

CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

February 7, 2018

John M. Provine, P.E.
Molzen Corbin
2701 Miles Road SE
Albuquerque, NM 87106

**RE: Double Eagle II Airport Hanger Facility
Grading and Drainage Plan
Stamp Date: 01/16/18
Hydrology File: E05D002**

Dear Mr. Provine:

PO Box 1293 Based upon the information provided in your submittal received 01/18/2018, the Grading
Plan is approved for Grading Permit.

Albuquerque If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

NM 87103 *Renée C. Brissette*

www.cabq.gov Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: _____
City Address: _____

Engineering Firm: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☐ ENGINEER/ ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY

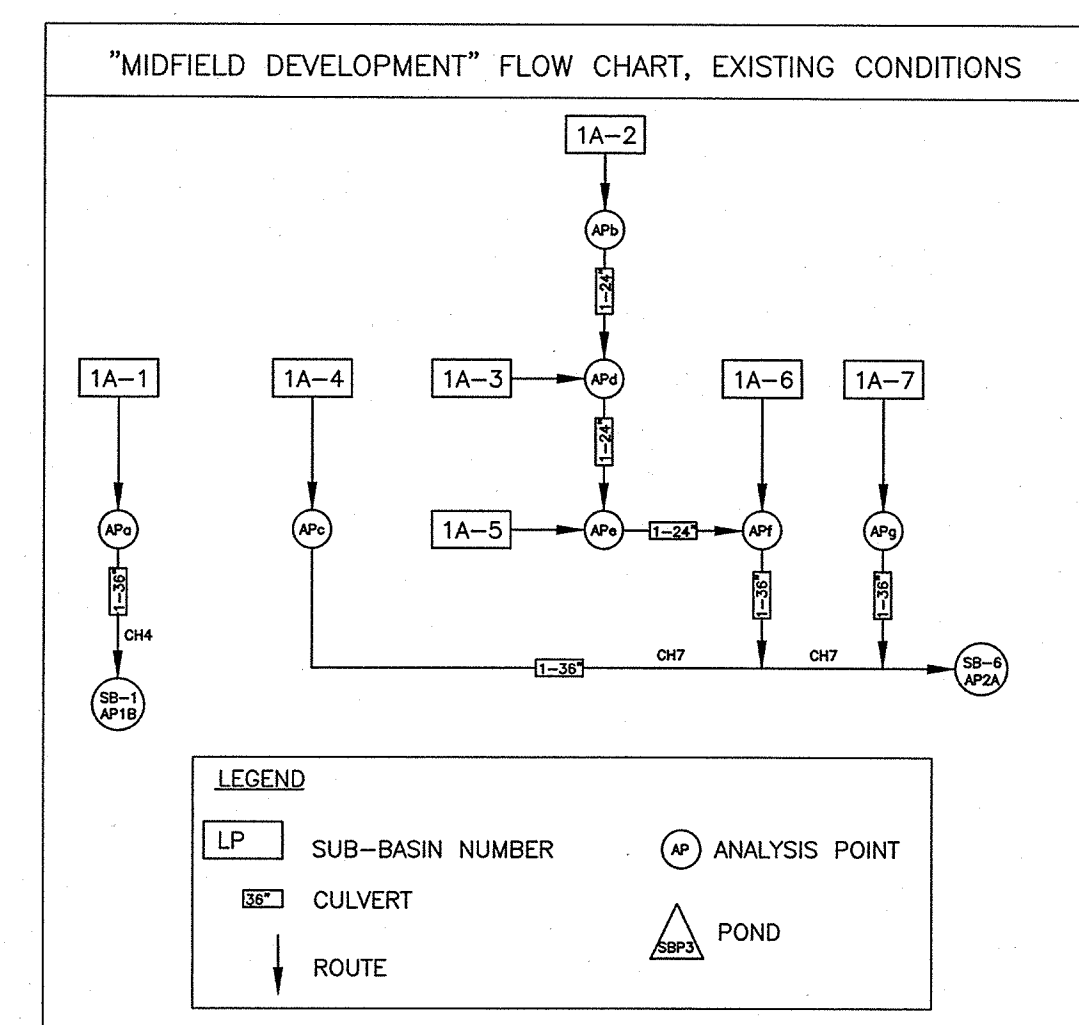
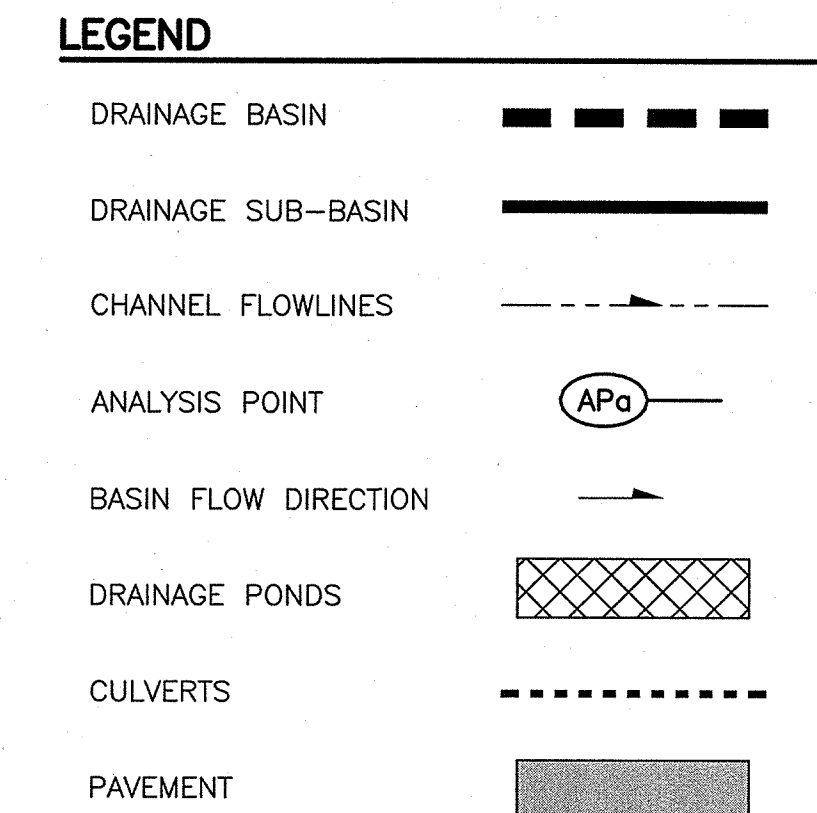
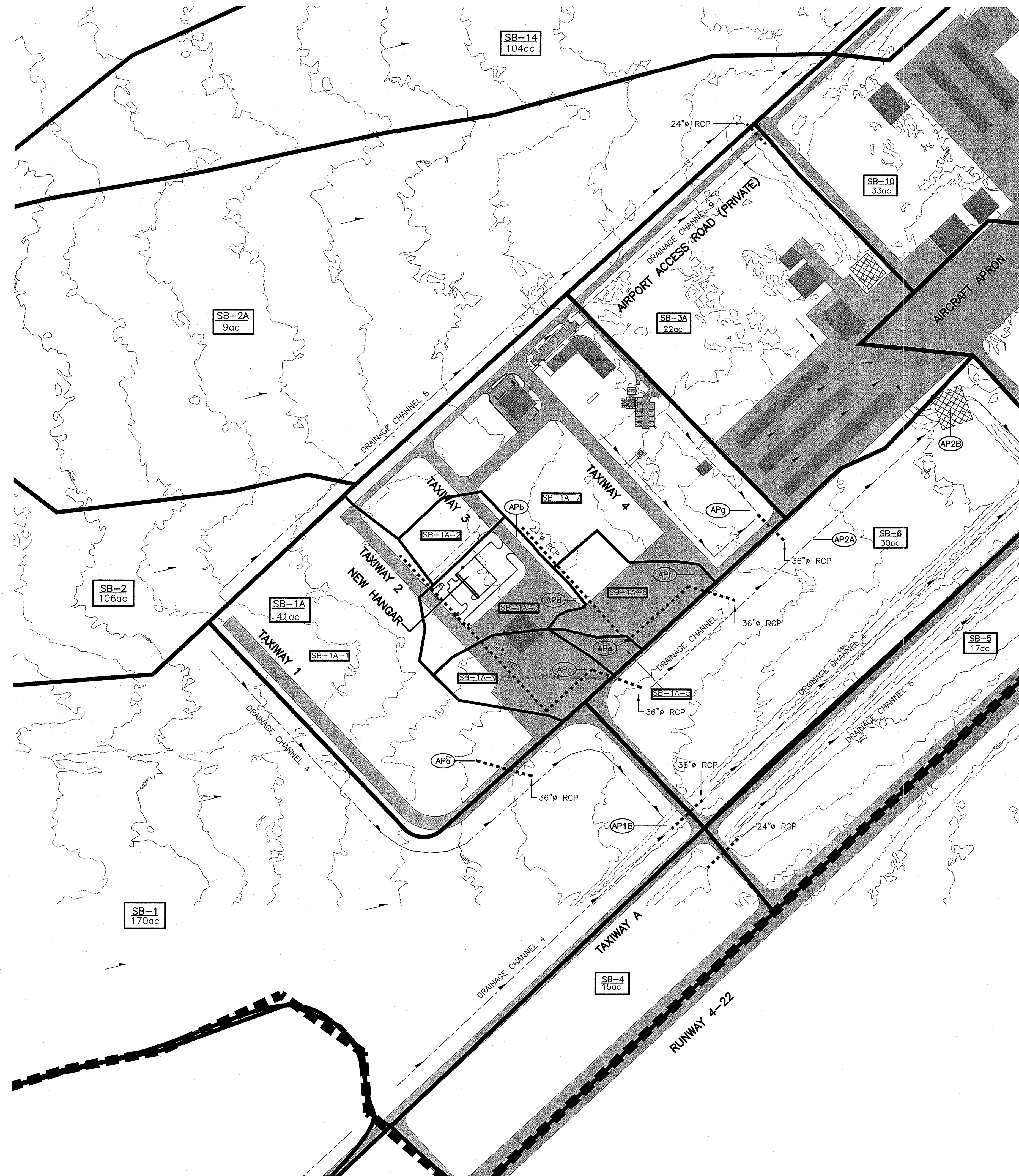
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____



HYDRAULIC ANALYSIS

FIRST FLUSH HYDROLOGY

BASIN CHARACTERISTICS:

SUB BASIN: SB-1a-3	AREA	Q (PEAK)	VOLUME
	0.32 AC	1.35 CFS	0.05 AC-FT

LAND TREATMENT:

	A	B	C	D	TOTAL
	0 AC	0.05 AC	1.48 AC	2.73 AC	4.26 AC

FIRST FLUSH CALCULATIONS:

FIRST FLUSH RUNOFF: 0.34 IN

FIRST FLUSH VOLUME: 0.34 IN x IMPERVIOUS AREA DEVELOPED

[0.34 IN x (1 FT/12 IN)] x [0.89 AC x (43,560 SF/AC)] = 1097.10 CF

POND VOLUMES:

	ELEVATIONS	AREA	AVERAGE END AREA
SOUTH	19.5	143.1	746.8 CF
	20	649.4	
	20.5	1740	
NW	17.5	32.95	315.6 CF
	18	184.1	
	18.5	379.2	
NE	19	660.75	509.0 CF
	18.5	273.65	
	19	744.4	

TOTAL POND VOLUME PROVIDED: 1571.4 CF

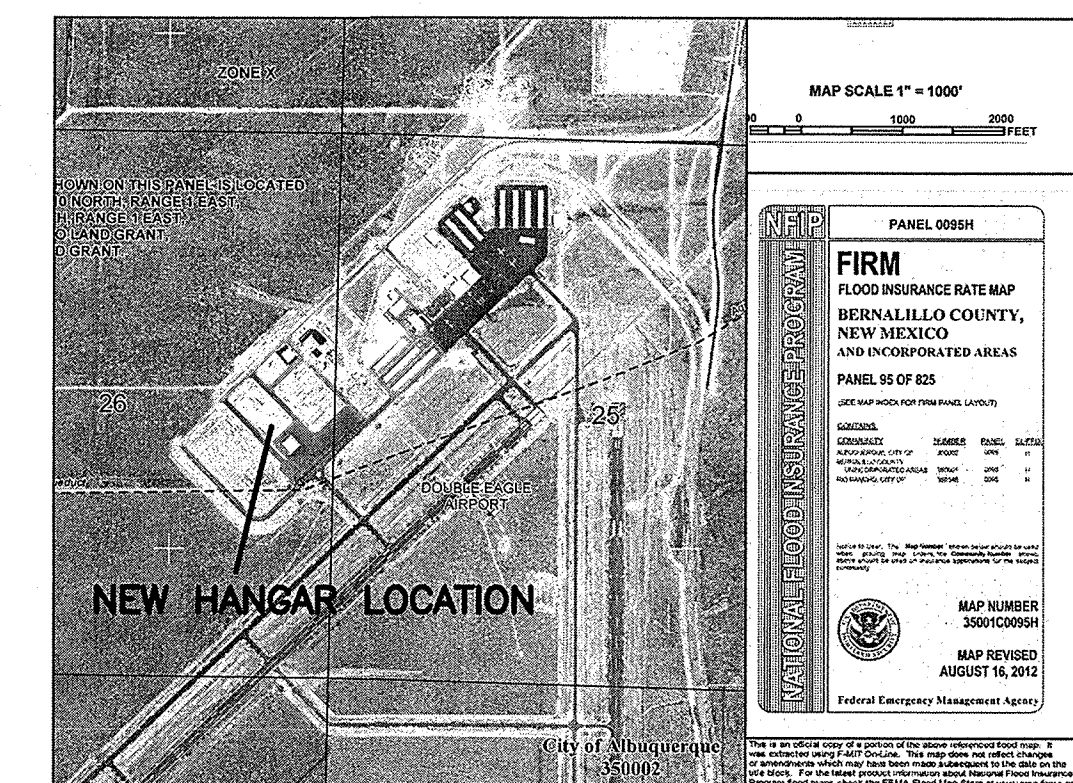
FIRST FLUSH VOLUME NEEDED: 1097.1 CF

BASIN SUMMARY

Sub-Basin	Area (ac)	Reach (ft)	Q _{peak} (cfs)	Runoff Vol. (ac-ft)	Runoff (in.)	Tp (hrs)
Midfield Basins (SB-1A-x)						
SB-1A-1	1.30	1,306.3	1.66	0.12	1.14	1.90
SB-1A-2	0.28	497.9	1.28	0.02	1.19	1.50
SB-1A-3	0.32	662.5	1.35	0.05	1.76	1.50
SB-1A-4	0.31	695.8	1.28	0.04	1.60	1.50
SB-1A-5	0.06	326.9	0.31	0.01	2.06	1.50
SB-1A-6	1.96	1,592.5	1.35	0.05	1.76	1.50
SB-1A-7	0.34	554.7	5.82	0.23	1.40	1.57

ANALYSIS POINTS

Sub-Basin	Area (ac)	Q _{peak} (cfs)	Runoff Vol. (ac-ft)	Runoff (in.)	Tp (hrs)
Midfield Development AP's					
AP a	0.0020	1.66	0.12	1.15	1.90
AP b	0.0004	0.86	0.03	1.20	1.53
AP c	0.0005	1.28	0.04	1.60	1.50
AP d	0.0009	2.15	0.07	1.51	1.50
AP e	0.0010	2.44	0.08	1.56	1.53
AP f	0.0015	3.61	0.13	1.63	1.53
AP g	0.0031	5.82	0.23	1.40	1.57



APPROVAL

James D. Smith 1-17-18

AVIATION DEPARTMENT DATE

MOLZENCORBIN

ENGINEERS | ARCHITECTS | PLANNERS

AECOM

AECOM TECHNICAL SERVICES, INC.
6501 Americas Pkwy NE, Suite 900
Albuquerque, NM 87110
505 855 7500 tel 505 855 7555 fax
www.aecom.com

CITY OF ALBUQUERQUE
AVIATION DEPARTMENT

DOUBLE EAGLE II AIRPORT HANGAR FACILITY

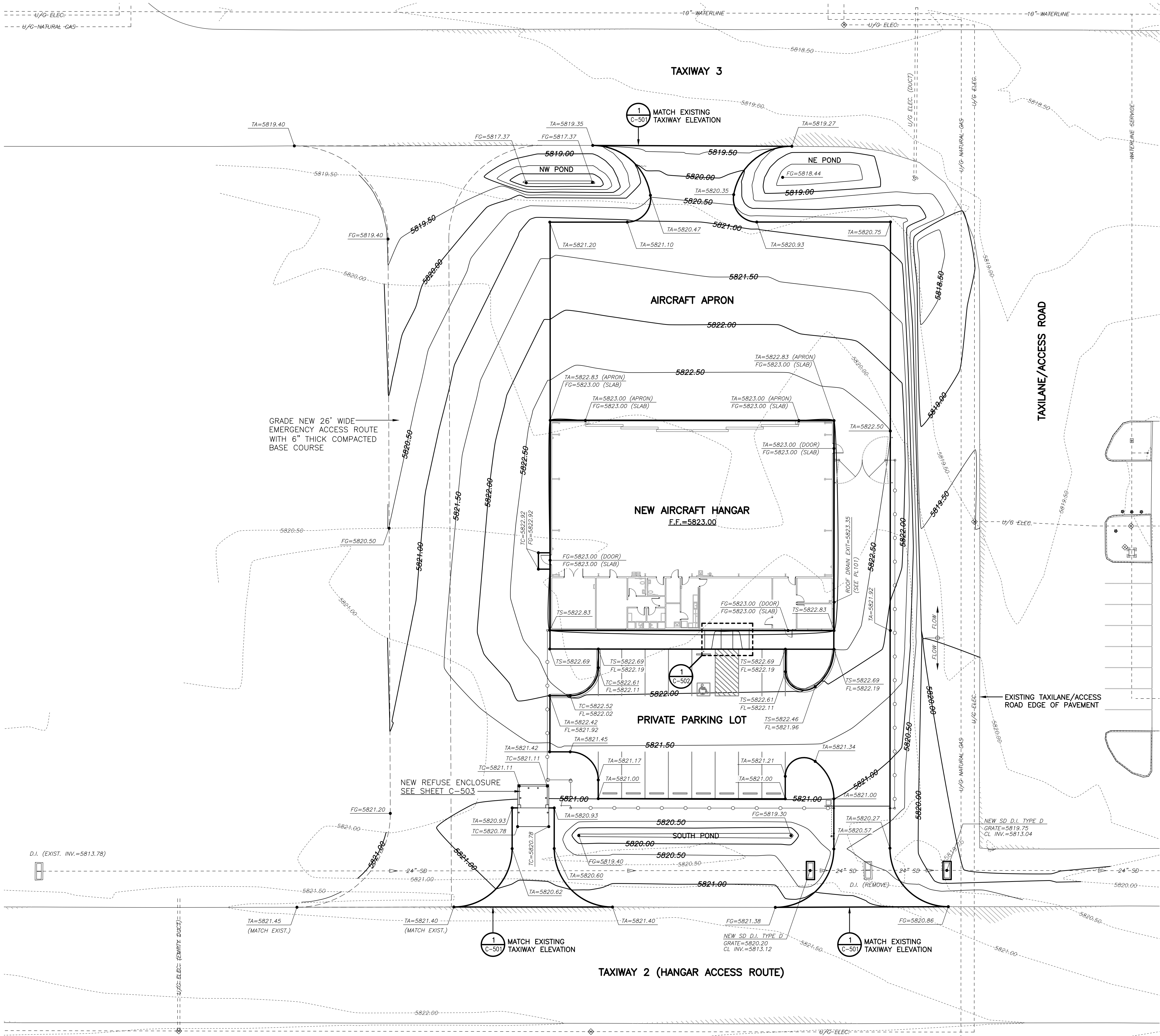
GRADING AND DRAINAGE ANALYSIS

Design Review Committee City Engineer Approval

City Project No. 656492 Zone Map No. E-05 Sheet Of

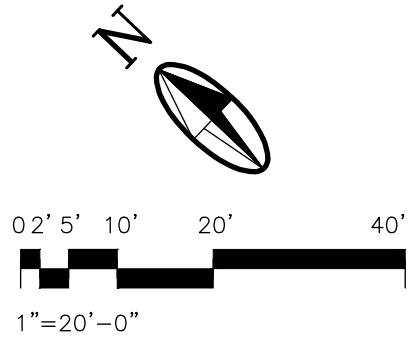
MO./DAY/YR. MO./DAY/YR.

C-103



- GENERAL NOTES**
- SEE SITE PLAN, SHEET C-101
 - SEE UTILITY SITE PLAN, SHEET C-105
 - ALL DRAINAGE INFRASTRUCTURE TO BE MAINTAINED BY CITY OF ALBUQUERQUE AVIATION DEPARTMENT

- LEGEND**
- 3646.00 --- EXISTING TOPOGRAPHY CONTOUR LINE (0.50' INTERVAL)
 - 3646.00 — NEW CONTOUR TOPOGRAPHY LINE (0.50' INTERVAL)
 - TS=3646.97 NEW TOPOGRAPHY SPOT ELEVATION (TS=TOP OF SIDEWALK) (FG=FINISH GRADE) (FL=FINISH GRADE FLOWLINE) (TA=TOP OF ASPHALT) (TC=TOP OF CURB)



APPROVAL

AVIATION DEPARTMENT

DATE

MOLZENCORBIN
ENGINEERS | ARCHITECTS | PLANNERS

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CITY OF ALBUQUERQUE
AVIATION DEPARTMENT

DOUBLE EAGLE II AIRPORT HANGAR FACILITY

GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO/DAY/YR.	MO/DAY/YR.
City Project No.	Zone Map No.	Sheet	Of	
656492	E-05	13	83	

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S STAMP		REVISIONS		PROJECT NUMBER:		DRAWN BY:		CHD BY:		DATE:	
CONTRACTOR:	DATE:	WORK STAKED BY:	DATE:	INSPECTOR'S ACCEPTANCE BY:	DATE:	FIELD VERIFICATION BY:	DATE:	DRAWINGS ORDERED BY:	DATE:	PROJECT NUMBER:	AEC101-12	DRAWN BY:	MOLZEN CORBIN	CHD BY:	MOLZEN CORBIN	DATE:	JANUARY 2018
REORDERED BY:	DATE:																