

GENERAL NOTES:

THE DETENTION POND FACILITY SHALL ALSO BE USED AS A TEMPORARY SEDIMENT TRAP FOR THE PURPOSES OF THE TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM CONSTRUCTION PERMIT FOR THIS SITE. THE CONTRACTOR SHALL CLEAN ALL SEDIMENT OUT OF THE DETENTION FACILITY UPON FINAL STABILIZATION OF THE SITE.

CONTRACTOR TO HYDROMULCH ENTIRE DISTURBED LIMITS OF EARTHEN PORTION OF POND. 85% OF POND SURFACE MUST HAVE ESTABLISHED VEGETATION PRIOR TO ACCEPTANCE OF THE CHANNEL BY THE CITY OF BOERNE & KENDALL COUNTY.

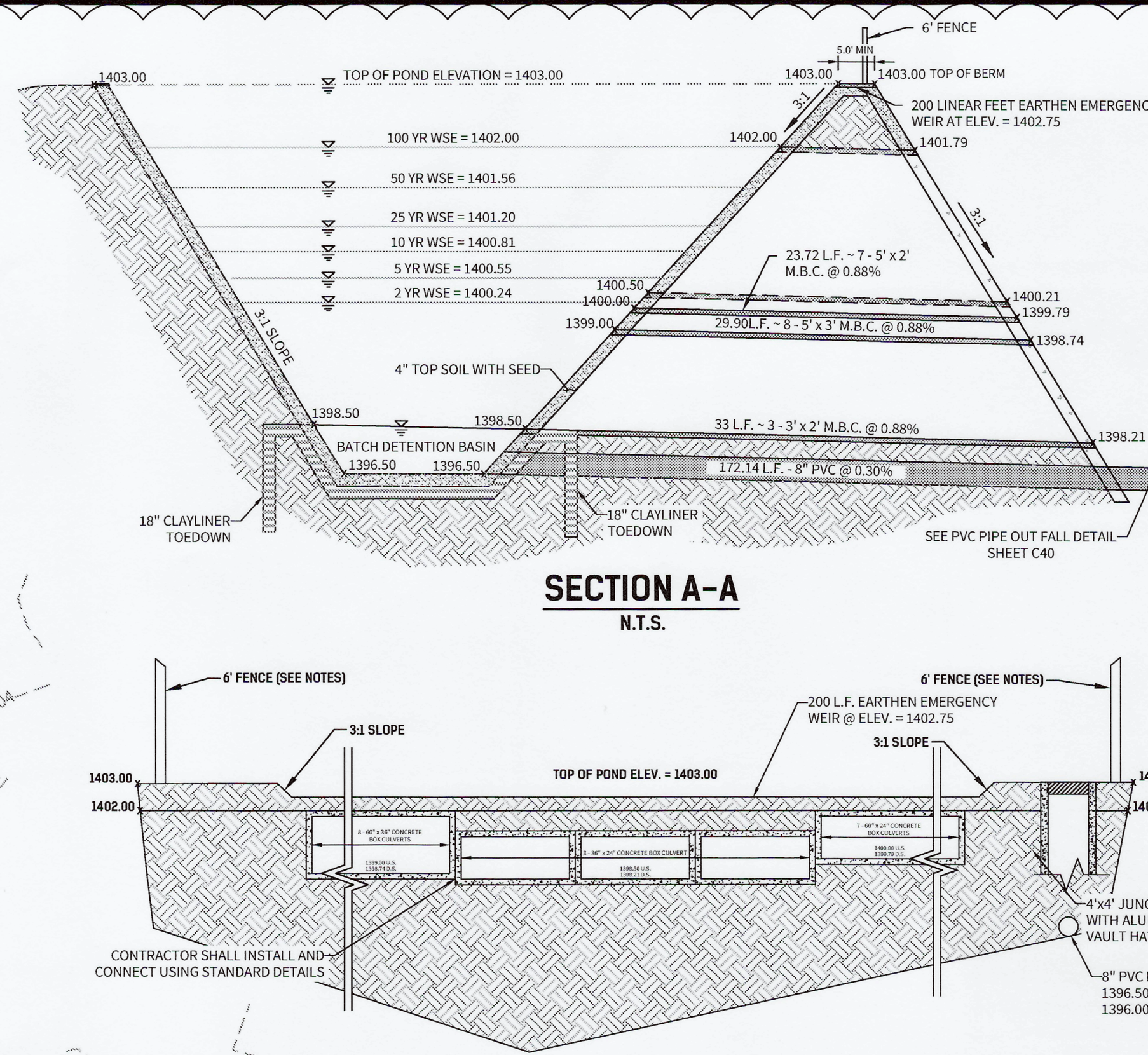
THE CONTRACTOR SHALL NOTIFY A UTILITY LOCATOR AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION ACTIVITY ADJACENT TO THE CONSTRUCTION OF ANY ON-SITE DRAINAGE FACILITIES TO PROTECT ANY UNIDENTIFIED EXISTING UNDERGROUND UTILITY FACILITY FROM DAMAGE OR HARM. THE CONTRACTOR SHALL HAVE THE SOLE RESPONSIBILITY FOR ANY DAMAGES TO UTILITIES AS A RESULT OF NOT LOCATING UNDERGROUND UTILITY RESOURCES.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE OF THE CITY OF BOERNE, TEXAS.

ANY AREAS EXPOSED TO HIGH VELOCITY FLOWS SHALL EITHER HAVE A 6" THICK ROCK GABION MATTRESS INSTALLED OR THE INSTALLATION OF APPROPRIATE GEOTECHNICAL LINER AS DIRECTED BY THE CONSTRUCTION ENGINEER IN CHARGE.

ALL CONCRETE SHALL BE A MINIMUM OF 3500 PSI @ 28 DAYS COMPRESSIVE STRENGTH UNLESS OTHERWISE SPECIFIED HEREIN ON THESE DOCUMENTS.

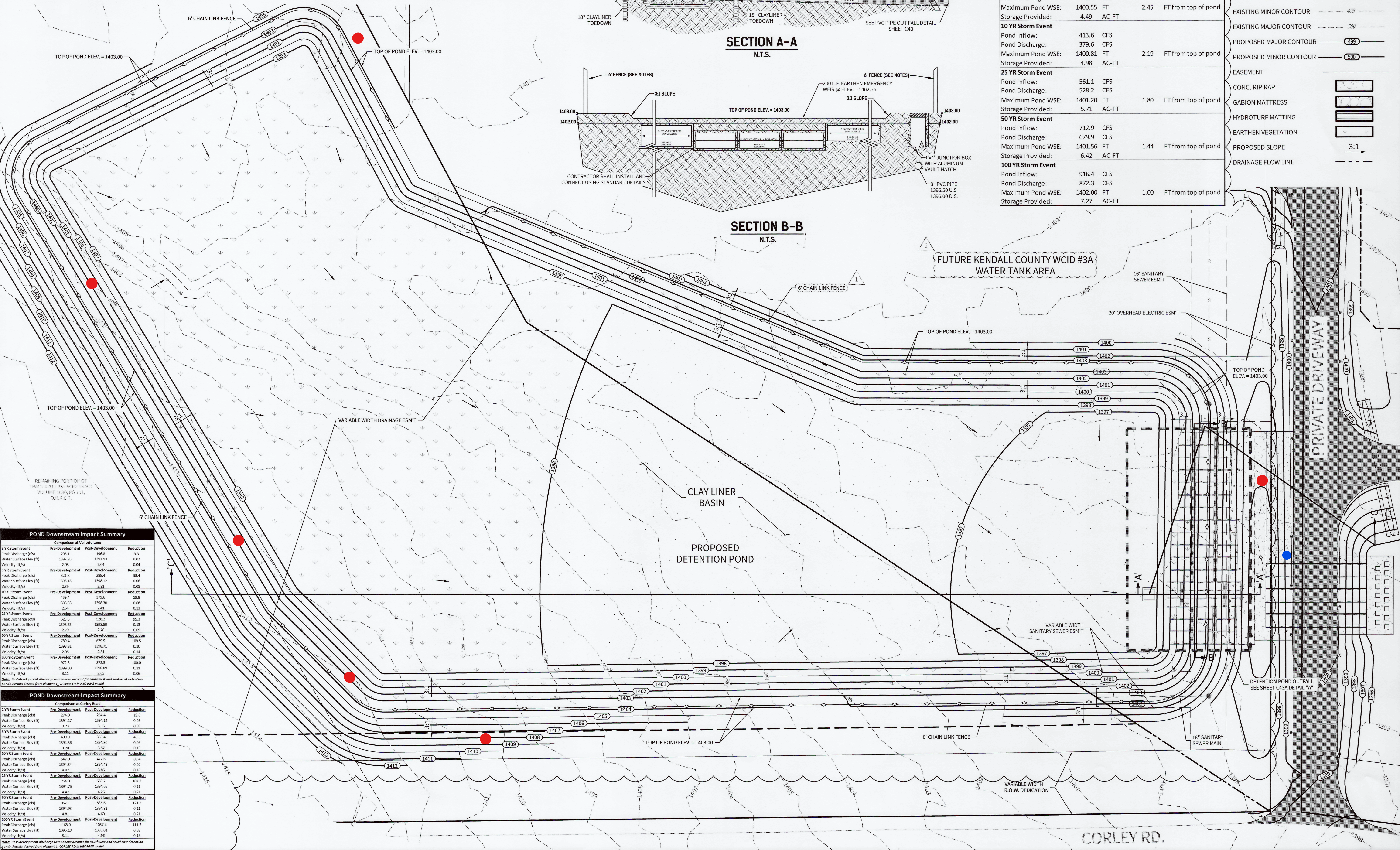
THE OWNER SHALL SPECIFY THE USE OF EITHER A CHAINLINK FENCE OR A WOODEN PRIVACY FENCE. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO INSTALLATION AND CONSTRUCTION.



POND Outfall Structure Details:				
33.00 LF of 3 - 3'x2' M.B.C. @ 0.88%	US Invert:	1398.50	DS Invert:	1398.21
29.90 LF of 8 - 5'x3' M.B.C. @ 0.88%	US Invert:	1399.00	DS Invert:	1398.74
23.72 LF of 7 - 5'x2' M.B.C. @ 0.88%	US Invert:	1400.00	DS Invert:	1399.79

POND Characteristics Table:				
2 YR Storm Event				
Pond Inflow:	229.3	CFS		
Pond Discharge:	196.8	CFS		
Maximum Pond WSE:	1400.24	FT	2.76	FT from top of pond
Storage Provided:	3.92	AC-FT		
5 YR Storm Event				
Pond Inflow:	321.5	CFS		
Pond Discharge:	288.4	CFS		
Maximum Pond WSE:	1400.55	FT	2.45	FT from top of pond
Storage Provided:	4.49	AC-FT		
10 YR Storm Event				
Pond Inflow:	413.6	CFS		
Pond Discharge:	379.6	CFS		
Maximum Pond WSE:	1400.81	FT	2.19	FT from top of pond
Storage Provided:	4.98	AC-FT		
25 YR Storm Event				
Pond Inflow:	561.1	CFS		
Pond Discharge:	528.2	CFS		
Maximum Pond WSE:	1401.20	FT	1.80	FT from top of pond
Storage Provided:	5.71	AC-FT		
50 YR Storm Event				
Pond Inflow:	712.9	CFS		
Pond Discharge:	679.9	CFS		
Maximum Pond WSE:	1401.56	FT	1.44	FT from top of pond
Storage Provided:	6.42	AC-FT		
100 YR Storm Event				
Pond Inflow:	916.4	CFS		
Pond Discharge:	872.3	CFS		
Maximum Pond WSE:	1402.00	FT	1.00	FT from top of pond
Storage Provided:	7.27	AC-FT		

LEGEND	
PROPERTY BOUNDARY	---
EXISTING MINOR CONTOUR	--- 499 ---
EXISTING MAJOR CONTOUR	--- 500 ---
PROPOSED MAJOR CONTOUR	--- 499 ---
PROPOSED MINOR CONTOUR	--- 500 ---
EASEMENT	---
CONC. RIP RAP	[Pattern]
GABION MATTRESS	[Pattern]
HYDROTUFF MATTING	[Pattern]
EARTHEN VEGETATION	[Pattern]
PROPOSED SLOPE	3:1
DRAINAGE FLOW LINE	---



POND Downstream Impact Summary				
Comparison at Vallente Lane				
	Pre-Development	Post-Development	Reduction	
2 YR Storm Event				
Peak Discharge (cfs)	206.3	196.8	9.3	
Water Surface Elev (ft)	1397.95	1397.93	0.02	
Velocity (ft/s)	2.08	2.06	0.02	
5 YR Storm Event				
Peak Discharge (cfs)	321.5	288.4	33.1	
Water Surface Elev (ft)	1398.38	1398.12	0.26	
Velocity (ft/s)	2.39	2.31	0.08	
10 YR Storm Event				
Peak Discharge (cfs)	413.6	379.6	34.0	
Water Surface Elev (ft)	1398.38	1398.30	0.08	
Velocity (ft/s)	2.54	2.41	0.13	
25 YR Storm Event				
Peak Discharge (cfs)	621.5	528.2	93.3	
Water Surface Elev (ft)	1398.63	1398.50	0.13	
Velocity (ft/s)	2.79	2.70	0.09	
50 YR Storm Event				
Peak Discharge (cfs)	712.9	679.9	33.0	
Water Surface Elev (ft)	1398.81	1398.71	0.10	
Velocity (ft/s)	2.95	2.85	0.10	
100 YR Storm Event				
Peak Discharge (cfs)	916.4	872.3	44.1	
Water Surface Elev (ft)	1399.00	1398.99	0.01	
Velocity (ft/s)	3.11	3.05	0.06	
Note: Post-development discharge rates above account for southeast and southwest detention ponds. Results derived from element 1, CORLEY RD to REC-1985 model.				
POND Downstream Impact Summary				
Comparison at Corley Road				
	Pre-Development	Post-Development	Reduction	
2 YR Storm Event				
Peak Discharge (cfs)	274.0	264.4	9.6	
Water Surface Elev (ft)	1394.17	1394.14	0.03	
Velocity (ft/s)	3.23	3.15	0.08	
5 YR Storm Event				
Peak Discharge (cfs)	409.9	366.4	43.5	
Water Surface Elev (ft)	1394.36	1394.30	0.06	
Velocity (ft/s)	3.70	3.57	0.13	
10 YR Storm Event				
Peak Discharge (cfs)	527.0	477.6	49.4	
Water Surface Elev (ft)	1394.54	1394.45	0.09	
Velocity (ft/s)	4.02	3.86	0.16	
25 YR Storm Event				
Peak Discharge (cfs)	764.0	656.7	107.3	
Water Surface Elev (ft)	1394.76	1394.65	0.11	
Velocity (ft/s)	4.47	4.28	0.19	
50 YR Storm Event				
Peak Discharge (cfs)	977.1	835.6	141.5	
Water Surface Elev (ft)	1394.93	1394.82	0.11	
Velocity (ft/s)	4.81	4.60	0.21	
100 YR Storm Event				
Peak Discharge (cfs)	1285.0	1071.4	213.6	
Water Surface Elev (ft)	1395.10	1395.01	0.09	
Velocity (ft/s)	5.11	4.90	0.21	
Note: Post-development discharge rates above account for southeast and southwest detention ponds. Results derived from element 1, CORLEY RD to REC-1985 model.				

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CORLEY FARMS
UNIT 1

BATCH DETENTION POND PLAN "SOUTHEAST POND"

DATE	11/15/2021
PROJECT NO.	03481.004
DRAWN BY	C3
CHECKED BY	XV/JC/DDC

REVISIONS	
1.	2021-04-28 - BID REVISION CALL OUT VERBAGE.
2.	
3.	2021-08-26 - CITY OF BOERNE COMMENTS
4.	2021-11-12 - CITY OF BOERNE COMMENTS
5.	
6.	
7.	
8.	
9.	

STATE OF TEXAS
DAVID D. CURP II
122076
Professional Engineer

11/15/2021
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TBPLS No. 10048500

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