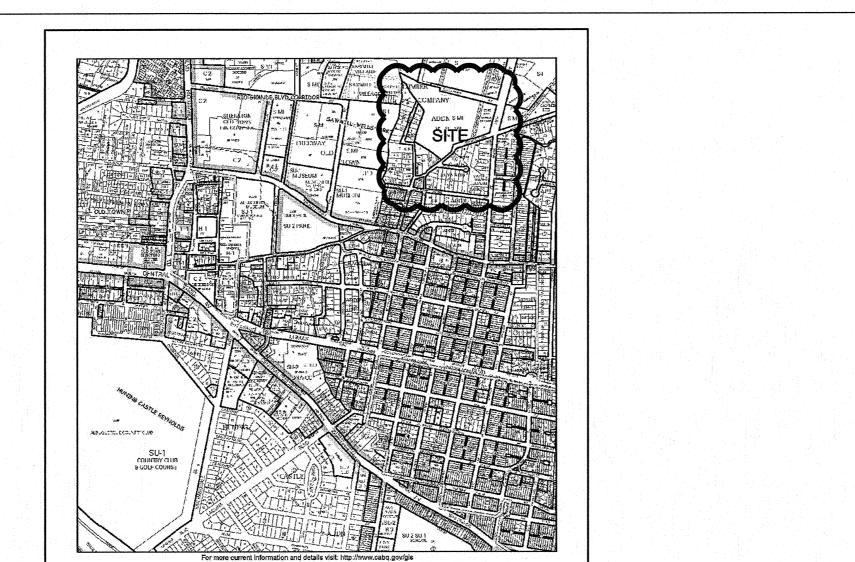
PROJECT #: DRAWN BY: CH'D BY:

SMPC Architects © 2014 These documents were prepared for this specific project only. SMPC Architects' liability is limited to this specific project, and does not extend to reuse of these documents for other projects

PROPOSED DRAINAGE **MANAGEMENT** PLAN

OF

Bohannan A Huston



FIRM MAP #FM35001C0331H (NTS)

Filed Jan. 21, 1947, Vol. B1, Folio 124

THAGT 12

M.A.B.C.D. MAP 38

LOT IB

Public Waterline / Utility Easement granted by Filed Sept. 17, 1990 Vol. 90C , folia 222 Note: \tions of these easements are "approximate" as id and shown an said Plat.

SEE DETAIL "A"



0 500 1000 FEET

PANEL 331 OF 825

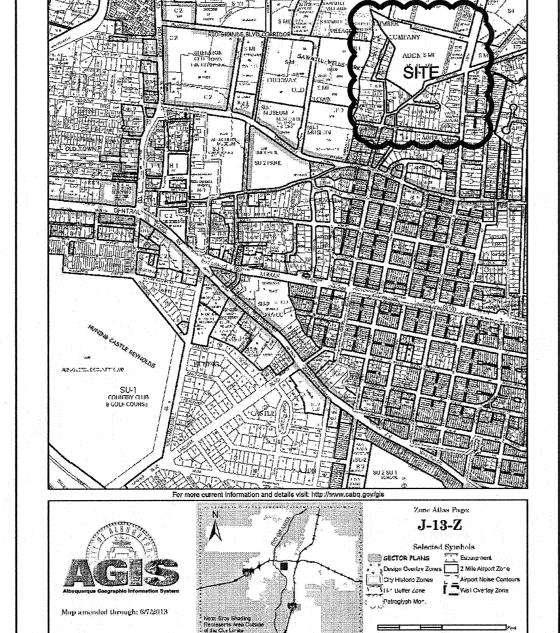
inches to their the blackments mean before should section a seen was creating into probes, the Community Number 2000s about should be used an increating projection of the subject.

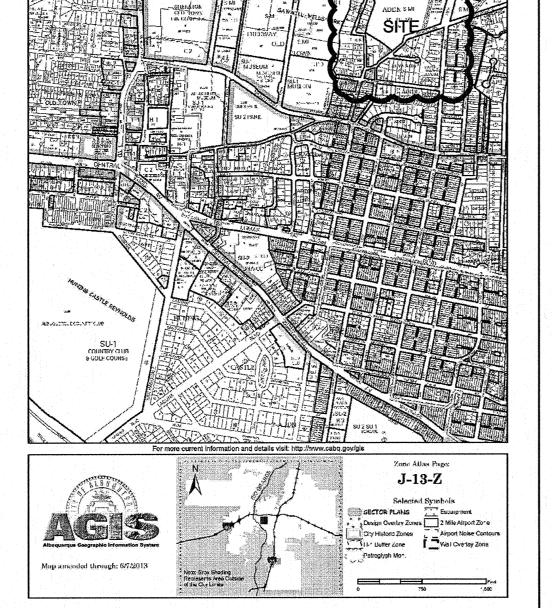
BASED ON DISCUSSIONS WITH THE CITY OF ALBUQUERQUE HYDROLOGY DEPARTMENT, ALLOWABLE DISCHARGE FROM THE SITE IS 0.5 CFS/ACRE. THEREFORE, ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 2.0 CFS

WITH THE PROPOSED REDEVELOPMENT OF THE SITE, THE TOTAL IMPERVIOUS AREA WILL BE REDUCED. THE PROPOSED FLOW FROM THE SITE IS APPROXIMATELY 15.8 CFS WHICH IS LESS THAN THAT OF EXISTING. THE PROPOSED FLOW WAS ANALYZED FOR FULLY PARKING AREAS. THE SITE IS DESIGNED TO FLOW TO A POND ON THE SOUTHERN PORTION OF THE PROPERTY VIA SURFACE FLOW

THE POND WAS ANALYZED USING AHYMO. USING ORIFICE ANALYSIS (THIS SHEET), A CALCULATED DISCHARGE RATE WAS DETERMINED BASED ON A 6" OUTLET. AFTER INPUTTING OUR INFORMATION INTO AHYMO, A PEAK DISCHARGE RATE WAS DETERMINED TO BE APPROXIMATELY 1.50 CFS, WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE. AN OVERFLOW IS PROVIDED IN THE EVENT THE OUTLET BECOMES CLOGGED. THE PROPOSED OVERFLOW IS 3 - 24" SIDEWALK CULVERTS THAT DISCHARGE INTO SAWMILL RD. THE MAXIMUM WATER SURFACE ELEVATION WAS CALCULATED TO BE 4960.5 WITH A RETENTION VOLUME OF 0.41 ACRE FT. THE ELEVATION OF THE SIDEWALK CULVERT FLOWLINE IS 4961.8 WHICH PROVIDES A FREEBOARD OF

THE PEAK DISCHARGE RATE IS 1.5 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE, THEREFORE WE ARE IN





							٠.
ZONE	EAT	LAS	PAG	E J-1	13 (1	NTS)	
					:		

SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0331H (THIS SHEET), MAP REVISED
AUGUST 16, 2012. THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF
ACE LEADERSHIP HIGH SCHOOL AND REQUEST BUILDING PERMIT APPROVAL.
EXISTING CONDITIONS:
THE 3.95 ACRE SITE IS CURRENTLY FULLY DEVELOPED. EXISTING FLOW IS EQUAL TO 18.5 CFS. THE SITE IS EXTREMELY FLAT AND
RUNOFF SHEET FLOWS TO THE SOUTH / SOUTHWEST FROM THE SITE INTO SAWMILL RD. THERE IS AN EXISTING 18" PUBLIC STORM
DRAIN IN SAWMILL RD.

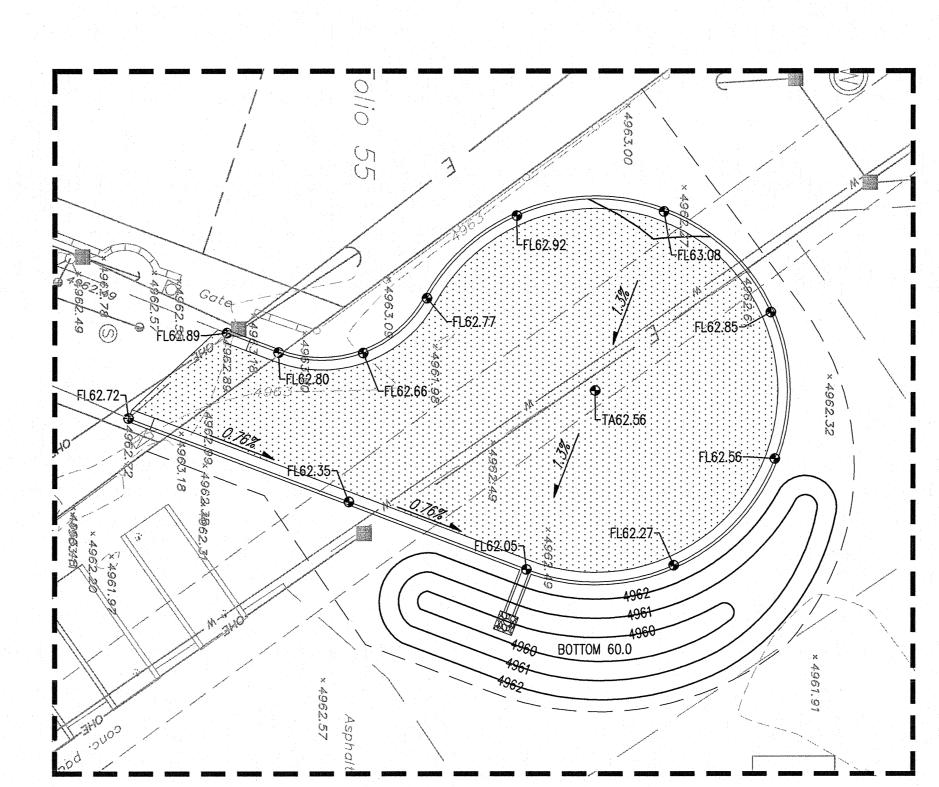
AND TWO CONCRETE RUNDOWNS.

CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST BUILDING PERMIT APPROVAL.

SANITARY SEWER MANHOLE Rim Elev= 4962.03 Inv. Elev= 4956.93(SW)

STORM SEWER MANHOLE

Rim Elev= 4962.34
inv. Elev= Manhole is full of dirt

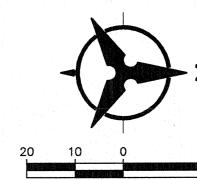


EXISTING CONDITIONS:
THE 15TH STREET CUL DE SAC IS CURRENTLY FULLY DEVELOPED. THE SITE IS EXTREMELY FLAT AND RUNOFF SHEET FLOWS TO

PROPOSED CONDITIONS:
WITH THE PROPOSED CUL DE SAC LOCATION, THE FLOW FROM THE SITE IS APPROXIMATELY 0.7 CFS. THE CUL DE SAC IS
DESIGNED TO FLOW TO A POND ON THE EASTERN PORTION OF THE PROPERTY VIA SURFACE FLOW AND A CONCRETE RUNDOWN. IT WAS DETERMINED THAT THE 100YR - 10 DAY VOLUME TO BE 2033 CF (SEE ABOVE). THE POND PROVIDED IS DESIGNED TO BE APPROXIMATELY 2345 CF WHICH IS MORE THAN THE ANALYSIS REQUIRED.

THE PEAK VOLUME IS FULLY RETAINED WITHIN THE PUBLIC ROADWAY EASEMENT, THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST BUILDING PERMIT APPROVAL.

NOTE: CURB & GUTTER, PAVING, AND GRADING FOR THE 15TH STREET CUL-DE-SAC IS SHOWN FOR INFORMATION ONLY. GRADING & CUL-DE-SAC TO BE CONSTRUCTED UNDER CITY WORK ORDER.



DETAIL "A" (15TH STREET)

		ACE	LEADI	ERSHIP	HIGH SC	CHOOL (15th St.	Cul De S	Sac)		
		Propo	sed Ult	imate De	velopme	nt Condi	itions Ba	sin Data i	Table		
7	This table is t	pased on the D	PM Section	n 22.2, Z one:	2		The state of the s	One good grant and a second gran			y rampo wangapa
Basin	Area	Area	Land Treatment Percentages				Q(100yr)	Q(100yr-6hr)	WTE	V(100yr-6hr)	V(100yr-10day
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	CF
Propo	sed										
B1	6559	0.15	0.0%	0.0%	0.0%	100.0%	4.70	0.71	2.12	1159	2033
OTAL	6559	**0.15							-		***2033

ACE LEADERSHIP HIGH SCHOOL

Existing Conditions Basin Data Table

ACE LEADERSHIP HIGH SCHOOL Proposed Ultimate Development Conditions Basin Data Table

- Ver. S4.01a, Rel: 01a RUN DATE (MON/DAY/YR) =04/02/2014

-- P:\20140224\CDP\HYDRO\AHYMO\100YR.OUT

EXB1 - 1 0.00617 18.44 0.687 2.08758 1.5

POND1 2 10 0.00617 1.5 0.561 1.70383 2.05

B1 - 2 0.00617 16.52 0.56 1.70287

PEAK RUNOFF

ID AREA DISCHARGE VOLUME RUNOFF PEAK PER

AreaAreaLand Treatment PercentagesQ(100yr)Q(100yr-6hr)WT EV(100yr-6hr)V(100yr-10day)(SQ. FT)(AC.)ABCD(cfs/ac.)(CFS)(inches)(CF)CF

172215 3.95 0.0% 0.0% 45.0% 55.0% 4.00 15.81 1.67 24031 36660

EXB1 172215 3.95 0.0% 0.0% 2.0% 98.0% 4.67 18.46 2.10 30140

Q(100yr) Q(100yr-6hr) WT E V(100yr-6hr) V(100yr-10day)

52643

***36660

| PAGE | = | 1

4.671 PER IMP= 98.00

4.184 PER IMP= 55.00

MAX VOLUME = 0.410 AC-FT

DISCHARGE (CFS)

(cfs/ac.) (CFS) (inches) (CF)

ELEVATION AREA VOLUME VOLUME CALCULATED

TIME TO CFS

4961.0 20900 26750 0.61

* HEAD MEASURED FROM CENTER OF PIPE

* OUTFLOW IS BASED ON 1-6" PIPE

(CFS) (AC-FT) (INCHES) (HOURS) ACRE

This table is based on the DPM Section 22.2, Zone: 2

TOTAL 172215 3.95

172215 **3.95

POND 1 - ORIFICE ANALYSIS

2.25

2.75

*S AHYMO FILE FOR ACE LEADERSHIP HIGH SCHOOL - ALBUQUERQUE, NM . BH PROJ # 20140224

* HEAD MEASURED FROM CENTER OF PIPE

* OUTFLOW IS BASED ON 1-6" PIPE

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4)

*S 100 YEAR - 24 HOUR STORM

RAINFALL TYPE= 1 NOAA 14

COMPUTE NM HYD

COMPUTE NM HYD

ROUTE RESERVOIR

S COMPUTE BASIN EXISTING CONDITIONS

S COMPUTE BASIN DEVELOPED CONDITIONS

HYDROGRAPH

TIME=0

ALBUQUERQUE

*S ROUTE BASIN B1 TO POND 1. OUTFLOW BASED ON 6" ORIFICE

IDENTIFICATION NO.

Basin | Area | Area | Land Treatment Percentages

ID (SQ. FT) (AC.) A B C D

4958.50

4960.50

4961.00

NO. (SQ MI)

DRAINAGE MANAGEMENT PLAN

PROPOSED DRAINAGE BASIN

10' P.N.M. Easem Filed July 22, 191 Book 9719, Page

P:\20140224\CDP\Hydro\Proposed DMP.dwg
Thu, 3-Apr-2014 - 8:31:am, Plotted by: BORTEGA

Ditch & Utility Ecsement as shown ond/or provided for on the Plat | Red April 4, 1978, DB - 102EX61.07

Vol. C29

1-13

OT 3

LEGEND