

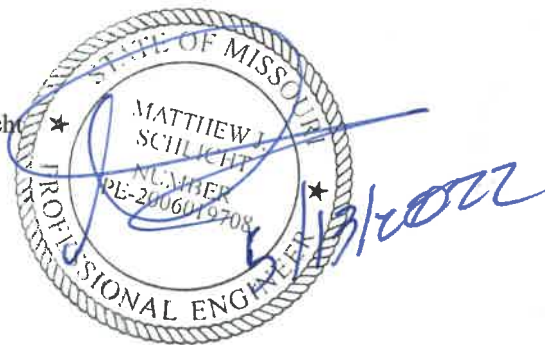


Storm Drainage Letter
May 13, 2022
Home Depot C-Store
Lee's Summit, MO

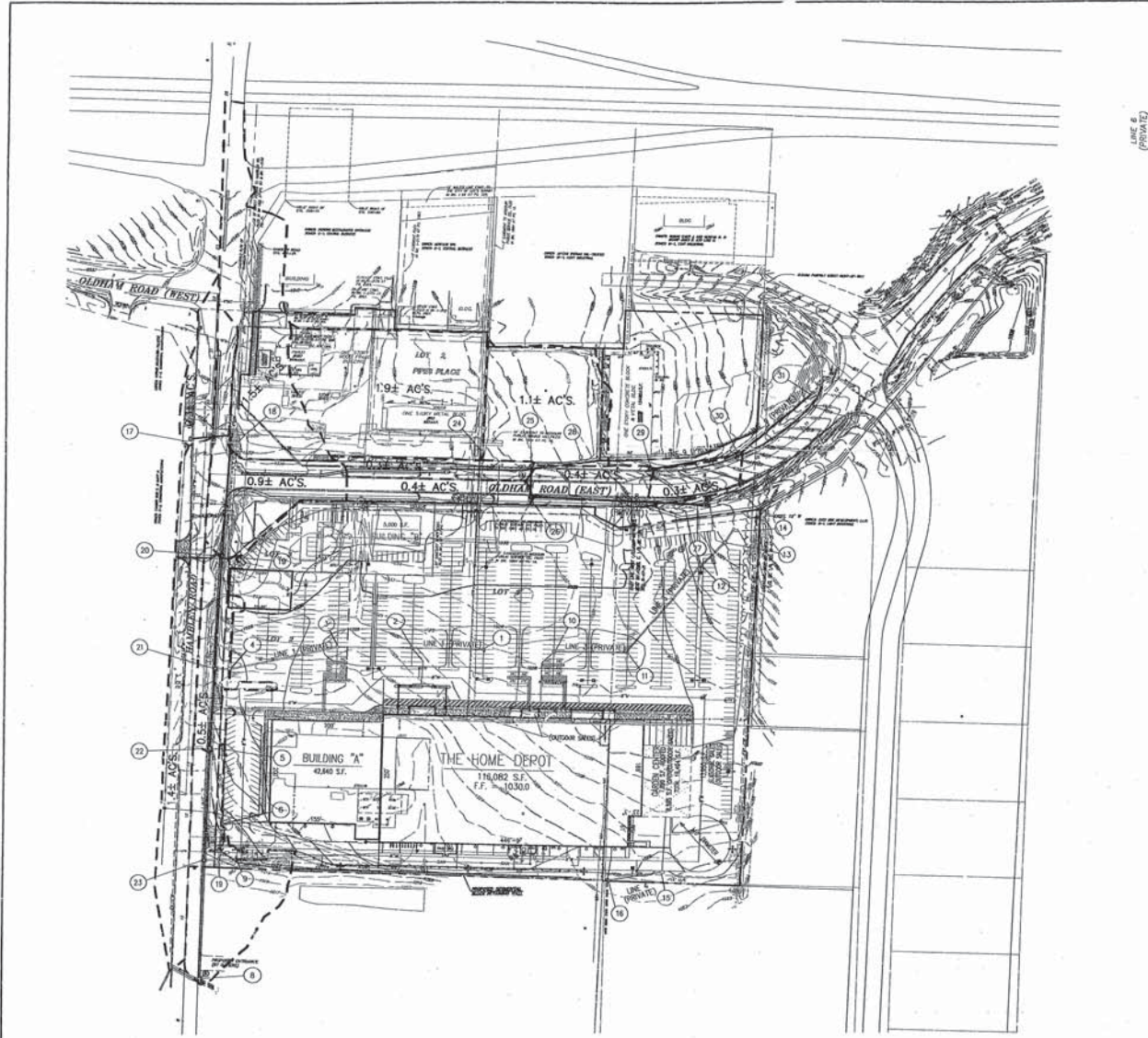
The subject project Home Depot C-Store is part of the larger Development Plan for the Home Depot site, reference attached Sheet 13 of the approved set. The proposed development of the subject site is in conformance with the Approved Stormwater Plan as it was shown as parking and future building areas. The site is draining to Storm Line 1 and within areas shown on the drainage calculation as shown on Sheet 13 as having a runoff coefficient of 0.90.

Should you have any questions related to this letter please contact Matt Schlicht, Engineering Solutions

Matt Schlicht



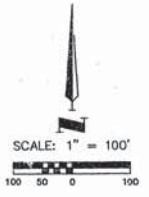
AUTOCAD 2013 INFORMATION BLOCK
 DRAWING: 2200022.DWG JOB NO.: LAYOUT: 1-4-D1
 USER: JAMES.MOORE USER PLOT: JAMES.MOORE
 USER: JAMES.MOORE



LINE 6
(PRIVATE)

STORM DRAINAGE CALCULATIONS																
LINE NUMBER	LINE TYPE	LINE LENGTH (FEET)	STORM FREQUENCY					Runoff Coef. "C"	Increment "I"	Area "A" (Acres)	Accum. Area "A" (Acres)	Runoff Rate "Q" (cfs)	Head-Water (feet)	Remarks		
			10 YEAR	5 YEAR	2 YEAR	1 YEAR	0.013									
1	LINE 1 (PRIVATE)	137.05	0.57	24	79.3	6.7	0.5	5.0	0.80	1.2	1.3	10.3	13.4	3.63	100 YEAR	
2	LINE 2 (PRIVATE)	132.50	1.00	24	26.7	0.5	0.3	5.5	0.80	1.2	1.3	2.7	10.3	20.7	4.00	
3	LINE 3 (PRIVATE)	97.00	1.14	27	30.1	0.8	0.3	5.0	0.80	1.1	1.2	3.8	10.3	30.1	3.55	
4	LINE 4 (PRIVATE)	27.19	0.64	27	29.3	2.4	0.1	6.1	0.80	1.0	0.9	4.1	2.1	20.1	2.30	
5	LINE 5 (PRIVATE)	18.50	2.00	18	68.8	14.0	0.1	5.0	0.90	2.8	2.5	—	7.4	18.5	3.44	
6	LINE 6 (PRIVATE)	27.35	2.02	30	68.8	14.0	0.1	5.1	—	—	—	—	7.4	18.5	3.81	
7	LINE 7 (PRIVATE)	15.00	0.50	21	13.5	5.6	0.5	5.0	0.80	1.2	1.3	—	10.3	13.4	2.81	
8	LINE 8 (PRIVATE)	27.11	1.00	24	26.7	8.5	0.6	6.1	0.80	0.8	0.9	2.2	10.3	22.7	2.37	
9	LINE 9 (PRIVATE)	59.85	0.40	24	16.9	5.4	0.2	6.1	0.80	0.6	0.5	2.3	7.1	10.3	2.31	
10	LINE 10 (PRIVATE)	27.11	0.44	27	24.3	7.0	0.1	6.3	0.80	1.2	1.1	3.4	7.1	24.1	2.61	
11	LINE 11 (PRIVATE)	100.00	0.78	15	6.7	3.8	0.3	5.0	0.80	0.7	0.6	—	2.4	4.5	2.03	
12	LINE 12 (PRIVATE)	3.00	1.25	11.25	8.44	—	—	5.3	0.80	1.0	0.9	1.5	2.4	11.1	2.23	
13	LINE 13 (PRIVATE)	28.10	1.10	15	8.0	6.5	0.1	5.0	0.90	0.3	0.3	—	2.4	2.2	1.30	
14	LINE 14 (PRIVATE)	68.74	5.04	15	17.2	14.0	0.1	5.0	0.90	1.3	1.2	—	7.4	8.0	2.15	
15	LINE 15 (PRIVATE)	28.25	1.40	15	7.8	6.2	0.3	5.0	0.78	0.3	0.23	—	7.35	1.7	1.28	
16	LINE 16 (PRIVATE)	232.15	1.48	18	12.8	7.2	0.6	5.3	0.78	1.5	1.17	1.4	2.35	10.3	1.71	
17	LINE 17 (PRIVATE)	219.25	2.20	18	15.6	8.8	0.5	6.4	—	—	—	—	8.2	7.08	4.58	
18	LINE 18 (PRIVATE)	533.88	0.68	42	63.0	8.8	0.2	6.6	0.78	0.5	0.39	6.89	7.06	48.8	2.88	
19	LINE 19 (PRIVATE)	218.82	1.82	34.63	136.1	14.2	0.4	7.0	—	—	—	—	10.58	7.08	74.8	
20	LINE 20 (PRIVATE)	237.27	0.68	42	63.0	8.8	0.4	7.4	—	—	—	—	—	—	—	
21	LINE 21 (PRIVATE)	—	—	—	—	—	—	—	5.0	0.9	1.9	1.71	—	7.35	12.6	2.37
22	LINE 22 (PRIVATE)	58.00	0.72	24	18.2	6.1	0.2	5.0	0.78	0.3	0.23	1.94	2.35	14.2	2.02	
23	LINE 23 (PRIVATE)	303.4	0.72	24	19.2	6.1	0.6	5.3	0.78	0.4	0.31	2.25	7.35	16.5	2.00	
24	LINE 24 (PRIVATE)	—	—	—	—	—	—	—	5.0	0.9	1.1	0.99	—	7.35	7.3	1.98
25	LINE 25 (PRIVATE)	58.96	2.60	18	16.9	8.8	0.3	5.0	0.78	0.4	0.31	1.30	7.35	8.6	1.68	
26	LINE 26 (PRIVATE)	77.34	4.04	18	21.1	12.0	0.2	5.3	0.78	0.3	0.23	1.53	7.35	11.2	2.84	
27	LINE 27 (PRIVATE)	—	—	—	—	—	—	—	5.3	0.78	0.3	0.23	1.53	7.35	11.2	2.84

GENERAL NOTES
 1. All pipe shall be CPEP w/ interior walls, spiral rib steel CSP, or RCP Class III, unless otherwise noted.
 2. Manning's "n" value used is 0.013.
 3. Design storm frequency used is 10 year developed condition for pipe design.



THE HOME DEPOT
 LEE'S SUMMIT, MISSOURI
 STORM DRAINAGE STUDY

SHAFFER, KLINE & WARREN, INC.
 11100 West 21st St., Overland Park, KS 66214
 913/688-7800 FAX 913/688-7898

OTHER OFFICE LOCATIONS:
 Lee, MO
 Chesterfield, MO
 Kansas City, MO
 Moberly, MO

DESIGNED BY: JMS
 DRAWN BY: BJS
 CHECKED BY: GCU
 ISSUE DATE: 2-26-16
 JOB NO.: 133000

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