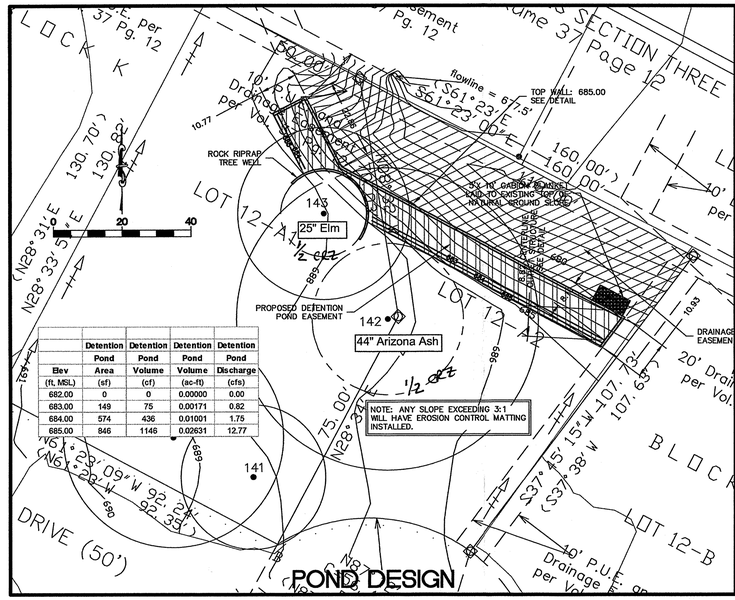
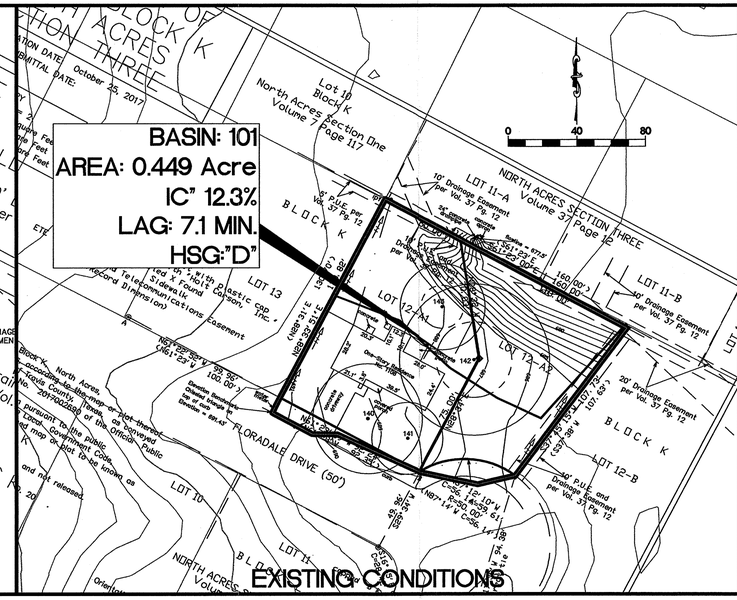
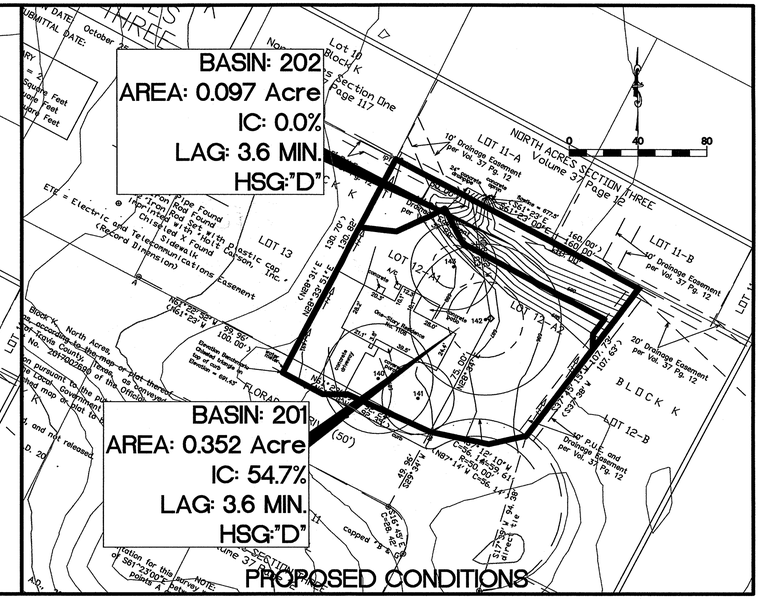


Elev (ft, MSL)	Detention Pond Area (sf)	Detention Pond Volume (cf)	Detention Pond Volume (ac-ft)	Detention Pond Discharge (cfs)
682.00	0	0	0.00000	0.00
683.00	149	75	0.00171	0.82
684.00	574	436	0.01001	1.75
685.00	846	1146	0.02631	12.77

POND DESIGN



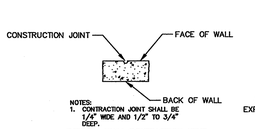
EXISTING CONDITIONS



PROPOSED CONDITIONS

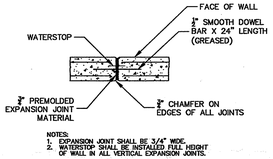
EC VS. PC COMPARISON TABLE

	Existing Condition (cfs)	Proposed Condition (cfs)	Det Pond Max Stage (FT., MSL)	Det Pond Max Storage (AC.-FT.)
Site 2-Year Peak Discharge	0.9	0.9	683.25	0.00378
Site 10-Year Peak Discharge	1.9	1.9	684.09	0.01152
Site 25-Year Peak Discharge	2.4	2.4	684.40	0.01655
Site 100-Year Peak Discharge	3.4	3.3	684.89	0.02458
Site 100-Year Overflow	n/a	n/a	684.96	0.02565



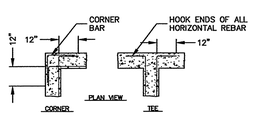
NOTES:
1. CONTRACTION JOINT SHALL BE 1/4" WIDE AND 1/2" TO 3/4" DEEP.

DETAIL - WALL CONTRACTION JOINT
N.T.S.

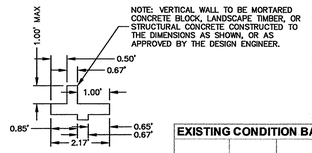


NOTES:
1. EXPANSION JOINT SHALL BE 3/4" WIDE.
2. WATERSTOP SHALL BE INSTALLED FULL HEIGHT OF WALL IN ALL VERTICAL EXPANSION JOINTS.

DETAIL - WALL EXPANSION JOINT
N.T.S.



DETAIL - CORNER/TEE WALL REINFORCING
N.T.S.

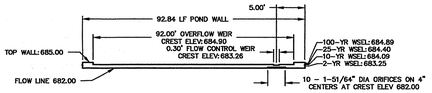


NOTE: VERTICAL WALL TO BE MORTARED CONCRETE BLOCK, LANDSCAPE TIMBER, OR STRUCTURAL CONCRETE CONSTRUCTED TO THE DIMENSIONS AS SHOWN, OR AS APPROVED BY THE DESIGN ENGINEER.

TIME OF CONCENTRATION

BASIN 101					
SHEET FLOW					
	Length (ft)	Slope (ft/ft)	n (Select)	t (hr)	
Segment 1	100	0.032	0.24	0.191	
Segment 2				0.000	
Segment 3				0.000	
SHALLOW CONCENTRATED FLOW					
	Length (ft)	Slope (ft/ft)	Surface (Select)	t (hr)	
Segment 1	67	0.032	Unpaved	0.006	
Segment 2	48	18.750	Unpaved	0.000	
Segment 3				0.000	
CHANNEL FLOW					
	Length (ft)	Velocity (fps)	t (hr)		
Segment 1			0.000		
Segment 2			0.000		
Segment 3			0.000		
Time of Concentration=		0.197	hr >	11.8	min
Lag Time=		0.118	hr >	7.1	min

PROPOSED CONDITION TIMES OF CONCENTRATION ARBITRARILY SET AT 3.6 MINUTES, THE MINIMUM RECOMMENDED



OUTLET STRUCTURE DETAIL

DETENTION POND OUTLET STRUCTURE

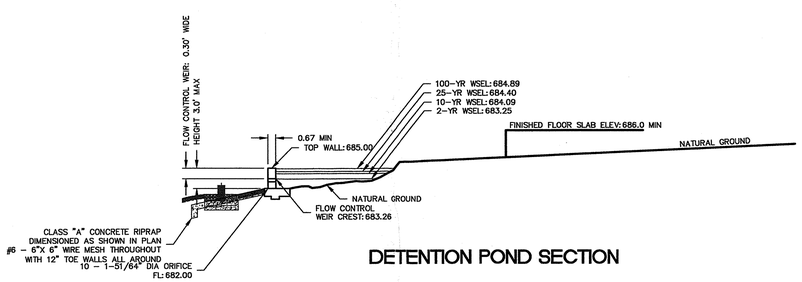
ORIFICE OUTLET						
Structure Number	No. of Barrels	Crest Elev (Ft)	Radius (in)	Center Elev (Ft)	Area (SF)	Coeff
1	10.00	682.00	0.90	682.08	0.01767	0.60
BROAD CRESTED SPILLWAYS						
Structure Number	Crest Elev (Ft)	Length (in)	Coeff			
1	683.26	0.30	3.00			
2	684.90	92.00	3.00			

EXISTING CONDITION BASIN INFORMATION

	Area (Acres)	Area (sm)	IC %	SOIL WEIGHTED PERVIOUS CN	Lag Time (min)	AREA IN HSG A (Acres)	HSG A CN	AREA IN HSG B (Acres)	HSG B CN	AREA IN HSG C (Acres)	HSG C CN	AREA IN HSG D (Acres)	HSG D CN	2-YEAR PEAK DISCHARGE (cfs)	10-YEAR PEAK DISCHARGE (cfs)	25-YEAR PEAK DISCHARGE (cfs)	100-YEAR PEAK DISCHARGE (cfs)
BASIN 101	0.449	0.00070156	12.7	84	7.1	0.00	49	0.00	69	0.00	79	0.45	84	0.9	1.9	2.4	3.4

PROPOSED CONDITION BASIN INFORMATION

	Area (Acres)	Area (sm)	IC %	SOIL WEIGHTED PERVIOUS CN	Lag Time (min)	AREA IN HSG A (Acres)	HSG A CN	AREA IN HSG B (Acres)	HSG B CN	AREA IN HSG C (Acres)	HSG C CN	AREA IN HSG D (Acres)	HSG D CN	2-YEAR PEAK DISCHARGE (cfs)	10-YEAR PEAK DISCHARGE (cfs)	25-YEAR PEAK DISCHARGE (cfs)	100-YEAR PEAK DISCHARGE (cfs)
BASIN 201	0.352	0.00055000	54.7	84	3.6	0.00	49	0.00	69	0.00	79	0.35	84	0.9	1.8	2.3	3.1
BASIN 202	0.097	0.00015156	0.0	84	3.6	0.00	49	0.00	69	0.00	79	0.10	84	0.2	0.5	0.6	0.9
TOTAL	0.449	0.00070156															



DETENTION POND SECTION

NOTE: THE DESIGN AND CONFIRMING ANALYSIS INFORMATION FOR THIS PLAN IS LOCATED IN THE DRAINAGE REPORT SUBMITTED ALONG WITH THIS PLAN.

REVISION NO.	DATE OF REVISION	REVISION DESCRIPTION	APPROVED BY

SHEET

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POND DESIGN