

APPENDIX 11 – Fire Flow Analysis Data

AREA	NUMBER OF NODES	NUMBER OF DEFICIENT JUNCTIONS	PERCENT DEFICIENT	MINIMUM AVAILABLE FIRE FLOW	AVERAGE AVAILABLE FIRE FLOW	DEFICIENT RANK	MINIMUM FIRE FLOW RANK	AVERAGE FIRE FLOW RANK	AVERAGE FIRE FLOW RANK
1A	65	20	30.8%	843	1,790	5	57	4	22
1B	57	5	8.8%	1,015	3,016	23	62	20	35
1C	154	0	0.0%	1,955	3,548	107	119	58	95
2A	480	0	0.0%	1,980	3,975	107	122	139	123
2B	198	0	0.0%	2,694	3,993	107	136	143	129
2C	12	0	0.0%	4,000	4,000	107	147	146	133
2D	251	0	0.0%	1,974	3,830	107	121	107	112
2E	211	0	0.0%	3,465	3,989	107	143	140	130
3A	327	9	2.8%	792	3,814	67	53	104	75
3B	227	1	0.4%	1,409	3,378	98	104	41	81
4	396	5	1.3%	1,116	3,865	86	71	112	90
5A	378	12	3.2%	717	3,826	66	52	106	75
5B	327	0	0.0%	3,339	3,993	107	140	142	130
5C	419	1	0.2%	1,076	3,972	105	66	137	103
6A	177	0	0.0%	1,525	3,741	107	109	93	103
6B	112	0	0.0%	2,496	3,712	107	135	88	110
6C	129	7	5.4%	1,135	3,514	44	76	51	57
6D	95	0	0.0%	1,709	3,332	107	116	38	87
6E	108	0	0.0%	1,583	3,691	107	113	82	101
6F	57	2	3.5%	1,132	3,499	59	73	49	60
6G1	93	2	2.2%	1,300	3,678	71	102	78	84
6G2	14	0	0.0%	2,098	3,646	107	126	73	102
6H	78	0	0.0%	4,000	4,000	107	147	146	133
6I	97	4	4.1%	1,196	5,615	51	86	191	109
6J	85	5	5.9%	1,196	3,098	37	86	23	49
6K	103	6	5.8%	1,172	3,551	40	78	59	59
6M	56	0	0.0%	4,000	4,000	107	147	146	133
6N	95	0	0.0%	4,000	4,000	107	147	146	133
7A1	57	7	12.3%	1,238	1,925	17	93	5	38
7A2	61	19	31.1%	905	1,943	4	58	6	23
7B1	55	13	23.6%	1,211	1,962	10	90	7	36
7B2	63	1	1.6%	1,284	3,237	81	101	34	72
7B3	120	3	2.5%	1,244	2,944	68	94	17	60
7B4	89	3	3.4%	1,034	3,008	63	64	19	49
7B5	9	4	44.4%	834	1,747	3	55	3	20
7C1	75	1	1.3%	1,381	2,178	85	103	9	66
7C2	27	0	0.0%	2,424	3,218	107	130	31	89
7C3	18	1	5.6%	1,264	3,108	43	98	24	55
7C4	97	6	6.2%	1,080	3,236	36	67	33	45
7C5	137	1	0.7%	691	2,800	94	51	14	53
7D1	312	1	0.3%	1,245	3,521	103	95	52	83
7D2	134	0	0.0%	1,799	3,521	107	117	52	92
7D3	134	7	5.2%	1,245	3,536	45	95	56	65
7E1	163	0	0.0%	1,511	3,567	107	108	62	92
7E2	31	1	3.2%	1,125	3,803	65	72	102	80
7E3	112	0	0.0%	1,563	3,613	107	111	71	96
7E4	72	9	12.5%	1,176	2,441	16	82	11	36
7F1	131	0	0.0%	2,021	3,685	107	125	81	104
7F2	104	0	0.0%	1,693	3,760	107	115	95	106
7F3	81	3	3.7%	1,081	3,060	57	68	22	49
7F4	69	17	24.6%	101	2,520	8	2	13	8
7G1	20	16	80.0%	1,278	1,429	2	100	2	35
7G2	25	7	28.0%	661	2,293	6	50	10	22
7G3	134	21	15.7%	1,416	2,070	13	105	8	42
7G4	113	0	0.0%	1,966	3,542	107	120	57	95
7G5	67	17	25.4%	101	2,470	7	2	12	7
9	86	1	1.2%	1,177	3,820	87	83	105	92
10	73	0	0.0%	2,482	3,782	107	133	98	113
11	21	0	0.0%	3,410	3,918	107	141	125	124
12A	303	11	3.6%	1,104	3,684	58	70	80	69
12B	270	1	0.4%	1,264	3,864	101	97	111	103
13A	328	0	0.0%	2,308	3,960	107	129	135	124
13B	406	0	0.0%	2,432	3,958	107	131	133	124
14	165	0	0.0%	3,944	3,999	107	146	145	133
15	50	0	0.0%	2,460	3,212	107	132	29	89
16	51	0	0.0%	1,655	3,227	107	114	32	84
17A	346	1	0.3%	1,096	3,952	104	69	128	100
17B	596	4	0.7%	173	3,957	95	13	132	80
18	506	2	0.4%	1,204	3,958	99	88	134	107
19	454	4	0.9%	968	3,940	92	60	127	93
20A	325	19	5.8%	191	3,648	39	16	75	43
20B	505	9	1.8%	168	3,607	76	12	69	52

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21	99	4	4.0%	357	3,651	52	42	76	57
22	31	2	6.5%	341	3,681	33	41	79	51
23	511	35	6.8%	160	3,474	31	9	46	29
24A	388	0	0.0%	1,564	3,954	107	112	129	116
24B	516	2	0.4%	971	3,907	100	61	121	94
25	63	5	7.9%	304	3,506	25	38	50	38
26A	242	9	3.7%	817	3,719	56	54	89	66
26B	459	7	1.5%	261	3,886	82	32	116	77
27	301	1	0.3%	1,142	3,957	102	77	131	103
28	466	1	0.2%	1,476	3,912	106	106	123	112
29	441	6	1.4%	427	3,907	84	49	122	85
30	21	0	0.0%	2,003	3,568	107	123	63	98
31A	171	6	3.5%	162	3,565	59	10	61	43
31B	40	0	0.0%	2,794	3,455	107	137	44	96
32	67	12	17.9%	272	2,824	12	33	16	20
33	154	0	0.0%	290	3,643	107	36	72	72
34	31	0	0.0%	2,844	3,963	107	138	136	127
35	191	1	0.5%	1,235	3,770	97	92	96	95
36	377	2	0.5%	411	3,896	96	47	119	87
37	27	2	7.4%	366	3,310	27	45	36	36
38A	319	3	0.9%	293	3,780	90	37	97	75
38B	255	6	2.4%	1,133	3,723	69	74	90	78
39	87	3	3.4%	152	3,590	61	7	66	45
40A	232	4	1.7%	1,133	3,882	79	74	115	89
40B	250	5	2.0%	1,016	3,557	72	63	60	65
41	117	5	4.3%	372	3,710	50	46	87	61
42A	67	0	0.0%	4,000	4,000	107	147	146	133
42B	200	30	15.0%	71	3,037	14	1	21	12
42C	105	2	1.9%	174	3,725	73	14	91	59
42D	101	1	1.0%	336	3,787	89	40	99	76
42E	114	12	10.5%	200	3,194	19	20	27	22
42F	92	2	2.2%	838	3,863	70	56	110	79
42G	84	0	0.0%	4,000	4,000	107	147	146	133
43A	117	4	3.4%	258	3,695	62	31	85	59
43B	2	0	0.0%	4,000	4,000	107	147	146	133
43C	11	0	0.0%	4,000	4,000	107	147	146	133
43D	19	0	0.0%	4,000	4,000	107	147	146	133
44	344	4	1.2%	365	3,934	87	44	126	86
45A	332	0	0.0%	4,000	4,000	107	147	146	133
45B	85	7	8.2%	210	3,594	24	21	67	37
46	94	0	0.0%	4,000	4,000	107	147	146	133
47	14	0	0.0%	2,493	3,871	107	134	113	118
48	142	14	9.9%	249	3,349	21	30	39	30
49	23	0	0.0%	4,000	4,000	107	147	146	133
51	221	0	0.0%	4,000	4,000	107	147	146	133
52A	124	0	0.0%	4,000	4,000	107	147	146	133
52B	110	0	0.0%	4,000	4,000	107	147	146	133
53	211	14	6.6%	239	3,522	32	27	54	38
54	72	5	6.9%	945	3,405	29	59	42	43
55	320	3	0.9%	365	3,799	91	43	101	78
56A	212	31	14.6%	215	3,215	15	24	30	23
56B	52	2	3.8%	218	3,308	55	25	35	38
57	420	29	6.9%	140	3,536	30	4	55	30
58A	148	0	0.0%	4,000	4,000	107	147	146	133
58B	63	0	0.0%	4,000	4,000	107	147	146	133
58C	8	0	0.0%	4,000	4,000	107	147	146	133
59	62	0	0.0%	4,000	4,000	107	147	146	133
60	1	0	0.0%	4,000	4,000	107	147	146	133
60A	84	0	0.0%	4,000	4,000	107	147	146	133
60B	52	0	0.0%	4,000	4,000	107	147	146	133
61	64	0	0.0%	4,000	4,000	107	147	146	133
62	31	0	0.0%	4,000	4,000	107	147	146	133
63	294	0	0.0%	4,000	4,000	107	147	146	133
64	27	0	0.0%	4,000	4,000	107	147	146	133
65	118	0	0.0%	4,000	4,000	107	147	146	133
66A	96	0	0.0%	4,000	4,000	107	147	146	133
66B	57	1	1.8%	1,216	3,700	78	91	86	85
66C	29	0	0.0%	2,299	3,851	107	128	108	114
66D	21	0	0.0%	3,026	3,648	107	139	74	107
66E	74	0	0.0%	1,551	3,893	107	110	118	112
66F	8	0	0.0%	4,000	4,000	107	147	146	133
67	17	0	0.0%	4,000	4,000	107	147	146	133

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68	13	0	0.0%	4,000	4,000	107	147	146	133
69	41	0	0.0%	4,000	4,000	107	147	146	133
70	231	0	0.0%	4,000	4,000	107	147	146	133
71	211	0	0.0%	4,000	4,000	107	147	146	133
72	66	1	1.5%	1,479	3,736	83	107	92	94
74	88	5	5.7%	1,208	3,477	41	89	47	59
76A	107	0	0.0%	4,000	4,000	107	147	146	133
76B	41	0	0.0%	4,000	4,000	107	147	146	133
76C	40	0	0.0%	3,675	3,992	107	145	141	131
76D	79	5	6.3%	274	3,694	34	34	84	51
76F	49	5	10.2%	248	3,583	20	28	65	38
76G	65	0	0.0%	4,000	4,000	107	147	146	133
76H	112	5	4.5%	248	3,743	49	28	94	57
76I	34	0	0.0%	3,454	3,955	107	142	130	126
76J	15	0	0.0%	4,000	4,000	107	147	146	133
76K	1	0	0.0%	4,000	4,000	107	147	146	133
77	25	0	0.0%	4,000	4,000	107	147	146	133
78	141	8	5.7%	213	3,610	42	23	70	45
79	81	0	0.0%	4,000	4,000	107	147	146	133
80	208	13	6.3%	228	3,493	35	26	48	36
81	109	0	0.0%	4,000	4,000	107	147	146	133
82	170	0	0.0%	1,925	3,916	107	118	124	116
83	186	0	0.0%	2,021	3,972	107	124	138	123
84	60	0	0.0%	4,000	4,000	107	147	146	133
85	149	17	11.4%	183	3,361	18	15	40	24
86A	306	10	3.3%	159	3,459	64	8	45	39
86B	257	2	0.8%	1,181	3,893	93	85	117	98
86C	240	4	1.7%	274	3,852	80	35	109	75
87A	4	0	0.0%	4,000	4,000	107	147	146	133
87B	13	1	7.7%	310	3,427	26	39	43	36
87C	35	0	0.0%	2,225	3,141	107	127	25	86
87D	20	1	5.0%	142	3,165	46	5	26	26
88	207	19	9.2%	147	3,209	22	6	28	19
89	117	0	0.0%	3,643	3,994	107	144	144	132
90A	220	11	5.0%	191	3,605	46	17	68	44
90B	29	7	24.1%	1,277	2,819	9	99	15	41
90C	153	9	5.9%	191	3,694	37	17	83	46
90D	21	4	19.0%	199	3,006	11	19	18	16
91	299	12	4.0%	210	3,576	53	22	64	46
92	1	1	100.0%	1,174	1,174	1	79	1	27
93A	275	5	1.8%	1,055	3,898	74	65	120	86
93B	282	5	1.8%	1,181	3,798	77	84	100	87
93C	278	11	4.0%	416	3,676	54	48	77	60
93D	280	5	1.8%	164	3,812	75	11	103	63
94	3	0	0.0%	4,578	4,000	107	191	146	148
95	22	1	4.5%	1,174	3,872	48	79	114	80
96	43	3	7.0%	1,174	3,329	28	79	37	48