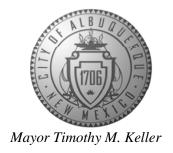
## CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



January 24, 2019

Diane Hoelzer, P.E. Mark Goodwin & Associates PO Box 90606 Albuquerque, NM 87199

**RE: ABC Building Expansion** 

Grading Plan Stamp Date: 1/23/19 Drainage Plan Stamp Date: 1/16/19

**Hydrology File: H14D001B** 

Dear Ms. Hoelzer:

Based on the submittal received on 1/23/19, the grading and drainage plan is re-approved for Site Plan Building Permit, Grading Permit, and Building Permit.

PO Box 1293

Prior to Certificate of Occupancy (For Information):

Albuquerque

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

NM 87103

If you have any questions, you can contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

www.cabq.gov

Dana Peterson, P.E.

Senior Engineer, Planning Dept. Development Review Services



# City of Albuquerque

### Planning Department

### Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: ABC Building Expansion	_Building Permit #:	Hydrology File #: D14D001B
DRB#:	_EPC#:	Work Order#:
Legal Description: <u>Tract M-1 Plat of Tract</u>	M-1 Gateway Industri	al Park
City Address: 2821 Broadway Blvd. NE, All	buquerque, NM 87107	
Applicant: ABC Apprenticeship Trust		Contact: Tom Novak
Address: 8701 Washington Street, Albuquerque	e, NM 87113	
Phone#: 856-8209	_Fax#:	E-mail: tomn@klingerllc.com
Other Contact: Mark Goodwin & Associates	s, PA	Contact: Cory Pierce
Address: PO BOX 90606, Albuquerque, NM 8	7199	
Phone#: 828.2200	_Fax#:	E-mail: cory@goodwinengineers.com
TYPE OF DEVELOPMENT:PLAT (# of le	ots)RESIDENC	CEDRB SITE_XADMIN SITE
IS THIS A RESUBMITTAL? X Yes	No	
<b>DEPARTMENT</b> TRANSPORTATION	X HYDROLOGY	V/DRAINAGE
Check all that Apply:		E OF APPROVAL/ACCEPTANCE SOUGHT: _BUILDING PERMIT APPROVAL
TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION    PAD CERTIFICATION    CONCEPTUAL G & D PLAN  X   GRADING PLAN    DRAINAGE REPORT    DRAINAGE MASTER PLAN    FLOODPLAIN DEVELOPMENT PERMIT A    ELEVATION CERTIFICATE    CLOMR/LOMR    TRAFFIC CIRCULATION LAYOUT (TCL)    TRAFFIC IMPACT STUDY (TIS)    TREET LIGHT LAYOUT    OTHER (SPECIFY)    PRE-DESIGN MEETING?	APPLIC X	-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 FLOODPLAIN DEVELOPMENT PERMIT
DATE SUBMITTED: January 17, 2019	By: Cory Diarea D	OTHER (SPECIFY)
DATE SUDWITTED. January 17, 2019	By. Cory Flerce, P.	<u> </u>
COA STAFF:	ELECTRONIC SUBMITTA	AL RECEIVED:

FEE PAID:\_\_\_\_\_



# D. Mark Goodwin & Associates, P.A. Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE,NM 87199 (505) 828-2200 FAX 797-9539

> ~ 2012 ACEC/NM Award Winner for Engineering Excellence ~ ~ 2008 ACEC/NM Award Winner for Engineering Excellence ~ ~ 2017 ENR Landscape/Urban Development Award of Merit~ ~ 2018 ENR Residential/Hospitality Award of Merit~

January 17, 2019

Mr. Dana Peterson City of Albuquerque 600 2<sup>nd</sup> Street Albuquerque, NM 87102

Re: ABC Building Expansion, File # H14D001B

Dear Mr. Peterson,

Please find enclosed the Grading and Drainage Plan, Drainage Management plan, original letter of approval, and DTIS for the ABC Building Expansion. The plan was originally approved September 28<sup>th</sup>, 2018. The resubmission is due to Grading and Drainage Plan revisions and additional detail to include roof drains.

The overall drainage trends and the First Flush capture system remain the same. However, the Drainage Management Plan is also included with the available First Flush volume to pond #3 revised to 1336 CF from 960 CF. The additional flow is from the existing higher elevations (roof of existing building); however, the required first flush volume generated by the area of new construction remains the same. As such, the first flush capture design is unchanged from the originally approved design.

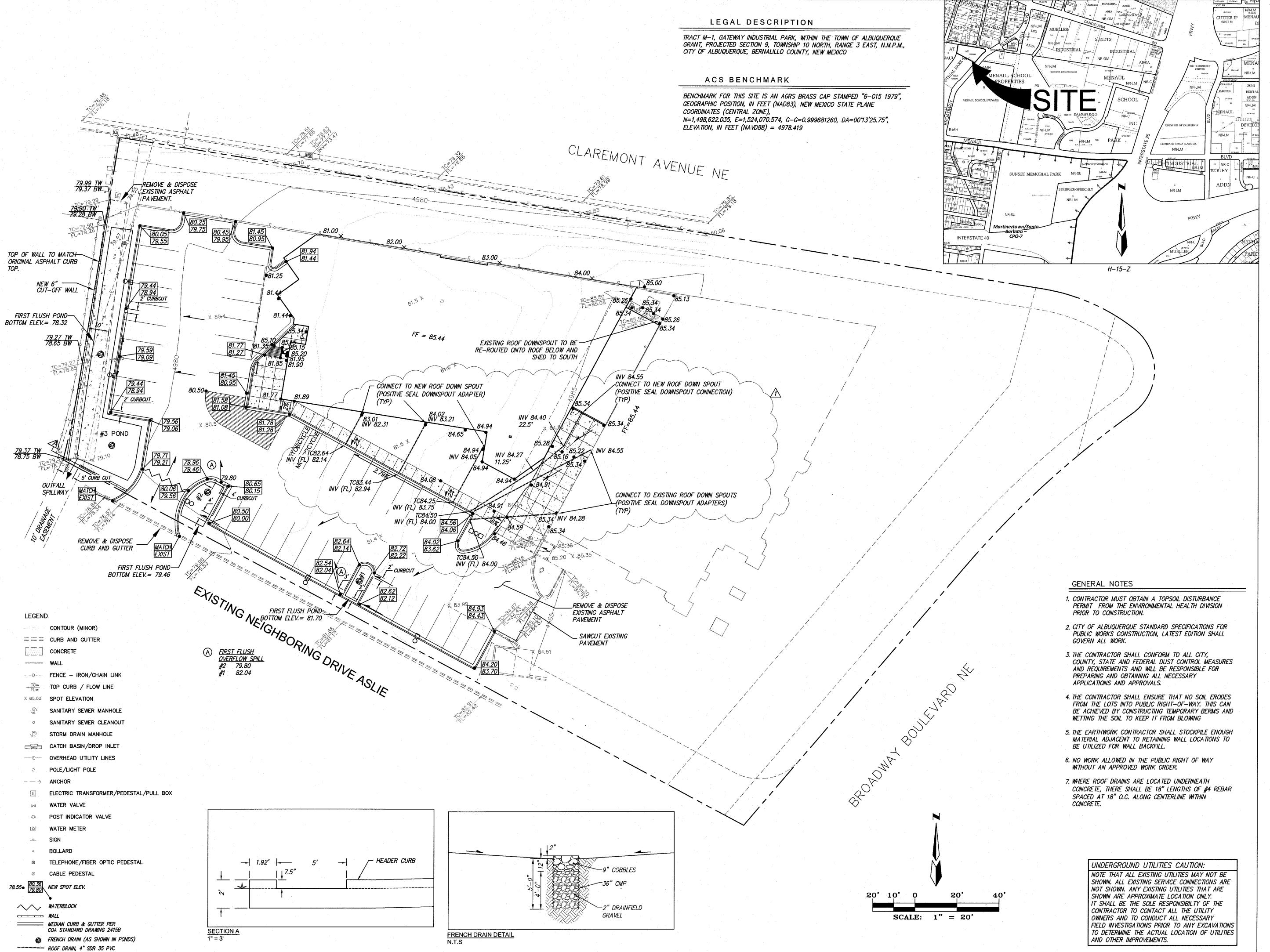
Please let us know if there are questions.

Sincerely,

MARK GOODWIN & ASSOCIATES, PA

Cory Pierce, PE
Staff Engineer

/cp



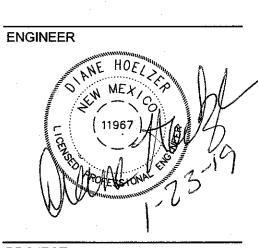
MARK GOODWIN & ASSOCIATES, P.A.

CONSULTING ENGINEERS

P.O. BOX 90606

ALBUQUERQUE, NEW MEXICO 87199

OFFICE (505) 828–2200, FAX (505) 797–9539



PROJECT

ABC BUILDING EXPANSION

REVISIONS

1/23/2019 ROOF DRAINS

^

· .	
DRAWN BY	SPS, CP
REVIEWED BY	DH
DATE	1/15/2019
PROJECT NO.	18022
DRAWING NAM	E .

GRADING & DRAINAGE PLAN

SHEET NO.

C1

## DRAINAGE REPORT

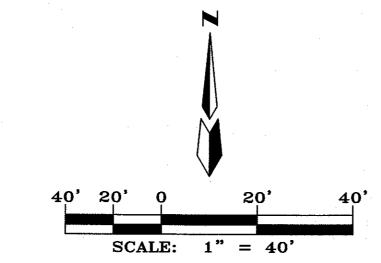
ID=3 CODE=1

\*BASIN 100 IS BASIN 200 IN EXISTING CONDITIONS

PRINT HYD

FINISH

THE GATEWAY INDUSTRIAL PARK CONCEPTUAL MASTER DRAINAGE PLAN ALLOWED FOR UNRESTRICTED DISCHARGE INTO THE ADJACENT CITY DETENTION POND. THE DEVELOPED DISCHARGE INDICATED BY THE 2009 GRADING PLAN FOR THE SITE (JOHN ARTHUR BLESSEN, STAMP DATE APRIL 4, 2009) WAS 5.1 CFS. THE EXISTING DISCHARGE INCLUDING THE EXISTING ROOF TOP AND SMALL PORTION OF EXISTING PAVEMENT IS EVALUATED AT 4.08 CFS USING AHYMO-S4. WITH PROVISION OF FIRST FLUSH CAPTURE, RAINFALL WAS REDUCED BY THE SPREAD OF THE FIRST FLUSH CAPTURE OVER THE SITE BASIN AREA (BASIN 200). THIS YIELDED SITE DISCHARGE FROM THE PROPOSED DEVELOPMENT TO BE ESTIMATED AT 4.96 CFS. THE CALCULATIONS ARE AS FOLLOWS:



		Pond #1 Wier			
		First Flush Basin Pond #1	19560 (SF)	•	
		Basin 101	53873 (SF)		
		Flow by Proportion	1.80 (C Wier Depth (FT)	0.24	
				Width	3
·				Weir Coeff	2.6
				Wier Discharge	1.83 (CFS)
AHYMO INPUT FILE (18	ROOD IN A TYT)	Pond #2 Wier		WICI DISCHAIGE	1.03 (013)
START	0.0 HOURS PC=0 PL=-1	First Flush Basin Pond #2	25485 (SF)		•
LOCATION	ALBUQUERQUE	Basin 101	53873 (SF)		
*S ABC -18022		•			
	RUNOFF FOR EXIST TO PROP COMPARISON	Flow by Proportion	2.35 (C Wier Depth (FT)	0.24	
*S By Cory Pierce			•	Width	4
RAINFALL	TYPE=1 0.0 1.84 2.38 2.77 DT=0.01			Weir Coeff	2.6
*Existing Conditions Bo		•		Wier Discharge	2.45 (CFS)
SEDIMENT BULK	CODE=1 BULK FACTOR = 1.18	Pond #3 Wier		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2. 15 (0.5)
COMPUTE NM HYD	ID=2 HYD=100 AREA=0.00193 SQ MI		000 (05)		
	A B C D 36 36 0 28	First Flush Basin Pond #3	960 (SF)		
	TP=0.13333 MASSRAIN=-1	Basin 101	53873 (SF)		
PRINT HYD	ID=2 CODE=1	Flow	4.96 (C Wier Depth (FT)	0.34	
*Proposed Condistions				Width	5
SEDIMENT BULK	CODE=1 BULK FACTOR = 1.06				_
RAINFALL	TYPE=1 0.0 1.63 2.17 2.56 DT=0.01			Weir Coeff	2.6
COMPUTE NM HYD	ID=3 HYD=200 AREA=0.00193 SQ MI			Wier Discharge	5.15 (CFS)
	A B C D O 6 6 88				
	TP=0.13333 MASSRAIN=-1				

<i>□</i> (s16.66H			
AHYMO PROGRAM SUMMARY TABLE (AH	YMO-S4)	– Ver. S4.01a, Rel: 01a	RUN DATE (MON/DAY/YR) =09/20/2018
INPUT FILE = $F: 1-Projects 2018 A186$	022 — ABC Building Expansion\Drai	inage\18022_IN_A.txt	R NO.= M-GoodwinNMSiteA90075759

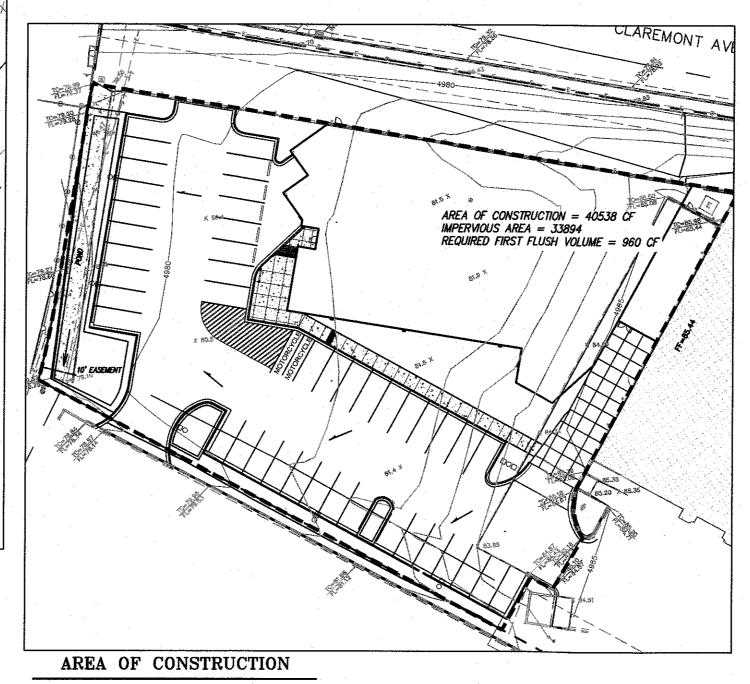
		UVDD	) GRAPH	FROM ID	TO ID	AREA	PEAK DISCHARGE	RUNOFF VOLUME	RUNOF	TIME TO F PEAK		PAGE	= 1
COM	MAND	IDENTIFIC.		NO.	NO.	(SQ MI)	(CFS)	(AC-FT)		r FEAR (HOURS)	ACRE	NOTATION	1
	RT ATION ABC -18022			ALBU	JQUERQUE							TIME=	0.00
*S C *S E	NSITE PROPE By Cory Pierce	•		? EXIS	T TO PROP	P COMPARISON							
*	'FALL TYPE= MENT BULK	1 NOAA	14				. • •					RAIN6= PK BF =	2.380 1.18
SEDI	PUTE NM ĤYD MENT BULK IFALL TYPE=		100.00 14		2	0.00193	4.08	0.138	1.34010	1.530		PER IMP= PK BF = RAIN6=	28.00 1.06 2.170
	PUTE NM HYD		200.00	-	3	0.00193	4.96	0.194	1.88694	1.530	4.013 F	PER IMP=	88.00

### NARRATIVE DESCRIPTION

THE SITE IS LOCATED WITHIN THE GATEWAY INDUSTRIAL PARK FOR WHICH A CONCEPTUAL MASTER DRAINAGE PLAN WAS PREPARED BY MARK GOODWIN AND ASSOCIATES (YEAR 2000). TO THE NORTH OF THE SITE IS CLAREMONT AVENUE. THE EXISTING BUILDING, WHICH IS BEING EXPANDED, IS TO THE EAST IN THE CORNER OF CLAREMONT AVENUE AND BROADWAY. TO THE SOUTH IS AN ADJACENT PROPERTY ALSO WITHIN THE GATEWAY INDUSTRIAL PARK THAT APPEARS TO BE MOSTLY ROOFED AND PAVED AREA. TO THE WEST OF THE SITE IS A LARGE CITY DETENTION POND.

THE SITE, WEST OF THE BUILDING TO BE EXPANDED, IS CURRENTLY UNDEVELOPED LAND WHICH SLOPES TO THE WEST TOWARDS THE DETENTION POND TO AN EXISTING ASPHALT CURB AND GUTTER WHICH CURRENTLY DIVERTS EXISTING ROOFTOP FLOW, UNDEVELOPED FLOW, AND A SMALL PORTION OF EXISTING PAVEMENT FLOW TO A LOW SPOT AT THE SOUTH END AND INTO A PRIVATE DRAINAGE EASEMENT ON THE ADJACENT PROPERTY TO THE

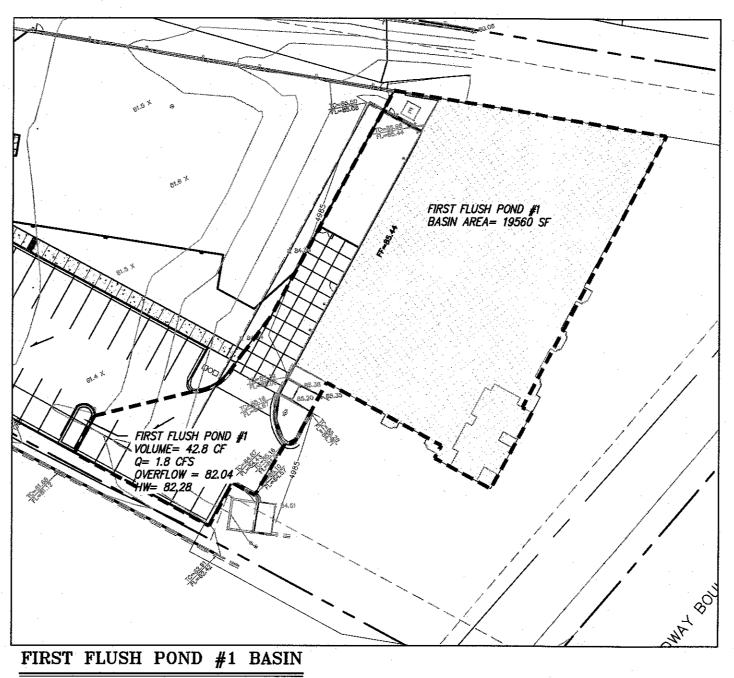
PROPOSED GRADING WILL MAINTAIN THE ORIGINAL FLOW DIRECTIONS AND WILL BE CLOSE TO EXISTING GRADES. THE GRADING WILL DIVERT FLOW TO A SERIES OF THREE FIRST FLUSH PONDS, THE LAST BEING THE WESTERN MOST, AND LARGEST FIRST FLUSH POND. A NEW CUT OFF WALL WILL BE CONSTRUCTED AT THE WEST SIDE OF THE POND, WITH TOP OF CURB ELEVATIONS CONSTRUCTED TO THE ORIGINAL ELEVATIONS OF THE ASPHALT CURB AND GUTTER TO BE REMOVED.

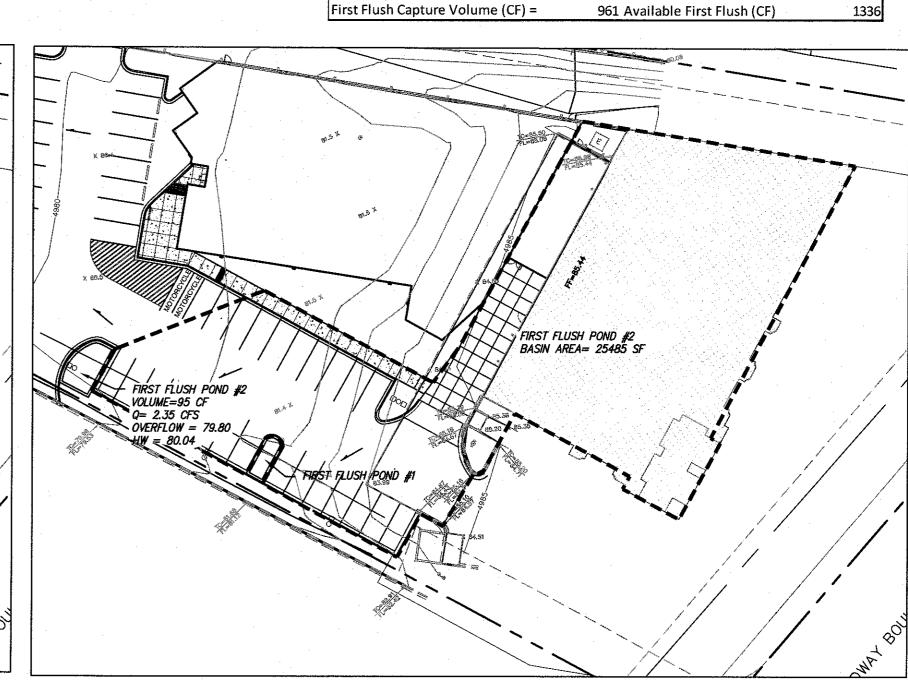


				-
Anna of Country live		SF	AC	SQ MI
Area of Construction:	40538	0.9306	0.001454	
Proposed (SF)				
Impervious	Landscape			
33894	6644			-

### FIRST FLUSH NOTES

THE NEW CONSTRUCTION IS SUCH THAT FIRST FLUSH FROM EXISTING IMPERVIOUS AREA IS AVAILABLE FROM HIGHER ELEVATIONS. THOUGH NOT REQUIRED TO CAPTURE, IT IS COLLECTED, AND A SMALL PORTION CREDITED TOWARDS THE FIRST FLUSH CAPTURE REQUIREMENT. FIRST FLUSH IS CAPTURED THROUGH A SERIES OF FIRST FLUSH PONDS: #1, #2, AND #3. AS THE LARGEST, WESTERN MOST FIRST FLUSH POND IS LOCATED AT THE NATURAL LOW POINT AND AT THE DISCHARGE OF THE SITE, AND THERE IS ADEQUATE AREA FOR FULL CAPTURE WITH A .43' DEEP POND; THE FIRST FLUSH REQUIREMENT IS FULLY CAPTURED.





First Flush depth:

based on Design: (CF)

**Required** First Flush Volume

Proposed Design First Flush Capacity

Depth (FT):

Top (SF)

POND 2 Depth (FT): Bottom (SF)

Top (SF)

POND 3

Depth (FT):

Top (SF)

FIRST FLUSH POND #2 BASIN

Bottom (SF).

Volume (CF)

Volume (CF)

Pond #1+#2

Volume (CF)

(inches)

0.34 (33894/12)=

150 Area

95 Area

823 Area

Available First Flush

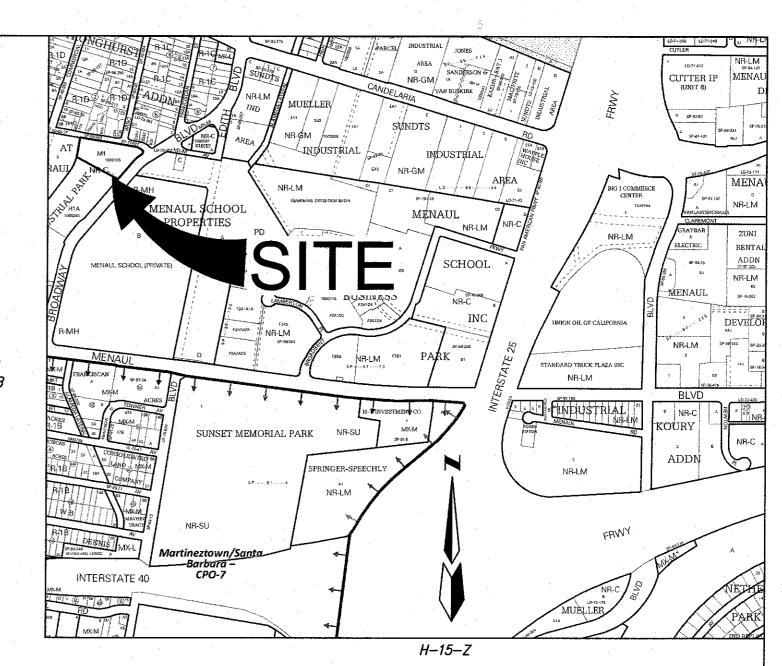
42.84 Available First Flush (CF)

102 First Flush Basin to Pond #1

311 First Flush Basin to Pond #2

137 Available First Flush (CF)

2260 First Flush Basin to Pond #3



**ENGINEER** 

**PROJECT** 

BUILDING ABC

REVISIONS DRAWN BY

**REVIEWED BY** DATE 9/20/18 PROJECT NO. 18-0057.001 DRAWING NAME

DRAINAGE PLAN

SHEET NO.

C2