APPENDIX C: GRAVEL PATCH MAPPING

Field Data Collection Sheets w/Corresponding Patch Maps and Supplemental Photographs

Table 1: Summary Gravel Patch Information

(1) RM_Start	(2) RM_End	(3) XS_Start	(4) XS_End	(5) LOCATION	(6) % PLACED	(7) PATCH DEPTH (IN)	(8) AREA (FT2)	(9) depth x area (FT3)	(10) PERIMETER (FT)	(11) ACRES	(12) PCT_GRAVEL	(13) MIN_SIZE (IN)	(14) MAX_SIZE (IN)	(15) D_50 (IN)	(16) GR_VOL_FT (FT3)	(17) PLACED_VOL (CY)	(18) ft3 BiOp gravel/SF (FT)
60.31	60.23	1	1.3	GB 1.0-1.0-1	0	6	4059	2030	344	0.09	50	0.02	10	5	0	0.0	0
60.31	60.23	1	1.3	GB 1.3-1.5-1	100	26	185	402	83	0.00	100	0.25	6	2	402	14.9	2.18
60.31	60.23	1	1.3	GB 1.0-1.3-3	100	28	1158	2702	158	0.02	100	0.02	6	2	2702	100.1	2.33
60.31	60.23	1	1.3	GB 1.0-1.3-2	50	4	977	326	289	0.02	100	0.5	6	2	163	3.0	0.08
60.31	60.23	1	1.3	GB 1.0-1.3-1	100	8	1736	1157	214	0.03	100	0.5	6	2	1157	21.4	0.67
60.23	60.16	1.3	1.5	GB 1.3-1.5-2	100	6	256	128	61	0.01	100	1	4	-901	128	2.4	0.53
60.23	60.16	1.3	1.5	GB 1.3-1.5-3	100	6	1566	783	380	0.03	30	0.25	24	8	235	4.3	0.16
60.23	60.16	1.3	1.5	GB 1.3-1.5-1	100	26	2217	4803	295	0.05	100	0.25	6	2	4803	177.9	2.17
60.23	60.16	1.3	1.5	GB 1.5-1.7-2	25	6	1141	570	165	0.02	15	0.02	24	4	21	0.4	0
60.16	60.06	1.5	1.7	GB 1.7-3	50	12	30	30	25	0.00	50	-901	-901	-901	7	0.1	0
60.16	60.06	1.5	1.7	GB 1.7-2	80	18	3113	4669	280	0.07	100	0.02	6	1	3735	138.3	0.96
60.16	60.06	1.5	1.7	GB 1.7-1	80	9	3296	2472	288	0.07	95	0.5	12	2.5	1879	34.8	0.46
60.16	60.06	1.5	1.7	GB 1.7-4	75	6	4108	2054	294	0.09	30	-901	-901	-901	462	8.6	0.09
60.16	60.06	1.5	1.7	GB 1.5-1.7-4	75	18	3510	5265	279	0.08	100	0.25	4	1	3949	146.2	0.85
60.16	60.06	1.5	1.7	GB 1.5-1.7-3	75	6	23908	11954	914	0.54	40	2	6	-901	3586	66.4	0.11
60.16	60.06	1.5	1.7	GB 1.5-1.7-1	75	6	17193	8597	616	0.39	25	-901	6	-901	1612	29.8	0.07
60.16	60.06	1.5	1.7	GB 1.5-1.7-2	25	6	2589	1294	258	0.05	15	0.02	24	4	49	0.9	0
60.06	59.96	1.7	1.9	GB 1.7-3	50	12	4933	4933	424	0.11	50	-901	-901	-901	1233	22.8	0.13
60.06	59.96	1.7	1.9	GB 1.7-2	80	18	7298	10947	497	0.16	100	0.02	6	1	8758	324.4	0.96
60.06	59.96	1.7	1.9	GB 1.7-1	80	9	10309	7731	535	0.23	95	0.5	12	2.5	5876	108.8	0.46
60.06	59.96	1.7	1.9	GB 1.7-4	75	6	5107	2554	425	0.11	30	-901	-901	-901	575	10.6	0.08
60.06	59.96	1.7	1.9	GB 1.5-1.7-3	75	6	185	92	61	0.00	40	2	6	-901	28	0.5	0.15
60.06	59.96	1.7	1.9	GB 1.7-1.9-1	100	12	2199	2199	400	0.05	75	0.5	24	-901	1649	30.5	0.75
60.06	59.96	1.7	1.9	GB 1.7-1.9-2	75	12	22624	22624	818	0.51	10	0.02	6	-901	1697	31.4	0.06
60.06	59.96	1.7	1.9	GB 1.7-1.9-3	95	15	10878	13597	423	0.24	95	0.5	6	2.5	12271	454.5	1.07
59.96	59.94	1.9	2	GB 1.7-1.9-3	95	15	11466	14332	436	0.26	95	0.5	6	2.5	12935	479.1	1.07
59.94	59.88	2	3	GB 2.0-3.0-4	75	12	9517	9517	486	0.21	10	0.02	6	-901	714	13.2	0.06
59.94	59.88	2	3	GB 3.0-1	95	24	6834	13668	389	0.15	90	0.5	48	2.5	11686	432.8	1.62
59.94	59.88	2	3	GB 1.7-1.9-3	95	15	3330	4163	331	0.07	95	0.5	6	2.5	3757	139.1	1.07
59.94	59.88	2	3	GB 2.0-3.0-1	100	72	1722	10333	244	0.03	95	0.5	24	2	9816	363.6	5.71
59.94	59.88	2	3	GB 2.0-3.0-3	95	12	2468	2468	286	0.05	60	2	24	-901	1407	26.0	0.55
59.94	59.88	2	3	GB 2.0-3.0-2	75	6	4052	2026	306	0.09	10	0.5	2	-901	152	2.8	0.03
59.94	59.88	2	3	GB 3.0-2	95	24	12127	24254	509	0.27	95	0.5	6	2	21890	810.7	1.71
59.88	59.83	3	3.2	GB 3.0-1	95	24	12291	24581	477	0.28	90	0.5	48	2.5	21017	778.4	1.62
59.88	59.83	3	3.2	GB 3.0-3.2-4	95	12	4448	4448	309	0.10	75	-901	-901	-901	3169	58.7	0.68
59.88	59.83	3	3.2	GB 3.0-3.2-3	100	60	2706	13530	291	0.06	95	0.5	4	1.5	12853	476.0	4.75
59.88	59.83	3	3.2	GB 3.0-2	95	24	5693	11386	441	0.13	95	0.5	6	2	10275	380.6	1.72
59.88	59.83	3	3.2	GB 3.0-3.2-2	95	12	1839	1839	223	0.04	80	0.5	6	2	1397	25.9	0.72
59.88	59.83	3	3.2	GB 3.0-3.2-1	75	12	7150	7150	366	0.16	10	-901	6	-901	536	9.9	0.06
59.88	59.83	3	3.2	GB 3.0-3.2-6	95	6	2665	1333	233	0.06	60	0.5	4	-901	760	14.1	0.27
59.88	59.83	3	3.2	GB 3.2-1	85	6	452	226	89	0.01	50	-901	6	-901	96	1.8	0.18
59.88	59.83	3	3.2	GB 3.2-2	70	6	398	199	92	0.01	25	-901	6	-901	35	0.6	0.07
59.88	59.83	3	3.2	GB 3.0-3.2-5	90	9	2199	1649	206	0.05	25	-901	-901	4	371	6.9	0.15
59.88	59.83	3	3.2	GB 3.2-3.7-3	85	9	48	36	74	0.00	50	-901	-901	4	15	0.3	0
59.83	59.73	3.2	3.7	GB 3.2-4.0-1	70	6	26816	13408	823	0.61	5	0.5	4	-901	469	8.7	0.01
59.83	59.73	3.2	3.7	GB 3.7-2	85	6	2045	1022	183	0.04	50	-901	-901	-901	434	8.0	0.18
59.83	59.73	3.2	3.7	GB 3.2-3.7-6	90	12	2879	2879	213	0.06	60	0.5	4	-901	1555	28.8	0.49
59.83	59.73	3.2	3.7	GB 3.2-3.7-9	90	9	1354	1016	230	0.03	90	0.5	10	3	823	15.2	0.54
59.83	59.73	3.2	3.7	GB 3.2-1	85	6	566	283	99	0.01	50	-901	6	-901	120	2.2	0.19
59.83	59.73	3.2	3.7	GB 3.2-2	70	6	4669	2334	318	0.10	25	-901	6	-901	409	7.6	0.06
59.83	59.73	3.2	3.7	GB 3.2-3.7-1	85	6	5640	2820	314	0.12	50	0.5	4	-901	1199	22.2	0.18
59.83	59.73	3.2	3.7	GB 3.2-3.7-2	75	6	7938	3969	446	0.18	20	0.5	4	-901	595	11.0	0.06
59.83	59.73	3.2	3.7	GB 3.2-3.7-3	85	9	6821	5116	349	0.15	50	-901	-901	4	2174	40.3	0.27
59.83	59.73	3.2	3.7	GB 3.2-3.7-5	85	12	12640	12640	536	0.29	80	0.5	4	1.5	8595	159.2	0.58
59.83	59.73	3.2	3.7	GB 3.2-3.7-4	75	6	14442	7221	631	0.33	10	0.5	4	-901	542	10.0	0.03
59.83	59.73	3.2	3.7	GB 3.2-3.7-10	85	6	8172	4086	460	0.18	50	0.5	6	2	1737	32.2	0.18
59.83	59.73	3.2	3.7	GB 3.7-1	70	6	1799	899	188	0.04	7.5	-901	-901	-901	47	0.9	0.02
59.83	59.73	3.2	3.7	GB 3.2-3.7-8	75	6	686	343	105	0.01	10	0.5	2	-901	26	0.5	0.04
59.83	59.73	3.2	3.7	GB 3.2-3.7-7	85	12	7603	7603	373	0.17	75	0.5	6	2	4847	89.8	0.54
59.73	59.64	3.7	4	GB 3.7-4.0-8	85	21	2100	3676	242	0.04	80	1	6	3	2499	92.6	1.02
59.73	59.64	3.7	4	GB 3.2-4.0-1	70	6	34864	17432	1314	0.80	5	0.5	4	-901	610	11.3	0.01
59.73	59.64	3.7	4	GB 3.7-2	85	6	756	378	155	0.01	50	-901	-901	-901	161	3.0	0.18
59.73	59.64	3.7	4	GB 3.7-1	70	6	1859	929	174	0.04	7.5	-901	-901	-901	49	0.9	0.01
59.73	59.64	3.7	4	GB 4.0-1	70	6	1320	660	172	0.03	10	0.5	6	3	46	0.9	0.02
59.73	59.64	3.7	4	GB 4.0-2	85	12	954	954	132	0.02	50	0.02	6	3	405	7.5	0.37
59.73	59.64	3.7	4	GB 3.7-4.0-9	70	12	3432	3432	334	0.07	25	0.5	12	-901	601	11.1	0.13
59.73	59.64	3.7	4	GB 3.7-4.0-5	70	12	1697	1697	229	0.03	25	0.5	6	2	297	5.5	0.13
59.73	59.64	3.7	4	GB 3.7-4.0-4	70	9	4033	3024	270	0.09	25	0.5	6	2	529	9.8	0.09

(1) RM_Start	(2) RM_End	(3) XS_Start	(4) XS_End	(5) LOCATION	(6) % PLACED	(7) PATCH DEPTH (IN)	(8) AREA (FT2)	(9) depth x area (FT3)	(10) PERIMETER (FT)	(11) ACRES	(12) PCT_GRAVEL	(13) MIN_SIZE (IN)	(14) MAX_SIZE (IN)	(15) D_50 (IN)	(16) GR_VOL_FT (FT3)	(17) PLACED_VOL (CY)	(18) ft3 BiOp gravel/SF (FT)
59.73	59.64	3.7	4	GB 3.7-4.0-3	85	9	5085	3814	325	0.11	50	-901	-901	-901	1621	30.0	0.27
59.73	59.64	3.7	4	GB 3.7-4.0-2	85	12	1467	1467	233	0.03	90	0.5	5	2	1122	20.8	0.64
59.73	59.64	3.7	4	GB 3.7-4.0-1	70	6	2058	1029	195	0.04	25	-901	-901	-901	180	3.3	0.07
59.73	59.64	3.7	4	GB 3.7-4.0-10	70	12	214	214	69	0.00	25	0.5	6	3	37	0.7	0.13
59.73	59.64	3.7	4	GB 3.7-4.0-6	70	12	502	502	114	0.01	25	0.5	12	-901	88	1.6	0.11
59.64	59.56	4	4.2	GB 3.7-4.0-8	85	21	22	39	23	0.00	80	1	6	3	27	1.0	1.21
59.64	59.56	4	4.2	GB 4.2-1	70	12	5150	5150	362	0.11	38	0.5	6	2	1370	25.4	0.19
59.64	59.56	4	4.2	GB 4.0-1	70	6	12796	6398	531	0.29	10	0.5	6	3	448	8.3	0.03
59.64	59.56	4	4.2	GB 4.0-4.2-1	70	6	16337	8168	521	0.37	25	0.5	6	2	1429	26.5	0.06
59.64	59.56	4	4.2	GB 4.0-2	85	12	8398	8398	480	0.19	50	0.02	6	3	3569	66.1	0.36
59.64	59.56	4	4.2	GB 4.0-4.2-2	70	12	5292	5292	369	0.12	15	0.5	6	2	556	10.3	0.07
59.64	59.56	4	4.2	GB 4.0-4.2-3	70	12	7052	7052	437	0.16	15	0.5	6	2	740	13.7	0.07
59.56	59.43	4.2	4.4	GB 4.4-2	20	6	142	71	54	0.00	20	0.5	6	3	3	0.1	0
59.56	59.43	4.2	4.4	GB 4.2-1	70	12	431	431	233	0.01	38	0.5	6	2	115	2.1	0.19
59.56	59.43	4.2	4.4	GB 4.2-4.4-3	85	6	43800	21900	1383	1.00	5	-901	-901	-901	931	17.2	0.02
59.56	59.43	4.2	4.4	GB 4.2-4.4-1	85	12	1622	1622	207	0.03	60	0.25	4	2	827	15.3	0.43
59.56	59.43	4.2	4.4	GB 4.2-4.4-2	70	12	27514	27514	972	0.63	15	0.5	6	2	2889	53.5	0.07
59.56	59.43	4.2	4.4	GB 4.2-4.4-5	85	18	325	487	105	0.01	90	0.5	4	1.5	373	13.8	1
59.56	59.43	4.2	4.4	GB 4.2-4.4-6	85	12	3246	3246	315	0.07	50	1	8	3	1379	25.5	0.36
59.56	59.43	4.2	4.4	GB 4.2-4.4-7	70	12	7554	7554	443	0.17	20	0.5	6	1.5	1058	19.6	0.1
59.56	59.43	4.2	4.4	GB 4.2-4.4-8	85	12	2456	2456	301	0.05	60	1	4	2	1253	23.2	0.43
59.56	59.43	4.2	4.4	GB 4.4-1	50	6	1318	659	180	0.03	20	0.5	6	3	66	1.2	0.02
59.56	59.43	4.2	4.4	GB 4.4-3	70	12	205	205	90	0.00	80	1	6	2	115	2.1	0.39
59.43	59.32	4.4	4.6	GB 4.4-2	20	6	4117	2059	330	0.09	20	0.5	6	3	82	1.5	0.01
59.43	59.32	4.4	4.6	GB 4.4-4.6-3	85	12	353	353	96	0.01	90	0.5	6	3	270	5.0	0.61
59.43	59.32	4.4	4.6	GB 4.2-4.4-3	85	6	4301	2151	500	0.09	5	-901	-901	-901	91	1.7	0.02
59.43	59.32	4.4	4.6	GB 4.4-4.6-1	85	18	18117	27175	809	0.41	90	0.5	5	1.5	20789	770.0	0.97
59.43	59.32	4.4	4.6	GB 4.4-3	70	12	5687	5687	394	0.13	80	1	6	2	3185	59.0	0.39
59.43	59.32	4.4	4.6	GB 4.4-4.6-2	70	6	17230	8615	825	0.39	20	0.5	6	3	1206	22.3	0.05
59.43	59.32	4.4	4.6	GB 4.6-1	85	12	5550	5550	320	0.12	60	0.5	6	2	2831	52.4	0.43
59.43	59.32	4.4	4.6	GB 4.6-4.8-1	50	6	3781	1890	265	0.08	25	0.5	6	4	236	4.4	0.03
59.32	59.2	4.6	4.8	GB 4.6-4.8-3	60	6	4381	2190	493	0.10	17.5	0.5	6	2.5	230	4.3	0.03
59.32	59.2	4.6	4.8	GB 4.6-1	85	12	3375	3375	442	0.07	60	0.5	6	2	1721	31.9	0.43
59.32	59.2	4.6	4.8	GB 4.6-4.8-2	60	24	32838	65677	999	0.75	100	1	6	2.5	39406	1459.5	0.72
59.32	59.2	4.6	4.8	GB 4.6-4.8-4	75	18	13145	19718	500	0.30	60	0.5	6	2	8873	328.6	0.51
59.32	59.2	4.6	4.8	GB 4.6-4.8-1	50	6	16250	8125	941	0.37	25	0.5	6	4	1016	18.8	0.03
59.32	59.2	4.6	4.8	GB 4.8-1	55	6	4265	2133	434	0.09	15	0.5	6	2	176	3.3	0.03
59.2	59.11	4.8	5	GB 4.6-4.8-4	75	18	186	278	152	0.00	60	0.5	6	2	125	4.6	0.44
59.2	59.11	4.8	5	GB 4.8-5.0-1	60	12	7612	7612	431	0.17	40	1	6	2	1827	33.8	0.15
59.2	59.11	4.8	5	GB 4.8-1	55	6	15095	7548	647	0.34	15	0.5	6	2	623	11.5	0.02
59.2	59.11	4.8	5	GB 4.8-5.0-2	60	12	1801	1801	243	0.04	10	0.1	4	0.5	108	2.0	0.03
59.2	59.11	4.8	5	GB 5.0-1	60	6	33207	16603	934	0.76	5	1	6	2	498	9.2	0.01
59.2	59.11	4.8	5	GB 5.0-2	50	24	277	553	70	0.01	100	0.01	2	0.5	277	10.2	0.49
59.11	59.07	5	5.2	GB 5.0-1	60	6	5268	2634	496	0.12	5	1	6	2	79	1.5	0.01
59.11	59.07	5	5.2	GB 5.0-2	50	24	2418	4835	268	0.05	100	0.01	2	0.5	2418	89.5	0.5
59.11	59.07	5	5.2	GB 5.2-1	60	12	11647	11647	524	0.26	100	0.5	10	3	6988	129.4	0.36
59.11	59.07	5	5.2	GB 5.2-2	50	24	1047	2094	149	0.02	20	0.5	3	1	209	7.8	0.1
59.11	59.07	5	5.2	GB 5.2-3	50	32	69	183	37	0.00	50	0.5	3	1	46	1.7	0.39
59.07	59.02	5.2	5.5	GB 5.2-1	60	12	2936	2936	268	0.06	100	0.5	10	3	1762	32.6	0.36
59.07	59.02	5.2	5.5	GB 5.2-2	50	24	207	414	65	0.00	20	0.5	3	1	41	1.5	0.13
59.07	59.02	5.2	5.5	GB 5.2-3	50	32	2716	7243	216	0.06	50	0.5	3	1	1811	67.1	0.34
59.07	59.02	5.2	5.5	GB 5.2-5.5-3	50	6	1485	743	353	0.03	40	0.25	5	1	149	2.8	0.05
59.07	59.02	5.2	5.5	GB 5.2-5.5-2	50	24	3474	6948	396	0.07	50	0.5	3	1	1737	64.3	0.25
59.07	59.02	5.2	5.5	GB 5.2-5.5-1	50	6	22843	11422	663	0.52	5	0.5	6	3	286	5.3	0.01
59.02	58.93	5.5	5.7	GB 5.2-5.5-3	50	6	813	407	153	0.01	40	0.25	5	1	81	1.5	0.07
59.02	58.93	5.5	5.7	GB 5.2-5.5-2	50	24	21	43	24	0.00	50	0.5	3	1	11	0.4	0
59.02	58.93	5.5	5.7	GB 5.2-5.5-1	50	6	316	158	185	0.01	5	0.5	6	3	4	0.1	0
59.02	58.93	5.5	5.7	GB 5.7-1	50	6	4139	2069	316	0.09	10	0.5	6	3	103	1.9	0.01
59.02	58.93	5.5	5.7	GB 5.7-2	50	6	6508	3254	340	0.14	30	0.5	6	3	488	9.0	0.04
59.02	58.93	5.5	5.7	GB 5.7-3	50	6	4632	2316	306	0.10	10	0.5	6	3	116	2.1	0.01
59.02	58.93	5.5	5.7	GB 5.5-5.7-5	60	18	730	1096	134	0.01	100	0.5	2	1	657	24.3	0.55
59.02	58.93	5.5	5.7	GB 5.5-5.7-1	60	36	1179	3538	169	0.02	100	0.5	5	1.5	2123	78.6	1.08
59.02	58.93	5.5	5.7	GB 5.5-5.7-4	60	36	3028	9083	241	0.06	100	0.5	2	1.25	5450	201.9	1.08
59.02	58.93	5.5	5.7	GB 5.5-5.7-2	60	6	36352	18176	1065	0.83	5	0.02	6	2	545	10.1	0.01
59.02	58.93	5.5	5.7	GB 5.5-5.7-3	60	30	909	2274	133	0.02	100	0.02	0.5	0.25	1364	50.5	0.89
58.93	58.87	5.7	6	GB 6.0-2	55	6	5199	2599	458	0.11	20	0.5	6	3	286	5.3	0.03
58.93	58.87	5.7	6	GB 5.7-6.0-1	60	12	17222	17222	569	0.39	60	0.5	5	2.5	6200	114.8	0.22
58.93	58.87	5.7	6	GB 5.7-1	50	6	7045	3523	417	0.16	10	0.5	6	3	176	3.3	0.01
58.93	58.87	5.7	6	GB 5.7-2	50	6	5619	2809	325	0.12	30	0.5	6	3	421	7.8	0.04
58.93	58.87	5.7	6	GB 5.7-3	50	6	5120	2560	327	0.11	10	0.5	6	3	128	2.4	0.01

(1) RM_Start	(2) RM_End	(3) XS_Start	(4) XS_End	(5) LOCATION	(6) % PLACED	(7) PATCH DEPTH (IN)	(8) AREA (FT2)	(9) depth x area (FT3)	(10) PERIMETER (FT)	(11) ACRES	(12) PCT_GRAVEL	(13) MIN_SIZE (IN)	(14) MAX_SIZE (IN)	(15) D_50 (IN)	(16) GR_VOL_FT (FT3)	(17) PLACED_VOL (CY)	(18) ft3 BiOp gravel/SF (FT)
58.93	58.87	5.7	6	GB 6.0-1	55	6	3147	1573	341	0.07	25	0.5	6	3	216	4.0	0.03
58.93	58.87	5.7	6	GB 6.0-6.5-1	55	12	342	342	177	0.01	35	0.5	6	1.5	66	1.2	0.08
58.87	58.8	6	6.5	GB 6.0-2	55	6	5288	2644	562	0.12	20	0.5	6	3	291	5.4	0.03
58.87	58.8	6	6.5	GB 6.0-6.5-6	20	12	785	785	137	0.01	30	0.02	6	3	47	0.9	0
58.87	58.8	6	6.5	GB 6.0-1	55	6	11857	5929	661	0.27	25	0.5	6	3	815	15.1	0.04
58.87	58.8	6	6.5	GB 6.0-6.5-3	60	12	7974	7974	372	0.18	50	1	6	1.5	2392	44.3	0.18
58.87	58.8	6	6.5	GB 6.0-6.5-4	60	24	1666	3333	182	0.03	80	0.02	8	-901	1600	59.2	0.58
58.87	58.8	6	6.5	GB 6.0-6.5-5	60	12	2586	2586	200	0.05	75	0.25	2	-901	1164	21.5	0.27
58.87	58.8	6	6.5	GB 6.0-6.5-1	50	6	2093	1046	264	0.04	50	0.5	5	1.5	262	4.8	0.06
58.87	58.8	6	6.5	GB 6.0-6.5-2	40	6	2841	1421	343	0.06	20	0.5	5	2	114	2.1	0.02
58.87	58.8	6	6.5	GB 6.5-7.0-1	40	6	2690	1345	290	0.06	5	0.5	6	3	27	0.5	0
58.87	58.8	6	6.5	GB 6.5-1	55	6	1412	706	194	0.03	20	0.5	6	1.5	78	1.4	0.04
58.87	58.8	6	6.5	GB 6.5-7.0-2	55	6	12897	6448	638	0.29	5	0.5	6	3	177	3.3	0.01
58.87	58.8	6	6.5	GB 6.0-6.5-1	55	12	5548	5548	356	0.12	35	0.5	6	1.5	1068	19.8	0.11
58.8	58.73	6.5	7	GB 6.5-7.0-1	40	6	7888	3944	714	0.18	5	0.5	6	3	79	1.5	0
58.8	58.73	6.5	7	GB 6.5-1	55	6	4725	2363	371	0.10	20	0.5	6	1.5	260	4.8	0.03
58.8	58.73	6.5	7	GB 6.5-7.0-3	40	6	6986	3493	481	0.16	40	0.5	6	1.5	559	10.3	0.03
58.8	58.73	6.5	7	GB 6.5-7.0-2	55	6	19918	9959	757	0.45	5	0.5	6	3	274	5.1	0.01
58.8	58.73	6.5	7	GB 6.5-7.0-4	40	6	7761	3880	455	0.17	25	1	6	2.5	388	7.2	0.02
58.8	58.73	6.5	7	GB 7.0-1	25	6	1258	629	173	0.02	25	-901	-901	2	39	0.7	0
58.8	58.73	6.5	7	GB 7.0-2	60	6	482	241	93	0.01	50	0.25	4	1.75	72	1.3	0.11
58.73	58.64	7	7.5	GB 7.0-7.5-4	60	18	3942	5914	306	0.09	60	-901	-901	3	2129	78.8	0.32
58.73	58.64	7	7.5	GB 6.5-7.0-1	40	6	38	19	49	0.00	5	0.5	6	3	0	0.0	0
58.73	58.64	7	7.5	GB 6.5-7.0-3	40	6	3553	1776	245	0.08	40	0.5	6	1.5	284	5.3	0.03
58.73	58.64	7	7.5	GB 7.0-7.5-9	40	6	6545	3272	399	0.15	7.5	0.5	6	3	98	1.8	0
58.73	58.64	7	7.5	GB 7.0-7.5-8	20	6	2489	1245	200	0.05	25	0.5	6	3	62	1.2	0
58.73	58.64	7	7.5	GB 7.0-7.5-7	40	12	4155	4155	289	0.09	40	1	6	3	665	12.3	0.06
58.73	58.64	7	7.5	GB 7.0-7.5-6	60	12	5000	5000	277	0.11	100	-901	-901	2.5	3000	55.6	0.36
58.73	58.64	7	7.5	GB 7.0-7.5-5	60	18	7021	10532	341	0.16	80	-901	-901	2	5055	187.2	0.43
58.73	58.64	7	7.5	GB 7.0-7.5-1	60	12	3180	3180	282	0.07	50	-901	-901	2.5	954	17.7	0.18
58.73	58.64	7	7.5	GB 7.0-1	25	6	6992	3496	376	0.16	25	-901	-901	2	219	4.0	0.01
58.73	58.64	7	7.5	GB 7.0-7.5-2	40	6	21631	10816	646	0.49	10	-901	-901	2	433	8.0	0.01
58.73	58.64	7	7.5	GB 7.0-7.5-3	40	6	1046	523	202	0.02	20	-901	-901	2	42	0.8	0.03
58.73	58.64	7	7.5	GB 7.5-8.0-1	40	9	11027	8270	428	0.25	25	-901	-901	2	827	15.3	0.03
58.73	58.64	7	7.5	GB 7.0-8.0-1	40	6	10676	5338	890	0.24	10	1	6	3	214	4.0	0.01
58.73	58.64	7	7.5	GB 7.0-7.5-12	40	6	476	238	111	0.01	30	0.25	5	1.75	29	0.5	0
58.73	58.64	7	7.5	GB 7.0-7.5-11	40	6	332	166	92	0.01	100	0.02	1	0.5	66	1.2	0.08
58.73	58.64	7	7.5	GB 7.0-7.5-10	60	12	1073	1073	137	0.02	80	0.25	4	1.5	515	9.5	0.28
58.73	58.64	7	7.5	GB 7.0-2	60	6	1160	580	184	0.02	50	0.25	4	1.75	174	3.2	0.09
58.64	58.6	7.5	8	GB 7.5-8.0-3	40	6	3830	1915	247	0.08	15	-901	-901	3	115	2.1	0.01
58.64	58.6	7.5	8	GB 7.5-8.0-4	40	6	2338	1169	224	0.05	7.5	-901	-901	3	35	0.6	0.01
58.64	58.6	7.5	8	GB 7.0-7.5-9	40	6	133	66	108	0.00	7.5	0.5	6	3	2	0.0	0
58.64	58.6	7.5	8	GB 7.5-8.0-2	40	12	5816	5816	408	0.13	40	-901	-901	3	931	17.2	0.06
58.64	58.6	7.5	8	GB 7.5-8.0-1	40	9	11692	8769	569	0.26	25	-901	-901	2	877	16.2	0.03
58.64	58.6	7.5	8	GB 7.0-8.0-1	40	6	4298	2149	311	0.09	10	1	6	3	86	1.6	0.01
58.6	58.51	8	8.2	GB 7.5-8.0-2	40	12	2748	2748	239	0.06	40	-901	-901	3	440	8.1	0.07
58.6	58.51	8	8.2	GB 7.5-8.0-1	40	9	1595	1196	165	0.03	25	-901	-901	2	120	2.2	0.03
58.6	58.51	8	8.2	GB 7.0-8.0-1	40	6	3348	1674	288	0.07	10	1	6	3	67	1.2	0.01
58.6	58.51	8	8.2	GB 8.2-8.6-1	40	6	4887	2443	298	0.11	10	2	6	4	98	1.8	0.01
58.6	58.51	8	8.2	GB 8.0-8.2-7	40	6	8194	4097	370	0.18	15	0.25	4	1.5	246	4.6	0.01
58.6	58.51	8	8.2	GB 8.0-8.2-6	15	6	246	123	65	0.01	75	0.25	3	1	14	0.3	0
58.6	58.51	8	8.2	GB 8.0-8.2-5	40	6	5135	2567	304	0.11	20	-901	-901	3	205	3.8	0.02
58.6	58.51	8	8.2	GB 8.0-8.2-1	40	6	5848	2924	398	0.13	10	-901	-901	-901	117	2.2	0.01
58.6	58.51	8	8.2	GB 8.0-8.2-2	40	6	8948	4474	509	0.20	20	-901	-901	2.5	358	6.6	0.02
58.6	58.51	8	8.2	GB 8.0-8.8-1	40	6	15376	7688	680	0.35	7.5	-901	-901	-901	231	4.3	0.01
58.6	58.51	8	8.2	GB 8.0-8.2-3	60	12	969	969	185	0.02	50	-901	-901	2.5	291	5.4	0.17
58.6	58.51	8	8.2	GB 8.0-8.2-4	60	18	2497	3745	266	0.05	75	-901	-901	2.5	1685	62.4	0.4
58.6	58.51	8	8.2	GB 8.0-8.8-2	40	6	6601	3300	607	0.15	25	0.5	4	1.5	330	6.1	0.02
58.51	58.47	8.2	8.4	GB 8.2-8.4-2	60	12	2330	2330	273	0.05	95	0.5	6	2	1328	24.6	0.35
58.51	58.47	8.2	8.4	GB 8.2-8.6-1	40	6	12637	6319	486	0.29	10	2	6	4	253	4.7	0.01
58.51	58.47	8.2	8.4	GB 8.4-1	40	6	360	180	98	0.01	25	-901	-901	2	18	0.3	0
58.51	58.47	8.2	8.4	GB 8.0-8.8-1	40	6	16435	8217	615	0.37	7.5	-901	-901	-901	247	4.6	0.01
58.51	58.47	8.2	8.4	GB 8.2-8.4-1	60	24	1827	3653	266	0.04	100	0.5	2	0.75	2192	81.2	0.72
58.51	58.47	8.2	8.4	GB 8.0-8.2-4	60	18	226	340	70	0.01	75	-901	-901	2.5	153	5.7	0.36
58.51	58.47	8.2	8.4	GB 8.0-8.8-2	40	6	4564	2282	513	0.10	25	0.5	4	1.5	228	4.2	0.02
58.47	58.42	8.4	8.6	GB 8.6-8.8-2	60	18	5407	8110	307	0.12	75	0.5	2	1	3650	135.2	0.4
58.47	58.42	8.4	8.6	GB 8.4-8.6-1	25	6	3497	1748	412	0.08	20	0.5	3	1	87	1.6	0.01
58.47	58.42	8.4	8.6	GB 8.4-8.6-3	60	12	649	649	159	0.01	50	-901	-901	3	195	3.6	0.17
58.47	58.42	8.4	8.6	GB 8.2-8.6-1	40	6	9742	4871	576	0.22	10	2	6	4	195	3.6	0.01
58.47	58.42	8.4	8.6	GB 8.4-1	40	6	1763	881	172	0.04	25	-901	-901	2	88	1.6	0.02

(1) RM_Start	(2) RM_End	(3) XS_Start	(4) XS_End	(5) LOCATION	(6) % PLACED	(7) PATCH DEPTH (IN)	(8) AREA (FT2)	(9) depth x area (FT3)	(10) PERIMETER (FT)	(11) ACRES	(12) PCT_GRAVEL	(13) MIN_SIZE (IN)	(14) MAX_SIZE (IN)	(15) D_50 (IN)	(16) GR_VOL_FT (FT3)	(17) PLACED_VOL (CY)	(18) ft3 BiOp gravel/SF (FT)
58.47	58.42	8.4	8.6	GB 8.0-8.8-1	40	6	17757	8879	632	0.40	7.5	-901	-901	-901	266	4.9	0.01
58.47	58.42	8.4	8.6	GB 8.0-8.8-2	40	6	3046	1523	516	0.06	25	0.5	4	1.5	152	2.8	0.02
58.47	58.42	8.4	8.6	GB 8.4-8.6-2	20	9	75	56	43	0.00	80	0.5	3	1	9	0.2	0
58.47	58.42	8.4	8.6	GB 8.6-9.0--1	40	6	1292	646	161	0.02	15	0.25	6	2.5	39	0.7	0.02
58.42	58.41	8.6	8.8	GB 8.6-8.8-2	60	18	4030	6044	269	0.09	75	0.5	2	1	2720	100.7	0.4
58.42	58.41	8.6	8.8	GB 8.0-8.8-1	40	6	5287	2644	301	0.12	7.5	-901	-901	-901	79	1.5	0.01
58.42	58.41	8.6	8.8	GB 8.0-8.8-2	40	6	1718	859	202	0.03	25	0.5	4	1.5	86	1.6	0.02
58.42	58.41	8.6	8.8	GB 8.6-8.8-1	60	12	582	582	139	0.01	70	1	5	2.5	244	4.5	0.23
58.42	58.41	8.6	8.8	GB 8.6-9.0--1	40	6	3289	1645	231	0.07	15	0.25	6	2.5	99	1.8	0.01
58.41	58.3	8.8	9	GB 8.8-9.0-8	60	12	11622	11622	632	0.26	50	-901	-901	3	3487	64.6	0.18
58.41	58.3	8.8	9	GB 8.6-8.8-2	60	18	572	858	121	0.01	75	0.5	2	1	386	14.3	0.42
58.41	58.3	8.8	9	GB 8.8-9.0-9	40	9	2276	1707	252	0.05	25	-901	-901	3	171	3.2	0.04
58.41	58.3	8.8	9	GB 9.0-3	40	6	13159	6579	570	0.30	2.5	-901	-901	-901	66	1.2	0
58.41	58.3	8.8	9	GB 8.0-8.8-1	40	6	19658	9829	968	0.45	7.5	-901	-901	-901	295	5.5	0.01
58.41	58.3	8.8	9	GB 8.0-8.8-2	40	6	2050	1025	239	0.04	25	0.5	4	1.5	103	1.9	0.03
58.41	58.3	8.8	9	GB 8.8-9.0-1	60	18	469	704	103	0.01	85	1	6	3	359	13.3	0.46
58.41	58.3	8.8	9	GB 8.8-9.0-3	60	6	1710	855	164	0.03	60	-901	-901	2	308	5.7	0.11
58.41	58.3	8.8	9	GB 8.8-9.0-5	60	9	981	736	185	0.02	75	-901	-901	2	331	6.1	0.19
58.41	58.3	8.8	9	GB 8.8-9.0-4	40	6	1850	925	196	0.04	30	-901	-901	2.5	111	2.1	0.03
58.41	58.3	8.8	9	GB 8.8-9.0-6	40	6	3298	1649	301	0.07	10	-901	-901	2.5	66	1.2	0.01
58.41	58.3	8.8	9	GB 8.8-9.0-7	60	18	527	791	116	0.01	60	0.5	5	1.5	285	10.5	0.31
58.41	58.3	8.8	9	GB 8.8-9.0-2	40	6	5511	2755	352	0.12	30	-901	-901	2.5	331	6.1	0.02
58.41	58.3	8.8	9	GB 8.8-9.0-10	60	12	1136	1136	166	0.02	95	0.25	4	1.5	648	12.0	0.33
58.41	58.3	8.8	9	GB 8.6-9.0--1	40	6	16370	8185	888	0.37	15	0.25	6	2.5	491	9.1	0.01
58.41	58.3	8.8	9	GB 8.8-9.0-11	25	6	1346	673	160	0.03	100	0.02	1	0.5	168	3.1	0.04
58.41	58.3	8.8	9	GB 8.8-9.0-12	40	6	1046	523	151	0.02	10	-901	-901	-901	21	0.4	0
58.41	58.3	8.8	9	GB 9.0-1	60	12	81	81	38	0.00	90	0.5	6	3	44	0.8	0.33
58.41	58.3	8.8	9	GB 9.0-2	40	6	2255	1128	243	0.05	40	-901	-901	-901	180	3.3	0.04
58.41	58.3	8.8	9	GB 9.0-4	20	6	71	35	44	0.00	50	0.02	0.5	0.25	4	0.1	0
58.3	58.07	9	10	GB 9.0-3	40	6	2316	1158	269	0.05	2.5	-901	-901	-901	12	0.2	0
58.3	58.07	9	10	GB-9-10-11	50	6	1619	810	172	0.03	50	-901	-901	-901	202	3.7	0.07
58.3	58.07	9	10	GB 9.0-1	60	12	1349	1349	201	0.03	90	0.5	6	3	728	13.5	0.32
58.3	58.07	9	10	GB 9.0-2	40	6	2278	1139	233	0.05	40	-901	-901	-901	182	3.4	0.04
58.3	58.07	9	10	GB 9.0-4	20	6	3332	1666	319	0.07	50	0.02	0.5	0.25	167	3.1	0.01
58.3	58.07	9	10	GB 9.0-10.0-1	15	6	4502	2251	346	0.10	2.5	-901	-901	-901	8	0.2	0
58.3	58.07	9	10	GB 9.0-10.0-2	60	6	1484	742	312	0.03	50	1	6	3	223	4.1	0.09
58.3	58.07	9	10	GB 9.0-10.0-3	40	6	1391	696	179	0.03	15	-901	-901	-901	42	0.8	0.02
58.3	58.07	9	10	GB 9.0-10.0-4	40	6	4829	2414	546	0.11	10	1	6	3	97	1.8	0.01
58.3	58.07	9	10	GB 9.0-10.0-6	10	12	4146	4146	459	0.09	15	0.02	4	1.5	62	1.2	0
58.3	58.07	9	10	GB 9.0-10.0-7	60	6	1280	640	158	0.02	50	0.02	6	1	192	3.6	0.08
58.3	58.07	9	10	GB 9.0-10.0-12	60	20	1847	3078	190	0.04	100	0.5	6	1.5	1847	68.4	0.6
58.3	58.07	9	10	GB 9.0-10.0-9	60	18	1620	2430	163	0.03	75	0.5	6	1.5	1093	40.5	0.4
58.3	58.07	9	10	GB 9.0-10.0-8	60	12	1737	1737	167	0.03	60	0.02	6	1	625	11.6	0.22
58.3	58.07	9	10	GB 9.0-10.0-16	60	15	642	802	146	0.01	75	2	8	4	361	13.4	0.34
58.3	58.07	9	10	GB 9.0-10.0-17	20	30	716	1789	133	0.01	100	1	4	2	358	13.3	0.11
58.3	58.07	9	10	GB 9.0-10.0-15	60	12	1837	1837	300	0.04	50	2	8	4	551	10.2	0.18
58.3	58.07	9	10	GB 9.0-10.0-14	40	12	5358	5358	315	0.12	70	2	8	2.5	1500	27.8	0.11
58.3	58.07	9	10	GB 9.0-10.0-13	40	6	4082	2041	369	0.09	25	0.02	6	-901	204	3.8	0.02
58.3	58.07	9	10	GB 9.0-10.0-19	15	12	236	236	59	0.01	10	0.02	2	-901	4	0.1	0
58.3	58.07	9	10	GB 9.0-10.0-20	15	9	446	334	110	0.01	10	0.02	2	-901	5	0.1	0
58.3	58.07	9	10	GB 10.0-1	60	24	3859	7717	309	0.08	95	0.02	4	1	4399	162.9	0.69
58.3	58.07	9	10	GB 9.0-10.0-18	60	24	1352	2703	209	0.03	100	0.02	4	2	1622	60.1	0.72
58.3	58.07	9	10	GB 9.0-10.0-5	40	6	91012	45506	2639	2.08	2.5	0.5	6	3	455	8.4	0
58.07	58	10	0	GB 10.0-1	60	24	3122	6245	294	0.07	95	0.02	4	1	3559	131.8	0.68
58.07	58	10	0	GB 9.0-10.0-5	40	6	33373	16686	1292	0.76	2.5	0.5	6	3	167	3.1	0
58.07	58	10	0	GB 10.0-3	60	12	8518	8518	740	0.19	80	1	6	3	4088	75.7	0.29
58.07	58	10	0	GB 10.0-5	40	12	885	885	143	0.02	10	0.02	6	3	35	0.7	0.03
58.07	58	10	0	GB 10.0-4	60	24	1805	3610	313	0.04	100	0.5	2	0.75	2166	80.2	0.72
58.07	58	10	0	GB 10.0-2	40	12	2615	2615	235	0.06	50	-901	-901	-901	523	9.7	0.08

(1) Starting River Mile for Gravel Patch
(2) Ending River Mile for Gravel Patch
(3) Starting River Mile for Gravel Patch
(4) Ending Cross Section for Gravel Patch
(5) Gravel Bar Location Code: Upstream Bounding Cross Section - Downstream Bounding Cross Section - Unique Number
(6) % "Placed"AKA "BiOp" or "Nourishment" gravel based on visual estimate of total patch percentage or native/placed count
(7) Patch Depth based on visual estimates (amount that D90 size stones are buried by gravel), depth probes, and cross section surveyes
(8) Area Computed in GIS
(9) = (7) x (8)
(10) Perimeter computed in GIS
(10) Patch Perimeter comuted in GIS
(11) Patch Acreage
(12) Percentage of patch that is estimated to be gravel (equal to or greater than 5-in nominal diameter)
(13) Vusual Estimate of patch minimum substrate nominal diameter (-901 = no data recorded)
(14) Vusual Estimate of patch maximum substrate nominal diameter (-901 = no data recorded)
(15) Vusual Estimate of patch median substrate nominal diameter (-901 = no data recorded)
(16) = (7)/12*(8)*(12), unless (6) <= 12", then (16) = (7/2)/12*(8)*(12)
(17) = (6)*(16)/27
(18) = (17)*27/(8)

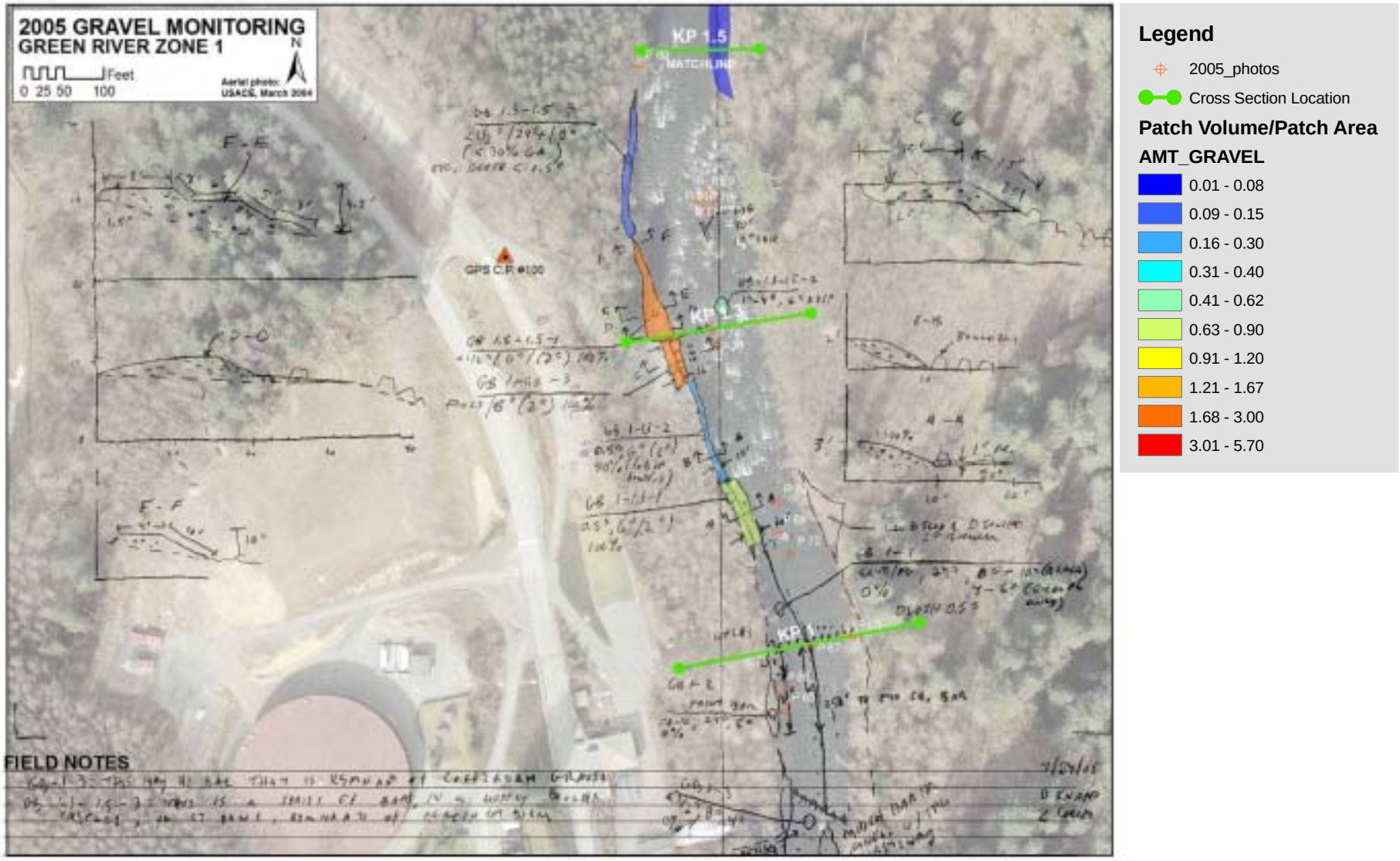

Figure-1: Zone 1 Gravel Patch mapping, KP 1.0 to KP 1.5

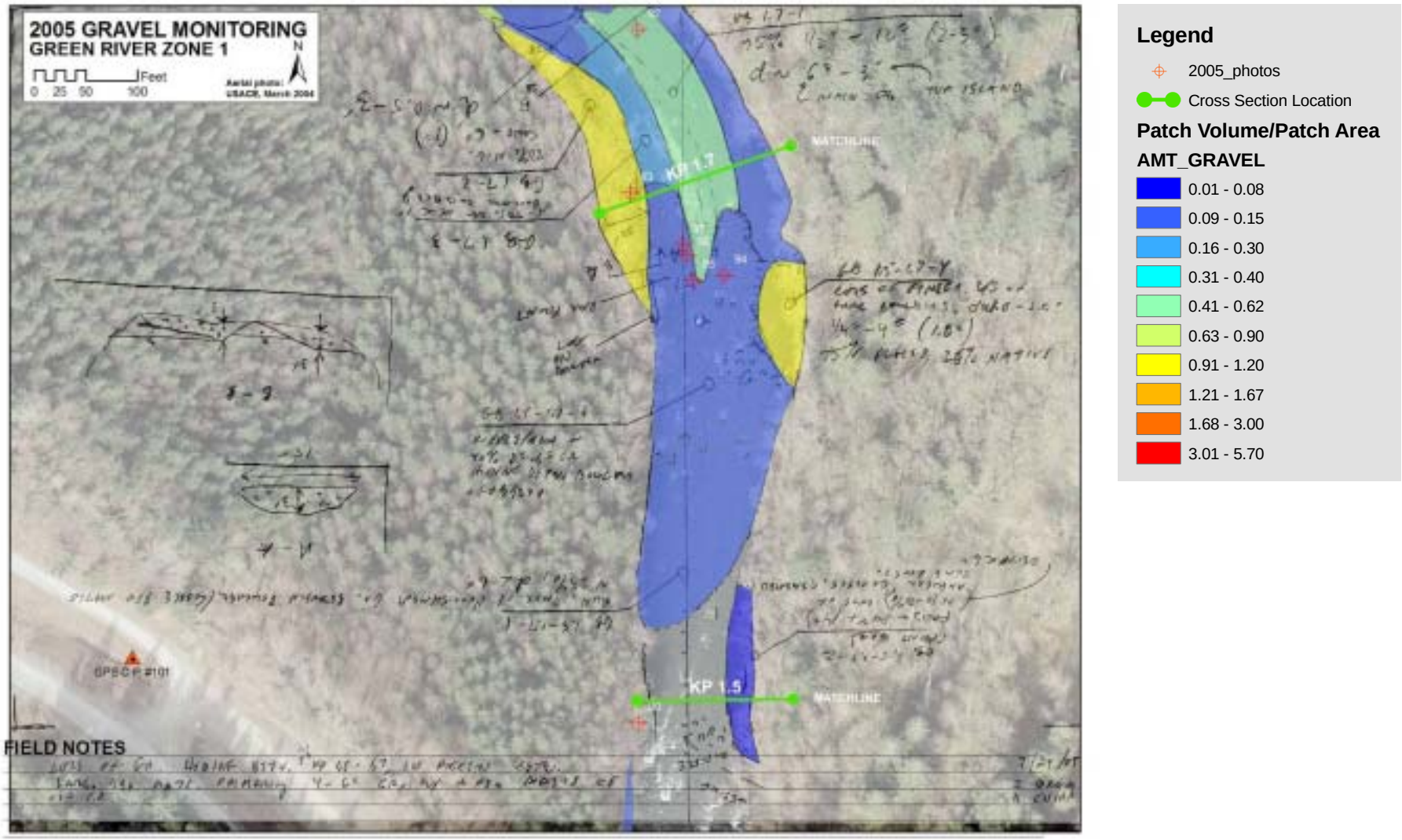

Figure-2: Zone 1 Gravel Patch mapping, KP 1.5 to KP 1.7

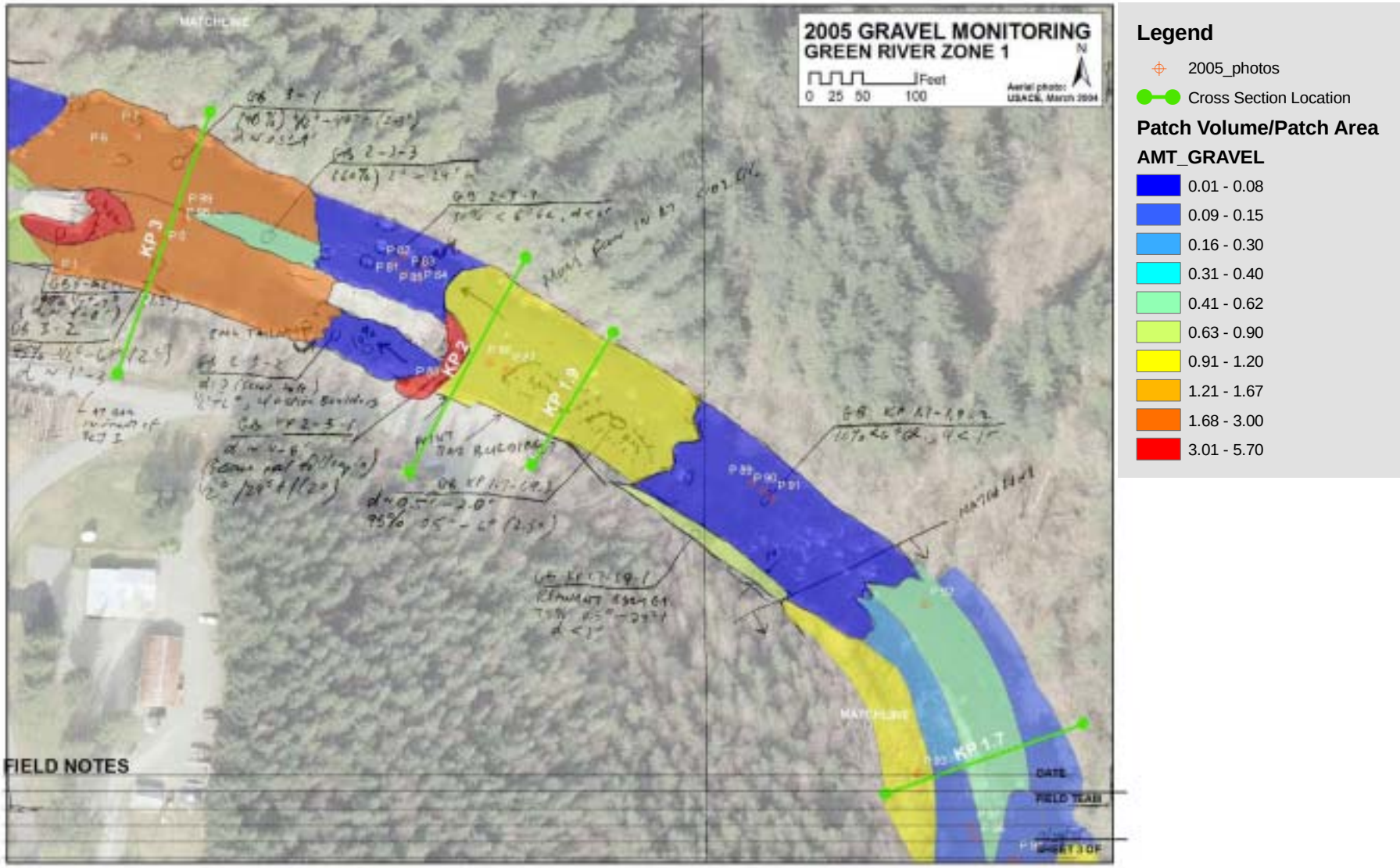

Figure-3: Zone 1 Gravel Patch mapping, KP 1.7 to KP 3.0

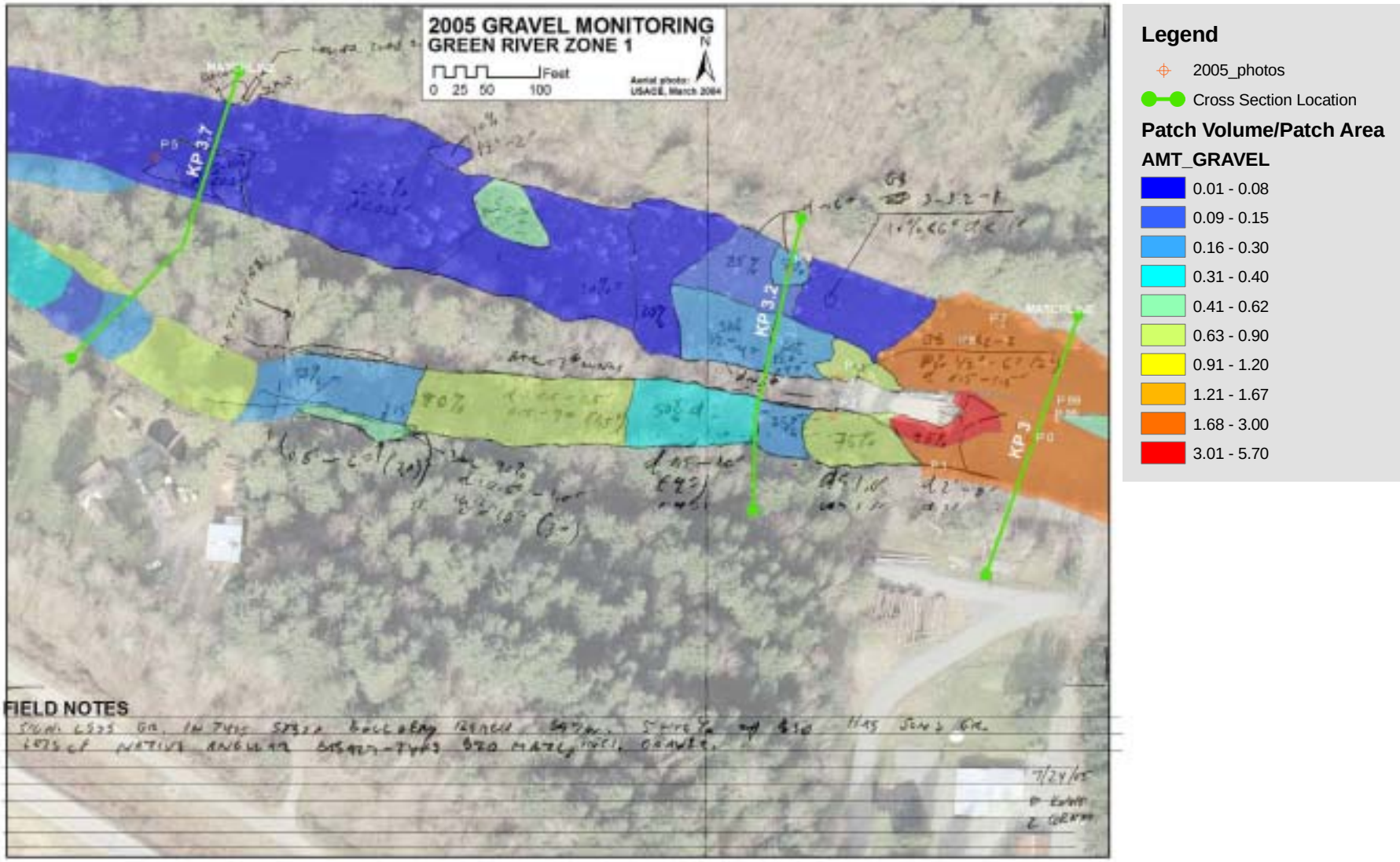

Figure-4: Zone 1 Gravel Patch mapping, KP 3.0 to KP 3.7

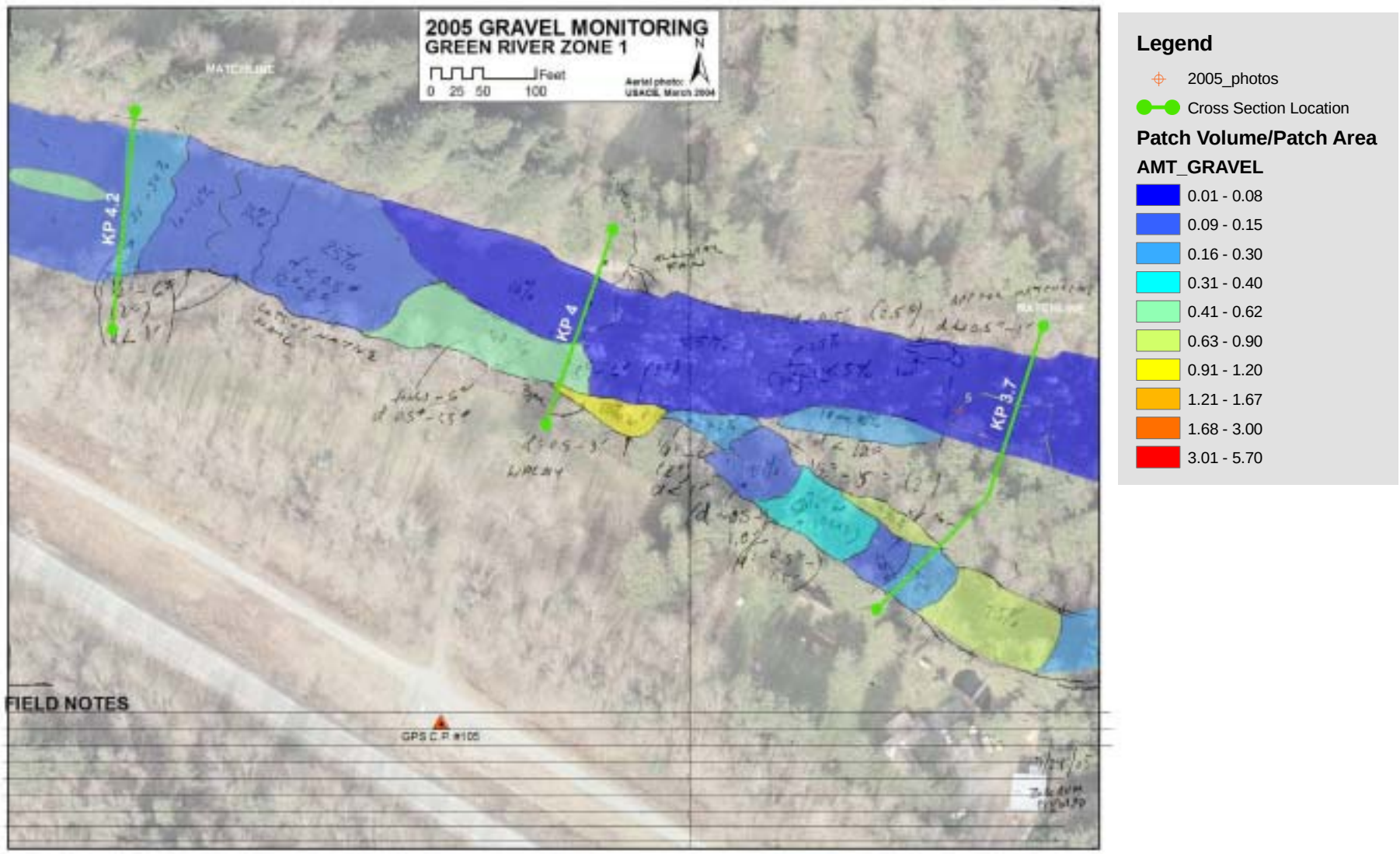

Figure-5: Zone 1 Gravel Patch mapping, KP 3.7 to KP 4.2

Figure-6: Zone 1 Gravel Patch mapping, KP 4.2 to KP 4.4

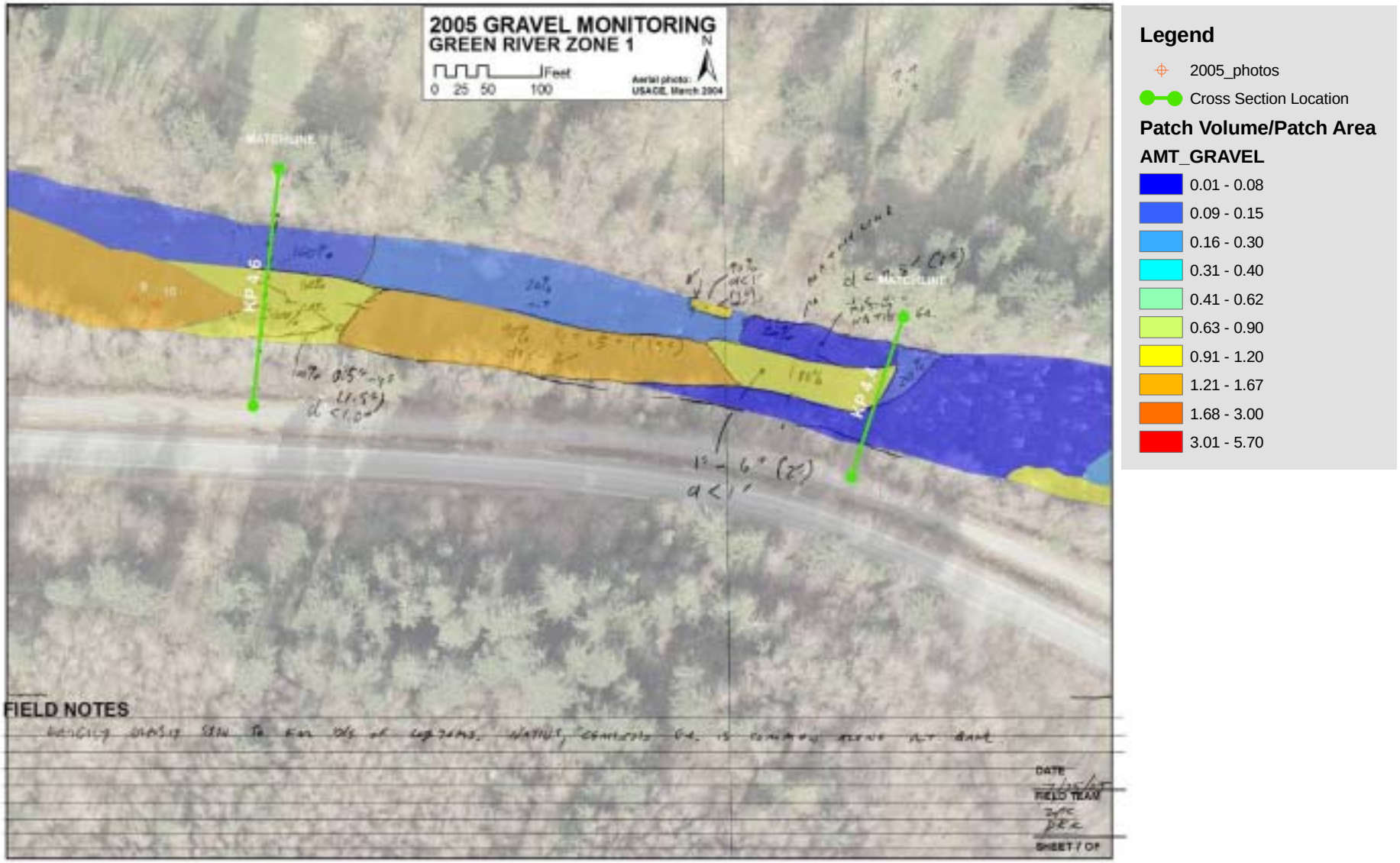

Figure-7: Zone 1 Gravel Patch mapping, KP 4.4 to KP 4.6

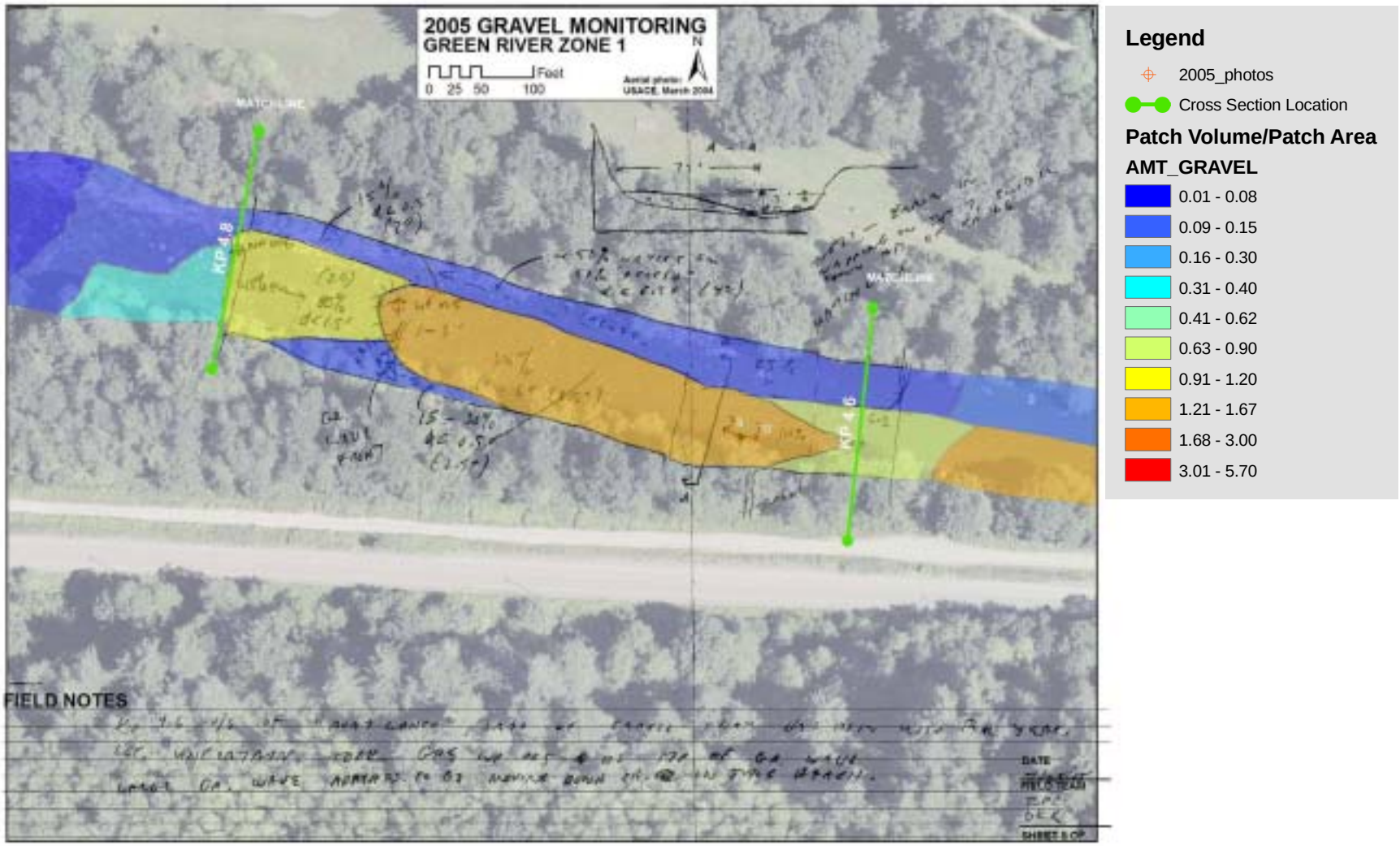

Figure-8: Zone 1 Gravel Patch mapping, KP 4.6 to KP 4.8

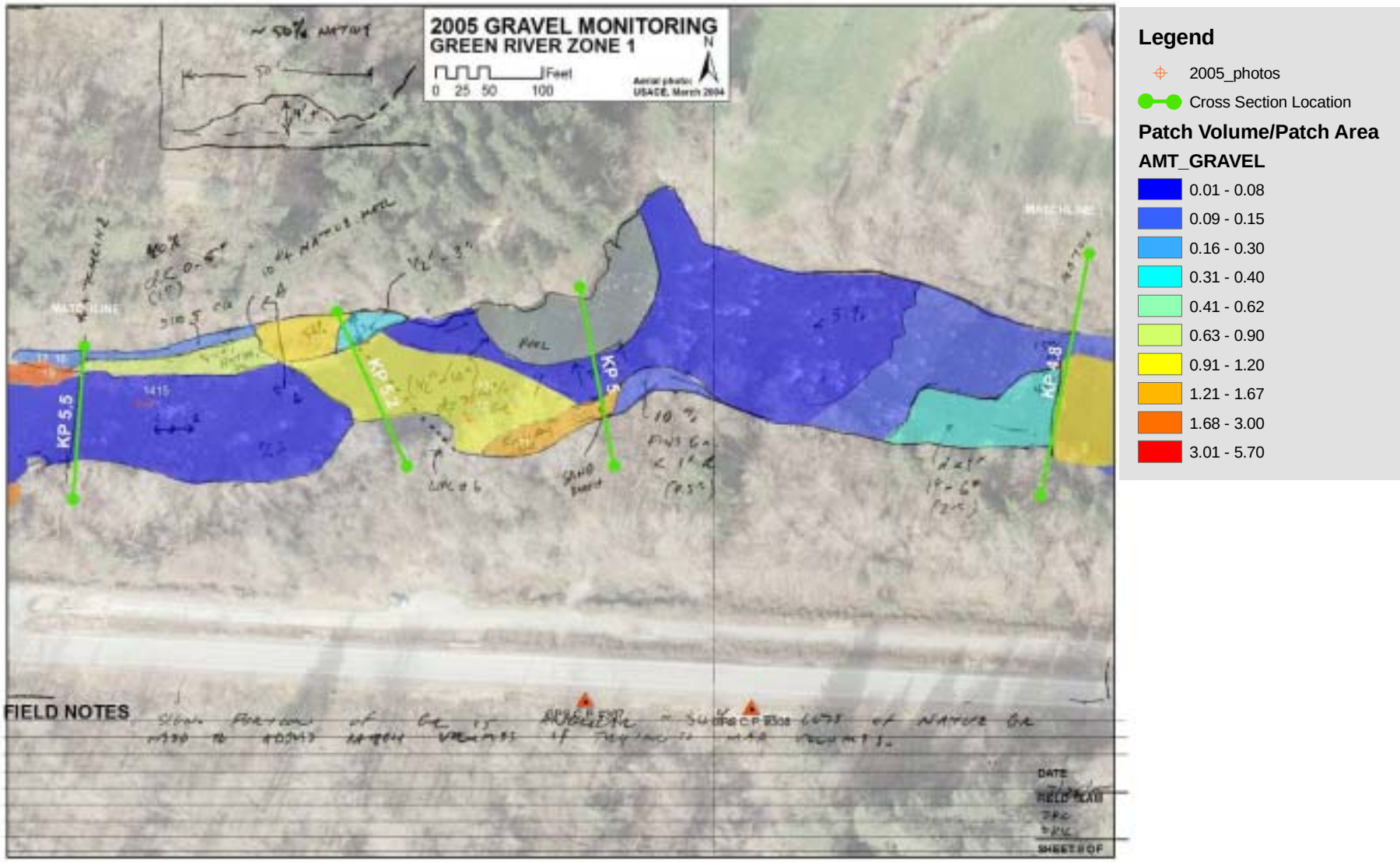

Figure-9: Zone 1 Gravel Patch mapping, KP 4.8 to KP 5.5

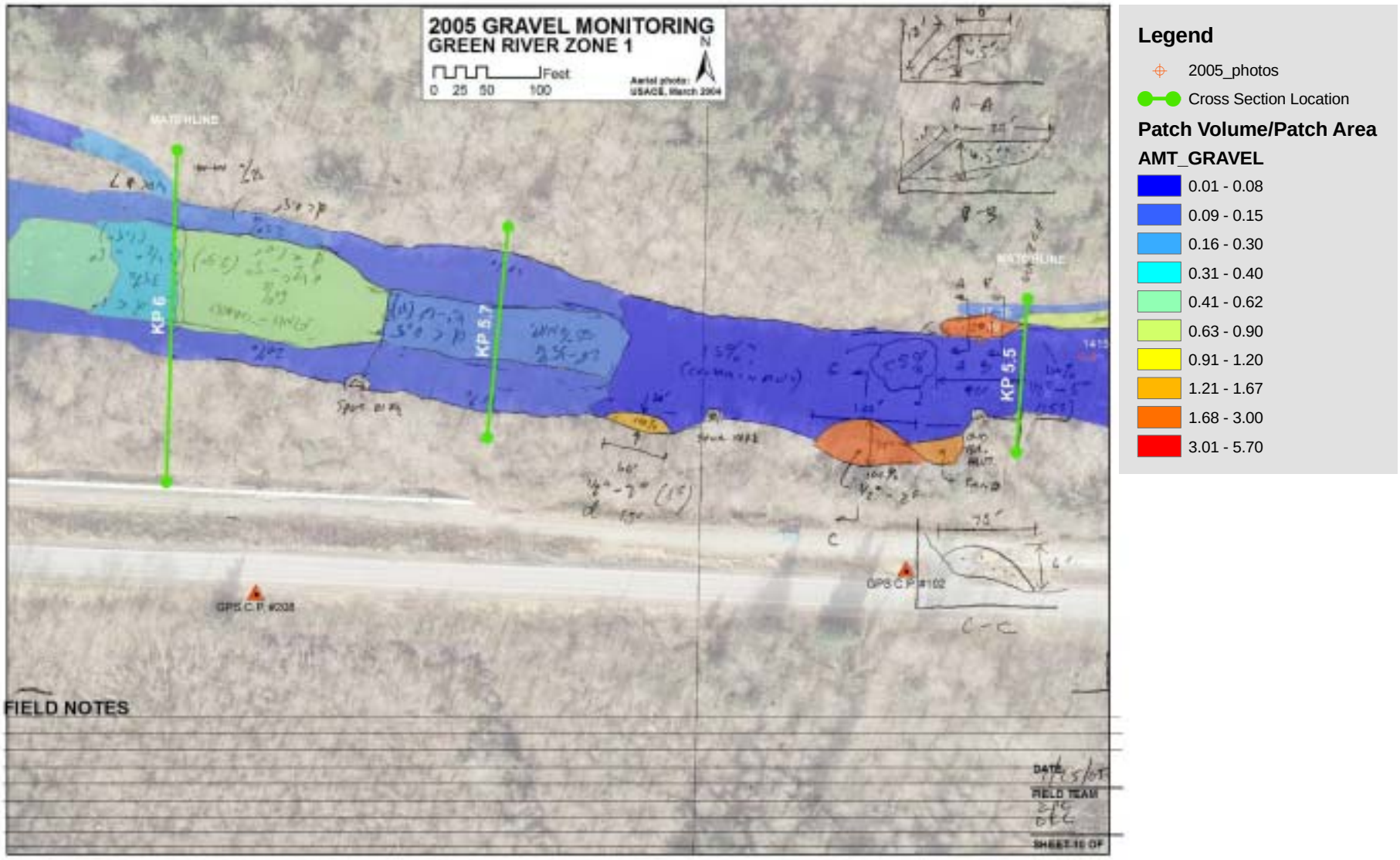

Figure-10: Zone 1 Gravel Patch mapping, KP 5.5 to KP 6.0

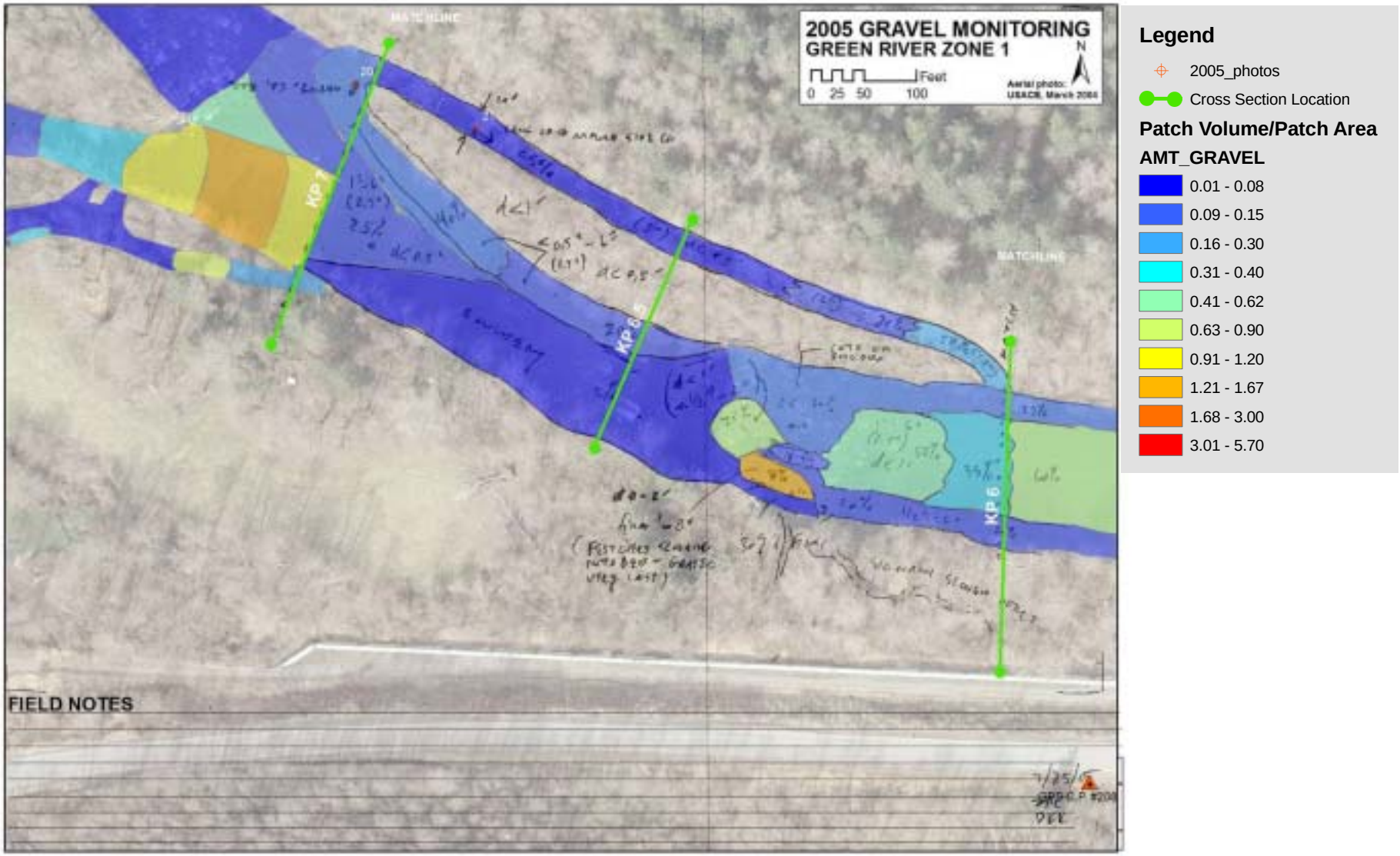

Figure-11: Zone 1 Gravel Patch mapping, KP 6.0 to KP 7.0

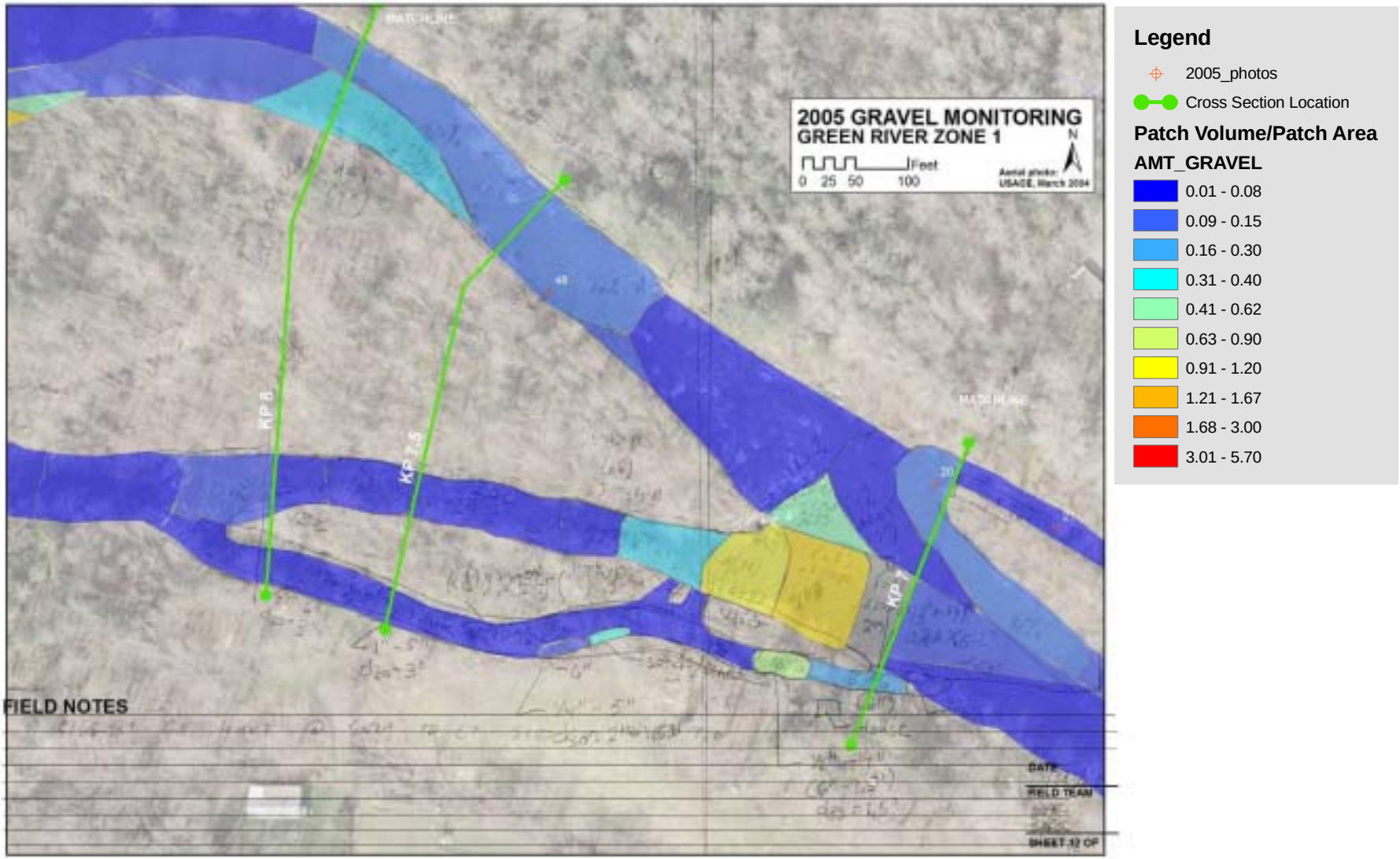

Figure-12: Zone 1 Gravel Patch mapping, KP 7.0 to KP 8.0

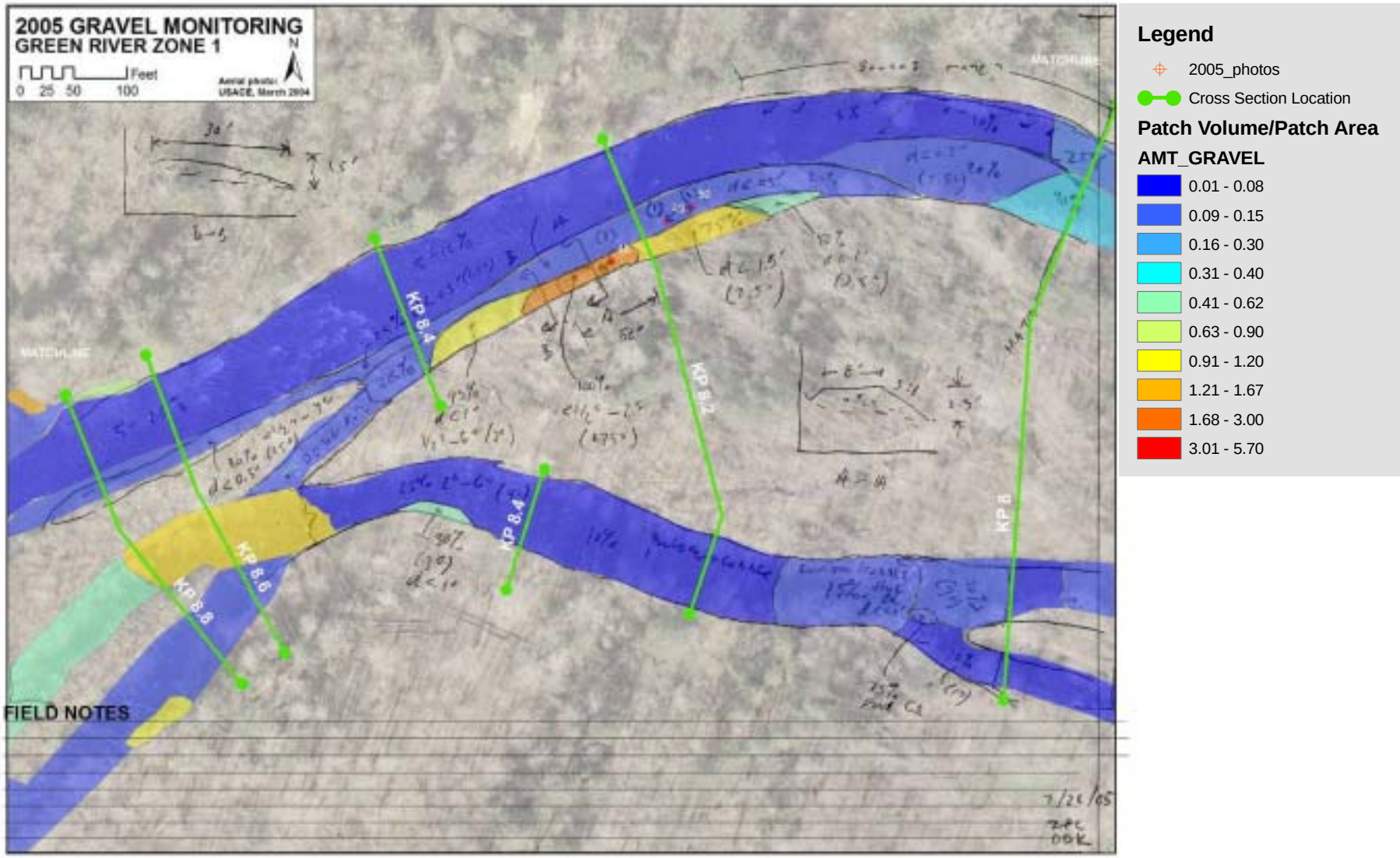

Figure-13: Zone 1 Gravel Patch mapping, KP 8.0 to KP 8.8

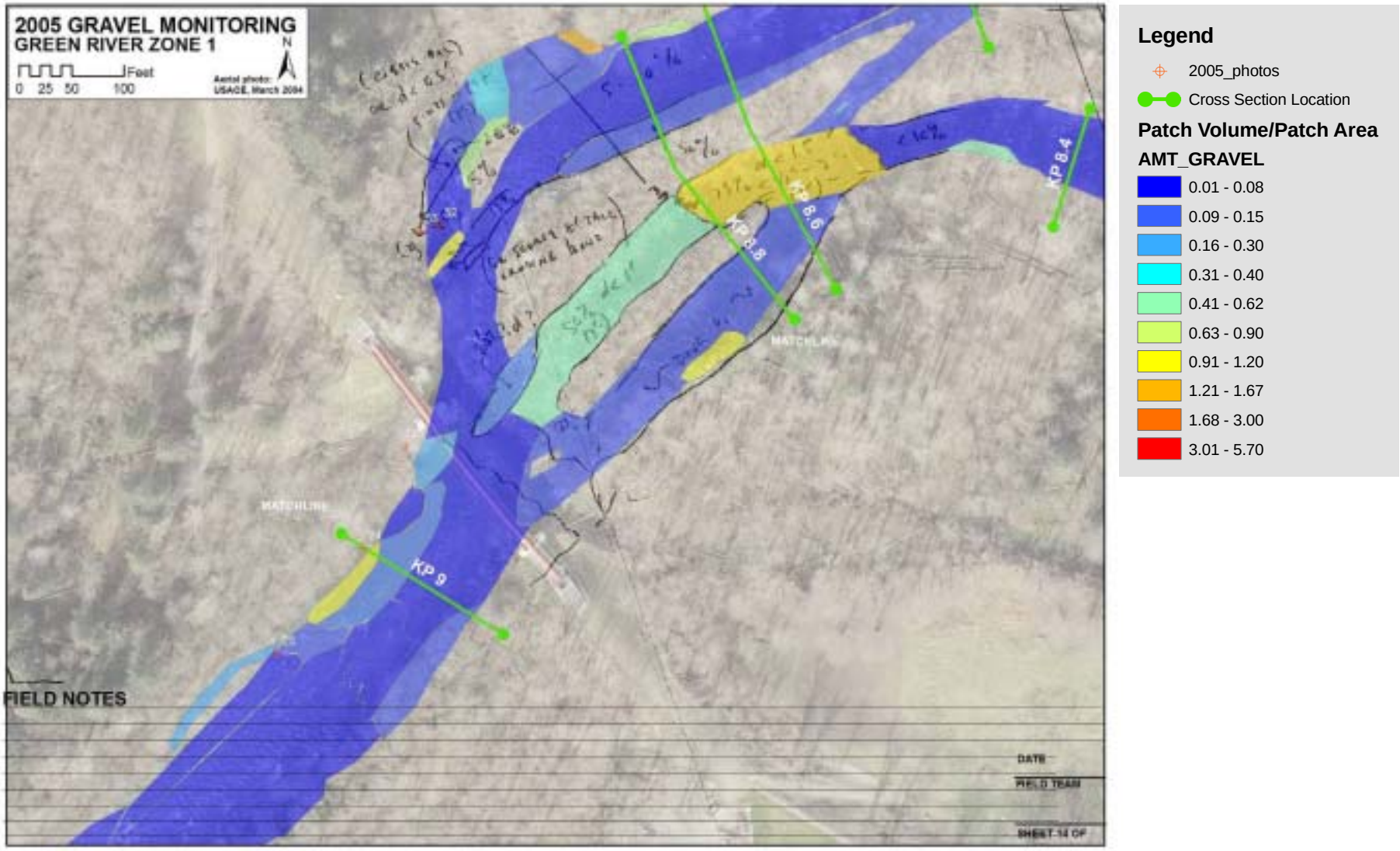

Figure-14: Zone 1 Gravel Patch mapping, KP 8.8 to KP 9.0

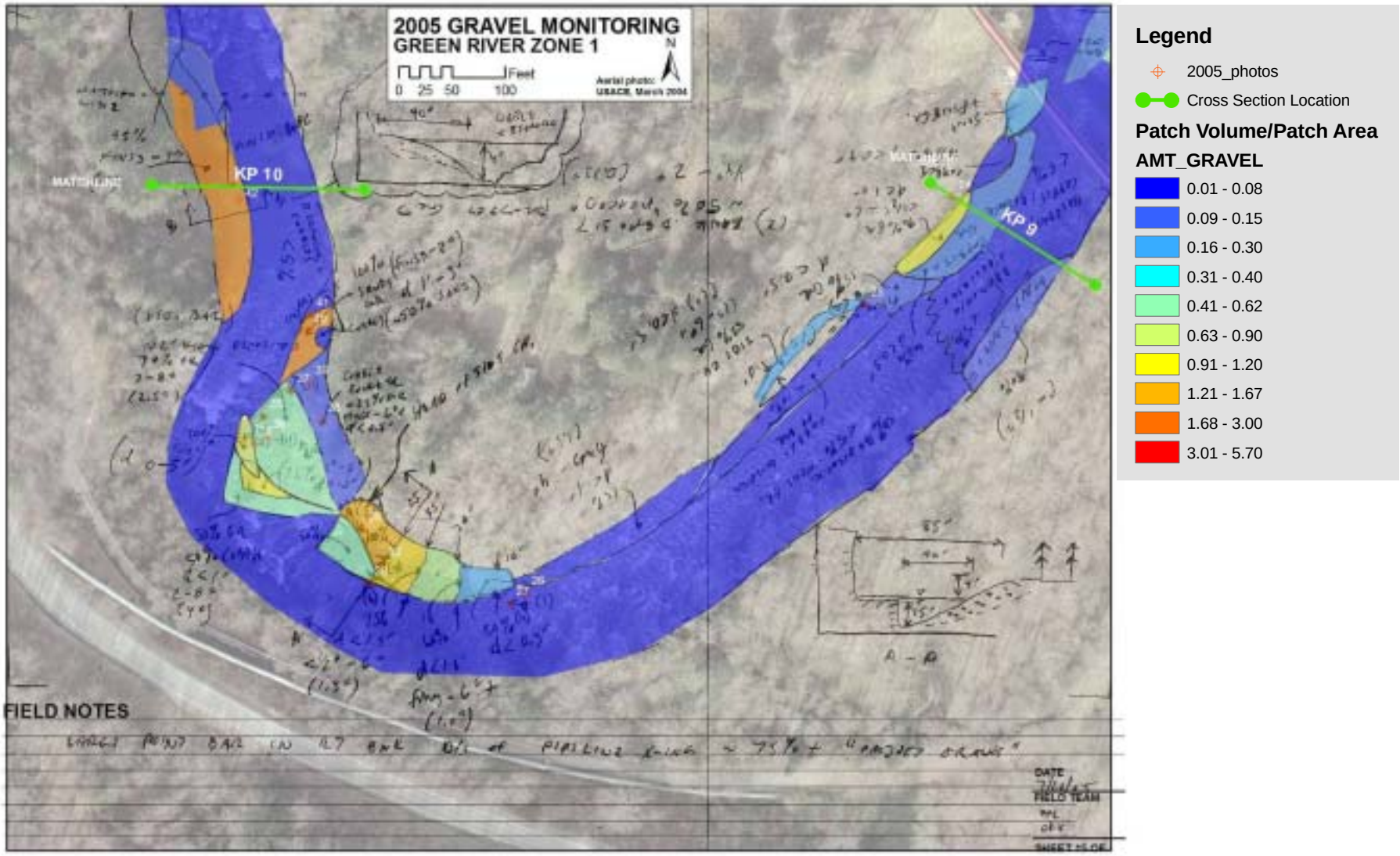

Figure-15: Zone 1 Gravel Patch mapping, KP 9.0 to KP 10.0

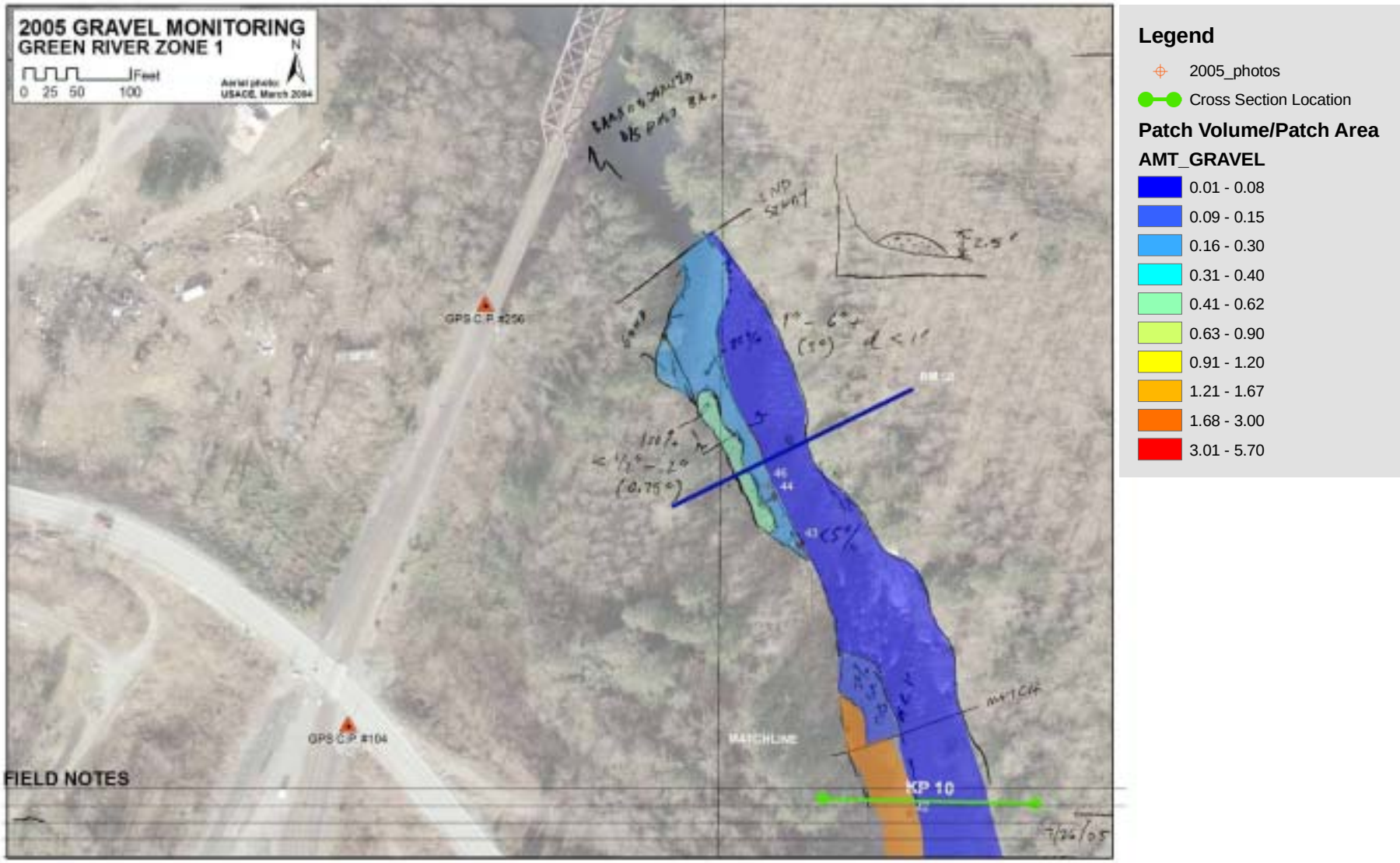

Figure-16: Zone 1 Gravel Patch mapping, KP 10 to end of study

SUPPLEMENTAL PHOTOGRAPHS

FIGURE 17: PHOTO 65 -NATIVE GRAVEL UPSTREAM OF USGS GAGE, LT BANK (BELIEVED TO BE REMNANT OF GRAVEL BAG COFFERDAM USED TO CONSTRUCT TPU FISH FACILITY)

FIGURE 18: PHOTO-66 NATIVE GRAVEL UPSTREAM OF USGS GAGE, LT BANK (BELIEVED TO BE REMNANT OF GRAVEL BAG COFFERDAM USED TO CONSTRUCT TPU FISH FACILITY)

FIGURE 19: PHOTO-80 NATIVE SOURCE MATERIAL UPSTREAM OF KP 1.5, LT BANK

FIGURE 20: PHOTO-94 GRAVEL POINT BAR BUILDING UP NEAR KP 1.7, LT BANK

FIGURE 21: PHOTO-95 MID CHANNEL GRAVEL BAR BUILDING UP NEAR KP 1.7,

FIGURE 22: PHOTO-97 GRAVEL BAR BUILDING UP NEAR KP 1.7 LT BANK, LWD FROM LOADING SITE RACKED ON BANK

FIGURE 23: PHOTO-93 GRAVEL BAR BUILDING UP NEAR KP 1.7 LT BANK, LOOKING UPSTREAM

FIGURE 24: PHOTO-92 GRAVEL BAR BUILDING UP NEAR KP 1.7 MID CHANNEL, LOOKING DOWNSTREAM

FIGURE 25: PHOTO-86 MID CHANNEL GRAVEL BAR BUILDING UP AT KP 1.9, LOOKING DOWNSTEAM AT ELJ 2

FIGURE 26: PHOTO-87 MID CHANNEL/POINT BAR BAR BUILDING UP AT KP 1.9, LOOKING UPSTREAM

FIGURE 27: PHOTO-00 MID CHANNEL/POINT BAR BAR BUILDING UP AT KP 3, LOOKING DOWNSTREAM AT ELJ 1

FIGURE 28: PHOTO-01 BAR BUILDING AND FILLING SCOUR POOL AT ELJ 1 (DEEPEST DEPOSIT ENCOUNTERED)

FIGURE 29: PHOTO-03 BAR OF 2-INCH MINUS GRAVEL D/S OF ELJ 1

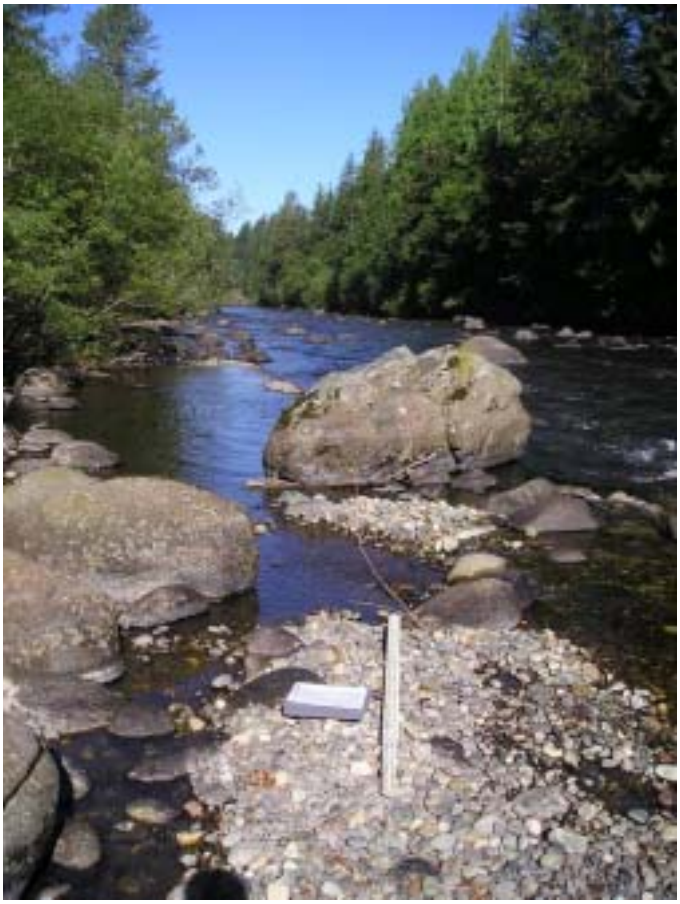

FIGURE 30: PHOTO-08 BAR OF 2-INCH MINUS GRAVEL D/S OF KP 4.2, LT BANK

FIGURE 31: PHOTO-10 MID-CHANNEL PAVING AT BOAT LAUNCH, NEAR KP 4.6, LOOKING UPSTREAM (A GRAVEL DEPOSIT WAS PRESENT BEFORE THE NOURISHMENT PROJECT)

FIGURE 32: PHOTO-09 MID-CHANNEL PAVING AT BOAT LAUNCH, NEAR KP 4.6, LOOKING DOWNSTREAM (A GRAVEL DEPOSIT WAS PRESENT BEFORE THE NOURISHMENT PROJECT)

FIGURE 33: PHOTO-11 NATIVE GRAVEL SOURCE ON LEFT BANK NEAR FISHING HOLE BEACH (KP 5-5.2) (SOME SMALL PLACED GRAVEL APPEARS MIXED IN)

FIGURE 34: PHOTO-12 GRAVEL BAR/POOL TAIL-OUT ON LEFT BANK BETWEEN KP 5-5.2

FIGURE 35: PHOTO-13 GRAVEL BAR/POOL TAIL-OUT ON LEFT BANK BETWEEN KP 5-5.2, LOOKING AT RIGHT BANK BAR

FIGURE 36: PHOTO-14 LOOKING DOWNSTREAM FROM KP 5.2 AT NEW BARS ON LEFT AND RIGHT BANKS

FIGURE 37: PHOTO-16 LOOKING UPSTREAM FROM KP 5.5 AT NEW BAR ON RIGHT BANK

FIGURE 38: PHOTO-19 LOOKING AT TOE OF RIGHT BANK BAR, KP 5.5

FIGURE 39: PHOTO-20 NATIVE GRAVEL AT KP 7.0, RIGHT SIDE CHANNEL CONFLUENCE WITH MAIN CHANNEL

FIGURE 40: PHOTO-21 NATIVE GRAVEL UPSTREAM OF KP 7.0, RIGHT SIDE CHANNEL, LOOKING UPSTREAM

FIGURE 41: PHOTO-50 POINT BAR BUILDING ON LEFT BANK NEAR KP 8.2, LOOKING UPSTREAM

FIGURE 42: PHOTO-49 POINT BAR BUILDING ON LEFT BANK NEAR KP 8.2, LOOKING DOWNSTREAM

FIGURE 43: PHOTO-51 POINT BAR BUILDING ON LEFT BANK NEAR KP 8.2, LOOKING DOWNSTREAM

FIGURE 44: PHOTO-54 NATIVE GRAVEL SOURCE (CUT BANK) UPSTREAM FROM PIPELINE CROSSING

FIGURE 45: PHOTO-24 LOOKING ACROSS KP 7, DOWNSTREAM FROM PIPELINE CROSSING

FIGURE 46: PHOTO-27 LOOKING DOWNSTREAM AT RT BANK POINT BAR, UPSTREAM FROM KP 10

FIGURE 47: PHOTO-28 LOOKING UPSTREAM AT RT BANK POINT BAR, UPSTREAM FROM KP 10

FIGURE 48: PHOTO-30 LOOKING AT RT BANK POINT BAR, UPSTREAM FROM KP 10

FIGURE 49: PHOTO-37 LOOKING AT SORTING NEAR RT BANK BAR, UPSTREAM FROM KP 10, WHERE SIDE CHANNEL OUTLETS TO MAIN CHANNEL EDDY

FIGURE 50: PHOTO-41 LOOKING AT FINE GRAVEL DEPOSIT ON RT BANK UPSTREAM FROM KP 10, WHERE SIDE CHANNEL OUTLETS TO MAIN CHANNEL EDDY

FIGURE 51: PHOTO-42 LOOKING AT MID CHANNEL BAR AT KP 10

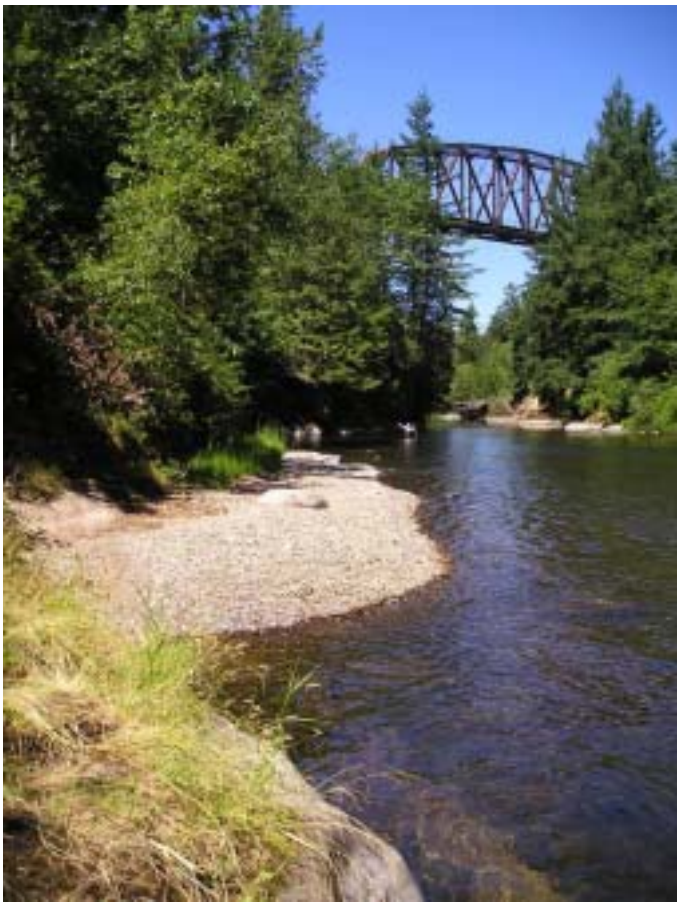

FIGURE 52: PHOTO-43 LOOKING DOWNSTREAM LEFT BANK BEACH/GRAVEL BAR AT RM 58

FIGURE 53: PHOTO-46 LOOKING AT LEFT BANK BEACH/GRAVEL BAR AT RM 58

FIGURE 54: PHOTO-45 LOOKING AT LEFT BANK BEACH/GRAVEL BAR AT RM 58