CITY OF ALBUQUERQUE

TIB UT

November 17, 2016

David Thompson, P.E. Thompson Engineering Consultants, Inc. PO Box 65760 Albuquerque, New Mexico 87193

Re: Midtown Storage Units-Phase 2

4339 Cutler Ave NE

Request for Permanent C.O. - Accepted Engineer's Stamp dated: 6-6-16 (H17D105)

Certification dated: 11-15-16

Dear Mr. Thompson,

Based on the Certification received 11/17/2016 the above referenced, is acceptable for permanent release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3986 or Totten Elliott at 924-3982.

PO Box 1293

Sincerely,

Albuquerque

New Mexico 87103 Abiel Carrillo, P.E.

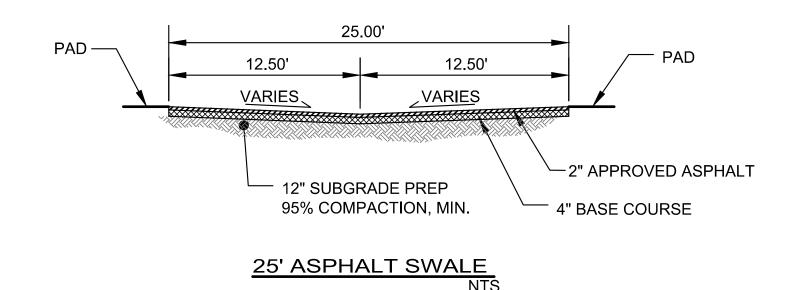
Principal Engineer, Planning Department

Development and Review Services

www.cabq.gov

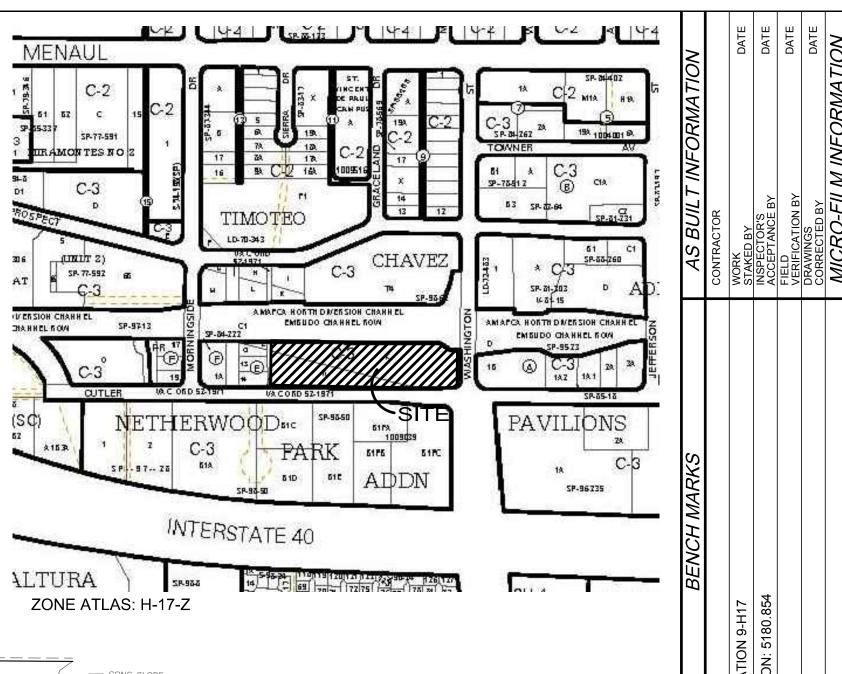
TE/AC

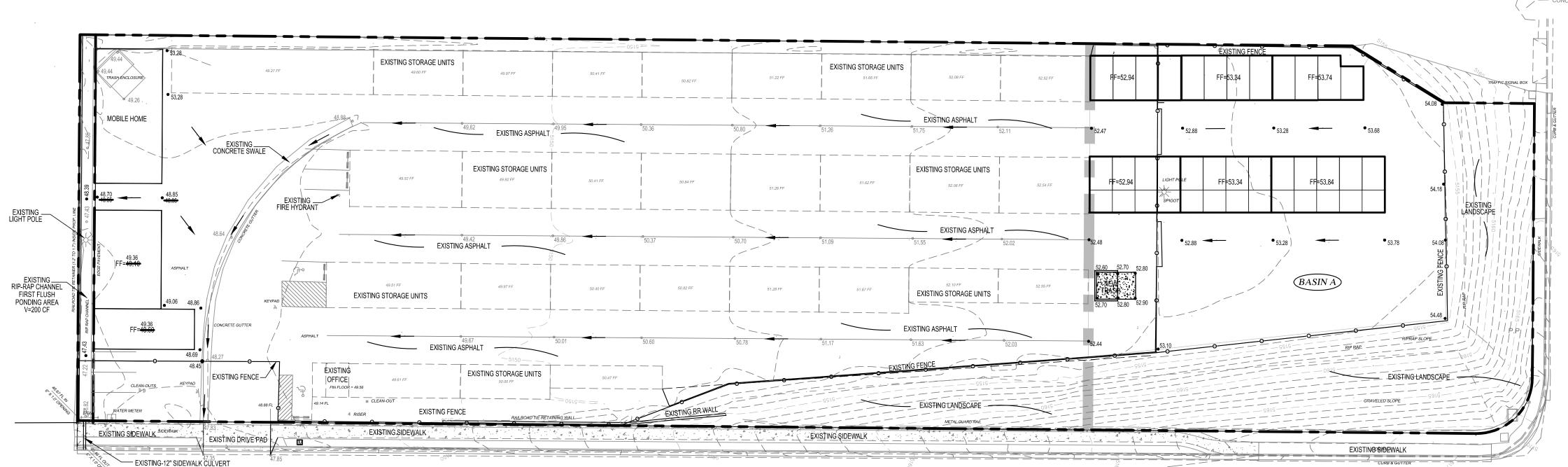
C: email, Cordova, Camille; Miranda, Rachel; Sandoval, Darlene M.; Blocker, Lois



100-YEAR HYDROLOGIC CALCULATIONS

		LAND TREATMENT			WEIGHTED	100-YEAR PRECIPITATION					
BASIN	AREA	Α	В	С	D	E	V (6-hr)	V (6-hr)	V(24-hr)	V(24-hr)	Q
#	(acre)	(%)	(%)	(%)	(%)	(in)	(acre-ft)	(cu-ft)	(acre-ft)	(cu-ft)	(cfs)
EXISTING CONDITIONS											
SITE	2.5300	0.00	0.00	24.50	75.50	1.88	0.40	17,242	0.46	20,016	10.92
TOTAL RUNOFF	2.53						0.40	17,242	0.46	20,016	10.92
PROPOSED CONDITIONS											
SITE	2.5300	0.00	0.00	24.50	75.50	1.88	0.40	17,242	0.46	20,016	10.92
TOTAL RUNOFF	2.53						0.40	17,242	0.46	20,016	10.92
EXCESS PRECIP.		0.53	0.78	1.13	2.12	Ei (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q _{Pi} (cfs)					
							ZONE = 2				
WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$						P_{6-HR} (in.) = 2.35					





 V_{6-HR} (acre-ft) = (WEIGHTED E)(AREA)/12

 V_{10DAY} (acre-ft) = V_{6-HR} + (AD)(P_{10DAY} - P_{6-HR})/12

 $Q(cfs) = (Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

EXIST. MAJOR CONTOURS
EXIST. MINOR CONTOURS
BASIN BOUNDARY

BASIN NUMBER

PROPOSED SWALE
PROPOSED SPOT ELEVATIONS

SEXISTING SPOT ELEVATIONS
PROPOSED FLOW DIRECTION
EXISTING CURB & GUTTER
PROPERTY BOUNDARY
(THIS IS NOT A BOUNDARY SURVEY)

PROPOSED PAVEMENT
SEE ASPHALT SWALE THIS SHEET

DRAINAGE PLAN:

LEGAL DESCRIPTION: A PORTION OF TRACT K, TIMETEO CHAVEZ ADDITION

DRAINAGE CE

SITE AREA: 2.53 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0351H) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA PROTECTED BY LEVEES FROM THE 1% ANNUAL CHANCE FLOOD. DIRECTLY NORTH OF THE SITE IS THE EMBUDO CHANNEL WHICH INDICATES A FLOOD HAZARD ZONE A.

EXISTING DRAINAGE CONDITIONS:

CURRENTLY THE TRACT HAS STORAGE UNITS AND AN OFFICE ON SITE. THE PROPERTY DRAINS FROM EAST TO WEST TO CUTLER AVENUE. THE TRACT CURRENTLY HAS FREE DISCHARGE TO CUTLER AVENUE. THE ENTIRE SITE WAS DEVELOPED IN 2005 AS A STORAGE UNIT COMPLEX. THIS PLAN INVOLVES THE DEVELOPMENT OF THE EASTERN PART OF THE TRACT AND THE WESTERN PART OF THE SITE. THE EXISTING PEAK RUNOFF FROM THE SITE UNDER CURRENT CONDITIONS IS 10.92 CFS.

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH SETION 22 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), ENTITLED "DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 2 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.35 INCHES. UNDER EXISTING CONDITIONS THE LOTS INCLUDE LAND TREATMENTS C AND D.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE ADDITION OF STORAGE UNITS TO THE EAST OF THE EXISTING BUILDINGS AND A MOBILE HOME AND GARAGES ON THE WEST SIDE OF THE PROPERTY. THE EASTERN AREA TO BE DEVELOPED HAS MILLINGS AND THEREFORE IS TREATED AS LAND TREATMENT D. SO, AFTER THE ADDITION OF STORAGE UNITS AND PAVING THERE WILL BE NO INCREASE IN RUNOFF FROM EXISTING CONDITIONS. THE WESTERN AREA TO BE DEVELOPED IS CURRENTLY PAVED, DO THE ADDITION OF THE BUILDINGS WILL NOT INCREASE THE RUNOFF FROM EXISTING CONDITIONS. THE TOTAL RUNOFF FROM THE SITE AFTER DEVELOPMENT IS 10.92 CFS, WHICH IS THE SAME UNDER EXISTING CONDITIONS. THE RUNOFF FROM THE SITE DISCHARGES TO CUTLER AVENUE EITHER THROUGH THE DRIVEWAY OR THROUGH A 12" SIDEWALK CULVERT FROM THE ROCK-LINED SWALE AT THE WEST END OF THE SITE.

IN 2005, WHEN THE SITE WAS DEVELOPED, THERE WAS NO REQUIREMENT TO RETAIN THE FIRST FLUSH ON SITE. THE LANDSCAPED AREAS OF THE SITE ARE ALONG THE SLOPING AREAS TO THE EAST AND SOUTH OF THE PAVEMENT. THE ONLY AREA AVAILABLE TO CONTAIN THE FIRST FLUSH IS IN THE ROCK-LINED SWALE ALONG THE WEST PROPERTY LINE. PLUS, AS STATED EARLIER, SINCE THE AREA TO BE DEVELOPED CURRENTLY HAS MILLINGS OR PAVING, THERE IS NO IMPACT TO DOWNSTREAM FACILITIES WITH THE DEVELOPMENT OF THE ADDITIONAL BUILDINGS AND PAVING. THE REQUIRED FIRST FLUSH VOLUME FROM THE SITE IS CALCULATED TO BE 2,367 CUBIC-FEET. THERE IS ONLY ENOUGH VOLUME ALONG THE WESTERN ROCK-LINED SWALE TO RETAIN ABOUT 200 CUBIC-FEET. THEREFORE, WE REQUEST A VARIANCE TO CONTAIN THE FIRST FLUSH FOR THIS EXPANSION.

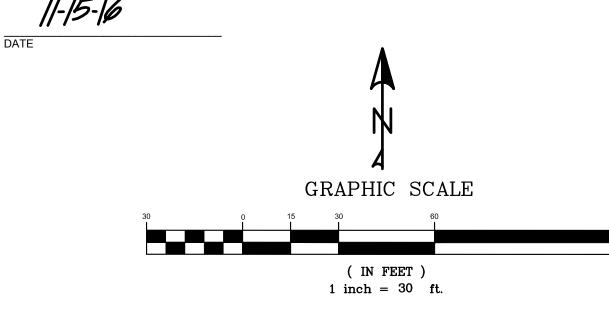
DRAINAGE CERTIFICATION

I, DAVID B. THOMPSON, NMPE 9677, OF THE FIRM THOMPSON ENGINEERING CONSULTANTS, INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6-6-16. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY MIKE SHOOK, NMPS 13240. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 11-15-16 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

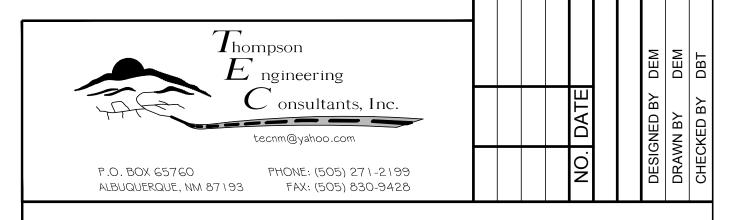
 P_{24-HR} (in.) = 2.75

 P_{10DAY} (in.) = 3.95

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.



CUTLER AVENUE (60' R/W)



MIDTOWN SELF STORAGE WEST EXPANSION GRADING AND DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.	
DEGICITATE VIEW COMMITTEE	OTT ENGINEER ATTROVAL				
ity Project No.	Zone Map I	No.	Sheet C	Of	
XXXX	H-17-Z	,	2	2	
	-		-		

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: MIDTOWN STORAGE UNITS	_ZONE MAP/DRG. FILE #: <u>H17/D105</u>
DRB #:EPC #:	_WORK ORDER#:
LEGAL DESCRIPTION: A PORTION OF TRACT K, TIMETEO CH	AVEZ ADDITION
CITY ADDRESS:	
CIT I ADDRESS.	
ENGINEERING FIRM: Thompson Engineering Consultants, Inc.	CONTACT: David Thompson
ADDRESS: <u>P.O. Box 65760</u>	
CITY, STATE: Albuquerque, NM	ZIP CODE: <u>87193</u>
OWNER AND GLOS	GOVERA GEORGE
OWNER: Midtown Self Storage	CONTACT: Richard Hix
ADDRESS:4339 Cutler NE CITY, STATE: Albuquerque, NM	PHONE: <u>250-1655</u> ZIP CODE: <u>87110</u>
CITT, STATE. Albuquerque, NWI	
ARCHITECT:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
SURVEYOR: A.M. Surveying Company	CONTACT: Mike Shook
ADDRESS: 612 Cerro de Ortega SE	
CITY, STATE: Rio Rancho, NM	ZIP CODE: <u>87124</u>
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CHECK TYPE OF SUBMITTAL:	
DRAINAGE REPORT	<u>CHECK TYPE OF APPROVAL SOUGHT:</u> SIA/FINANCIAL GUARANTEE RELEASE
DRAINAGE REFORM DRAINAGE PLAN 1 st SUBMITTAL, REQUIRES TCL or equ	ual PRELIMINARY PLAT APPROVAL
DRAINAGE PLAN RESUBMITTAL	S. DEV. PLAN FOR SUB'D. APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV PLAN FOR BLDG. PERMIT APPROVAI
GRADING PLAN	SECTOR PLAN APPROVAL
EROSION CONTROL PLAN	FINAL PLAT APPROVAL
XX ENGINEER'S CERTIFICATION (HYDROLOGY)	FOUNDATION PERMIT APPROVAL
CLOMR/LOMR	BUILDING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL)	XX CERTIFICATE OF OCCUPANCY (PERM.)
ENGINEER'S CERTIFICATION(TCL)	CERTIFICATE OF OCCUPANCY (TEMP.)
ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN)	GRADING PERMIT APPROVAL
OTHER	PAVING PERMIT APPROVAL
	WORK ORDER APPROVAL OTHER (SPECIFY)
	OTHER (SPECIFT)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	
YES	
XX NO	
COPY PROVIDED	
DATE SUBMITTED: November 17, 2016 BY:	
DATE SODIMITIED. MOVEMBER 17, 2010 D1.	

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines 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 acres
- 2. **Drainage Plans:** Required for building permits, grading permits, paving permits, and site plans less than five (5)
- 3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or