

# Big Gypsum Study Site Summary



2007

**Big Gyp Summary of the Random Points Project**

By

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Using Arc View random point generator, Jim Siscoe randomly selected 100 points within 5 reaches, with 20 random points per reach. (Figure 1). The coordinates of these points were uploaded into a GPS unit, which was used in the field in order to locate the random points in the field. Once the general location of these points were found, a stone was lobed up and over my shoulders to prevent me from personally choosing the location of the pin-flag. This pin-flag was placed where the stone fell and three photographs were taken. One photo was taken directly down at the flag to show the vegetation and soil of what was directly near the flag. The other photos were taken to show the vegetation around the flag, one was taken up river (facing east to South) and the other was taken in the down river direction (facing west to North).

Once the pictures were taken, the photos were loaded onto a computer. The photo numbers were recorded into a black notebook along with the flag site number, the purpose is to have a hard copy of photograph numbers in case of computer malfunction. The last part that was to be done with the photographs was to hotlink them to their corresponding sites on a map using ArcView (Figure 2).

All of the days except for 1, random points were reached by foot. An inflatable kayak was used to reach the sites, the reason was due to the sand-bar willows (*Salix exigua*) and other dense vegetation that prevented me from reaching the Dolores river (Figure 3). During this field study, the amount of water released from McPhee reservoir was just above 50 cubic feet per second. Tamarisk sites were identified and way points taken and uploaded into the Arc View GIS project (Figure 4).

Sites for Tamarisk treatment identified were treated by chemical and or mechanical methods. The monitoring goals of these sites, is to measure if any correlation can be determined between reduction of Tamarisk and geomorphologic and ecological changes along the riparian corridor. Aerial photos are now being used to identify vegetation changes along the riparian corridor as one method to monitor tamarisk growth along the riparian study corridor (Figure 5).

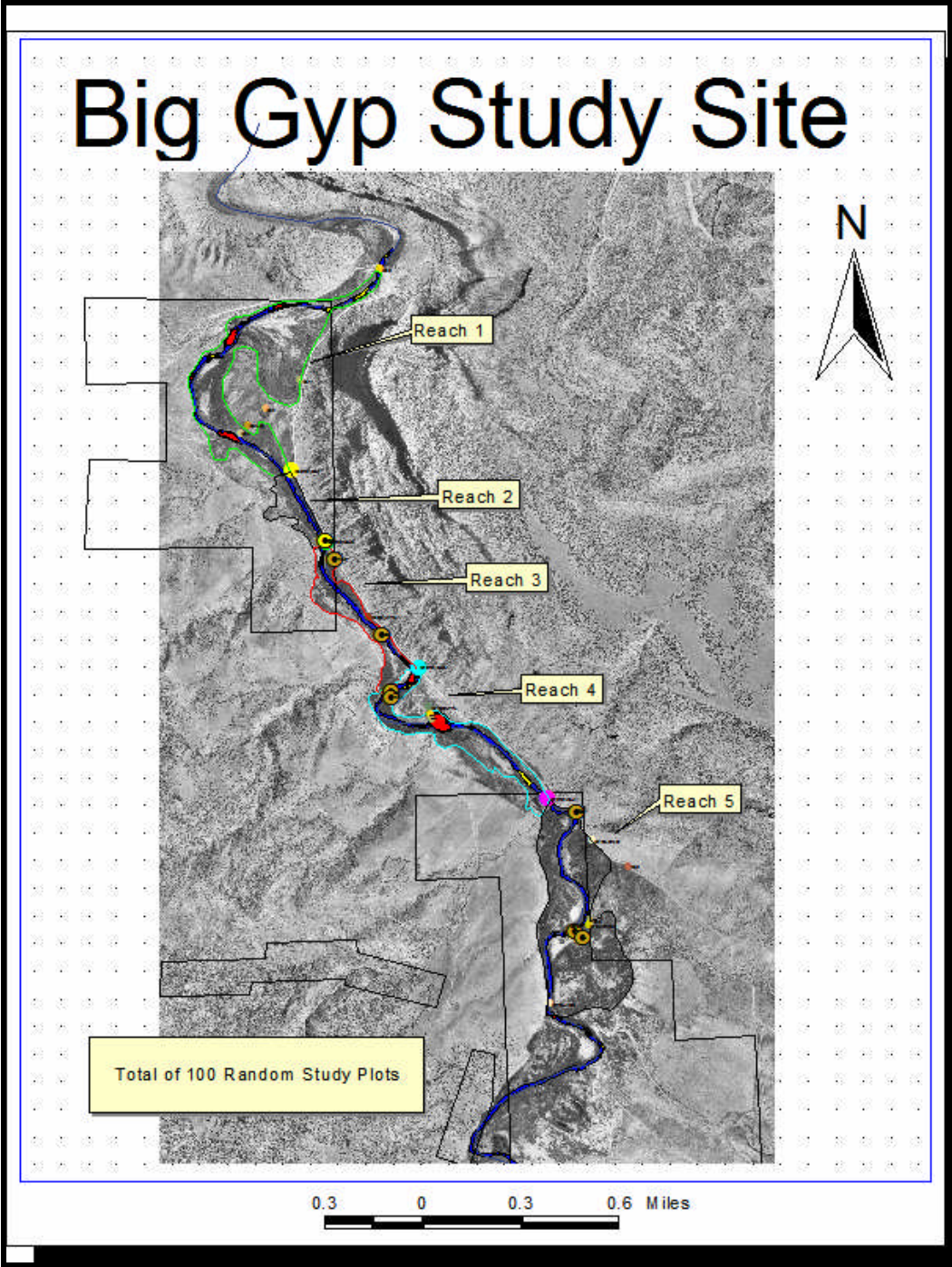


Figure 1

View of Reach 1 showing Post Spill Color Aerial Photos

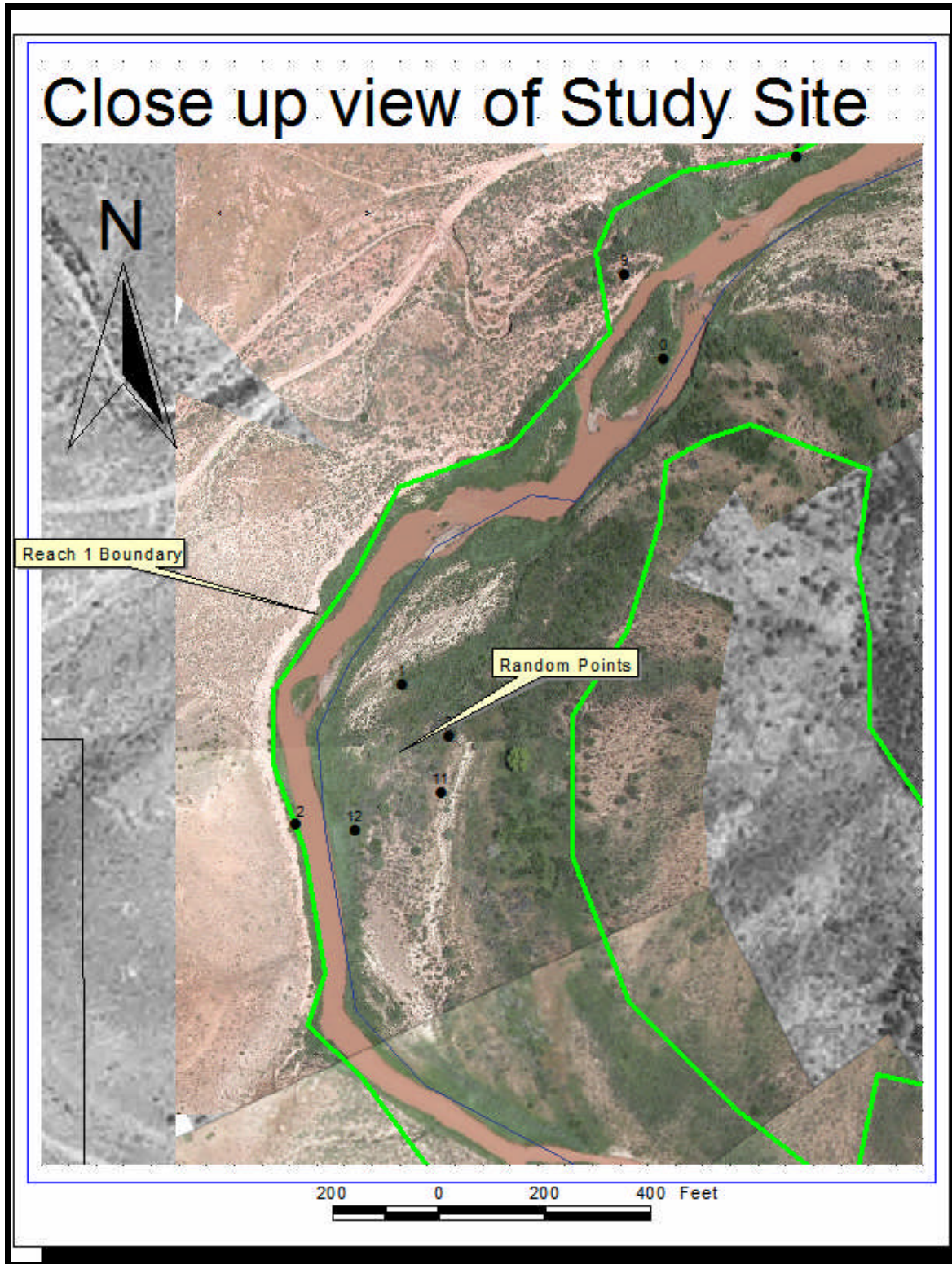


Figure 2

Example of study site photos

Example of Sand Bar and previous willow recruitment



Figure 3

Map of tamarisk sites

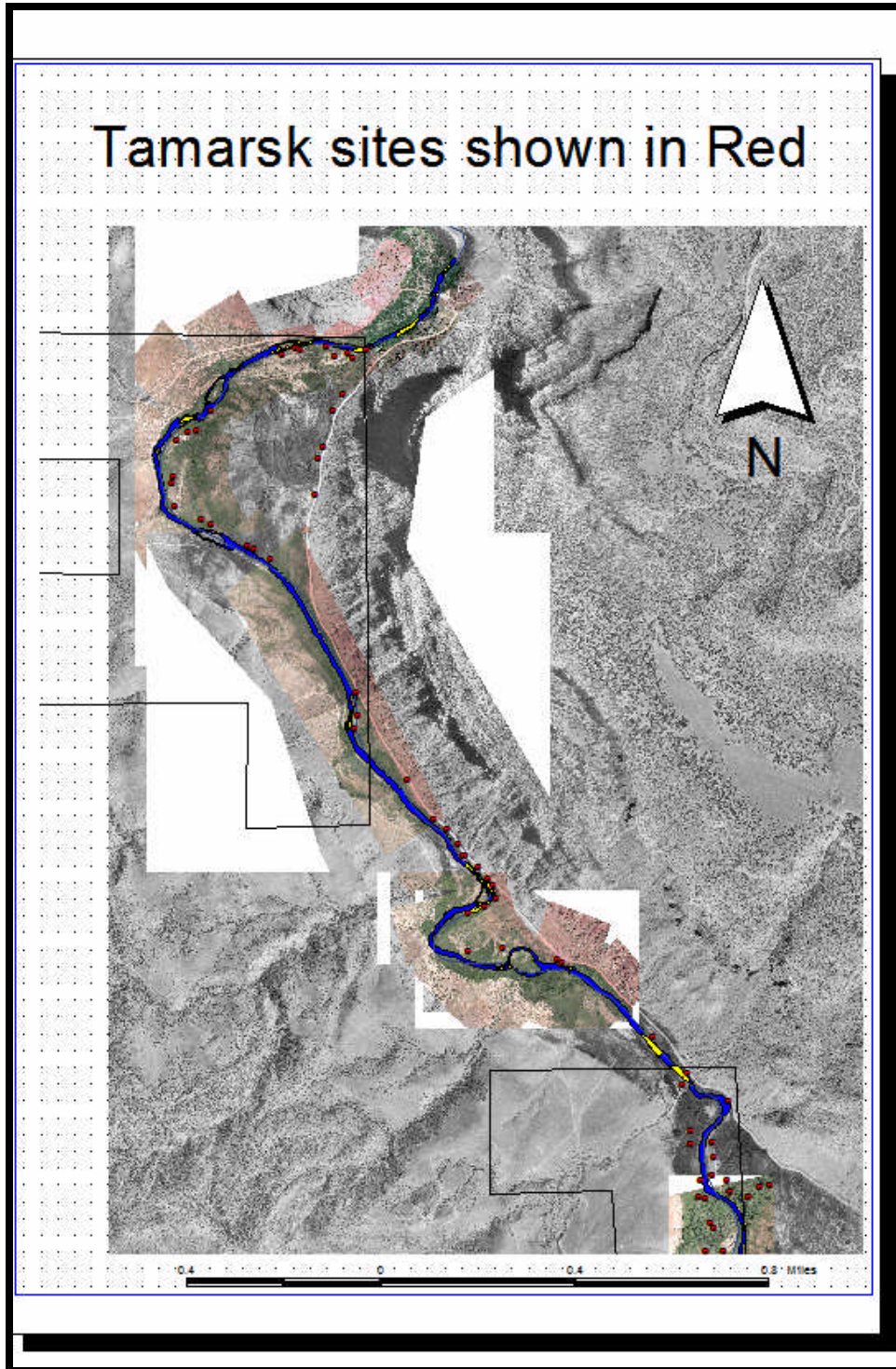


Figure 4

Example of Aerial Color Photos used for Tamarisk Monitoring

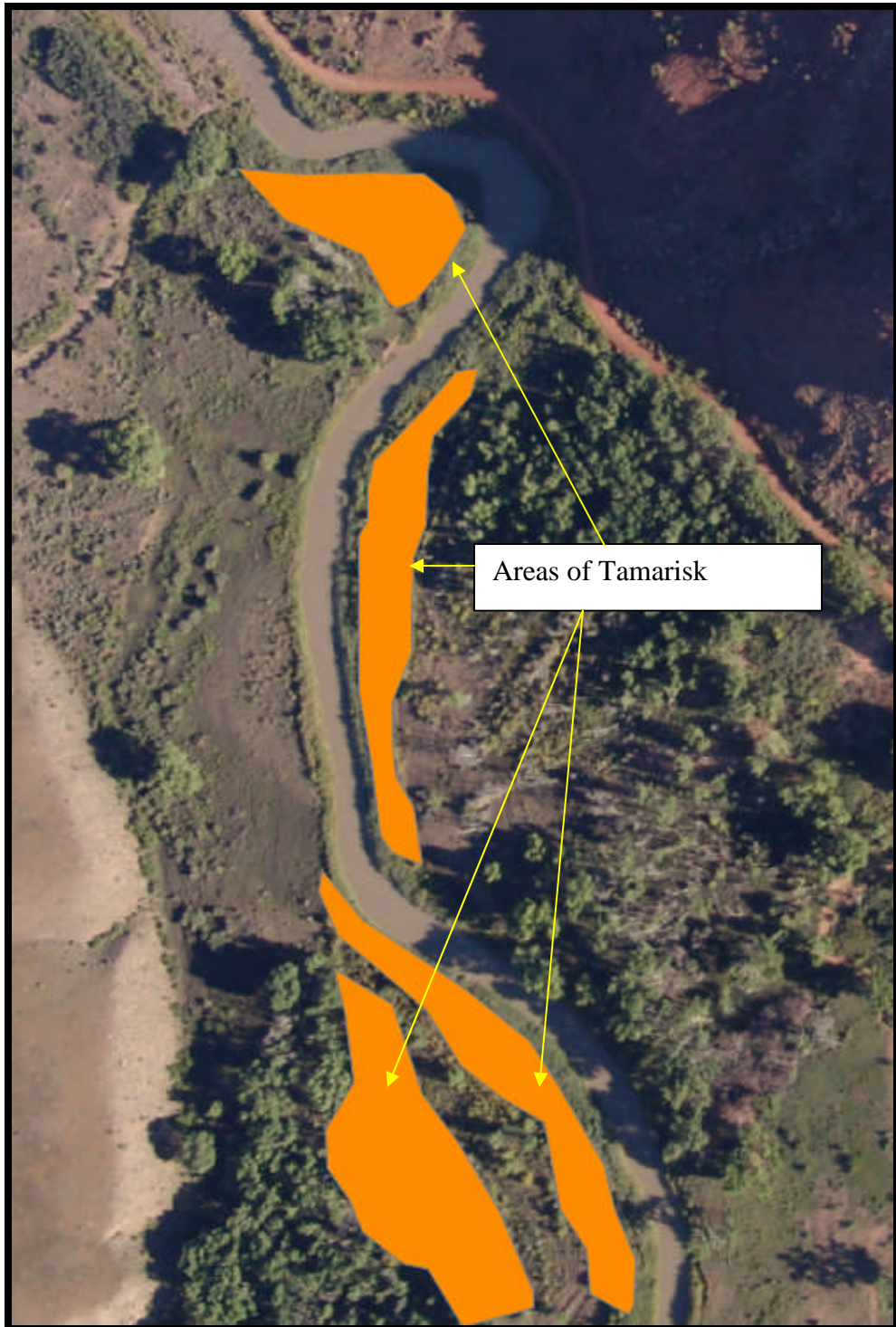


Figure 5



## Appendix A Random points Table

<i>Shape</i>	<i>ID</i>	<i>Unique_ID</i>	<i>Find_X_Crd</i>	<i>Find_Y_Crd</i>	<i>waypoint</i>
Point	0	0	686524.7513026	4221826.2002250	r5-1
Point	0	1	686441.3175796	4222186.4124551	r5-2
Point	0	2	686487.5355456	4222000.0430532	r5-3
Point	0	3	686593.0914163	4221411.6844813	r5-4
Point	0	4	686608.9801733	4221427.5623214	r5-5
Point	0	5	686568.3992373	4221918.4088302	r5-6
Point	0	6	686479.3852806	4221540.9196880	r5-7
Point	0	7	686638.7556187	4221749.0235104	r5-8
Point	0	8	686588.3205295	4222153.9735072	r5-9
Point	0	9	686658.9182955	4221974.3066362	r5-10
Point	0	10	686494.5498851	4222101.0365280	r5-11
Point	0	11	686663.2774094	4222084.5079567	r5-12
Point	0	12	686519.2420642	4222092.8698520	r5-13
Point	0	13	686826.3111070	4221433.9394867	r5-14
Point	0	14	686580.4826441	4221911.5110800	r5-15
Point	0	15	686570.4865003	4222299.7047486	r5-16
Point	0	16	686667.7501158	4222159.2118930	r5-17
Point	0	17	686533.2139470	4221642.6289671	r5-18
Point	0	18	686520.0798092	4221432.8332437	r5-19
Point	0	19	686519.9662167	4221888.8005628	r5-20

<i>Shape</i>	<i>ID</i>	<i>Unique_ID</i>	<i>Find_X_Crd</i>	<i>Find_Y_Crd</i>	<i>waypoint</i>
Point	0	0	685765.8216779	4222745.4985120	r4-1
Point	0	1	686244.9012990	4222664.5559758	r4-2
Point	0	2	686407.9928089	4222327.4784028	r4-3
Point	0	3	685838.3218169	4222764.6691127	r4-4
Point	0	4	685731.7485055	4222790.2957920	r4-5
Point	0	5	685706.7074281	4222808.3903796	r4-6
Point	0	6	686424.0829181	4222354.1810952	r4-7
Point	0	7	685747.7845303	4222875.4984617	r4-8
Point	0	8	685703.2730686	4222927.9815495	r4-9
Point	0	9	685869.7178114	4222765.6792474	r4-10
Point	0	10	686455.6141236	4222424.6270139	r4-11
Point	0	11	686050.2785835	4222734.6725027	r4-12
Point	0	12	685791.6469792	4222996.8463877	r4-13
Point	0	13	685832.8592924	4222713.1742002	r4-14
Point	0	14	685599.6743993	4222864.1015067	r4-15
Point	0	15	686423.3798209	4222442.5459258	r4-16
Point	0	16	685886.3217224	4222722.3971696	r4-17
Point	0	17	686335.3574590	4222560.8634476	r4-18
Point	0	18	685785.4002309	4222786.1234963	r4-19
Point	0	19	685807.9804681	4222942.6724222	r4-20

<i>Shape</i>	<i>ID</i>	<i>Unique_ID</i>	<i>Find_X_Crd</i>	<i>Find_Y_Crd</i>	<i>waypoint</i>
Point	0	0	685603.0036497	4223225.6720583	r3-1
Point	0	1	685412.3413331	4223471.1214781	r3-2
Point	0	2	685649.2262708	4223221.6259431	r3-3
Point	0	3	685636.2276575	4223207.3192374	r3-4
Point	0	4	685385.8484645	4223482.2762377	r3-5
Point	0	5	685677.7496730	4223034.2975157	r3-6
Point	0	6	685481.3155244	4223374.6853402	r3-7
Point	0	7	685729.1845301	4223087.5229316	r3-8
Point	0	8	685515.1630819	4223289.6945668	r3-9
Point	0	9	685481.9070972	4223311.9146691	r3-10
Point	0	10	685689.5651407	4223189.2570215	r3-11
Point	0	11	685475.6716001	4223431.2415360	r3-12
Point	0	12	685437.1714024	4223389.5061931	r3-13
Point	0	13	685340.2653816	4223339.2538894	r3-14
Point	0	14	685356.3497665	4223396.5924832	r3-15
Point	0	15	685645.8367185	4223222.0059649	r3-16
Point	0	16	685508.0162429	4223387.8519803	r3-17
Point	0	17	685334.5894804	4223396.1230445	r3-18
Point	0	18	685672.9371483	4222966.9665821	r3-19
Point	0	19	685330.6403322	4223411.2792108	r3-20

<i>Shape</i>	<i>ID</i>	<i>Unique_ID</i>	<i>Find_X_Crd</i>	<i>Find_Y_Crd</i>	<i>waypoint</i>
Point	0	0	685224.4293763	4223898.9298272	r2-1
Point	0	1	685193.3144627	4223839.9812848	r2-2
Point	0	2	685270.9615025	4223708.2852756	r2-3
Point	0	3	685183.5457146	4223808.4573827	r2-4
Point	0	4	685285.1987275	4223827.5333850	r2-5
Point	0	5	685334.7968862	4223657.9278627	r2-6
Point	0	6	685221.0828546	4223841.9674062	r2-7
Point	0	7	685202.2901045	4223875.5929018	r2-8
Point	0	8	685186.3892908	4223975.3954976	r2-9
Point	0	9	685328.1522031	4223699.8558073	r2-10
Point	0	10	685298.5557979	4223732.4189590	r2-11
Point	0	11	685216.4015932	4223828.3532374	r2-12
Point	0	12	685188.4204166	4223786.2636314	r2-13
Point	0	13	685185.3543838	4223965.7535714	r2-14
Point	0	14	685184.0583321	4223773.0305208	r2-15
Point	0	15	685147.8559319	4223806.1941282	r2-16
Point	0	16	685338.6270093	4223709.6363000	r2-17
Point	0	17	685268.4757913	4223714.0126952	r2-18
Point	0	18	685108.9743799	4223778.1690324	r2-19
Point	0	19	685162.6444624	4223825.5819054	r2-20

<i>Shape</i>	<i>ID</i>	<i>Unique_ID</i>	<i>Find_X_Crd</i>	<i>Find_Y_Crd</i>	<i>waypoint</i>
Point	1	0	684936.6754446	4224644.8011346	r1-1
Point	1	1	684786.9080413	4224458.4356652	r1-2
Point	1	2	684725.9964721	4224378.2573178	r1-3
Point	1	3	684813.9285288	4224428.7991902	r1-4
Point	1	4	685139.7621220	4224017.9773897	r1-5
Point	1	5	685013.0025484	4224760.7031167	r1-6
Point	1	6	685230.8407963	4224632.1656665	r1-7
Point	1	7	685201.9438860	4224523.1809113	r1-8
Point	1	8	685253.0403208	4224785.2054721	r1-9
Point	1	9	684914.2738438	4224693.4369265	r1-10
Point	1	10	685085.3169943	4224139.7205858	r1-11
Point	1	11	684808.9343575	4224396.3650811	r1-12
Point	1	12	684759.5700052	4224374.8448191	r1-13
Point	1	13	685236.7587449	4224539.8744860	r1-14
Point	1	14	685588.5735762	4224860.4034160	r1-15
Point	1	15	685353.0392192	4224742.9950155	r1-16
Point	1	16	685570.3867095	4224855.6997016	r1-17
Point	1	17	685165.2814714	4224611.1372962	r1-18
Point	1	18	685266.4639604	4224538.9829323	r1-19
Point	1	19	685328.7611957	4224799.5933044	r1-20

## Appendix A