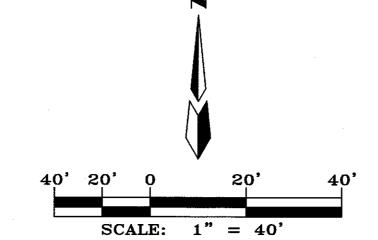
DRAINAGE REPORT

SITE BASIN (BASIN 200, FIRST FLUSH POND #3 BASIN)

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	022 IN A.TXT)	Pond #2 Wier		J	, ,
START	0.0 HOURS PC=0 PL=-1	First Flush Basin Pond #2	25485 (SF)		
LOCATION	ALBUQUERQUE	Basin 101	53873 (SF)		
*S ABC -18022	NUMBER FOR EVICE TO POOR COMPARISON	Flow by Proportion	2.35 (C Wier Depth (FT)	0.24	
*S UNSITE PROPERTY F *S By Cory Pierce	RUNOFF FOR EXIST TO PROP COMPARISON		,	Width	4
RAINFALL	TYPE=1 0.0 1.84 2.38 2.77 DT=0.01	•		Weir Coeff	2.6
*Existing Conditions Ba				Wier Discharge	2.45 (CFS)
SEDIMENT BULK	CODE=1 BULK FACTOR = 1.18	Pond #3 Wier		Wiel Discharge	2.43 (013)
COMPUTE NM HYD	ID=2 HYD=100 AREA=0.00193 SQ MI	First Flush Basin Pond #3	960 (SF)		
	A B C D 36 36 0 28				
DOINT LIVI	TP=0.13333 MASSRAIN=-1 ID=2 CODE=1	Basin 101	53873 (SF)		
PRINT HYD		Flow	4.96 (C Wier Depth (FT)	0.34	
*Proposed Condistions SEDIMENT BULK	CODE=1 BULK FACTOR = 1.06		-	Width	5
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)
00m 012 1m 1110	A B C D 0 6 6 88			ŭ	,
	TP=0.13333 MASSRAIN=-1				

⊈(s16.66H		
AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4)	Ver. S4.01a, Rel: 01a	RUN DATE (MON/DAY/YR) =09/20/2018
INPUT FILE = F: \1-Projects\2018\A18022 - ABC Building	Expansion\Drainage\18022_IN_A.txt USER	NO.= M-GoodwinNMSiteA90075759

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES) (H	TIME TO PEAK OURS)	CFS PER ACRE	PAGE NOTATION	
START LOCATION *S ABC -1802 *S ONSITE PRO)2 DPERTY RUNOFF FOR		QUERQUE TO PROF	COMPARISON						TIME=	0.00
*S By Cory Pie RAINFALL TYP SEDIMENT BULF COMPUTE NM F SEDIMENT BULF	PE= 1 NOAA 14 K HYD 100.00		2	0.00193	4.08	0.138	1.34010	1.530	3.300 P	PK BF =	2.380 1.18 28.00 1.06
RAINFALL TYP COMPUTE NM I FINISH	PE= 1 NOAA 14 HYD 200.00	-	3	0.00193	4.96	0.194	1.88694	1.530	4.013 F	RAIN6= PER IMP=	2.170 88.00

*BASIN 100 IS BASIN 200 IN EXISTING CONDITIONS

ID=3 CODE=1

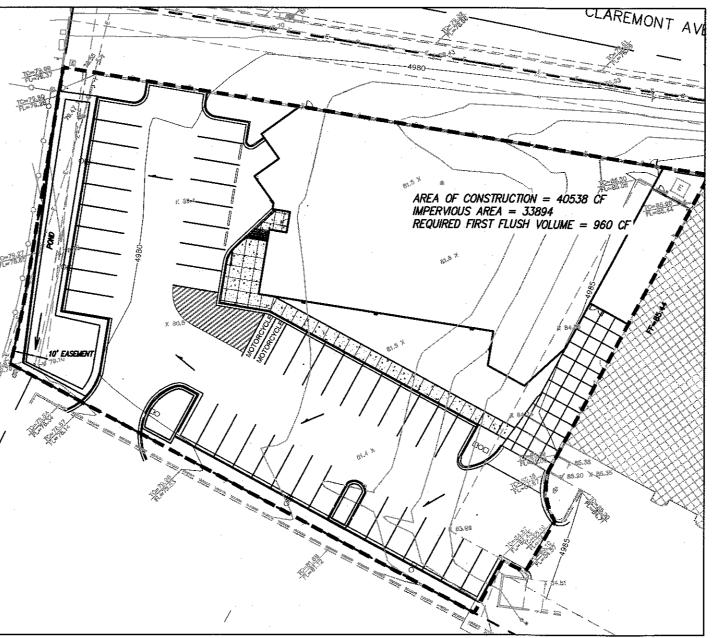
PRINT HYD FINISH

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

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.

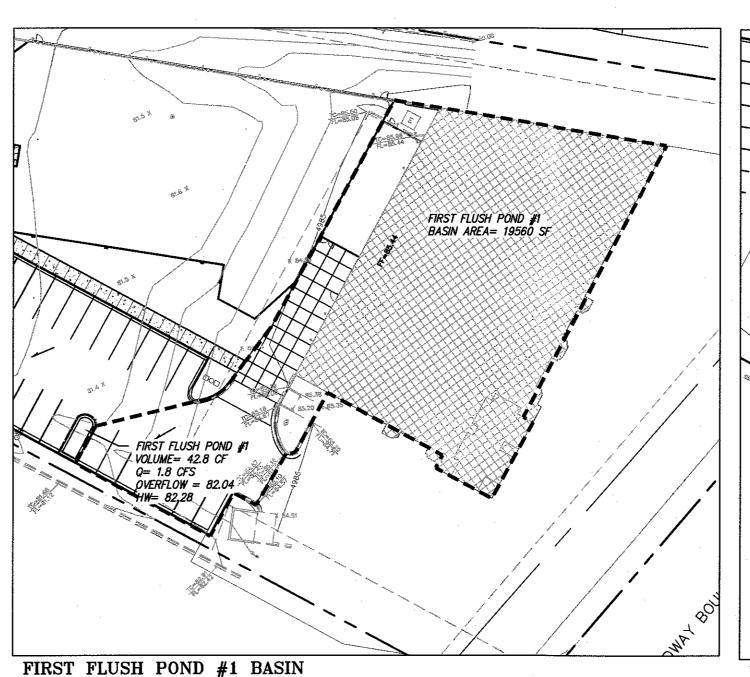


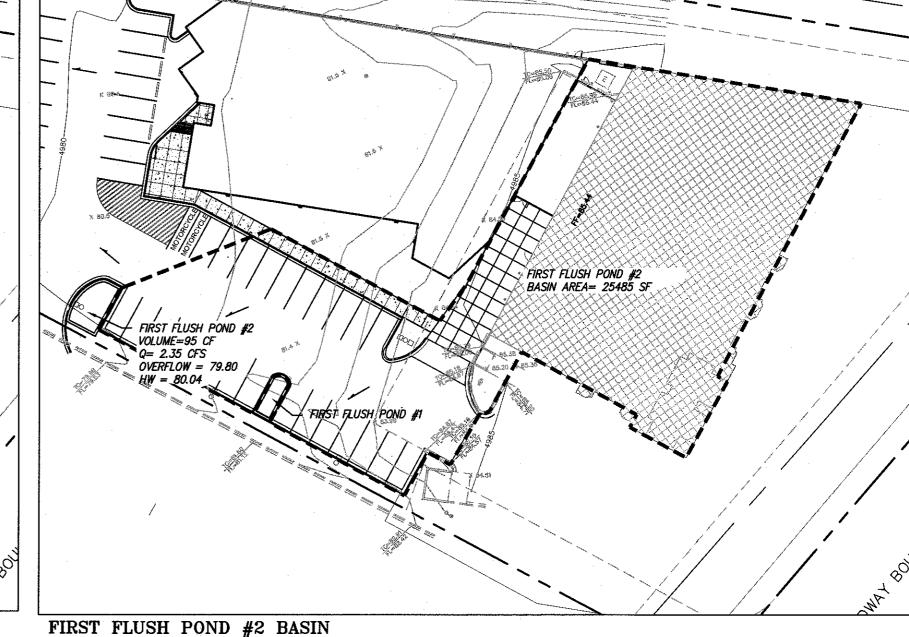
AREA OF CONSTRUCTION

Area of Construction:		SF	AC	SQ MI	
			40538	0.9306	0.001454
Propose	d (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 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.





POND 3

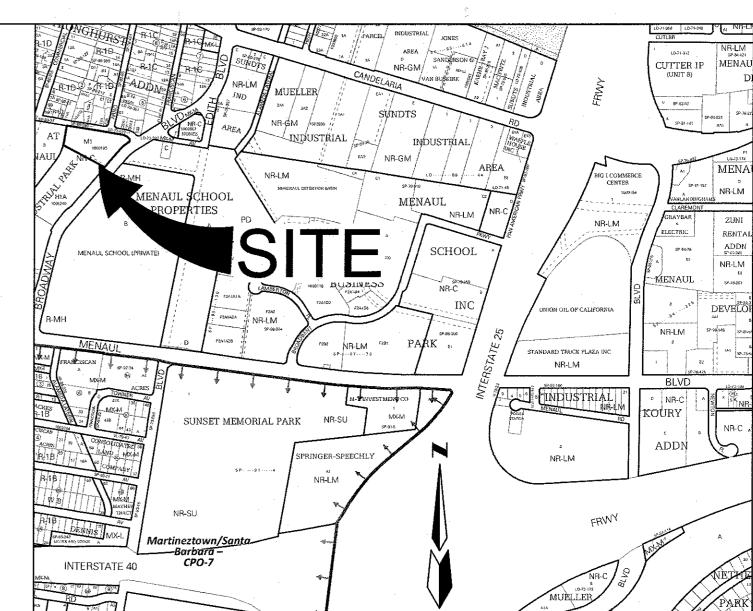
Top (SF)

Depth (FT):

Bottom (SF)

Volume (CF)

First Flush Capture Volume (CF) =



H-15-Z

PROJECT First Flush depth: 0.34 (33894/12)= **Required** First Flush Volume based on Design: (CF) Proposed Design First Flush Capacity Available First Flush Depth (FT): Bottom (SF) 102 First Flush Basin to Ponds #1 Top (SF) 42.84 Available First Flush |Volume (CF) POND 2 Depth (FT): Bottom (SF) Top (SF) First Flush Basin to Pond #1+#2 Volume (CF) Pond #1+#2 Available First Flush

961 Available First Flush

First Flush Basin to Ponds #1,#2,and #3

ARCHITECTURE / DESIGN / INSPIRATION

DEKKER PERICH SABATINI

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505.761.9700 / DPSDESIGN.ORG

ARCHITECT

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ENGINEER



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

DRAINAGE PLAN