMES PROHIBITED.

DESERT LAKES DEVELOPMENT L.P. LAWYERS TITLE AGENCY, INC. Delaware Limited Partnership ANGELO RINALDI, President Title: Trust Officer LAGO ENTERPRISES, INC., The General Partner STATE OF ARIZONA COUNTY OF MOHAVE

On this, the TSEN day of Nay before me the undersigned officer, personally appeared ROBERT P. DOUGLASS , who acknowledged himself to be a Trust Officer of LAWYERS TITLE AGENCY, INC., an Arizona corporation, and that he, as such officer being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Trust Officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: February 12, 1992



and in the event that one or more of the phrases, sentences, clauses, paragraphs or sections contained therein should be invalid or should operate to render this agreement invalid, this agreement shall be construed as if such invalid phrase or phrases, sentence or sentences, clause or clauses, paragraph or paragraphs, or section or sections had not been inserted. In the event that any provision or provisions of this instrument appear to be violative of the Rule against Perpetuities, such provision or provisions shall be construed as being void and of no effect as of twenty-one (21) years after the death of the last partners of Desert Lakes Development, or twenty-one (21) years after the death of the last survivor of all of said incorporators children or grandchildren who shall be living at the time this instrument is executed, whichever is the later.

22. The singular wherever used herein shall be construed to mean the plural when applicable, and the necessary grammatical changes required to make the provisions hereof apply either to corporations or individuals, men or women, shall in all cases be assumed as though in each case fully expressed.

B(1). Special Development Residential SD-R Single Family Residential, Mobile Homes Prohibited Land Use Regulations.

Uses Permitted:

Single Family dwelling and accessory structures and uses normally incidental to single family residences; MOBILE HOMES, MANUFACTURED HOMES AND PREFABRICATED HOMES PROHIBITED.

LAWYERS TITLE AGENCY, INC., as Trustee

By War Officer

By Trust Officer

STATE OF ARIZONA

DESERT LAKES DEVELOPMENT L.P. a Delaware Limited Partnership

By Resh Grassating

On this, the 6th day of December, 1989, before me the undersigned officer, personally appeared ROBERT P. DOUGLASS, who acknowledged himself to be a Trust Officer of LAWYERS TITLE AGENCY, INC., an Arizona corporation, and that he, as such officer being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Trust Officer.

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IN WITNESS WHEREOF, I hereunto set my hand and pofficial seal.

My Commission Expires: MY COMMISSION EXPIRES MAY 30, 1990.

COUNTY OF MOHAVE

MAY 30, 1990. Notary