

PIPE FRAGILITY
RATE OF REPAIR
Liquefaction-Induced Lateral Spreading

PIPE ID	PIPE MATERIAL	OPERATION SINCE	K1	K2	PGV (in/sec)	PGD LIQ (in)	PGD LAT (in)	RR (PGV)	RR (PGD LIQ)	RR (PGD LAT)
6194	CI	1/1/1960	1.4	1	10.67	6.00	19.92	0.03	1.88	2.75
6197	CI	1/1/1960	1.4	1	10.64	6.00	19.88	0.03	1.88	2.75
6196	CI	1/1/1960	1.4	1	10.67	6.00	19.85	0.03	1.88	2.75
8113	CI	1/1/1960	1.4	1	10.68	6.00	19.75	0.03	1.88	2.75
527	CI	1/1/1960	1.4	1	10.72	4.38	15.46	0.03	1.70	2.54
528	CI	1/1/1960	1.4	1	10.70	3.87	14.33	0.03	1.63	2.48
2884	CI	1/1/1960	1.4	1	10.68	2.84	12.59	0.03	1.48	2.38
2893	CI	1/1/1960	1.4	1	10.68	2.00	10.61	0.03	1.32	2.25
524	CI	1/1/1960	1.4	1	10.72	2.00	10.18	0.03	1.32	2.22
9937	DI	10/15/2013	0.4	0.5	10.86	6.00	19.57	0.01	0.94	1.37
9165	DI	8/10/1995	0.5	0.5	10.86	6.00	19.54	0.01	0.94	1.37
9533	DI	7/5/1995	0.4	0.5	10.90	6.00	19.52	0.01	0.94	1.37
8038	DI	7/5/1995	0.4	0.5	10.90	6.00	19.51	0.01	0.94	1.37
9396	DI	7/5/1995	0.5	0.5	10.90	6.00	19.51	0.01	0.94	1.37
8039	DI	8/10/1995	0.5	0.5	10.90	6.00	19.51	0.01	0.94	1.37
8037	DI	7/21/1992	0.4	0.5	10.89	6.00	19.47	0.01	0.94	1.37
7985	DI	7/21/1992	0.4	0.5	10.83	6.00	19.38	0.01	0.94	1.36
7981	DI	7/21/1992	0.4	0.5	10.82	6.00	19.38	0.01	0.94	1.36
3463	DI	7/21/1992	0.4	0.5	10.81	6.00	19.32	0.01	0.94	1.36
910	DI	7/21/1992	0.4	0.5	10.80	6.00	19.26	0.01	0.94	1.36
8346	DI	4/5/1982	0.4	0.5	10.58	6.00	19.18	0.01	0.94	1.36
21162	DI	5/1/2016	0.4	0.5	10.83	6.00	19.18	0.01	0.94	1.36
9939	DI	4/1/1999	0.4	0.5	10.92	5.84	19.07	0.01	0.93	1.36
8348	DI	4/5/1982	0.4	0.5	10.39	6.00	19.04	0.01	0.94	1.36
6060	DI	1/1/2010	0.5	0.5	10.68	6.00	18.76	0.01	0.94	1.35
6057	DI	2/18/2005	0.5	0.5	10.67	6.00	18.69	0.01	0.94	1.35
1833	DI	4/1/1997	0.4	0.5	10.30	6.00	18.59	0.01	0.94	1.35
4099	DI	4/1/1997	0.5	0.5	10.37	6.00	18.57	0.01	0.94	1.35
3725	DI	11/2/2004	0.4	0.5	11.00	6.00	18.56	0.01	0.94	1.35
4098	DI	10/1/1985	0.5	0.5	10.38	6.00	18.55	0.01	0.94	1.35
3842	DI	4/1/1997	0.4	0.5	10.39	6.00	18.53	0.01	0.94	1.35
7249	DI	10/1/1985	0.5	0.5	10.38	6.00	18.53	0.01	0.94	1.34
7501	DI	4/1/1997	0.4	0.5	10.21	6.00	18.52	0.01	0.94	1.34
4632	DI	4/1/1997	0.4	0.5	10.33	6.00	18.50	0.01	0.94	1.34
9223	DI	4/1/1997	0.4	0.5	10.31	6.00	18.43	0.01	0.94	1.34
6245	DI	4/23/1990	0.4	0.5	10.46	6.00	18.43	0.01	0.94	1.34
8868	DI	1/1/2005	0.5	0.5	10.34	6.00	18.43	0.01	0.94	1.34
7248	DI	10/1/1985	0.5	0.5	10.39	6.00	18.42	0.01	0.94	1.34
7497	DI	4/1/1997	0.4	0.5	10.21	6.00	18.41	0.01	0.94	1.34
8466	DI	5/22/1986	0.5	0.5	10.50	6.00	18.39	0.01	0.94	1.34
1840	DI	4/1/1997	0.4	0.5	10.21	6.00	18.39	0.01	0.94	1.34
372	CI	1/1/1960	1.4	1	10.58	1.94	9.19	0.03	1.31	2.15

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7102	DI	7/15/2003	0.5	0.5	10.38	6.00	18.38	0.01	0.94	1.34
2031	DI	10/1/1985	0.5	0.5	10.43	6.00	18.36	0.01	0.94	1.34
4976	DI	10/1/1985	0.5	0.5	10.36	6.00	18.36	0.01	0.94	1.34
3151	DI	7/15/2003	0.5	0.5	10.46	6.00	18.36	0.01	0.94	1.34
6659	DI	7/15/2003	0.5	0.5	10.44	6.00	18.33	0.01	0.94	1.34
6657	DI	5/22/1986	0.5	0.5	10.45	6.00	18.31	0.01	0.94	1.34
6660	DI	5/22/1986	0.5	0.5	10.46	6.00	18.26	0.01	0.94	1.34
6080	DI	8/15/1985	0.4	0.5	10.55	5.93	18.12	0.01	0.94	1.34
3655	DI	3/3/1976	0.5	0.5	10.13	5.84	17.71	0.01	0.93	1.33
4649	DI	9/23/1985	0.4	0.5	10.41	5.35	17.46	0.01	0.90	1.32
9107	DI	4/5/1982	0.4	0.5	10.68	5.11	17.45	0.01	0.89	1.32
992	DI	4/13/1990	0.4	0.5	10.80	5.38	17.29	0.01	0.91	1.32
1670	DI	7/14/1992	0.5	0.5	10.48	5.47	17.09	0.01	0.91	1.31
8870	DI	1/1/2005	0.5	0.5	11.27	5.44	16.84	0.01	0.91	1.30
1841	DI	11/29/1996	0.4	0.5	10.48	5.03	16.37	0.01	0.89	1.29
888	DI	8/22/1975	0.4	0.5	9.80	5.21	16.28	0.01	0.90	1.29
7765	DI	1/1/2010	0.4	0.5	10.64	5.27	16.03	0.01	0.90	1.28
9166	DI	8/10/1995	0.5	0.5	10.89	4.34	15.84	0.01	0.85	1.28
6059	DI	2/18/2005	0.5	0.5	10.68	4.59	15.67	0.01	0.86	1.27
3965	DI	6/27/2006	0.5	0.5	10.47	3.86	14.86	0.01	0.82	1.25
1587	DI	4/23/1990	0.4	0.5	10.48	4.24	14.64	0.01	0.84	1.25
961	DI	4/13/1990	0.4	0.5	10.65	3.94	14.22	0.01	0.82	1.24
3238	DI	2/18/2005	0.5	0.5	10.70	3.89	14.12	0.01	0.82	1.23
4621	DI	3/3/1976	0.5	0.5	10.47	4.15	13.62	0.01	0.83	1.22
929	DI	4/13/1990	0.4	0.5	10.58	4.36	13.52	0.01	0.85	1.22
8081	DI	4/1/1997	0.4	0.5	10.10	3.63	13.21	0.01	0.80	1.21
2038	DI	2/1/2003	0.4	0.5	10.49	3.22	12.71	0.01	0.77	1.19
9081	DI	4/1/1997	0.4	0.5	10.39	3.27	12.57	0.01	0.77	1.19
7807	DI	4/1/1997	0.4	0.5	10.35	3.27	12.41	0.01	0.77	1.18
10107	DI	8/10/1990	0.4	0.5	10.39	4.34	12.16	0.01	0.85	1.18
9471	DI	1/1/2005	0.5	0.5	10.63	3.95	12.01	0.01	0.82	1.17
10192	DI	8/1/1992	0.4	0.5	10.56	2.97	11.77	0.01	0.75	1.16
2398	DI	9/30/1987	0.5	0.5	10.90	2.00	11.44	0.01	0.66	1.15
8463	DI	5/22/1986	0.5	0.5	10.37	2.72	11.28	0.01	0.73	1.15
6805	DI	1/23/1990	0.5	0.5	10.85	2.00	11.26	0.01	0.66	1.15
6803	DI	1/23/1990	0.5	0.5	10.91	2.00	11.24	0.01	0.66	1.15
2391	DI	1/23/1990	0.5	0.5	10.98	2.00	11.12	0.01	0.66	1.14
9670	DI	4/5/1982	0.4	0.5	10.69	2.24	11.07	0.01	0.69	1.14
2393	DI	1/23/1990	0.5	0.5	11.00	2.00	11.07	0.01	0.66	1.14
2406	DI	1/23/1990	0.5	0.5	11.05	2.00	11.01	0.01	0.66	1.14
7549	DI	3/22/1994	0.5	0.5	11.09	2.00	10.95	0.01	0.66	1.14
6058	DI	2/18/2005	0.5	0.5	10.66	2.44	10.94	0.01	0.70	1.14

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9719	DI	1/15/2014	0.5	0.5	10.81	2.00	10.89	0.01	0.66	1.14
10066	DI	1/1/1975	0.5	0.5	10.80	2.00	10.88	0.01	0.66	1.14
9218	DI	1/1/1975	0.5	0.5	10.80	2.00	10.88	0.01	0.66	1.13
9217	DI	1/1/1975	0.5	0.5	10.80	2.00	10.86	0.01	0.66	1.13
4466	DI	6/15/1997	0.5	0.5	10.77	2.00	10.83	0.01	0.66	1.13
8165	DI	5/12/1988	0.5	0.5	10.82	2.00	10.83	0.01	0.66	1.13
6524	DI	6/15/1997	0.5	0.5	10.77	2.00	10.82	0.01	0.66	1.13
6525	DI	2/1/1991	0.5	0.5	10.78	2.00	10.82	0.01	0.66	1.13
9742	DI	2/1/1991	0.5	0.5	10.80	2.00	10.82	0.01	0.66	1.13
5549	DI	5/12/1988	0.5	0.5	10.80	2.00	10.81	0.01	0.66	1.13
2745	DI	1/1/1975	0.5	0.5	10.81	2.00	10.81	0.01	0.66	1.13
6240	DI	2/1/1991	0.5	0.5	10.78	2.00	10.80	0.01	0.66	1.13
9743	DI	2/1/1991	0.5	0.5	10.79	2.00	10.80	0.01	0.66	1.13
22918	DI	4/1/1989	0.5	0.5	10.85	2.00	10.79	0.01	0.66	1.13
6154	DI	8/25/1986	0.5	0.5	10.81	2.00	10.76	0.01	0.66	1.13
6150	DI	8/25/1986	0.5	0.5	10.82	2.00	10.76	0.01	0.66	1.13
1041	DI	4/22/1980	0.5	0.5	10.69	2.00	10.74	0.01	0.66	1.13
1042	DI	4/22/1980	0.5	0.5	10.69	2.00	10.73	0.01	0.66	1.13
1039	DI	4/22/1980	0.5	0.5	10.67	2.00	10.72	0.01	0.66	1.13
9460	DI	4/22/1980	0.5	0.5	10.65	2.00	10.71	0.01	0.66	1.13
1081	DI	7/8/1982	0.4	0.5	10.61	2.00	10.69	0.01	0.66	1.13
1068	DI	6/1/1978	0.5	0.5	10.66	2.00	10.68	0.01	0.66	1.13
1043	DI	10/1/1979	0.5	0.5	10.66	2.00	10.68	0.01	0.66	1.13
4664	DI	7/8/1982	0.4	0.5	10.63	2.00	10.68	0.01	0.66	1.13
1072	DI	6/1/1978	0.5	0.5	10.63	2.00	10.67	0.01	0.66	1.13
5095	DI	7/8/1982	0.4	0.5	10.59	2.00	10.67	0.01	0.66	1.13
1044	DI	6/1/1978	0.5	0.5	10.66	2.00	10.67	0.01	0.66	1.13
10115	DI	7/28/1994	0.5	0.5	10.73	2.00	10.66	0.01	0.66	1.13
1078	DI	7/8/1982	0.4	0.5	10.58	2.00	10.65	0.01	0.66	1.13
1076	DI	7/8/1982	0.4	0.5	10.55	2.00	10.64	0.01	0.66	1.13
4661	DI	1/4/1995	0.5	0.5	10.68	2.00	10.64	0.01	0.66	1.13
10114	DI	7/28/1994	0.5	0.5	10.77	2.00	10.63	0.01	0.66	1.13
4172	DI	11/1/1980	0.4	0.5	10.64	2.00	10.62	0.01	0.66	1.13
4660	DI	6/15/1994	0.5	0.5	10.76	2.00	10.62	0.01	0.66	1.13
4175	DI	11/1/1980	0.4	0.5	10.65	2.00	10.61	0.01	0.66	1.13
4174	DI	11/1/1980	0.4	0.5	10.64	2.00	10.59	0.01	0.66	1.13
2924	DI	8/1/1977	0.5	0.5	10.68	2.00	10.59	0.01	0.66	1.13
4171	DI	11/1/1980	0.4	0.5	10.65	2.00	10.58	0.01	0.66	1.12
2951	DI	8/1/1977	0.4	0.5	10.70	2.00	10.57	0.01	0.66	1.12
4238	DI	1/1/1980	0.4	0.5	10.60	2.00	10.57	0.01	0.66	1.12
8755	DI	6/1/1978	0.4	0.5	10.66	2.00	10.56	0.01	0.66	1.12
2918	DI	1/1/1980	0.4	0.5	10.66	2.00	10.56	0.01	0.66	1.12

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4176	DI	8/1/1977	0.5	0.5	10.72	2.00	10.55	0.01	0.66	1.12
2952	DI	1/1/1975	0.4	0.5	10.72	2.00	10.54	0.01	0.66	1.12
2954	DI	8/1/1977	0.4	0.5	10.69	2.00	10.54	0.01	0.66	1.12
10059	DI	7/8/1982	0.4	0.5	10.37	2.00	10.53	0.01	0.66	1.12
9096	DI	8/10/1977	0.4	0.5	10.71	2.00	10.53	0.01	0.66	1.12
9094	DI	8/1/1977	0.4	0.5	10.69	2.00	10.53	0.01	0.66	1.12
6496	DI	1/1/1981	0.4	0.5	10.64	2.00	10.52	0.01	0.66	1.12
9669	DI	4/5/1982	0.4	0.5	10.67	2.00	10.52	0.01	0.66	1.12
4239	DI	1/1/1980	0.4	0.5	10.64	2.00	10.51	0.01	0.66	1.12
9667	DI	4/5/1982	0.4	0.5	10.70	2.00	10.51	0.01	0.66	1.12
8757	DI	6/1/1978	0.4	0.5	10.71	2.00	10.51	0.01	0.66	1.12
18364	DI	8/10/1977	0.4	0.5	10.70	2.00	10.50	0.01	0.66	1.12
2953	DI	1/1/1975	0.4	0.5	10.68	2.00	10.50	0.01	0.66	1.12
18363	DI	11/13/1998	0.4	0.5	10.71	2.00	10.50	0.01	0.66	1.12
2908	DI	6/1/1978	0.4	0.5	10.67	2.00	10.48	0.01	0.66	1.12
10359	DI	6/1/1978	0.4	0.5	10.67	2.00	10.48	0.01	0.66	1.12
2930	DI	6/1/1978	0.4	0.5	10.72	2.00	10.47	0.01	0.66	1.12
4975	DI	2/23/1995	0.5	0.5	10.07	2.54	10.44	0.01	0.71	1.12
4596	DI	1/1/1975	0.4	0.5	10.74	2.00	10.43	0.01	0.66	1.12
9559	DI	6/1/1978	0.4	0.5	10.71	2.00	10.43	0.01	0.66	1.12
9560	DI	6/1/1978	0.4	0.5	10.69	2.00	10.43	0.01	0.66	1.12
4438	DI	4/5/1982	0.4	0.5	10.76	2.00	10.41	0.01	0.66	1.12
9949	DI	4/5/1982	0.4	0.5	10.75	2.00	10.40	0.01	0.66	1.12
4436	DI	4/5/1982	0.4	0.5	10.74	2.00	10.39	0.01	0.66	1.12
5206	DI	4/5/1982	0.4	0.5	10.76	2.00	10.39	0.01	0.66	1.12
537	DI	5/25/1975	0.4	0.5	10.78	2.00	10.38	0.01	0.66	1.12
944	DI	4/13/1990	0.4	0.5	10.79	3.44	10.37	0.01	0.79	1.12
444	DI	5/25/1975	0.4	0.5	10.76	2.00	10.37	0.01	0.66	1.12
5243	DI	5/25/1975	0.4	0.5	10.74	2.00	10.33	0.01	0.66	1.12
7201	DI	5/25/1975	0.4	0.5	10.74	2.00	10.30	0.01	0.66	1.12
8841	DI	5/25/1975	0.4	0.5	10.72	2.00	10.21	0.01	0.66	1.11
8133	DI	8/22/1975	0.4	0.5	10.52	2.00	10.19	0.01	0.66	1.11
8839	DI	5/25/1975	0.4	0.5	10.72	2.00	10.18	0.01	0.66	1.11
1671	DI	7/14/1992	0.5	0.5	10.53	2.33	10.18	0.01	0.69	1.11
446	DI	5/25/1975	0.4	0.5	10.73	2.00	10.16	0.01	0.66	1.11
448	DI	5/25/1975	0.4	0.5	10.72	2.00	10.15	0.01	0.66	1.11
4650	DI	9/23/1985	0.4	0.5	10.40	2.00	10.04	0.01	0.66	1.11
1985	DI	9/23/1985	0.4	0.5	10.42	2.00	10.03	0.01	0.66	1.11
963	DI	4/13/1990	0.4	0.5	10.75	2.00	10.03	0.01	0.66	1.11
4577	DI	8/22/1975	0.4	0.5	10.55	3.13	10.03	0.01	0.76	1.11
8516	DI	8/22/1975	0.4	0.5	10.45	2.00	10.01	0.01	0.66	1.11
4978	DI	4/13/1990	0.4	0.5	10.61	2.00	9.99	0.01	0.66	1.10

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1980	DI	9/23/1985	0.4	0.5	10.54	2.00	9.99	0.01	0.66	1.10
1984	DI	9/23/1985	0.4	0.5	10.54	2.00	9.98	0.01	0.66	1.10
9134	DI	4/1/1997	0.4	0.5	10.34	2.10	9.97	0.01	0.67	1.10
4097	DI	4/1/1997	0.4	0.5	10.53	2.00	9.95	0.01	0.66	1.10
10012	DI	6/9/1997	0.4	0.5	10.43	2.00	9.94	0.01	0.66	1.10
8514	DI	9/23/1985	0.4	0.5	10.53	2.00	9.93	0.01	0.66	1.10
9234	DI	6/9/1997	0.4	0.5	10.46	2.00	9.91	0.01	0.66	1.10
1860	DI	6/9/1997	0.4	0.5	10.42	2.00	9.88	0.01	0.66	1.10
8513	DI	8/22/1975	0.4	0.5	10.59	2.00	9.88	0.01	0.66	1.10
1790	DI	8/22/1975	0.4	0.5	10.53	2.00	9.87	0.01	0.66	1.10
1792	DI	8/22/1975	0.4	0.5	10.52	2.00	9.86	0.01	0.66	1.10
6244	DI	4/23/1990	0.4	0.5	10.59	2.18	9.86	0.01	0.68	1.10
991	DI	4/13/1990	0.4	0.5	10.80	2.00	9.86	0.01	0.66	1.10
9398	DI	8/22/1975	0.4	0.5	10.53	2.00	9.85	0.01	0.66	1.10
4659	DI	6/9/1997	0.4	0.5	10.46	2.00	9.84	0.01	0.66	1.10
3239	DI	2/18/2005	0.5	0.5	10.67	2.00	9.84	0.01	0.66	1.10
4647	DI	4/13/1990	0.4	0.5	10.85	2.00	9.84	0.01	0.66	1.10
6351	DI	6/9/1997	0.4	0.5	10.46	2.00	9.84	0.01	0.66	1.10
9401	DI	8/22/1975	0.4	0.5	10.49	2.00	9.84	0.01	0.66	1.10
4490	DI	2/18/2005	0.5	0.5	10.62	2.00	9.84	0.01	0.66	1.10
916	DI	4/13/1990	0.4	0.5	10.84	2.00	9.83	0.01	0.66	1.10
6792	DI	2/18/2005	0.5	0.5	10.68	2.00	9.83	0.01	0.66	1.10
4488	DI	2/18/2005	0.5	0.5	10.65	2.00	9.82	0.01	0.66	1.10
6795	DI	2/18/2005	0.5	0.5	10.66	2.00	9.82	0.01	0.66	1.10
6793	DI	2/18/2005	0.5	0.5	10.70	2.00	9.82	0.01	0.66	1.10
6350	DI	6/9/1997	0.5	0.5	10.44	2.00	9.82	0.01	0.66	1.10
8533	DI	6/9/1997	0.5	0.5	10.41	2.00	9.81	0.01	0.66	1.10
9001	DI	2/18/2005	0.5	0.5	10.60	2.00	9.81	0.01	0.66	1.10
8508	DI	4/2/1982	0.4	0.5	10.52	2.00	9.80	0.01	0.66	1.10
4489	DI	2/18/2005	0.5	0.5	10.65	2.00	9.80	0.01	0.66	1.10
3828	DI	2/18/2005	0.5	0.5	10.65	2.00	9.80	0.01	0.66	1.10
4494	DI	2/18/2005	0.5	0.5	10.63	2.00	9.80	0.01	0.66	1.10
9662	DI	6/9/1997	0.5	0.5	10.48	2.00	9.79	0.01	0.66	1.10
9000	DI	5/12/2003	0.5	0.5	10.60	2.00	9.79	0.01	0.66	1.10
964	DI	4/13/1990	0.4	0.5	10.87	2.00	9.79	0.01	0.66	1.10
1836	DI	4/1/1997	0.4	0.5	10.68	2.00	9.78	0.01	0.66	1.10
8507	DI	4/2/1982	0.4	0.5	10.50	2.00	9.78	0.01	0.66	1.10
9003	DI	5/21/2003	0.5	0.5	10.55	2.00	9.77	0.01	0.66	1.10
10166	DI	6/9/1997	0.5	0.5	10.48	2.00	9.73	0.01	0.66	1.10
7507	DI	4/2/1982	0.4	0.5	10.50	2.00	9.72	0.01	0.66	1.09
8060	DI	11/29/1996	0.4	0.5	10.48	2.00	9.71	0.01	0.66	1.09
9904	DI	6/9/1997	0.5	0.5	10.48	2.00	9.71	0.01	0.66	1.09

PIPE FRAGILITY
RATE OF REPAIR
Liquefaction-Induced Lateral Spreading

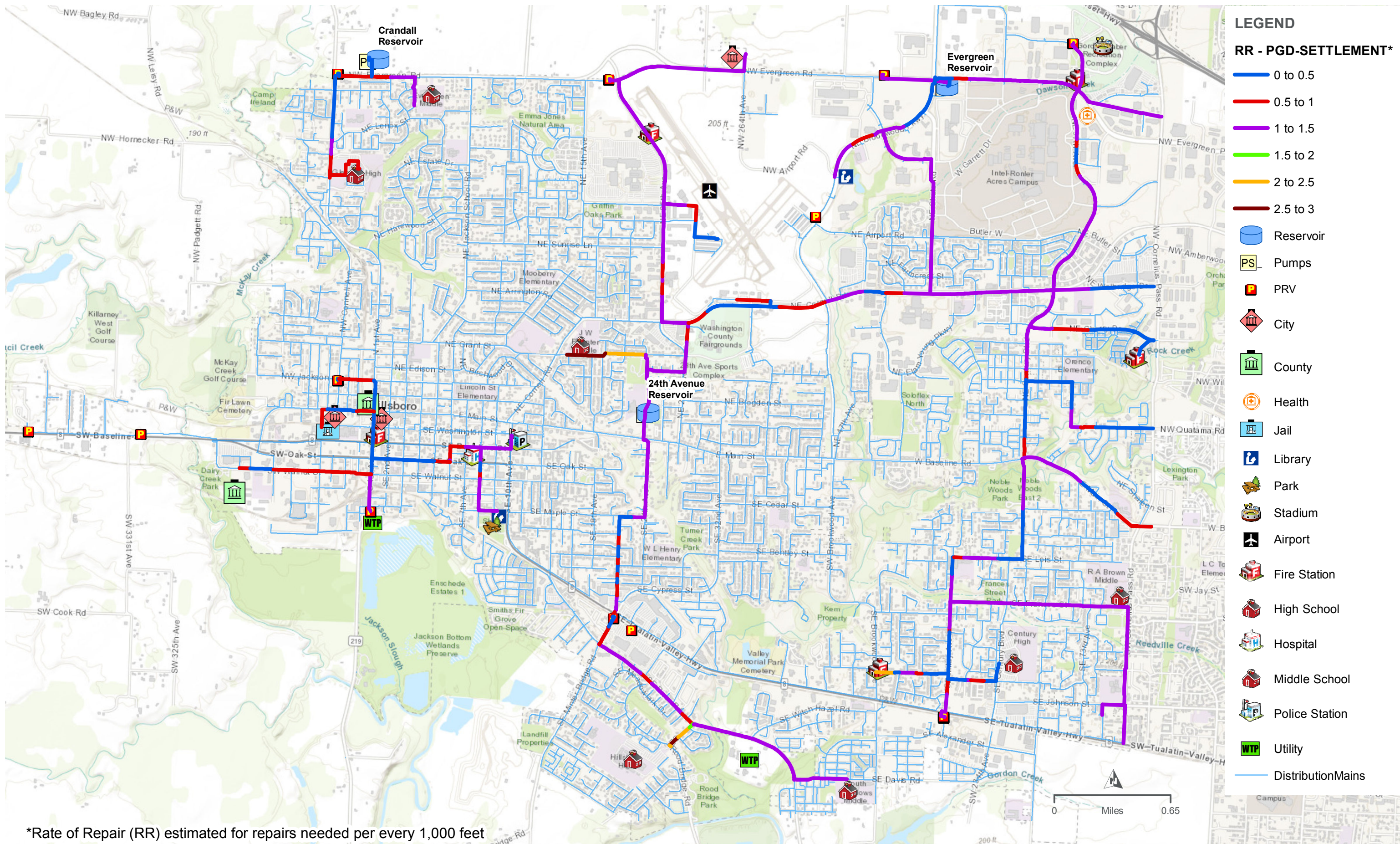
PIPE ID	PIPE MATERIAL	OPERATION SINCE	K1	K2	PGV (in/sec)	PGD LIQ (in)	PGD LAT (in)	RR (PGV)	RR (PGD LIQ)	RR (PGD LAT)
1764	DI	8/14/1986	0.4	0.5	10.45	2.00	9.71	0.01	0.66	1.09
4112	DI	4/2/1982	0.4	0.5	10.51	2.00	9.67	0.01	0.66	1.09
6774	DI	8/14/1986	0.4	0.5	10.54	2.00	9.65	0.01	0.66	1.09

PIPE FRAGILITY
 RATE OF REPAIR
 Liquefaction-Induced Settlement

PIPE ID	PIPE MATERIAL	OPERATION SINCE	K1	K2	PGV (in/sec)	PGD LIQ (in)	PGD LAT (in)	RR (PGV)	RR (PGD LIQ)	RR (PGD LAT)
6197	CI	1/1/1960	1.4	1	10.64	6.00	19.88	0.03	1.88	2.75
6194	CI	1/1/1960	1.4	1	10.67	6.00	19.92	0.03	1.88	2.75
6196	CI	1/1/1960	1.4	1	10.67	6.00	19.85	0.03	1.88	2.75
8113	CI	1/1/1960	1.4	1	10.68	6.00	19.75	0.03	1.88	2.75

**PIPE FRAGILITY
RATE OF REPAIR
Ground Shaking**

PIPE ID	PIPE MATERIAL	OPERATION SINCE	K1	K2	PGV (in/sec)	PGD LIQ (in)	PGD LAT (in)	RR (PGV)	RR (PGD LIQ)	RR (PGD LAT)
87	CI	1/1/1960	1.4	1	11.02	1.00	0.68	0.03	1.06	0.94
88	CI	1/1/1960	1.4	1	11.01	1.00	0.68	0.03	1.06	0.94
6887	CI	1/1/1970	1.4	1	11.00	1.00	0.66	0.03	1.06	0.93
7778	CI	1/1/1960	1.4	1	11.00	1.00	0.75	0.03	1.06	0.97
9715	CI	1/1/1960	1.4	1	11.00	1.00	0.67	0.03	1.06	0.94
140	CI	1/1/1960	1.4	1	10.98	1.00	0.76	0.03	1.06	0.97
141	CI	1/1/1960	1.4	1	10.98	1.00	0.76	0.03	1.06	0.97
6889	CI	1/1/1970	1.4	1	10.98	1.00	0.67	0.03	1.06	0.93
7743	CI	1/1/1960	1.4	1	10.98	1.00	0.79	0.03	1.06	0.98
9860	CI	1/1/1965	1.4	1	10.97	1.00	0.62	0.03	1.06	0.91
9864	CI	1/1/1965	1.4	1	10.97	1.00	0.64	0.03	1.06	0.92
122	CI	1/1/1960	1.4	1	10.94	1.00	0.72	0.03	1.06	0.95
116	CI	1/1/1960	1.4	1	10.93	1.00	0.69	0.03	1.06	0.94
117	CI	1/1/1960	1.4	1	10.93	1.00	0.73	0.03	1.06	0.96
118	CI	1/1/1960	1.4	1	10.93	1.00	0.68	0.03	1.06	0.94
9148	CI	1/1/1960	1.4	1	10.91	1.00	0.67	0.03	1.06	0.93
524	CI	1/1/1960	1.4	1	10.72	2.00	10.18	0.03	1.32	2.22
527	CI	1/1/1960	1.4	1	10.72	4.38	15.46	0.03	1.70	2.54
528	CI	1/1/1960	1.4	1	10.70	3.87	14.33	0.03	1.63	2.48
4064	CI	1/1/1960	1.4	1	10.70	1.33	3.35	0.03	1.16	1.56
2884	CI	1/1/1960	1.4	1	10.68	2.84	12.59	0.03	1.48	2.38
2893	CI	1/1/1960	1.4	1	10.68	2.00	10.61	0.03	1.32	2.25
8113	CI	1/1/1960	1.4	1	10.68	6.00	19.75	0.03	1.88	2.75
6194	CI	1/1/1960	1.4	1	10.67	6.00	19.92	0.03	1.88	2.75
6196	CI	1/1/1960	1.4	1	10.67	6.00	19.85	0.03	1.88	2.75
6197	CI	1/1/1960	1.4	1	10.64	6.00	19.88	0.03	1.88	2.75
4246	CI	1/1/1960	1.4	1	10.63	1.00	0.14	0.03	1.06	0.57
862	CI	1/1/1960	1.4	1	10.62	1.00	0.17	0.03	1.06	0.60
871	CI	1/1/1960	1.4	1	10.61	1.00	0.18	0.03	1.06	0.61
372	CI	1/1/1960	1.4	1	10.58	1.94	9.19	0.03	1.31	2.15
9959	CCP	7/17/1970	1	1	10.90	1.00	0.66	0.02	1.06	0.93
9962	CCP	7/17/1970	1	1	10.88	1.31	2.79	0.02	1.16	1.47



*Rate of Repair (RR) estimated for repairs needed per every 1,000 feet



CITY OF HILLSBORO
REPAIR RATES FOR PGD SETTLEMENT