APPENDIX I

PIPE RECONAISSANCE SURVEY

Pipe Count	Location Description	Creek Mile of pipe	Date Reconned	Time Reconned	River Bank of Pipe	Diameter of pipe	Latitude			Longitude			GPS Accuracy	Was Pipe Flowing?	Days since last precipitation > 0.3 inches	Approx Ht of Pipe invert above water	Approx Dist pipe end to edge of water	Photo Number	Comments	
		(from GIS)			(River Right or Left)	(feet)	(decimal deg)			(decimal deg)			(feet)	(Yes or No)	(from Harris Co. OEM)	(feet)	(feet)			
1	200 ft upstream of FM 518 bridge		6/29/2005	8:35	left bank	1.5	29	31	6	95	11	27		Cannot Tell		2	6			
2	15 ft downstream of FM 518 bridge		6/29/2005	8:45	left bank	5								No		10	25		Trickle of Flow	
3	30 ft downstream of FM 518 bridge		6/29/2005	8:49	right bank	5								No		3				
4	1000 ft downstream of FM 518 bridge		6/29/2005	8:55	right bank	1								No					Submerged pipe	
5	800 ft past first left curve in creek		6/29/2005	9:01	left bank	1								No			3.5			
6	End of Deep Wood Road		6/29/2005	9:27	left bank	1.5	29	31	6.62	95	11	27.62		No		0.5	0.5			
7	200 ft from end of Deep Wood Road		6/29/2005	9:30	left bank	0.25								No		0.5	0.5			
8	1000 ft from FM 528 bridge at water ret. pond		6/29/2005	9:43	right bank	2.5								No		5	7			
9	90 ft upstream of FM 528 bridge		6/29/2005	9:54	right bank	2.5	27	31	5	95	10	44		No			0.5			
10	60 ft downstream of FM 528 bridge		6/29/2005	10:02	right bank	0.8	29	31	2	95	10	43		No		5	10			
11	On foot observed drainage		6/29/2005	12:35	left bank		29	35	13.2	95	23	2.4		No						
12	Near park		6/29/2005	12:57	right bank		29	35	16.83	95	22	41.01		No		5				
13			6/29/2005	13:01	left bank	3.8	29	35	17.86	95	22	34.75		No			8			
14	Drainage ditch at park		6/29/2005	13:10			29	35	17.93	95	22	31.96		No		2				
15	Draining from ditch		6/29/2005	13:16	left bank	4	29	35	15.85	95	22	26.13		No		2				
16	Found drainage ditch		6/29/2005	13:27	left bank		29	35	9.95	95	22	14.26		No						
17	600 ft downstream of bridge		8/4/2005	11:42	left bank	3.4	29	34.892					13.4	No			2	1		
18	100 ft downstream of bridge		8/4/2005	11:48	right bank	2.25	29	34.929		95	27.497		13.5	No				2		
19	1500 ft downstream		8/4/2005	11:52	right bank	1.81	29	34.946		95	27.480		13.6	No				3		
20	1750 ft downstream		8/4/2005	11:54	left bank	4	29	34.959		95	27.475		13.7	No		1.5		4		
21	1000 ft upstream of H. Walker bridge		8/4/2005	12:00	left bank	2.16	29	35.016		95	27.36		14.1	No			1	5		
22	Approx same distance from bridge		8/4/2005	12:01		2.16	29	35.016		95	27.36			No			3	6		
23	Right under H.Walker bridge		8/4/2005	12:08	right bank	2.75	29	35.013		95	27.248		14.6	No				7		
24	1000 ft upstream of H.Walker Bdg		8/4/2005	12:20	right bank	3.42	29	35.015		95	27.136		16.6	No			1.5	8		
25	2000 ft upstream		8/4/2005	12:25	left bank	3.2	29	35.033		95	27.68		15.6	No			25	9		
26	.25 mi downstream of H.Walker bridge		8/4/2005	12:37	left bank	1.86	29	35.057		95	29.917		16.5	No			6	10		
27	Across stream from previous		8/4/2005	12:38	right bank	1.5	29	35.057		95	26.917		16.5	No				11		
28	Across upstream of highway		8/4/2005	12:47	right bank	2.04	29	35.051		95	26.847		15.9	No			5	12		
29	.25 mi upstream of highway		8/4/2005	12:48	left bank	2.1	29	35.057		95	26.852		15	No			10	13		
30	2000 ft upstream bridge		8/4/2005	12:54	right bank	1.46	29	35.001		95	26.765		17.8	No			6			
31	1950 ft from bridge		8/4/2005	12:57	left bank	1.72	29	35.001		95	26.746		16.1	No			10	15		
32	10 ft upstream FM 2234		8/4/2005	13:08	right bank	2.6	29	34.892		95	26.485		14.8	No			12			
33	30 ft downstream of 2234 bridge		8/4/2005	13:16	left bank	3.04	29	34.88		95	26.456		14.8	No			10	17		
34	1500 ft downstream 2234 bridge		8/4/2005	13:23	right bank	1.6	29	34.829		95	26.37		14.9	No			5	18		
35	1500 ft from 2234 bridge		8/4/2005	13:24	left bank	1.6	29	34.838		95	26.367		14.8	No			5	18.5		
36	20 ft downstream of 521 bridge at 2234		8/4/2005	15:16	right bank	2	29	34.755		95	25.947		17.3	No				19&20		
37	30 ft downstream of 521 bridge		8/4/2005	15:22		1.94	29	34.814		95	25.859		16.4	No			2	21		
38			8/5/2005	9:21	left bank		29	34.92		95	24.282		16	No		ck level	0	23&24	looks like construction runoff	
39			8/5/2005	9:38	left bank	2.5	29	34.922		95	24.087		14.4	No		ck level	0	25		
40	10 ft downstream of wooden bridge		8/5/2005	10:24		3.3	29	34.918		95	24.028		21.2	No				1		
41	Northward turn in creek channel		8/5/2005	11:21	right bank	4	29	34.898		95	23.568		13.4	No		ck level	0	2&3		
42	600 yards upstream of 865 bridge		8/8/2005	13:25	left bank	5	29	35.172		95	21.235		41.6	No		0.3	1.8	4		
43			8/8/2005	13:45	left bank	2.25	29	35.119		95	21.574			No		8	2	5&6		
44	Wooden bridge approx. 100 ft upstream of fork		8/8/2005	13:53	left bank		29	35.099		95	21.635			No		ck level	0	7&8		
45	Heading downstream from 856 bridge approx 0.125 mile		8/8/2005	15:39	left bank	3.8	29	35.152		95	20.689		22.4	No		ck level	23	9&10		
46	.25 downstream of 856 bridge at a park		8/8/2005	15:52	left bank	3.96	29	35.184		95	20.766		30	No		5	15	11&12		
47	200 yards downstream from previous		8/8/2005	16:00	left bank	4.08	29	35.215		95	20.697		25.6	No		5	20	13&14		
48	1500 yards downstream		8/8/2005	16:51	left bank	4.04	29	35.608		95	20.329			No				15&16		
49	.125 miles upstream of beltway		8/8/2005	17:17	left bank	2.56	29	35.865		95	30.037			No			20	17&18&19		
50	Around beltway 8		8/8/2005	17:33	left bank	7	29	35.746		95	19.903			No		4	3	20&21		
51	1/2 way between Stoney Rd & 35		8/8/2005	18:04	left bank	3.04	29	95.879		95	19.514		26.7	No		3				
52	1500 ft from exit point		8/8/2005	18:16	left bank	3.65	29	35.833		95	19.276		18.9	No		3.5	2.25			
53	At bend where Curt picked us up		8/8/2005	18:22	left bank	4	29	35.898		95	19.18		13.8	No		8				
54	.20 miles downstream of wayside		8/11/2005	12:06	right bank		29	35.9		95	18.901		16.5	No						
55			8/11/2005	12:10	right bank	2	29	35.718		95	18.582		17.9	No		15	5			
56	100 ft downstream of previous		8/11/2005	12:15	right bank	3.5	29	35.711		95	18.555		18	No			0.5			
57	200 ft downstream of previous		8/11/2005	12:17	right bank	3	29	35.705		95	18.516		16	No		4	5			
58	200 ft downstream of previous		8/11/2005	12:19	right bank	1.3	29	35.711		95	18.468		16.2	No		20	5			
59	300 ft downstream of previous		8/11/2005	12:26	right bank	1.75	29	35.715		95	18.41		16.2	No		20	10			
60	750 ft downstream of previous		8/11/2005	12:32	right bank	4.5	29	35.721		95	18.251		16.6	No		15	15			
61	100 ft downstream of previous		8/11/2005	12:34	right bank	2.25	29	35.718		95	18.232		16.9	No		15	7			
62	2000 ft downstream of previous		8/11/2005	12:38	right bank	1.95	29	35.737		95	18.129		17.8	No		5	2.5			

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		(from GIS)			(River Right or Left)	(feet)	(decimal deg)			(decimal deg)			(feet)	(Yes or No)	(from Harris Co. OEM)	(feet)	(feet)			
63	60 ft downstream of previous		8/11/2005	12:40	right bank	3.1	29	35.742		95	18.117		16.7	No		5	2.5			
64	35 ft downstream of previous		8/11/2005	12:41	right bank	1	29	35.743		95	18.113		18.2	No		23	11			
65	250 ft downstream of previous		8/11/2005	12:45	right bank	2.3	29	35.772		85	18.041		16.9	No		19	12			
66	82 yards downstream of Mykawa bridge		8/11/2005	12:49	right bank	3	29	35.828		95	17.906		17	No			36			
67	250 yards downstream from Mykawa bridge		8/11/2005	13:45	right bank	2.3	29	35.795		95	19.685		16.4	No						
68	150 yards downstream of previous		8/11/2005	13:50	right bank	2.1	29	35.784		95	77.62		15.1	No		0.5	14			
69	1000 ft downstream of previous		8/11/2005	14:02	right bank	2.2	29	35.86		95	17.352		16.7	No						
70	60 ft upstream of 35 bridge		8/11/2005	14:08	right bank	3.1	29	35.854		95	17.206		15.2	No		0.25	3			
71	55 ft upstream of 35 bridge		8/11/2005	14:09	left bank	4.02	29	35.856		95	17.205		25.6	No		1	17.5			
72	40 ft downstream of 35 bridge		8/11/2005	16:30	right bank	2.6	29	35.852		95	17.182		17.9	No		3.6	7			
73	45 ft downstream from 35 bridge		8/11/2005	16:31	left bank	5.3	29	35.856		95	17.18		18.9	No		2	12			
74	.30 mi downstream of 35 bridge		8/11/2005	16:49	right bank	0.9	29	35.73		95	16.716		30.6	No		12	33			
75	1/2 way between 35 & Pearland pkwy.		8/11/2005	16:59	right bank	1.8	29	35.716		95	16.614		29.5	No		2.5	9.5			
76	3/4 way to Pearland pkwy		8/11/2005	17:13	right bank	1.96	29	35.671		95	16.243		19.5	No		2	10			
77	200 yards upstream of Pearland pkwy.		8/11/2005	17:34	right bank	5.2	29	35.631		95	16.05		26.2	No		20				
78	100 ft downstream of Pearland pkwy		8/12/2005	9:24	right bank	2.2	29	35.639		95	15.936		13.8	No		15	35			
79	1000 ft downstream of Pearland pkwy		8/12/2005	9:29	right bank	1.75	29	35.619		95	15.81		13.2	No		0.25	3			
80	200 yards downstream of previous		8/12/2005	9:32	left bank	1	29	35.525		95	15.721		13.6	No		4.5				
81	50 ft downstream of previous		8/12/2005	9:35	left bank	3.7	29	35.585		95	15.718		13.8	No		3	4			
82	400 ft downstream of previous		8/12/2005	9:40	right bank	2.8	29	35.482		95	15.665		13	No		15	23			
83	800 ft downstream of previous		8/12/2005	9:47	right bank	3.7	29	35.021		95	15.746		12.6	No		5	8			
84	1000 ft downstream from previous		8/12/2005	9:55	right bank	2	29	35.864		95	15.684		12.5	No		15	20			
85	300 ft downstream of previous		8/12/2005	9:58	right bank	4.7	29	34.779		95	15.63		12.7	No		3.6	33			
86	200 yards upstream of entrance by WWTP		8/12/2005	10:02	right bank	1.3	29	34.544		95	15.6		12.5	No		12	35			
87	100 yards upstream of WWTP entrance		8/12/2005	10:07	right bank	1.25	29	34.476		95	15.596		13.6	No			2			
88	20 ft upstream from WWTP entrance		8/12/2005	10:09	right bank	3.5	29	34.427		95	15.554		13.7	No		5	11			
89	10 ft upstream of WWTP entrance		8/12/2005	10:12	left bank	5	29	24.427		95	15.551		12.4	No		2				
90	20 ft downstream of pkwy entrance		8/12/2005	10:14	left bank	4.8	29	34.418		95	15.543		12.4	No			3			
91	30 yards downstream of WWTP		8/16/2005	8:35	right bank	2.3	29	34.39		95	15.53		26	No		12	16			
92	300 ft downstream of previous		8/16/2005	8:40	left bank	2.9	29	34.337		95	15.504		20	No						
93	800 ft downstream of previous		8/16/2005	8:46	right bank	1.7	29	34.199		95	15.454		23	No		5	15			
94	600 ft downstream of previous		8/16/2005	8:50	right bank		29	34.155		95	15.411			No						
95	700 ft downstream of previous		8/16/2005	8:56	left bank	5.3	29	34.062		95	15.343		21	No						
96	1000 ft downstream of previous		8/16/2005	9:15	left bank	3.2	29	33.807		95	15.563		23	No		2	0.5			
97	1200 ft downstream of previous		8/16/2005	9:22	left bank	3.4	29	33.462		95	15.464		16	No						
98	80 yards from country club		8/16/2005	10:27			29	33.33		95	15.076		10	No						
99	200 ft upstream of Regal Oaks		8/16/2005	10:31	left bank	1.7	29	33.341		95	14.903		10	No		0.5	0.5			
100	50 ft downstream of Regal Oaks		8/16/2005	10:36	right bank	2.3	29	33.218		95	14.878		13	No		0.5				
101	100 ft downstream of previous		8/16/2005	10:38	right bank	3.3	29	33.189		95	14.838		10	No						
102	300 ft downstream of previous		8/16/2005	10:41	right bank	1	29	33.218		95	14.805		10	No		10	10			
103	400 ft downstream of previous		8/16/2005	10:44	right bank	2.3	29	33.256		95	14.75		10	No		3	5			
104	1000 ft downstream of previous		8/16/2005	10:50	left bank	2	29	33.294		95	14.617		16	No			0.5			
105	50 ft downstream of previous		8/16/2005	10:53	right bank	3.2	29	33.316		95	14.56		30	No		0.5	2			
106	2000 ft downstream of previous		8/16/2005	11:07	right bank	1.5	29	33.45		95	14.534		13	No						
107	400 ft downstream of previous		8/16/2005	11:15	right bank	1.75	29	33.588		95	14.493		13	No			20			
108	200 ft downstream of previous		8/16/2005	11:18	left bank	1.25	29	33.606		95	14.475		16	No		0.25	17			
109	600 ft downstream of previous		8/16/2005	11:25	left bank	5.8	29	33.671		95	14.326		20	No						
110	600 ft downstream of previous		8/16/2005	11:33	right bank	4.1	29	33.591		95	14.181		23	No						
111	Downstream end of park		8/16/2005	12:59	right bank	1.75	29	33.482		95	13.836		46	No		10	22			
112	1000 downstream of previous		8/16/2005	13:05	left bank	2.4	29	33.588		95	13.619		33	No		3.6	7			
113	1500 ft downstream		8/16/2005	13:12	left bank	1.6	29	33.524		95	13.372		13	No						
114	500 ft downstream		8/16/2005	13:16	left bank	1.2	29	33.487		95	13.321		10	No		10	12			
115	200 yards downstream		8/16/2005	13:20	right bank	2.7	29	33.419		95	13.24		43	No						
116	400 yards downstream		8/16/2005	13:25	left bank	3.3	29	33.551		95	13.107		16	No			5			
117	70 yards upstream of Dixie Farm Rd.		8/16/2005	13:30	left bank	2.5	29	33.519		95	12.989		13	Yes						
118	2500 downstream of Dixie Farm Rd.		8/17/2005	10:33	right bank	2.1	29	33.48		95	12.47		13	Yes		1	2.7	1		
119	2000 ft from previous		8/17/2005	11:13	left bank	2	29	33.633		95	11.977		25	Yes		11	4	2		
120	150 ft downstream of previous		8/17/2005	11:18	left bank	0.6	29	33.585		95	11.935		16	Yes		4	8	3		
121	250 ft downstream of previous		8/17/2005	11:23	left bank	0.6	29	33.544		95	11.957		23	Yes		4	6	4		
122	400 ft downstream of previous		8/17/2005	11:27	left bank	0.6	29	33.539		95	11.882		16	Yes		5	6	5		
123	500 ft downstream		8/17/2005	11:33	right bank	0.6	29	33.539		95	11.768		20	Yes		0.4	5	6		
124	300 ft downstream of previous		8/17/2005	11:37	left bank	0.6	29	33.597		95	11.819		26	Yes		3.9	3	7		
125	100 ft downstream of previous		8/17/2005	11:40	left bank	0.6	29	33.607		95	11.824			Yes		5	1	8		

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		(from GIS)			(River Right or Left)	(feet)	(decimal deg)			(decimal deg)			(feet)	(Yes or No)	(from Harris Co. OEM)	(feet)	(feet)			
126	300 ft downstream of previous		8/17/2005	11:45	left bank	0.6	29	33.617		95	11.753			Yes		4	2	9		
127	400 ft downstream of previous		8/17/2005	11:50	left bank	0.6	29	33.608		95	11.632		30	Yes				10		
128	1000 ft downstream		8/17/2005	11:57	left bank	0.6	29	33.359		95	11.684		39	Yes		5	3	11		
129	300 ft downstream of previous		8/17/2005	12:02	right bank	0.6	29	33.456		95	11.764		33	Yes		2	1	12		
130	200 ft downstream of previous		8/17/2005	12:07	right bank	0.6	29	33.448		95	11.834		16	Yes		6	2	13		
131	200 ft downstream of previous		8/17/2005	12:22	right bank	5.4	29	32.803		95	11.89		33	Yes		0	5	14		
132	500 ft downstream		8/17/2005	12:28	right bank	3.5	29	32.589		95	11.91		16	Yes		4	6	15&15.5		
133	300 ft downstream of previous		8/17/2005	12:34	right bank	3.3	29	32.521		95	11.859		16	Yes		2.6		16		
134	80 ft downstream of 2351 bridge		8/17/2005	12:38	left bank	5	29	32.534		95	11.792		16	Yes		5	25	17		
135	2000 ft downstream of 2351 bridge		8/18/2005	9:34	right bank	0.8	29	32.459		95	11.668		10	Yes		0	2	18		
136	350 ft downstream		8/18/2005	9:42	right bank	2.5	29	32.415		95	11.58			Yes		0		18.5		
137	1000 ft downstream of previous		8/18/2005	9:49	right bank	2	29	32.307		95	11.667		10	Yes		0.25	0.75	19		
138	750 ft downstream of previous		8/18/2005	9:54	right bank	0.7	29	32.186		95	11.564		16	Yes		0.25	0.8	20		
139	300 ft downstream of previous		8/18/2005	9:57	right bank	4.2	29	32.158		95	11.517		10	Yes		0.25	6.5	21		
140	1200 ft downstream of previous		8/18/2005	10:06	left bank	1.3	29	32.055		95	11.26		10	Yes		1.5	1.6	22		
141	1000 ft downstream		8/18/2005	10:15	left bank	2.5	29	31.768		95	11.32		10	Yes		0.1		23		
142	300 ft downstream of previous		8/18/2005	10:17	right bank	1.8	29	31.752		95	11.347		13	Yes		1	4	24		
143	250 ft downstream of previous		8/18/2005	10:21	left bank	3	29	31.718		95	11.275		10	Yes		0		25		
144	250 ft downstream of previous		8/18/2005	10:27	left bank	0.8	29	31.564		95	11.206		13	Yes		0.2	1.6	26		
145	100 ft downstream		8/18/2005	10:29	right bank	1.2	29	31.541		95	11.208		10	Yes		0.5	2	27		
146	200 ft downstream of previous		8/18/2005	10:33	right bank	1.7	29	31.478		95	11.257		10	Yes		2	0.75	28		
147	30 ft downstream		8/18/2005	10:35	right bank	0.8	29	31.47		95	11.268		10	Yes				29		
148	5 ft downstream of Whispering Oaks		8/18/2005	10:38	right bank	3	29	31.398		85	11.175		7	Yes		20	40	30		
149	600 ft downstream of previous		8/18/2005	10:45	right bank	0.2	29	31.249		95	11.078		10	Yes		0.6	0.5	31		
150	100 ft downstream		8/18/2005	10:47	right bank	2.7	29	31.231		85	11.071		13	Yes		0.25		32		
151	100 ft downstream		8/18/2005	10:49	right bank	1.9	29	31.218		95	11.054		10	Yes				33		
152	50 downstream of 528 bridge		8/18/2005	13:09	right bank	1	29	31.052		95	10.729		92	Yes		1.2	5	34		
153	1300 ft downstream from previous		8/18/2005	13:21	right bank	3.4	29	30.956		95	10.45		33	Yes		0.5	even	35		
154	800 ft downstream of previous		8/18/2005	13:26	right bank	0.4	29	30.868		95	10.28		30			1	0.5	36		
155	2000 ft downstream		8/18/2005	13:39	right bank	unknown	29	30.624		95	10.248		26					37		
156	600 ft downstream of previous		8/18/2005	13:45	right bank	3	29	30.448		95	10.256		26			0		38		
157	400 ft downstream of previous		8/18/2005	13:51	right bank	0.8	29	30.387		95	10.13		30			1	1.5	39		
158	500 ft downstream		8/18/2005	13:56	left bank		29	30.328		95	10.035		33					40.5		
159	2000 ft from previous		8/18/2005	14:14	right bank	2.3	29	29.968		95	9.826		20			0	0.5	41		
160	2500 ft from downstream		8/19/2005	10:15	right bank	2.3	29	30.043		95	8.853		13				0	42&43		
161	300 ft downstream of previous		8/19/2005	10:19	right bank	0.3	29	30.108		95	8.826		10			2.7	even	44		
162	175 ft downstream		8/19/2005	10:22	right bank	0.3	29	30.124		95	8.807		13			2.7	even	45		
163	1750 ft downstream		8/19/2005	10:29	right bank	2	29	30.33		95	8.566		26			11		46		
164	2700 ft downstream		8/19/2005	10:41	left bank	3.6	29	30.357		95	7.99		10				10	47		
165	250 ft downstream of previous		8/19/2005	10:44	left bank	1.7	29	30.332		95	7.906		23				7	48		
166	1500 ft upstream of 11447		8/19/2005	11:01	right bank	1	29	30.437		95	7.174		13			1.5	6	49		
167	1400 ft upstream		8/19/2005	11:02	right bank	1.3	29	30.42		95	7.165		10			0.1	even	50		
168	1100 ft upstream		8/19/2005	11:04	left bank	0.8	29	30.408		95	7.125		49			0.2	even	51		