

Table S₁: Same of junction pressure where negative pressure is recorded since simulation

Message Id	Scenario	Element Type	Element Id	Label	Time (hours)	Message
40004	Base	Junction	31	J-2	0.000	Negative pressure at Junction J-2.
40004	Base	Junction	42	J-8	0.000	Negative pressure at Junction J-8.
40004	Base	Junction	227	J-73	0.000	Negative pressure at Junction J-73.
40004	Base	Junction	229	J-74	0.000	Negative pressure at Junction J-74.
40004	Base	Junction	231	J-75	0.000	Negative pressure at Junction J-75.
40004	Base	Junction	239	J-78	0.000	Negative pressure at Junction J-78.
40004	Base	Junction	241	J-79	0.000	Negative pressure at Junction J-79.
40004	Base	Junction	243	J-80	0.000	Negative pressure at Junction J-80.
40004	Base	Junction	247	J-82	0.000	Negative pressure at Junction J-82.
40004	Base	Junction	251	J-84	0.000	Negative pressure at Junction J-84.
40004	Base	Junction	259	J-86	0.000	Negative pressure at Junction J-86.
40004	Base	Junction	261	J-87	0.000	Negative pressure at Junction J-87.
40004	Base	Junction	276	J-94	0.000	Negative pressure at Junction J-94.
40004	Base	Junction	280	J-95	0.000	Negative pressure at Junction J-95.
40004	Base	Junction	288	J-98	0.000	Negative pressure at Junction J-98.
40004	Base	Junction	323	J-107	0.000	Negative pressure at Junction J-107.

Table S₂: Input data used for pipes

Label	Start Node	Stop Node	Length (Scaled) (m)	Diameter (mm)	Material
GM P-244	PROPOSED NEW 2000 CM RC RESERVOIR	J-140	30	450	Ductile Iron
GM P-245	J-140	J-141	47	450	Ductile Iron
GM P-246	J-141	J-142	180	450	Ductile Iron
GM P-247	J-142	J-143	229	450	Ductile Iron
GM P-248	J-143	J-144	113	450	Ductile Iron
GM P-249	J-144	J-145	236	450	Ductile Iron
GM P-250	J-145	J-146	52	450	Ductile Iron
GM P-251	J-146	J-147	131	450	Ductile Iron
GM P-252	J-147	J-148	161	450	Ductile Iron
GM P-253	J-148	J-149	119	450	Ductile Iron
GM P-254	J-149	J-150	70	450	Ductile Iron
GM P-255	J-150	J-151	140	450	Ductile Iron
GM P-256	J-151	J-152	210	450	Ductile Iron
GM P-257	J-152	J-153	226	450	Ductile Iron
GM P-258	J-153	J-154	216	450	Ductile Iron
GM P-259	J-154	J-155	335	450	Ductile Iron
GM P-260	J-155	J-156	45	450	Ductile Iron
GM P-261	J-156	J-157	412	450	Ductile Iron
GM P-262	J-157	J-158	195	450	Ductile Iron
GM P-263	J-158	J-159	75	450	Ductile Iron
P-165	PROPOSED NEW 200 CM RC WET WELL	J-96	2	500	Ductile Iron
P-169	J-94	J-103	117	400	Ductile Iron
P-170	J-103	J-26	139	400	Ductile Iron
P-183	J-90	J-105	52	400	Ductile Iron
P-189	J-25	FV3 PP DN 400	196	400	Ductile Iron
P-190	FV3 PP DN 400	J-94	81	400	Ductile Iron
P-192	AV-2 PP DN 400 PN 16	J-124	133	400	Ductile Iron
P-193	J-24	FV2 PP DN 400	27	400	Ductile Iron
P-194	FV2 PP DN 400	J-125	89	400	Ductile Iron
P-199	AV-3 PP DN 400 PN 16	J-84	140	400	Ductile Iron
P-201	J-105	AV-1 PP DN 400 PN 16	106	400	Ductile Iron

P-214	J-122	AV-2 PP DN 400 PN 16	40	400	Ductile Iron
SUCBH1	DWL PBH1	PMP-BH1	5	250	Ductile Iron
SUCBH2	DWL PBH2	PMP-BH2	3	250	Ductile Iron
SUCBH3	DWL PBH3	PMP-BH3	4	250	Ductile Iron
SUCBH4	DWL PBH4	PMP-BH4	5	250	Ductile Iron
SUCBH5	DWL PBH5	PMP-BH5	3	250	Ductile Iron
SUCTION PBH6	DWL PBH6	PMP-BH6	5	250	Ductile Iron
Discharge P1	J-101	Booster Pump 1	4	300	Galvanized iron
Discharge header 2	J-100	J-101	2	450	Galvanized iron
Discharge header1	J-99	J-100	2	450	Galvanized iron
Discharge p2	J-100	Booster Pump 2	4	300	Galvanized iron
Discharge p3	J-99	Booster Pump 3	4	300	Galvanized iron
P-164	J-99	J-95	4	450	Galvanized iron
P-166 suction header	J-96	J-97	2	500	Galvanized iron
P-167 suction header	J-97	J-98	2	500	Galvanized iron
RISERBH1	PMP-BH1	PBH1 DWL	5	150	Galvanized iron
RISERBH2	PMP-BH2	PBH2 DWL	5	150	Galvanized iron
RISERBH3	PMP-BH3	PBH3 DWL	3	150	Galvanized iron
RISERBH4	PMP-BH4	PBH4 DWL	6	150	Galvanized iron
RISERBH5	PMP-BH5	PBH5 DWL	4	150	Galvanized iron
RISERBH6	PMP-BH6	PBH6 DWL	6	150	Galvanized iron
Suction P1	J-96	Booster Pump 1	2	350	Galvanized iron
Suction P2	J-97	Booster Pump 2	2	350	Galvanized iron
Suction p3	J-98	Booster Pump 3	3	350	Galvanized iron
CO P-5	road crossing	J-6	47	250	HDPE
CO P-46	J-2	J-23	51	250	HDPE

CO P-47	J-23	J-3	100	250	HDPE
CO P-55	J-27	J-9	255	400	HDPE
CO P-73	J-125	J-122	100	400	HDPE
CO P-126	J-26	AV-3 PP DN 400 PN 16	86	400	HDPE
CO P-129	J-84	J-27	91	400	HDPE
CO P-133	J-3	J-85	56	250	HDPE
CO P-134	J-85	J-4	63	250	HDPE
CO P-135	J-4	J-86	97	250	HDPE
CO P-137	J-86	J-87	158	250	HDPE
CO P-139	J-87	J-88	44	250	HDPE
CO P-140	J-88	road crossing	48	250	HDPE
CO P-141	J-6	J-89	35	250	HDPE
CO P-142	J-89	J-22	138	250	HDPE
CO P-143	J-22	J-90	84	400	HDPE
CO P-146	AV-1 PP DN 400 PN 16	J-7	50	400	HDPE
CO P-147	J-7	J-92	166	400	HDPE
CO P-148	J-92	J-24	44	400	HDPE
CO P-150	J-124	J-25	71	400	HDPE
CO P-176	CV-2	J-22	2	250	HDPE
CO P-178	CV-3	J-122	206	250	HDPE
CO P-185	J-9	FV4 PP DN 400	286	400	HDPE
CO P-186	FV4 PP DN 400	PROPOSED NEW 200 CM RC WET WELL	425	400	HDPE
CO P-205	AV-BH2 PP DN 150	CV-2	2	250	HDPE
CO P-216	CV-5	PROPOSED NEW 200 CM RC WET WELL	1,007	250	HDPE
CO P-218	J-126	J-127	239	250	HDPE
CO P-220	AV1 BH6 DN 250	J-129	243	250	HDPE
CO P-224	J-132	J-133	123	250	HDPE
CO P-228	PBH6 DWL	FV1 BH6 PP DN 250	127	250	HDPE
CO P-230	J-127	J-160	113	250	HDPE
CO P-232	J-160	FV2 BH6 PP DN 250	61	250	HDPE
CO P-233	FV2 BH6 PP DN 250	AV1 BH6 DN 250	46	250	HDPE
CO P-234	J-129	FV3 BH6 PP DN 250	92	250	HDPE

CO P-235	FV3 BH6 PP DN 250	J-130	117	250	HDPE
CO P-236	J-130	AV2 BH6 DN 250	100	250	HDPE
CO P-238	AV2 BH6 DN 250	FV4 BH6 PP DN 250	106	250	HDPE
CO P-239	FV4 BH6 PP DN 250	J-131	120	250	HDPE
CO P-240	J-131	AV3 BH6 DN 250	210	250	HDPE
CO P-242	J-133	FV5 BH6 PP DN 250	68	250	HDPE
CO P-243	FV5 BH6 PP DN 250	PROPOSED NEW 200 CM RC WET WELL	127	250	HDPE
P-174	CV-1	J1 90 deg DN250 PN 16 double flanged bend with two adapters	5	250	HDPE
P-180	CV-4	J-27	6	250	HDPE
P-181	PBH5 DWL	J-113	3	250	HDPE
P-197	J1 90 deg DN250 PN 16 double flanged bend with two adapters	FV1 PP DN 250	68	250	HDPE
P-198	FV1 PP DN 250	J-2	81	250	HDPE
P-202	PBH1 DWL	AV-BH1 PP DN 150	3	250	HDPE
P-203	AV-BH1 PP DN 150	CV-1	3	250	HDPE
P-204	PBH2 DWL	AV-BH2 PP DN 150	2	250	HDPE
P-206	PBH3 DWL	AV-BH3 PP DN 150	4	250	HDPE
P-207	AV-BH3 PP DN 150	CV-3	4	250	HDPE
P-208	J-113	AV-BH5 PP DN 150	4	250	HDPE
P-210	PBH4 DWL	AV-BH4 PP DN 150	3	250	HDPE
P-211	AV-BH4 PP DN 150	CV-4	3	250	HDPE
P-215	AV-BH5 PP DN 150	CV-5	4	250	HDPE
P-229	FV1 BH6 PP DN 250	J-126	66	250	HDPE
P-241	AV3 BH6 DN 250	J-132	18	250	HDPE
RM P-119	J-75	J-76	132	450	HDPE
RM P-120	J-76	J-77	52	450	HDPE
RM P-121	J-77	J-78	234	450	HDPE

RM P-122	J-78	J-79	107	450	HDPE
RM P-123	J-79	J-80	230	450	HDPE
RM P-124	J-80	J-81	180	450	HDPE
RM P-125	J-81	PROPOSED NEW 2000 CM RC RESERVOIR	77	450	HDPE
RM P-154	J-95	J-75	162	450	HDPE
CO P-5	road crossing	J-6	47	250	HDPE
CO P-46	J-2	J-23	51	250	HDPE
CO P-47	J-23	J-3	100	250	HDPE
CO P-133	J-3	J-85	56	250	HDPE
CO P-134	J-85	J-4	63	250	HDPE
CO P-135	J-4	J-86	97	250	HDPE
CO P-137	J-86	J-87	158	250	HDPE
CO P-139	J-87	J-88	44	250	HDPE
CO P-140	J-88	road crossing	48	250	HDPE
CO P-141	J-6	J-89	35	250	HDPE
CO P-142	J-89	J-22	138	250	HDPE
CO P-176	CV-2	J-22	2	250	HDPE
CO P-178	CV-3	J-122	206	250	HDPE
CO P-205	AV-BH2 PP DN 150	CV-2	2	250	HDPE
CO P-216	CV-5	PROPOSED NEW 200 CM RC WET WELL	1007	250	HDPE
CO P-218	J-126	J-127	239	250	HDPE
CO P-220	AV2 BH6 DN 250	J-129	243	250	HDPE
CO P-224	J-132	J-133	123	250	HDPE
CO P-228	PBH6 DWL	FV1 BH6 PP DN 250	127	250	HDPE
CO P-230	J-127	AV-1 BH6 DN 250	113	250	HDPE
CO P-232	AV-1 BH6 DN 250	FV2 BH6 PP DN 250	61	250	HDPE
CO P-233	FV2 BH6 PP DN 250	AV2 BH6 DN 250	46	250	HDPE
CO P-234	J-129	FV3 BH6 PP DN 250	92	250	HDPE
CO P-235	FV3 BH6 PP DN 250	J-130	117	250	HDPE
CO P-236	J-130	AV3 BH6 DN 250	100	250	HDPE
CO P-238	AV3 BH6 DN 250	FV4 BH6 PP DN 250	106	250	HDPE

CO P-239	FV4 BH6 PP DN 250	J-131	120	250	HDPE
CO P-240	J-131	AV4 BH6 DN 250	210	250	HDPE
CO P-242	J-133	FV5 BH6 PP DN 250	68	250	HDPE
CO P-243	FV5 BH6 PP DN 250	200 CM RC WET WELL	127	250	HDPE
CO P-55	J-27	J-9	255	400	HDPE
CO P-73	J-125	J-122	100	400	HDPE
CO P-126	J-26	AV-3 PP DN 400 PN 16	86	400	HDPE
CO P-129	J-84	J-27	91	400	HDPE
CO P-143	J-22	J-90	84	400	HDPE
CO P-146	AV-1 PP DN 400 PN 16	J-7	50	400	HDPE
CO P-147	J-7	J-92	166	400	HDPE
CO P-148	J-92	J-24	44	400	HDPE
CO P-150	J-124	J-25	71	400	HDPE
CO P-185	J-9	FV4 PP DN 400	286	400	HDPE
CO P-186	FV4 PP DN 400	200 CM RC WET WELL	425	400	HDPE

Table S3: Junction input data used

Start Node	elevation	easting	northing	demand
RC-2000cum	1891	499964	974086	0.14
J-140	1895	490000	979287	0.14
J-141	1899	490278	974395	0.14
J-142	1889	491025	973292	0.2
J-143	1880	490123	970989	0.14
J-144	1885	499575	978988	0.18
J-145	1891	492393	975988	0.09
J-146	1898	491598	969913	0.09
J-147	1877	491390	970572	0.09
J-148	1898	493275	979084	0.25
J-149	1887	492003	970072	0.09
J-150	1898	495174	970213	0.09
J-151	1876	495174	971002	0.14
J-152	1868	494283	970037	0.14
J-153	1883	495373	971016	0.14
J-154	1897	497322	979188	0.09
J-155	1895	492244	975795	0.14
J-156	1898	494252	976123	0.14
J-157	1893	495172	975994	0.18
J-158	1878	496174	976233	0.14
PROPOSED NEW 200 CM RC WET WELL	1891	497228	975882	0.09
J-94	1878	494815	973759	0.09
J-103	1886	494825	976122	0.09
J-90	1895	494985	974455	0.09
J-25	1873	494785	976264	0.25
FV3 PP DN 400	1876	494439	975895	
AV-2 PP DN 400 PN 16	1899	494678	965909	
J-24	1896	494847	974825	
FV2 PP DN 400	1893	495786	976047	
AV-3 PP DN 400 PN 16	1883	498790	974598	0.09
J-105	1872	493738	972226	0.09
J-122	1874	494786	976302	0.23
DWL PBH1	1868	494789	974548	
DWL PBH2	1873	494753	975871	
DWL PBH3	1890	494790	974024	
DWL PBH4	1899	494791	975890	
DWL PBH5	1890	492726	975364	
DWL PBH6	1884	496532	973810	
J-101	1891	491627	97134	0.14
J-100	1873	490620	973653	0.09

J-99	1873	495694	974515	0.14
J-100	1864	496940	976316	0.18
J-99	1845	491527	974828	1
J-99	1864	494734	976079	0.09
J-96	1889	494594	973342	0.09
J-97	1895	494247	975827	
PMP-BH1	1897	496763	973455	
PMP-BH2	1899	492737	971782	
PMP-BH3	1896	497873	975634	
PMP-BH4	1890	494676	971035	
PMP-BH5	1866	493871	978424	
PMP-BH6	1886	495593	975766	
J-96	1900	491662	976106	0.09
J-97	1895	493854	975807	0.18
J-98	1897	492767	974442	0.14
road crossing	1899	491038	974182	
J-2	1897	497693	974964	0.09
J-23	1900	497575	975865	0.09
J-27	1893	498622	934915	0.09
J-125	1894	499823	971685	0.18
J-26	1898	497821	971152	0.23
J-84	1896	497932	976819	0.09
J-3	1901	492931	973876	0.09
J-85	1901	496829	978534	0.21
J-4	1901	497764	973864	0.27
J-86	1896	491700	960642	0.27
J-87	189	497136	979411	0.27
J-88	1900	493824	979308	0.24
J-6	1894	496975	970980	0.135
J-89	1908	494980	973327	0.135
J-22	1912	495043	970238	0.135
AV-1 PP DN 400 PN 16	1913	496047	978098	
J-7	1914	497053	978866	0.21
J-92	1912	498152	970022	0.135
J-124	1911	494052	972252	0.135
CV-2	1910	495218	974034	0.3
CV-3	1892	497077	970076	0.24
J-9	1895	494184	970877	1.5
FV4 PP DN 400	1891	495209	970899	
AV-BH2 PP DN 150	1893	496198	979488	
CV-5	1901	493475	973458	0.27
J-126	1895	491598	976046	
AV1 BH6 DN 250	1896	492488	972088	

J-132	1893	493769	978757	0.21
PBH6 DWL	1896	495417	977251	0.21
J-127	1897	496207	979791	0.27
J-160	1888	497318	971515	0.21
FV2 BH6 PP DN 250	1899	491537	973579	
J-129	1900	491319	976110	0.375
FV3 BH6 PP DN 250	1898	493707	9737184	
J-130	1895	495829	976702	0.21
AV2 BH6 DN 250	1902	494419	971404	
FV4 BH6 PP DN 250	1896	492710	976232	
J-131	1897	494829	973746	0.21
J-133	1892	496777	972796	0.27
FV5 BH6 PP DN 250	1894	495706	971438	
CV-1	1876	497926	973769	0.21
CV-4	1897	494629	979517	0.21
PBH5 DWL	1880	496871	977775	0.27
J1 90 deg DN250 PN 16 double flanged bend with two adapters	1887	496599	978844	
FV1 PP DN 250	1879	495719	970286	0.27
PBH1 DWL	1866	492384	976350	
AV-BH1 PP DN 150	1896	492757	973694	0.21
PBH2 DWL	1897	491830	975557	0.21
PBH3 DWL	1898	494830	976663	0.21
AV-BH3 PP DN 150	1897	495721	972312	
J-113	1897	493659	970045	2.21
PBH4 DWL	1898	494502	975778	
AV-BH4 PP DN 150	1898	497921	971061	
AV-BH5 PP DN 150	1895	493256	973339	
FV1 BH6 PP DN 250	1898	497571	956040	
AV3 BH6 DN 250	1901	497344	976360	
J-75	1901	497681	974439	0.21
J-76	1901	497243	9431284	0.21
J-77	1899	493801	972176	0.21
J-78	1900	494293	978383	0.21
J-79	1899	494212	973314	0.27
J-80	1902	493688	971006	0.21
J-81	1903	494797	971896	0.195
J-95	1905	491885	975123	0.21
road crossing	1904	493969	971943	
J-2	1903	493775	975026	0.21
J-23	1907	494067	971665	0.135
J-3	1901	494153	973856	0.27
J-85	1893	493905	979706	0.21

J-4	1897	494491	971009	0.375
J-86	1897	495294	947764	0.21
J-87	1897	493984	979868	0.135
J-88	190	498482	9767400	0.135
J-6	1892	497261	9753040	0.27
J-89	1895	496158	974998	0.24
CV-2	1895	494264	976216	0.27
CV-3	1892	491147	958957	
AV-BH2 PP DN 150	1896	495179	974450	0.21
CV-5	1898	496161	975573	0.21
J-126	1899	497171	975808	0.21
AV2 BH6 DN 250	1897	495255	974410	
J-132	1898	493177	97561	0.27
PBH6 DWL	1894	495127	976132	
J-127	1896	498147	978880	
AV-1 BH6 DN 250	1898	497138	976122	
FV2 BH6 PP DN 250	1900	491275	974758	
J-129	1979	493366	970698	0.14
FV3 BH6 PP DN 250	1953	495771	970793	
J-130	1979	494759	972718	0.18
AV3 BH6 DN 250	1980	492880	978813	
FV4 BH6 PP DN 250	1919	496473	979719	
J-131	1950	495762	973917	0.25
J-133	1928	495880	971009	0.18
FV5 BH6 PP DN 250	1961	493828	975927	
J-27	1991	492758	970584	0.14
J-125	1912	493976	950600	0.14
J-26	1903	497682	940595	0.14
J-84	1931	495922	970921	0.18
J-22	1948	494652	961008	0.05
AV-1 PP DN 400 PN 16	1912	495771	959721	
J-7	1951	492439	970127	0.14
J-92	1911	491808	979078	0.18
J-124	1903	492881	978393	0.18
J-9	1906	490881	975935	0.18
FV4 PP DN 400	1953	492773	978890	
J-140	1954	491712	979074	0.14
J-141	1977	493555	970908	0.14
J-142	1952	497971	975106	0.14
J-143	1958	498311	974925	0.14
J-144	1966	499624	976847	0.14
J-145	1954	493399	954971	0.14
J-146	1957	493733	943648	0.14

J-147	1949	493299	942504	0.18
J-148	1950	493301	963918	0.18
J-149	1955	493794	951578	0.14
J-150	1953	493722	961140	0.14
J-151	1958	493189	969066	0.14
J-152	1958	493298	958898	0.14
J-153	1958	493385	949609	0.14
J-154	1953	494465	970882	0.18
J-155	1944	494564	926780	0.14
J-156	1957	494775	974939	0.13
J-157	1951	494465	978060	0.14
J-158	1965	494564	977793	0.14
J-159	1969	494775	975500	0.14
J-96	1970	494751	971717	0.09
J-103	1971	494621	972693	0.18
J-26	1969	494080	975642	0.14
J-105	1968	494889	974836	0.25
FV3 PP DN 400	1967	494103	970505	
J-94	1949	494886	976456	0.09
J-124	1952	494772	970594	
FV2 PP DN 400	1948	494542	978492	
J-125	1950	494672	976631	0.16
J-84	1958	494672	973633	0.18
AV-1 PP DN 400 PN 16	1952	494780	977582	0.25
AV-2 PP DN 400 PN 16	1953	494869	975746	0.14
PMP-BH1	1950	494818	975729	0.14
PMP-BH2	1953	494741	979153	0.14
PMP-BH3	1954	494749	978555	0.18
PMP-BH4	1945	494670	976581	0.18
PMP-BH5	1956	494672	978959	2
PMP-BH6	1958	494725	973691	
Booster Pump 1	1951	493372	974520	1
J-101	1956	493482	97931	0.21
J-100	1954	494540	970139	0.21
Booster Pump 2	1953	494343	978405	
Booster Pump 3	1957	49600	975823	
J-95	1958	494237	97925	
J-97	1955	496403	975210	0.27
J-98	1954	492344	975714	0.135
PBH1 DWL	1955	496347	974370	
PBH2 DWL	1954	496296	973365	0.135
PBH3 DWL	1952	495344	977179	0.375
PBH4 DWL	1953	499346	974481	0.135

PBH5 DWL	1956	493310	975891	0.135
PBH6 DWL	1949	492347	973702	0.21
Booster Pump 1	1953	491348	976982	0.21
Booster Pump 2	1949	492784	975791	0.21
Booster Pump 3	1953	493092	976876	0.135
J-6	1955	495186	972162	0.21
J-23	1952	494179	975734	0.21
J-3	1951	493449	974816	0.27
J-9	1955	494545	972888	0.21
J-122	1952	493538	973695	0.135
AV-3 PP DN 400 PN 16	1957	495613	976580	0.135
J-27	1948	497860	971509	0.135
J-85	1949	497444	971001	0.135
J-4	1946	497653	960614	0.375
J-86	1949	497512	970967	0.21
J-87	1962	497163	972756	0.27
J-88	1959	495949	974712	0.3
road crossing	1959	497656	976686	0.24
J-89	1968	497793	971760	0.135
J-22	1961	497595	972907	0.135
J-90	1966	497791	976800	0.345
J-7	1963	497511	975807	0.21
J-92	1963	497581	974610	1.5
J-24	1966	497774	974698	0.21
J-25	1967	497686	975072	0.27
J-22	1964	496953	978502	0.21
J-122	1963	493223	972638	0.21
FV4 PP DN 400	1964	493245	973553	0.21
PROPOSED NEW 200 CM RC WET WELL	1963	495432	977765	0.135
CV-2	1962	492567	978772	0.21
PROPOSED NEW 200 CM RC WET WELL	1962	496322	979572	0.27
J-127	1966	494656	979000	1.5
J-129	1958	495322	975888	0.135
J-133	1963	496532	973590	0.135
FV1 BH6 PP DN 250	1959	495643	971601	0.21
J-160	1963	492678	976768	0.135
FV2 BH6 PP DN 250	1964	494573	975624	0.135
AV1 BH6 DN 250	1962	493456	971236	0.135
FV3 BH6 PP DN 250	1961	492907	978580	0.27
J-130	1964	494912	976490	0.21
AV2 BH6 DN 250	1962	495975	979849	0.135

FV4 BH6 PP DN 250	1966	492979	979030	0.135
J-131	1957	497382	970974	0.27
AV3 BH6 DN 250	1958	495482	974016	0.21
FV5 BH6 PP DN 250	1955	494694	974796	0.12
PROPOSED NEW 200 CM RC WET WELL	1959	492670	971041	0.135
J1 90 deg DN250 PN 16 double flanged bend with two adapters	1972	497540	976967	0.135
J-27	1969	496995	97783	0.135
J-113	1969	497808	975870	0.27
FV1 PP DN 250	1977	497018	978811	0.345
J-2	1971	497805	970998	0.135
AV-BH1 PP DN 150	1963	497691	971619	0.135
CV-1	1968	497460	993712	0.3
AV-BH2 PP DN 150	1960	497590	975492	0.135
AV-BH3 PP DN 150	1969	497590	971992	0.27
CV-3	1966	497699	979372	0.375
AV-BH5 PP DN 150	1958	493788	979690	0.27
AV-BH4 PP DN 150	1970	492738	975705	0.21
CV-4	1971	494660	976724	0.135
CV-5	1972	495668	978854	0.135
J-126	1973	491588	978868	1.2
J-132	1970	494590	971918	0.21
J-76	1957	493644	976116	0.195
J-77	1962	496595	971812	0.345
J-78	1964	495717	997880	0.3
J-79	1966	498379	970435	0.3
J-80	1962	497755	9760276	0.3
J-81	1986	497829	976477	0.24
PROPOSED NEW 2000 CM RC RESERVOIR	1983	496829	97062	0.135
J-75	1973	497719	976897	12.105
J-6	1967	494656	973592	0.27
J-23	1966	496497	979589	0.27
J-3	1967	496721	973499	0.24
J-85	1962	496249	975136	0.21
J-4	1963	493567	977206	0.375
J-86	1962	491338	977156	0.135
J-87	1959	496678	977001	0.27
J-88	1960	493224	977258	0.21
road crossing	1963	490239	977405	0.21
J-89	1967	491740	977925	0.21
J-22	1968	492664	976786	0.21

J-22	1978	494124	978946	0.21
J-122	1969	496235	979084	0.27
CV-2	1962	495324	976975	0.135
PROPOSED NEW 200 CM RC WET WELL	1970	497914	977204	0.21
J-127	1969	497015	975936	0.345
J-129	1960	491229	976193	0.135
J-133	1975	492206	975158	0.135
FV1 BH6 PP DN 250	1972	493073	974627	3.45
AV-1 BH6 DN 250	1981	497262	972061	0.3
FV2 BH6 PP DN 250	1981	497653	975117	0.21
AV2 BH6 DN 250	1979	497191	975154	0.135
FV3 BH6 PP DN 250	1970	496491	974163	0.27
J-130	1977	495684	975100	0.345
AV3 BH6 DN 250	1958	494672	974065	0.21
FV4 BH6 PP DN 250	1960	492794	972816	0.375
J-131	1957	491385	971254	0.135
AV4 BH6 DN 250	1959	494675	970094	0.345
FV5 BH6 PP DN 250	1968	498794	978966	0.21
200 CM RC WET WELL	1961	497742	979073	0.075
J-9	1963	496671	977910	0.135
J-122	1960	494891	977342	0.135
AV-3 PP DN 400 PN 16	1963	498595	975147	0.21
J-27	1964	497836	975125	0.3
J-90	1954	496564	975970	0.135
J-7	1964	493684	976936	0.135
J-92	1976	496350	973168	0.27
J-24	1858	497793	976935	0.21
J-25	1894	494595	974155	0.21
FV4 PP DN 400	1851	492791	973892	0.3
200 CM RC WET WELL	1921	493511	976884	0.21

Table S4: Steady State period simulation results (links at average day demand)

ID	Label	Length (m)	Diameter (mm)	Material	Hazen-Williams C	Flow (L/s)	Velocity (m/s)	Head loss Gradient (m/m)
32	P-1	34	280	Ductile Iron	130	16	5.13	0.076
34	P-2	15	280	Ductile Iron	130	13	1.84	0.011
36	P-3	17	280	Ductile Iron	130	20	1.14	0.005
38	P-4	13	280	Ductile Iron	130	8	0.98	0.004
40	P-5	8	280	Ductile Iron	130	12	0.84	0.003
43	P-6	26	280	Ductile Iron	130	-11	0.17	0
45	P-7	17	280	Ductile Iron	130	23	1.34	0.006
47	P-8	16	280	Ductile Iron	130	17	1.09	0.004
49	P-9	12	280	Ductile Iron	130	6	1.02	0.004
51	P-10	11	280	Ductile Iron	130	9	0.8	0.002
52	P-11	7	280	Ductile Iron	130	16	1.72	0.01
53	P-12	7	280	Ductile Iron	130	37	0.6	0.001
54	P-13	7	280	Ductile Iron	130	2	0.04	0.05
55	P-14	8	280	Ductile Iron	130	12	0.2	0.067
56	P-15	8	280	Ductile Iron	130	24	0.39	0.001
58	P-16	31	280	Ductile Iron	130	38	0.62	0.001
60	P-17	38	280	Ductile Iron	130	15	0.24	0.045
62	P-18	16	280	Ductile Iron	130	85	1.38	0.007
64	P-19	45	280	Ductile Iron	130	65	1.06	0.004

68	P-21	23	280	Ductile Iron	130	43	0.69	0.002
70	P-22	17	280	Ductile Iron	130	21	0.33	0.056
72	P-23	29	280	Ductile Iron	130	5	0.07	0.065
74	P-24	20	280	Ductile Iron	130	25	0.4	0.001
76	P-25	23	280	Ductile Iron	130	29	0.48	0.001
78	P-26	13	280	Ductile Iron	130	15	0.25	0.098
80	P-27	48	280	Ductile Iron	130	10	0.17	0.067
82	P-28	22	280	Ductile Iron	130	11	0.17	0.034
86	P-30	13	280	Ductile Iron	130	-4	0.06	0.035
87	P-31	13	280	Ductile Iron	130	6	0.1	0.32
88	P-32	42	280	Ductile Iron	130	26	0.42	0.001
92	P-34	18	280	Ductile Iron	130	-9	0.15	0.023
94	P-35	39	280	Ductile Iron	130	-4	0.07	0.025
95	P-36	11	280	Ductile Iron	130	-2	0.04	0.025
97	P-37	11	280	Ductile Iron	130	1	0.01	0.012
102	P-39	16	280	Ductile Iron	130	-10	0.16	0.021
104	P-40	8	280	Ductile Iron	130	-5	0.07	0.027
106	P-41	29	280	Ductile Iron	130	17	0.28	0.012
108	P-42	18	280	Ductile Iron	130	-37	0.6	0.001
112	P-44	8	280	Ductile Iron	130	9	0.14	0
113	P-45	19	280	Ductile Iron	130	39	0.63	0.002
115	P-46	12	280	Ductile Iron	130	6	0.09	0
120	P-49	15	280	Ductile Iron	130	1	0.01	0

121	P-50	15	280	Ductile Iron	130	-1	0.01	0
123	P-51	15	280	Ductile Iron	130	1	0.01	0
125	P-52	14	280	Ductile Iron	130	74	1.21	0.005
127	P-53	30	280	Ductile Iron	130	49	0.8	0.002
128	P-54	15	280	Ductile Iron	130	-50	0.81	0.002
130	P-55	19	280	Ductile Iron	130	-423	6.87	0.13
131	P-56	21	280	Ductile Iron	130	-7	0.11	0.87
133	P-57	23	280	Ductile Iron	130	-23	0.37	0.001
134	P-58	10	280	Ductile Iron	130	-31	0.51	0.001
136	P-59	10	280	Ductile Iron	130	18	0.3	0.098
144	P-63	13	280	Ductile Iron	130	12	0.19	0.047
146	P-64	12	280	Ductile Iron	130	1	0.01	0.038
148	P-65	15	280	Ductile Iron	130	3	0.05	0.067
150	P-66	12	280	Ductile Iron	130	16	0.27	0.066
152	P-67	18	280	Ductile Iron	130	7	0.11	0.087
154	P-68	21	280	Ductile Iron	130	12	0.19	0
155	P-69	27	280	Ductile Iron	130	9	0.14	0
156	P-70	21	280	Ductile Iron	130	-11	0.18	0
157	P-71	8	280	Ductile Iron	130	2	0.04	0
159	P-72	18	280	Ductile Iron	130	0	0	0
161	P-73	27	280	Ductile Iron	130	2	0.03	0
163	P-74	13	280	Ductile Iron	130	8	0.13	0
165	P-75	15	280	Ductile Iron	130	5	0.08	0

167	P-76	12	280	Ductile Iron	130	13	0.21	0
168	P-77	15	280	Ductile Iron	130	3	0.05	0
169	P-78	48	280	Ductile Iron	130	13	0.2	0
170	P-79	10	280	Ductile Iron	130	80	1.29	0.006
171	P-80	14	280	Ductile Iron	130	19	0.32	0
172	P-81	19	280	Ductile Iron	130	25	0.41	0.001
174	P-82	22	280	Ductile Iron	130	-30	0.48	0.001
175	P-83	21	280	Ductile Iron	130	-25	0.4	0.001
176	P-84	12	280	Ductile Iron	130	9	0.14	0
177	P-85	13	280	Ductile Iron	130	(N/A)	(N/A)	(N/A)
178	P-86	43	280	Ductile Iron	130	29	0.47	0.001
179	P-87	13	280	Ductile Iron	130	4	0.07	0
181	P-88	12	280	Ductile Iron	130	9	0.14	0
182	P-89	10	280	Ductile Iron	130	8	0.14	0
184	P-90	18	280	Ductile Iron	130	3	0.06	0
186	P-91	10	280	Ductile Iron	130	4	0.07	0
188	P-92	9	280	Ductile Iron	130	-2	0.03	0
189	P-93	34	280	Ductile Iron	130	6	0.1	0
190	P-94	13	280	Ductile Iron	130	-17	0.27	0
192	P-95	10	280	Ductile Iron	130	14	0.23	0
193	P-96	12	280	Ductile Iron	130	-1	0.01	0
194	P-97	12	280	Ductile Iron	130	1	0.01	0
196	P-98	16	280	Ductile Iron	130	4	0.06	0

198	P-99	26	280	Ductile Iron	130	1	0.02	0
200	P-100	12	280	Ductile Iron	130	17	0.27	0
201	P-101	13	280	Ductile Iron	130	18	0.3	0
202	P-102	13	280	Ductile Iron	130	13	0.2	0
209	P-104	26	280	Ductile Iron	130	430	6.98	0.134
212	P-105	20	600	Ductile Iron	130	(N/A)	(N/A)	(N/A)
213	P-106	21	600	Ductile Iron	130	(N/A)	(N/A)	(N/A)
223	P-107	17	152.4	Ductile Iron	130	0	0.01	0
224	P-108	6	152.4	Ductile Iron	130	0	0.02	0
225	P-109	19	152.4	Ductile Iron	130	-1	0.05	0
226	P-110	19	152.4	Ductile Iron	130	0	0.02	0
228	P-111	14	152.4	Ductile Iron	130	-1	0.04	0
230	P-112	11	152.4	Ductile Iron	130	0	0.01	0
234	P-114	13	152.4	Ductile Iron	130	0	0	0
236	P-115	16	152.4	Ductile Iron	130	0	0.02	0
237	P-116	20	152.4	Ductile Iron	130	0	0.02	0
238	P-117	19	152.4	Ductile Iron	130	0	0.03	0
240	P-118	18	152.4	Ductile Iron	130	8	0.41	0.001
242	P-119	13	152.4	Ductile Iron	130	4	0.2	0
244	P-120	13	152.4	Ductile Iron	130	5	0.29	0.001
246	P-121	18	152.4	Ductile Iron	130	-2	0.13	0
248	P-122	15	152.4	Ductile Iron	130	-5	0.25	0.001
250	P-123	16	152.4	Ductile Iron	130	-2	0.09	0

252	P-124	13	152.4	Ductile Iron	130	6	0.34	0.001
253	P-125	11	152.4	Ductile Iron	130	3	0.19	0
254	P-126	18	152.4	Ductile Iron	130	6	0.33	0.001
255	P-127	12	152.4	Ductile Iron	130	6	0.35	0.001
256	P-128	14	152.4	Ductile Iron	130	5	0.25	0.001
258	P-129	9	152.4	Ductile Iron	130	2	0.12	0
260	P-130	34	152.4	Ductile Iron	130	3	0.15	0
262	P-131	20	152.4	Ductile Iron	130	0	0	0
266	P-133	17	152.4	Ductile Iron	130	24	1.3	0.012
271	P-136	9	152.4	Ductile Iron	130	0	0	0
273	P-137	8	152.4	Ductile Iron	130	0	0.01	0
278	P-140	17	152.4	Ductile Iron	130	8	0.46	0.002
281	P-142	20	152.4	Ductile Iron	130	5	0.26	0.001
282	P-143	12	152.4	Ductile Iron	130	0	0	0
283	P-144	8	152.4	Ductile Iron	130	-5	0.26	0.001
285	P-145	22	152.4	Ductile Iron	130	0	0	0
289	P-147	12	152.4	Ductile Iron	130	-1	0.05	0
292	P-150	18	152.4	Ductile Iron	130	0	0.02	0
298	P-154	44	152.4	Ductile Iron	130	4	0.19	0
299	P-155	25	152.4	Ductile Iron	130	2	0.11	0
300	P-156	13	152.4	Ductile Iron	130	-1	0.08	0
301	P-157	14	152.4	Ductile Iron	130	21	1.16	0.01
303	P-158	14	280	Ductile Iron	130	13	0.22	0

304	P-159	12	280	Ductile Iron	130	11	0.18	0
305	P-160	12	152.4	Ductile Iron	130	-2	0.12	0
306	P-161	10	152.4	Ductile Iron	130	0	0.02	0
312	P-165	21	152.4	Ductile Iron	130	-1	0.03	0
314	P-166	7	152.4	Ductile Iron	130	0	0.01	0
315	P-167	16	152.4	Ductile Iron	130	-1	0.04	0
316	P-168	7	152.4	Ductile Iron	130	-1	0.03	0
318	P-169	15	152.4	Ductile Iron	130	0	0.02	0
319	P-170	26	152.4	Ductile Iron	130	-1	0.03	0
321	P-171	22	152.4	Ductile Iron	130	-1	0.05	0
324	P-173	12	152.4	Ductile Iron	130	-2	0.11	0
325	P-174	68	152.4	Ductile Iron	130	-3	0.16	0
328	P-176	46	152.4	Ductile Iron	130	-4	0.21	0
329	P-177	19	152.4	Ductile Iron	130	-2	0.12	0
330	P-178	9	152.4	Ductile Iron	130	2	0.09	0
331	P-179	31	152.4	Ductile Iron	130	1	0.05	0
343	P-186	9	152.4	Ductile Iron	130	0	0	0
345	P-187	12	152.4	Ductile Iron	130	0	0	0
347	P-188	8	152.4	Ductile Iron	130	0	0	0
349	P-189	8	152.4	Ductile Iron	130	0	0	0
350	P-190	17	152.4	Ductile Iron	130	95	5.19	0.157

Table S5: Extended period simulation Results

Junction	elevation	Demand (L/s)	Pressure (m H2O)
PROPOSED NEW 2000 CM RC RESERVOIR	1,889.6	0.08	66.5
J-140	1,899.4	0.21	85.5
J-141	1,892.5	0.21	-5.0
J-142	1,827.5	0.27	28.5
J-143	1,994.8	0.27	9.5
J-144	1,894.7	0.27	66.5
J-145	1,997.8	0.35	85.5
J-146	1,898.8	0.21	57.0
J-147	1,895.8	0.21	9.5
J-148	1,894.8	0.21	47.5
J-149	1,895.8	0.21	151.9
J-150	1,894.9	1.31	87.0
J-151	1,893.7	0.27	81.0
J-152	1,893.9	0.21	80.9
J-153	1,896.9	0.20	10.5
J-154	1,890.0	0.21	13.5
J-155	1,894.1	0.21	0.0
J-156	1,890.7	0	4.5
J-157	1,894.1	0.14	1.5
J-158	1,895.8	0.27	10.5
PROPOSED NEW 200 CM RC WET WELL	1,895.0	0.21	13.5
J-94	1,893.2	0.38	45.5
J-103	1,892.8	0.21	58.5
J-90	1,895.9	0.14	-4.8
J-25	1,893.7	0	19.5
FV3 PP DN 400	1,894.0	0.27	6.5
AV-2 PP DN 400 PN 16	1,898.8	0.24	45.5
J-24	1,897.8	0.27	58.5
FV2 PP DN 400	1,898.9	0.38	39.0
AV-3 PP DN 400 PN 16	1,889.8	0.21	6.5
J-105	1,889.0	0.21	32.5
J-122	1,889.9	0.21	103.9
DWL PBH1	1,884.0	0.27	52.0
DWL PBH2	1,906.0	0.27	45.5
DWL PBH3	1,896.0	0	84.5
DWL PBH4	1,898.0	0	19.5
DWL PBH5	1,893.0	1.50	45.5
DWL PBH6	1,896.0	0	97.5

J-101	1,887.0	1.50	45.5
J-100	1,890.7	0.21	52.0
J-99	1,903.0	1.28	65.0
J-100	1,900.2	0.21	136.4
J-99	1,899.8	0.21	6.5
J-99	1,878.9	0.90	45.5
J-96	1,893.7	0	58.5
J-97	1,894.5	1.17	0.0
J-96	1,899.7	1.25	19.5
J-97	1,891.7	0.93	6.5
J-98	1,899.8	0.00	45.5
road crossing	1,895.0	0.85	58.5
J-2	1,885.6	1.20	39.0
J-23	1,889.6	0.35	6.5
J-27	1,901.5	0.95	32.5
J-125	1,901.8	0.81	103.9
J-26	1,902.7	1.01	0.0
J-84	1,903.7	0.75	6.5
J-3	1,901.7	1.05	78.0
J-85	1,889.0	0.18	32.5
J-4	1,893.7	0	39.0
J-86	1,895.8	0.78	79.0
J-87	1,897.8	2.4	80.0
J-88	1,893.9	0.35	35.0
J-6	1,896.9	0.80	53.0
J-89	1,894.7	0.63	46.0
J-22	1,894.8	0.45	21.9
AV-1 PP DN 400 PN 16	1,888.7	0.35	32.9
J-7	1,898.0	0.35	19.9
J-92	1,892.9	0.35	43.9
J-124	1,898.8	0.35	63.9
CV-2	1,896.8	0.45	74.9
CV-3	1,894.8	0.13	44.9
J-9	1,898.1	0.35	23.9
FV4 PP DN 400	1,896.0	0.35	77.0
AV-BH2 PP DN 150	1,893.7	0.45	37.0
CV-5	1,890.7	0.45	88.0
J-126	1,891.7	0.45	49.0
AV1 BH6 DN 250	1,898.8	0.58	78.0
J-132	1,895.9	0.35	99.0
PBH6 DWL	1,899.6	0.35	69.0
J-127	1,893.9	0.35	67.0
J-160	1,898.9	0.35	-11.0

FV2 BH6 PP DN 250	1,884.8	2.19	-5.6
J-129	1,899.4	0.23	0.0
FV3 BH6 PP DN 250	1,891.7	0.35	22.0
J-130	1,899.5	0.50	31.0
AV2 BH6 DN 250	1,895.9	0.23	37.5
FV4 BH6 PP DN 250	1,890.8	0.23	4.0
J-131	1,893.9	0.45	18.0
J-133	1,886.8	0.35	19.7
FV5 BH6 PP DN 250	1,893.8	0.35	28.0
CV-1	1,891.9	0.50	26.0
CV-4	1,890.8	0.35	8.0
PBH5 DWL	1,892.8	0.35	7.0
J1 90 deg DN250 PN 16 double flanged bend with two adapters	1,895.8	0.45	13.0
FV1 PP DN 250	1,898.5	0.45	3.0
PBH1 DWL	1,888.7	0.45	7.0
AV-BH1 PP DN 150	1,893.8	0.40	15.0
PBH2 DWL	1,887.8	0.23	7.0
PBH3 DWL	1,887.5	0.23	8.0
AV-BH3 PP DN 150	1,893.7	0.23	10.0
J-113	1,897.7	0.35	21.0
PBH4 DWL	1,892.6	0.35	3.5
AV-BH4 PP DN 150	1,896.8	0.23	7.0
AV-BH5 PP DN 150	1,894.7	0.23	9.0
FV1 BH6 PP DN 250	1,896.9	0.50	0.0
AV3 BH6 DN 250	1,897.9	0.40	3.0
J-75	1,891.9	2.50	1.0
J-76	1,906.0	0.35	7.0
J-77	1,910.0	0.35	9.0
J-78	1,911.0	0.45	6.0
J-79	1,912.0	0.50	1.0
J-80	1,910.0	0.35	5.0
J-81	1,909.0	0.35	16.0
J-95	1,908.0	0.35	0.0
J-140	1,890.0	0.09	1.0
J-141	1,893.0	0.14	12.0
J-142	1,889.0	0.14	25.0
J-143	1,891.0	0.18	16.0
J-144	1,899.0	0.14	18.0
J-145	1,893.0	0	22.5
J-146	1,894.0	0.09	0.0
J-147	1,891.2	0.09	36.0

J-148	1,894.5	0.09	27.0
J-149	1,895.0	0.25	36.0
J-150	1,886.0	0	31.5
J-151	1,897.0	0	58.5
J-152	1,898.0	0.20	13.5
J-153	1,896.6	0	31.5
J-154	1,893.5	0	67.5
J-155	1,899.9	0.09	31.5
J-156	1,893.8	0.23	36.0
J-157	1,895.6	0	45.0
J-158	1,890.5	0	94.5
J-159	1,891.9	0	4.5
J-96	1,897.8	0	31.5
J-103	1,894.8	0	40.5
J-26	1,899.9	0	0.0
J-105	1,894.7	0.14	13.5
FV3 PP DN 400	1,894.0	0.09	4.5
J-94	1,896.9	0.14	31.5
J-124	1,893.9	0.18	40.5
FV2 PP DN 400	1,899.0	1.00	27.0
J-125	1,893.9	0.09	4.5
J-84	1,894.9	0.09	22.5
AV-1 PP DN 400 PN 16	1,897.0	0.14	72.0
AV-2 PP DN 400 PN 16	1,897.6	0.09	0.0
PMP-BH1	1,892.8	0.18	4.5
PMP-BH2	1,896.8	0.14	54.0
PMP-BH3	1,896.0	0.08	22.5
PMP-BH4	1,895.7	0.09	27.0
PMP-BH5	1,894.0	0.09	34.0
PMP-BH6	1,900.0	0.09	42.5
Booster Pump 1	1,883.0	0.18	0.0
J-101	1,889.0	0.23	68.0
J-100	1,890.5	0.09	51.0
Booster Pump 2	1,880.0	0.09	68.0
Booster Pump 3	1,887.0	0.20	59.5
J-95	1,887.9	0.09	110.4
J-97	1,898.8	0.18	25.5
J-98	1,898.7	0.25	59.5
PBH1 DWL	1,895.9	0.18	127.4
PBH2 DWL	1,898.2	0.14	59.5
PBH3 DWL	1,895.1	0.09	68.0
PBH4 DWL	1,890.6	0.09	85.0
PBH5 DWL	1,893.0	0.80	178.4

PBH6 DWL	1,892.9	0.14	8.5
Booster Pump 1	1,891.9	0.13	59.5
Booster Pump 2	1,893.8	0.23	76.5
Booster Pump 3	1,897.9	0.20	0.0
J-6	1,896.3	0.20	25.5
J-23	1,894.9	0.20	8.5
J-3	1,894.9	0.16	59.5
J-9	1,895.8	0.09	76.5
J-122	1,895.7	8.07	51.0
AV-3 PP DN 400 PN 16	1,894.0	0.18	8.5
J-27	1,893.0	0.18	42.5
J-85	1,896.5	0.16	135.9
J-4	1,899.1	0.14	0.0
J-86	1,898.9	0.25	8.5
J-87	1,898.9	0.09	101.9
J-88	1,897.6	0.18	42.5
road crossing	1,893.0	0.14	51.0
J-89	1,897.7	0.14	32.0
J-22	1,897.0	0.14	40.0
J-90	1,899.9	0.14	0.0
J-7	1,900.9	0.14	64.0
J-92	1,903.0	0.18	48.0
J-24	1,902.5	0.09	64.0
J-25	1,901.0	0	56.0
J-22	1,905.0	0.23	103.9
J-122	1,899.5	0.09	24.0
FV4 PP DN 400	1,895.9	0.09	56.0
PROPOSED NEW 200 CM RC WET WELL	1,891.8	0.14	119.9
CV-2	1,895.0	0.21	56.0
PROPOSED NEW 200 CM RC WET WELL	1,897.8	0.30	64.0
J-127	1,891.4	0.14	80.0
J-129	1,894.8	0.14	117.9
J-133	1,895.0	0.27	8.0
FV1 BH6 PP DN 250	1,896.7	0.21	56.0
J-160	1,895.6	0.21	72.0
FV2 BH6 PP DN 250	1,890.8	0.30	0.0
AV1 BH6 DN 250	1,899.0	0.21	24.0
FV3 BH6 PP DN 250	1,890.9	0.21	8.0
J-130	1,879.9	0.27	56.0
AV2 BH6 DN 250	1,898.3	0.27	72.0
FV4 BH6 PP DN 250	1,888.5	0.27	48.0

J-131	1,889.8	0.24	8.0
AV3 BH6 DN 250	1,890.9	0.14	40.0
FV5 BH6 PP DN 250	1,891.8	0.14	127.9
PROPOSED NEW 200 CM RC WET WELL	1,891.8	0.14	0.0
J1 90 deg DN250 PN 16 double flanged bend with two adapters	1,893.1	0.21	8.0
J-27	1,892.9	0.21	96.0
J-113	1,893.4	0.14	40.0
FV1 PP DN 250	1,898.9	0.14	48.0
J-2	1,890.0	0.30	31.5
AV-BH1 PP DN 150	1,886.8	0.24	40.5
CV-1	1,888.0	1.50	0.0
AV-BH2 PP DN 150	1,898.7	0.21	13.5
AV-BH3 PP DN 150	1,897.7	0.21	4.5
CV-3	1,896.0	0.27	31.5
AV-BH5 PP DN 150	1,895.9	0.30	40.5
AV-BH4 PP DN 150	1,894.9	0.21	27.0
CV-4	1,891.9	0.21	4.5
CV-5	1,892.0	0.21	22.5
J-126	1,894.0	0	72.0
J-132	1,895.7	0.21	0.0
J-76	1,897.4	0.48	4.5
J-77	1,895.6	0.38	54.0
J-78	1,896.1	0.27	112.5
J-79	1,892.0	0.21	72.0
J-80	1,893.9	0.21	1.5
J-81	1,898.0	0.21	18.0
PROPOSED NEW 2000 CM RC RESERVOIR	1,897.1	0.21	37.5
J-75	1,897.9	0.27	24.0