
APPENDIX S

- 1) Manhole and Outfall Topographical Surveys**
- 2) CCTV Surveys**
- 3) Ancillary Surveys**
- 4) Surface Water Outfall Locations**

Manhole and Outfall Topographical Surveys

Project No. and Name **Comrie Model Build**

Date 08/01/2015

Project Engineer Claire McArtney

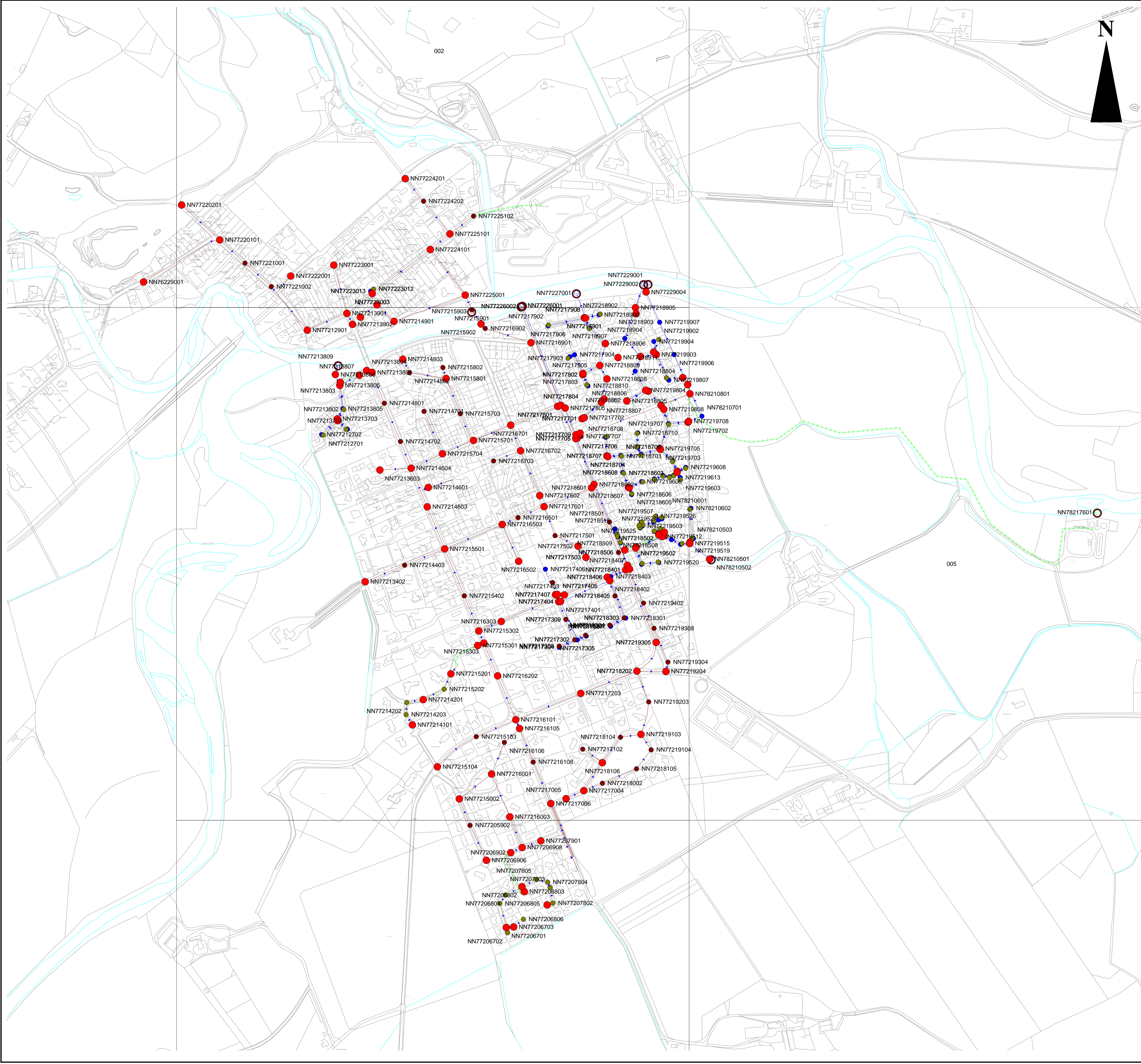
Revision B

Contact No. 01698 802850

Manhole Reference	Drawing No.	Cover level from GIS	Depth from GIS	Survey Type	System Type	x	y	Comments
NN76229001	COMRIE_MANHOLE_SURVEY_001	Unknown	Unknown	Manhole	Combined	276936	722050	
NN77220101	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277084	722132	
NN77220201	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277010	722200	
NN77222001	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277223	722061	
NN77223001	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277307	722083	
NN77223002	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277391	722005	
NN77223003	COMRIE_MANHOLE_SURVEY_002	9.74	2	Manhole	Combined	277382	722027	
NN77224101	COMRIE_MANHOLE_SURVEY_002	Unknown	1.87	Manhole	Combined	277495	722113	
NN77224201	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277446	722251	
NN77225001	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277563	722024	
NN77225101	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Combined	277533	722143	
NN77226001	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Outfall	Surface Water	277675	722004	Upstream manhole is NN77218407
NN77226002	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Outfall	Combined	277672	722003	
NN77227001	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Outfall	Surface Water	277780	722028	
NN77229001	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Outfall	Surface Water	277920	722046	
NN77229002	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Outfall	Surface Water	277912	722046	
NN77229004	COMRIE_MANHOLE_SURVEY_002	Unknown	Unknown	Manhole	Surface Water	277916	722030	
NN77212901	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277255	721956	
NN77213402	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277368	721465	
NN77213603	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277397	721683	
NN77213701	COMRIE_MANHOLE_SURVEY_003	58.18	1.9	Manhole	Foul	277314	721779	
NN77213703	COMRIE_MANHOLE_SURVEY_003	58.18	1.605	Manhole	Surface Water	277314	721783	
NN77213801	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277382	721873	
NN77213803	COMRIE_MANHOLE_SURVEY_003	58.1	2.6	Manhole	Foul	277320	721854	
NN77213804	COMRIE_MANHOLE_SURVEY_003	58.35	1.35	Manhole	Foul	277371	721877	
NN77213806	COMRIE_MANHOLE_SURVEY_003	58.1	1.995	Manhole	Surface Water	277319	721848	
NN77213807	COMRIE_MANHOLE_SURVEY_003	58.1	1.35	Manhole	Surface Water	277357	721868	
NN77213808	COMRIE_MANHOLE_SURVEY_003	56.7	0.745	Manhole	Surface Water	277310	721869	
NN77213809	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Outfall	Surface Water	277316	721888	
NN77213901	COMRIE_MANHOLE_SURVEY_003	Unknown	2.6	Manhole	Combined	277332	721988	
NN77213902	COMRIE_MANHOLE_SURVEY_003	Unknown	1.94	Manhole	Combined	277343	721967	
NN77213903	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277359	721981	
NN77214101	COMRIE_MANHOLE_SURVEY_003	60.7	1.04	Manhole	Foul	277460	721186	
NN77214201	COMRIE_MANHOLE_SURVEY_003	60.25	1.59	Manhole	Foul	277481	721235	
NN77214601	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277491	721649	
NN77214603	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277489	721611	
NN77214604	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277458	721687	
NN77214803	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277441	721899	
NN77214901	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277424	721973	
NN77215002	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277552	721042	
NN77215104	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277509	721104	
NN77215201	COMRIE_MANHOLE_SURVEY_003	60	2.29	Manhole	Foul	277535	721286	
NN77215301	COMRIE_MANHOLE_SURVEY_003	60.7	1.3	Manhole	Foul	277588	721341	
NN77215302	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277590	721369	
NN77215303	COMRIE_MANHOLE_SURVEY_003	60.4	1.98	Manhole	Combined	277600	721345	
NN77215501	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277523	721529	
NN77215701	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277579	721741	
NN77215704	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277519	721715	
NN77215801	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277526	721862	
NN77215902	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277594	721968	
NN77215903	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Outfall	Combined	277576	721992	
NN77216001	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277615	721090	
NN77216003	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277650	721007	
NN77216101	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277662	721196	
NN77216105	COMRIE_MANHOLE_SURVEY_003	Unknown	Unknown	Manhole	Combined	277669	721179	

NN77216202	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277626	721282	
NN77216303	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277633	721388	
NN77216502	COMRIE MANHOLE SURVEY 003	57.825	0.7	Manhole	Combined	277667	721505	
NN77216503	COMRIE MANHOLE SURVEY 003	57.29	1.14	Manhole	Combined	277635	721577	
NN77216701	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277652	721770	
NN77216702	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277671	721720	
NN77216901	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277692	721931	This is at an entrance to Fire Station
NN77217004	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277795	721058	
NN77217005	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277760	721042	
NN77217006	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277730	721033	
NN77217203	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277789	721247	
NN77217401	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277749	721427	
NN77217403	COMRIE MANHOLE SURVEY 003	58.95	2.46	Manhole	Combined	277757	721439	
NN77217404	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277746	721426	
NN77217405	COMRIE MANHOLE SURVEY 003	59.138	2.566	Manhole	Combined	277743	721440	
NN77217407	COMRIE MANHOLE SURVEY 003	59.151	2.54	Manhole	Surface Water	277739	721440	
NN77217502	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277783	721534	
NN77217503	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277799	721513	
NN77217601	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277717	721612	
NN77217602	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277709	721633	
NN77217701	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277791	721783	
NN77217702	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277795	721785	
NN77217705	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277779	721744	
NN77217706	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277782	721745	
NN77217708	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277787	721755	
NN77217709	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277779	721752	
NN77217801	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277744	721807	
NN77217802	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277793	721869	
NN77217803	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277793	721871	
NN77217804	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277750	721809	
NN77217805	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277758	721804	
NN77217901	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277796	721980	
NN77217908	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277798	721979	
NN77218106	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277831	721112	
NN77218202	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277898	721291	
NN77218401	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277876	721488	
NN77218402	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277845	721467	
NN77218404	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277880	721497	
NN77218406	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277840	721474	
NN77218407	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277884	721490	
NN77218502	COMRIE MANHOLE SURVEY 003	58.33	3.74	Manhole	Foul	277896	721533	
NN77218503	COMRIE MANHOLE SURVEY 003	58.41	1.21	Manhole	Combined	277875	721527	
NN77218505	COMRIE MANHOLE SURVEY 003	57.36	2.04	Manhole	Surface Water	277896	721531	
NN77218601	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277810	721648	
NN77218602	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277815	721655	
NN77218604	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277883	721648	
NN77218607	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277882	721649	
NN77218704	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277841	721709	
NN77218707	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277840	721710	
NN77218803	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277834	721821	
NN77218805	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277879	721818	
NN77218807	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277829	721815	
NN77218808	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277840	721861	
NN77218809	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277826	721887	
NN77218903	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277897	721988	
NN77218905	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277895	721999	
NN77218906	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277837	721930	
NN77218911	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277861	721902	
NN77219103	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277906	721167	
NN77219204	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277955	721290	
NN77219305	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Combined	277936	721347	
NN77219508	COMRIE MANHOLE SURVEY 003	56.13	1.19	Manhole	Surface Water	277941	721557	
NN77219509	COMRIE MANHOLE SURVEY 003	56.08	2.11	Manhole	Foul	277942	721558	
NN77219510	COMRIE MANHOLE SURVEY 003	56.1	3.425	Manhole	Foul	277952	721562	
NN77219511	COMRIE MANHOLE SURVEY 003	56.11	3.31	Manhole	Foul	277950	721555	
NN77219512	COMRIE MANHOLE SURVEY 003	56.11	1.24	Manhole	Surface Water	277947	721553	
NN77219602	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277977	721679	
NN77219607	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Surface Water	277977	721681	
NN77219702	COMRIE MANHOLE SURVEY 003	Unknown	Unknown	Manhole	Foul	277998	721776	

NN77219703	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Foul	277944	721723
NN77219705	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277943	721724
NN77219708	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277999	721778
NN77219802	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Combined	277945	721809
NN77219803	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Foul	277920	721837
NN77219804	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277915	721838
NN77219805	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Foul	277988	721863
NN77219808	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277951	721801
NN77219809	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277997	721849
NN77219901	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Foul	277931	721913
NN77219903	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277936	721908
NN77219905	COMRIE MANHOLE SURVEY_003	Unknown	Unknown	Manhole	Surface Water	277905	721904
NN77206701	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Foul	277643	720791
NN77206703	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Foul	277658	720792
NN77206802	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Foul	277674	720870
NN77206803	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Foul	277679	720861
NN77206902	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Combined	277652	720937
NN77206906	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Combined	277605	720922
NN77206908	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Combined	277674	720947
NN77207801	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Foul	277723	720835
NN77207901	COMRIE MANHOLE SURVEY_004	Unknown	Unknown	Manhole	Combined	277711	720960
NN77219515	COMRIE MANHOLE SURVEY_005	55.88	1.64	Manhole	Surface Water	278001	721540
NN77219519	COMRIE MANHOLE SURVEY_005	55.84	2.365	Manhole	Foul	278002	721542
NN78210501	COMRIE MANHOLE SURVEY_005	Unknown	Unknown	Manhole	Surface Water	278040	721509
NN78210502	COMRIE MANHOLE SURVEY_005	Unknown	Unknown	Outfall	Surface Water	278043	721509
NN78210801	COMRIE MANHOLE SURVEY_005	Unknown	Unknown	Manhole	Combined	278002	721832
NN78217601	COMRIE MANHOLE SURVEY_005	Unknown	Unknown	Outfall	Combined	278797	721600



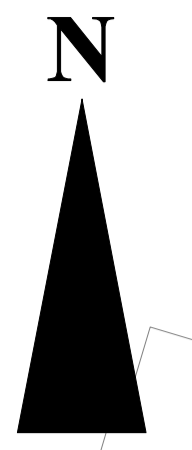
LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- Proposed Foul Sewer
- Proposed Combined Sewer
- Proposed Surface Water Line
- Manhole for survey
- Outfall for survey

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_MANHOLE_SURVEY _OVERVIEW

 building great relationships	Drawn: CMC Chkd: MD
	Approved: PS
Scale: NTS	REVISION: B
Date: FEB 2015	



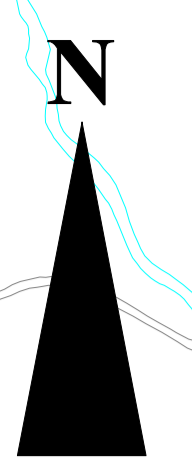
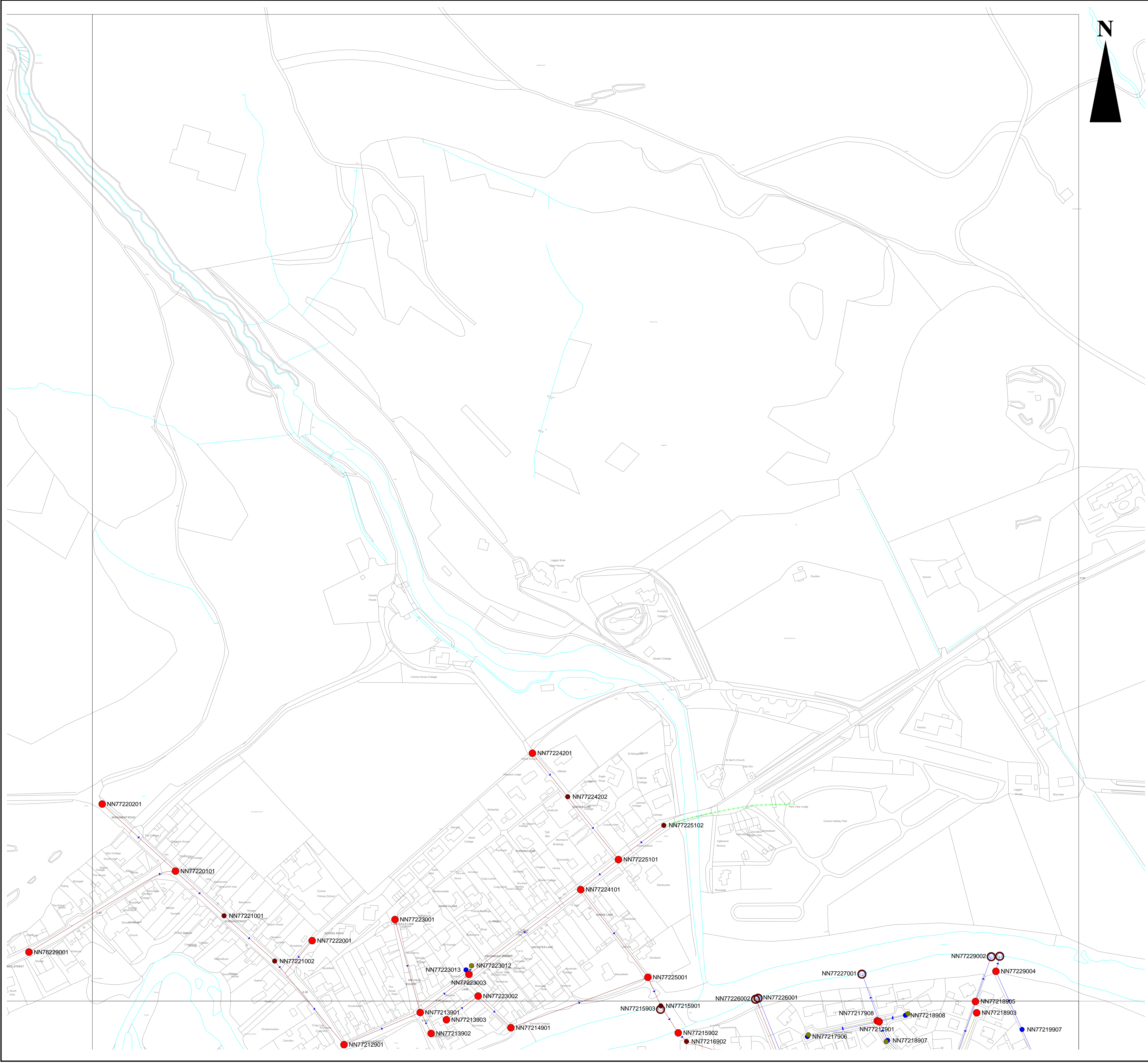
LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Manhole for survey
- Outfall for survey

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_MANHOLE_SURVEY_001

 building great relationships	Drawn: CMC	Chkd: MD	
	Approved: PS		
	Scale: NTS	REVISION: B	
Date: FEB 2015			



LEGEND

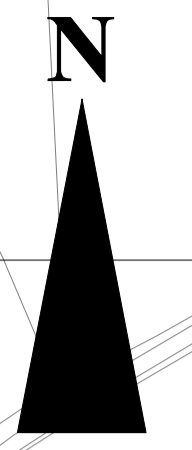
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Manhole for survey
- Outfall for survey

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_MANHOLE_SURVEY_002



Drawn	CMC	Ch'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



LEGEND

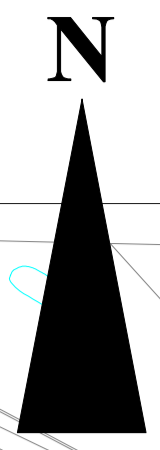
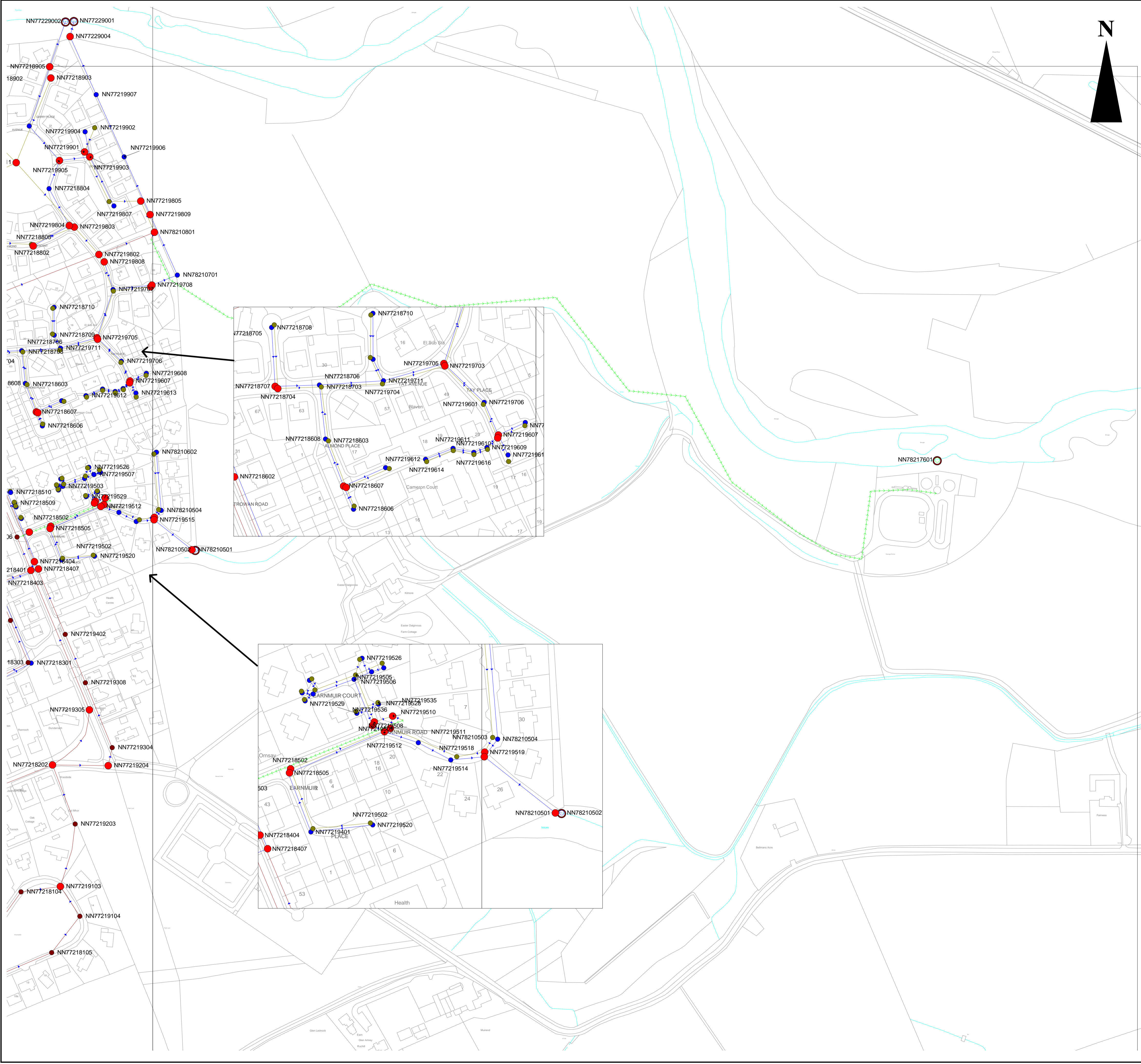
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- Proposed Foul Sewer
- Proposed Combined Sewer
- Proposed Surface Water Line
- Manhole for survey
- Outfall for survey

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_MANHOLE_SURVEY_004



Drawn	CMC	Chkd	MD
Approved	PS		
Scale	NTS		REVISION
Date	FEB 2015		B



LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Manhole for survey
- Outfall for survey

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_MANHOLE_SURVEY_005



Drawn	CMC	Chkd	MD
Approved	PS		
Scale	NTS		REVISION
Date	FEB 2015		B

CCTV Surveys

Project **Comrie and Dalginross**

Date 17/02/2015

Project Engineer Claire McArtney

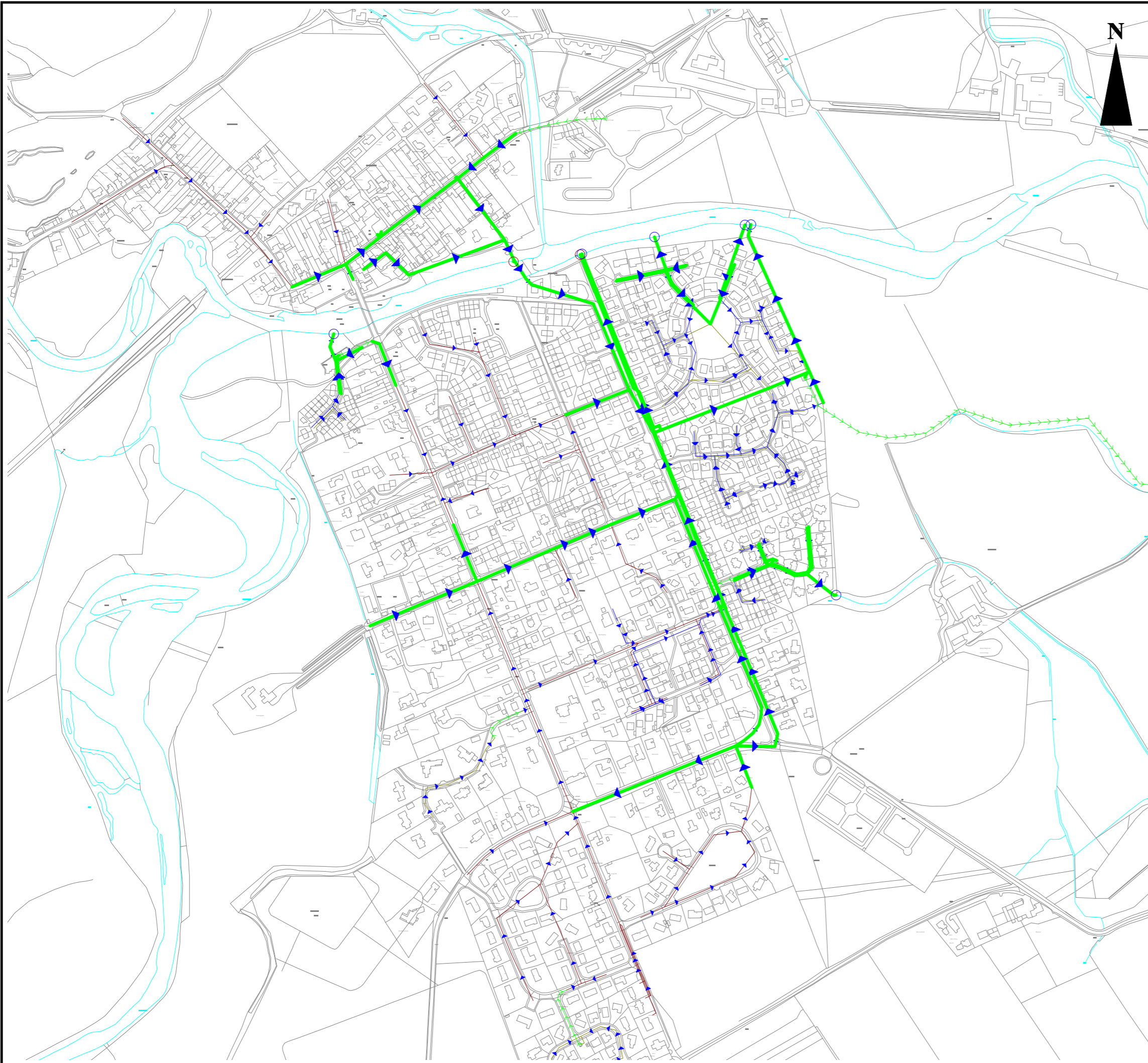
Revision B

Contact No. 01698 802850

Upstream Node ID	Downstream Node ID	Drawing Number	Depth Upstream	Depth Downstream	Length	Pipe Shape	Diameter	System Type
NN77223013	NN77223003	COMRIE_CCTV_SURVEY_001	0.72	1.22	5.429	Circular	150	Surface Water
NN77223012	NN77223003	COMRIE_CCTV_SURVEY_001	1.39	2	9.133	Circular	150	Foul
NN77214901	NN77225001	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	148.011	Circular	150	Combined
NN77225102	NN77225101	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	57.558	Circular	Unknown	Combined
NN77224101	NN77225001	COMRIE_CCTV_SURVEY_001	1.87	Unknown	111.975	Circular	300	Combined
NN77225101	NN77224101	COMRIE_CCTV_SURVEY_001	Unknown	1.77	48.912	Circular	225	Combined
NN77224103	NN77224101	COMRIE_CCTV_SURVEY_001	Unknown	0.67	2.984	Circular	150	Combined
NN77224102	NN77224101	COMRIE_CCTV_SURVEY_001	Unknown	1.34	3.067	Circular	100	Combined
NN77215901	NN77215902	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	32.677	Circular	150	Combined
NN77215902	NN77216902	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	12.069	Circular	150	Combined
NN77225001	NN77215901	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	31.693	Circular	150	Combined
NN77223002	NN77214901	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	46.238	Circular	Unknown	Combined
NN77223003	NN77224101	COMRIE_CCTV_SURVEY_001	2	1.85	142.209	Circular	300	Combined
NN77213901	NN77223003	COMRIE_CCTV_SURVEY_001	2.6	2	62.795	Circular	300	Combined
NN77213903	NN77223002	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	40.179	Circular	Unknown	Combined
NN77213902	NN77213901	COMRIE_CCTV_SURVEY_001	1.94	2.39	24.418	Circular	150	Combined
NN77212901	NN77213901	COMRIE_CCTV_SURVEY_001	Unknown	2.58	83.818	Circular	300	Combined
NN77215901	NN77215903	COMRIE_CCTV_SURVEY_001	Unknown	Unknown	2.843	Circular	150	Combined
NN77218407	NN77226001	COMRIE_CCTV_SURVEY_002	Unknown	Unknown	554.625	Circular	300	Surface Water
NN77216902	NN77216901	COMRIE_CCTV_SURVEY_002	Unknown	Unknown	93.507	Circular	Unknown	Combined
NN77216901	NN77217801	COMRIE_CCTV_SURVEY_002	Unknown	Unknown	134.636	Circular	300	Combined
NN77216701	NN77217801	COMRIE_CCTV_SURVEY_002	Unknown	Unknown	98.67	Circular	300	Combined
NN77217804	NN77226002	COMRIE_CCTV_SURVEY_002	Unknown	Unknown	208.102	Circular	600	Combined
NN77217707	NN77219802	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	167.299	Circular	375	Combined
NN77218602	NN77217705	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	96.278	Circular	Unknown	Combined
NN77217801	NN77217705	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	72.023	Circular	450	Combined
NN77217706	NN77217707	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	8.06	Circular	Unknown	Combined
NN77217705	NN77217706	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	3.1	Circular	450	Combined
NN77218601	NN77218602	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	8.088	Circular	Unknown	Combined
NN77217709	NN77217805	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	56.25	Circular	600	Combined
NN77217805	NN77217804	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	10.139	Circular	600	Combined
NN77217707	NN77217708	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	6.941	Circular	600	Combined
NN77217708	NN77217709	COMRIE_CCTV_SURVEY_003	Unknown	Unknown	8.517	Circular	600	Combined
NN77218404	NN77218504	COMRIE_CCTV_SURVEY_004	Unknown	Unknown	29.16	Circular	300	Combined
NN77218504	NN77218501	COMRIE_CCTV_SURVEY_004	Unknown	Unknown	62.268	Circular	300	Combined
NN77218401	NN77218506	COMRIE_CCTV_SURVEY_004	Unknown	3.21	36.578	Circular	Unknown	Combined
NN77217601	NN77218601	COMRIE_CCTV_SURVEY_004	Unknown	Unknown	99.887	Circular	Unknown	Combined
NN77218506	NN77218601	COMRIE_CCTV_SURVEY_004	3.21	Unknown	136.543	Circular	450	Combined
NN77218501	NN77218602	COMRIE_CCTV_SURVEY_004	Unknown	Unknown	79.206	Circular	300	Combined
NN77219305	NN77218401	COMRIE_CCTV_SURVEY_005	Unknown	Unknown	153.583	Circular	150	Combined
NN77219402	NN77218404	COMRIE_CCTV_SURVEY_005	Unknown	Unknown	80.113	Circular	300	Combined
NN77218401	NN77218404	COMRIE_CCTV_SURVEY_005	Unknown	Unknown	9.491	Circular	Unknown	Combined

NN77219308	NN77219402	COMRIE_CCTV_SURVEY_005	Unknown	Unknown	53.208	Circular		300	Combined
NN77218202	NN77219204	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	56.565	Circular		150	Combined
NN77219304	NN77219308	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	71.241	Circular	Unknown		Combined
NN77219204	NN77219304	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	18.744	Circular		150	Combined
NN77218202	NN77219305	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	71.468	Circular		150	Combined
NN77219203	NN77218202	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	64.235	Circular		150	Combined
NN77218202	NN77217203	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	117.818	Circular		150	Combined
NN77217203	NN77216101	COMRIE_CCTV_SURVEY_006	Unknown	Unknown	136.87	Circular		150	Combined
NN77213402	NN77214403	COMRIE_CCTV_SURVEY_007	Unknown	Unknown	83.526	Circular	Unknown		Combined
NN77214403	NN77215501	COMRIE_CCTV_SURVEY_007	Unknown	Unknown	84.234	Circular		150	Combined
NN77215501	NN77214603	COMRIE_CCTV_SURVEY_007	Unknown	Unknown	88.811	Circular		150	Combined
NN77215501	NN77216503	COMRIE_CCTV_SURVEY_007	Unknown	1.14	122.078	Circular		150	Combined
NN77216501	NN77217601	COMRIE_CCTV_SURVEY_007	1.3	Unknown	54.981	Circular		150	Combined
NN77216503	NN77216501	COMRIE_CCTV_SURVEY_007	1.14	1.3	33.598	Circular		150	Combined
NN77213807	NN77213806	COMRIE_CCTV_SURVEY_008	1.35	1.995	43	Circular		150	Surface Water
NN77213805	NN77213806	COMRIE_CCTV_SURVEY_008	1.635	1.995	46.031	Circular		225	Surface Water
NN77213806	NN77213808	COMRIE_CCTV_SURVEY_008	1.995	0.745	22.842	Circular		225	Surface Water
NN77213808	NN77213809	COMRIE_CCTV_SURVEY_008	0.745	Unknown	19.316	Circular		225	Surface Water
NN77213802	NN77213803	COMRIE_CCTV_SURVEY_008	2.03	2.57	53.486	Circular		150	Foul
NN77213803	Unknown	COMRIE_CCTV_SURVEY_008	2.03	2.57	4.224	Circular		150	Foul
NN77213804	NN77213801	COMRIE_CCTV_SURVEY_008	1.35	Unknown	11.239	Circular		150	Foul
NN77213801	NN77214801	COMRIE_CCTV_SURVEY_008	Unknown	Unknown	64.847	Circular	Unknown		Combined
NN77218505	NN77219512	COMRIE_CCTV_SURVEY_009	2.04	1.24	56.113	Circular		150	Surface Water
NN77219506	NN77219508	COMRIE_CCTV_SURVEY_009	0.88	1.19	26.915	Circular		225	Surface Water
NN77219508	NN77219512	COMRIE_CCTV_SURVEY_009	1.19	1.24	7.313	Circular		225	Surface Water
NN77219515	NN78210501	COMRIE_CCTV_SURVEY_009	1.64	Unknown	49.134	Circular		225	Surface Water
NN78210602	NN78210504	COMRIE_CCTV_SURVEY_009	1.35	1.62	59.352	Circular		150	Surface Water
NN78210501	NN78210502	COMRIE_CCTV_SURVEY_009	Unknown	Unknown	3.413	Circular		225	Surface Water
NN77219513	NN77219514	COMRIE_CCTV_SURVEY_009	1.31	1.53	19.939	Circular		150	Surface Water
NN77219512	NN77219513	COMRIE_CCTV_SURVEY_009	1.24	1.31	19.295	Circular		150	Surface Water
NN77219514	NN77219515	COMRIE_CCTV_SURVEY_009	1.53	1.64	18.225	Circular		150	Surface Water
NN78210504	NN77219515	COMRIE_CCTV_SURVEY_009	1.62	1.64	11.967	Circular		150	Surface Water
NN77219505	NN77219509	COMRIE_CCTV_SURVEY_009	1.6	2.11	27.415	Circular		150	Foul
NN77218502	NN77219511	COMRIE_CCTV_SURVEY_009	3.74	3.31	58.324	Circular		150	Foul
NN77219509	NN77219510	COMRIE_CCTV_SURVEY_009	2.11	3.4	10.449	Circular		150	Foul
NN77219511	NN77219510	COMRIE_CCTV_SURVEY_009	3.31	3.425	6.744	Circular		150	Foul
NN78210601	NN78210503	COMRIE_CCTV_SURVEY_009	1.625	2.3	56.619	Circular		150	Foul
NN77219518	NN77219511	COMRIE_CCTV_SURVEY_009	2.6	3.31	39.165	Circular		150	Foul
NN77219510	NN77219501/ Earnmuir Road PS	COMRIE_CCTV_SURVEY_009	3.425	Unknown	6.248	Circular		150	Foul
NN77219519	NN77219518	COMRIE_CCTV_SURVEY_009	2.365	2.6	15.354	Circular		150	Foul
NN78210503	NN77219519	COMRIE_CCTV_SURVEY_009	2.3	2.365	9.046	Circular		150	Foul
NN77219809	NN77219906	COMRIE_CCTV_SURVEY_010	Unknown	Unknown	64.261	Circular		375	Surface Water
NN78210701	NN77219809	COMRIE_CCTV_SURVEY_010	Unknown	Unknown	67.375	Circular		375	Surface Water
NN77219802	NN78210801	COMRIE_CCTV_SURVEY_010	Unknown	Unknown	60.777	Circular		375	Combined
NN78210801	NN77219801/ Tay Avenue PS	COMRIE_CCTV_SURVEY_010	Unknown	Unknown	7.466	Circular	Unknown		Combined
NN77219907	NN77229004	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	64.647	Circular		375	Surface Water
NN77218905	NN77229002	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	48.879	Circular		375	Surface Water
NN77229004	NN77229001	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	16.53	Circular		375	Surface Water
NN77218905	NN77218904	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	63.734	Circular		375	Surface Water
NN77219906	NN77219907	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	69.216	Circular		375	Surface Water
NN77217906	NN77217908	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	74.306	Circular		150	Surface Water
NN77218908	NN77217908	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	27.428	Circular		150	Surface Water

NN77217908	NN77218907	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	20.811	Circular	375	Surface Water
NN77217908	NN77227001	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	51.936	Circular	375	Surface Water
NN77218907	NN77218906	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	43.083	Circular	375	Surface Water
NN77218903	NN77218911	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	92.811	Circular	150	Foul
NN77218902	NN77217901	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	31.905	Circular	150	Foul
NN77217901	NN77218901	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	22.924	Circular	150	Foul
NN77217902	NN77217901	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	71.219	Circular	150	Foul
NN77218901	NN77218911	COMRIE_CCTV_SURVEY_011	Unknown	Unknown	80.038	Circular	150	Foul



LEGEND

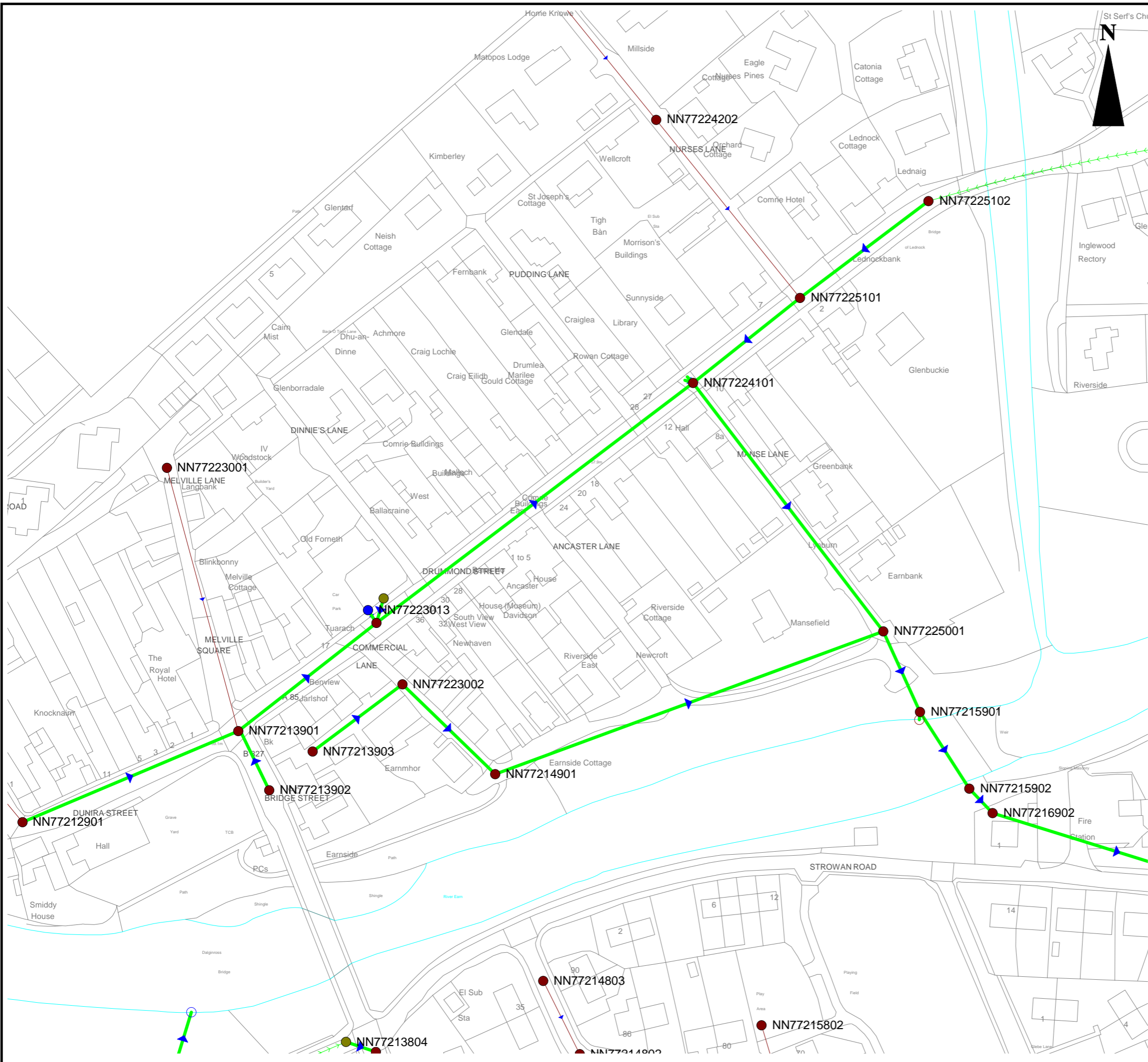
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- Proposed Foul Sewer
- Proposed Combined Sewer
- Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

**COMRIE AND DALGINROSS
FLOOD STUDY**

COMRIE_CCTV_SURVEY_OVERVIEW



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



LEGEND

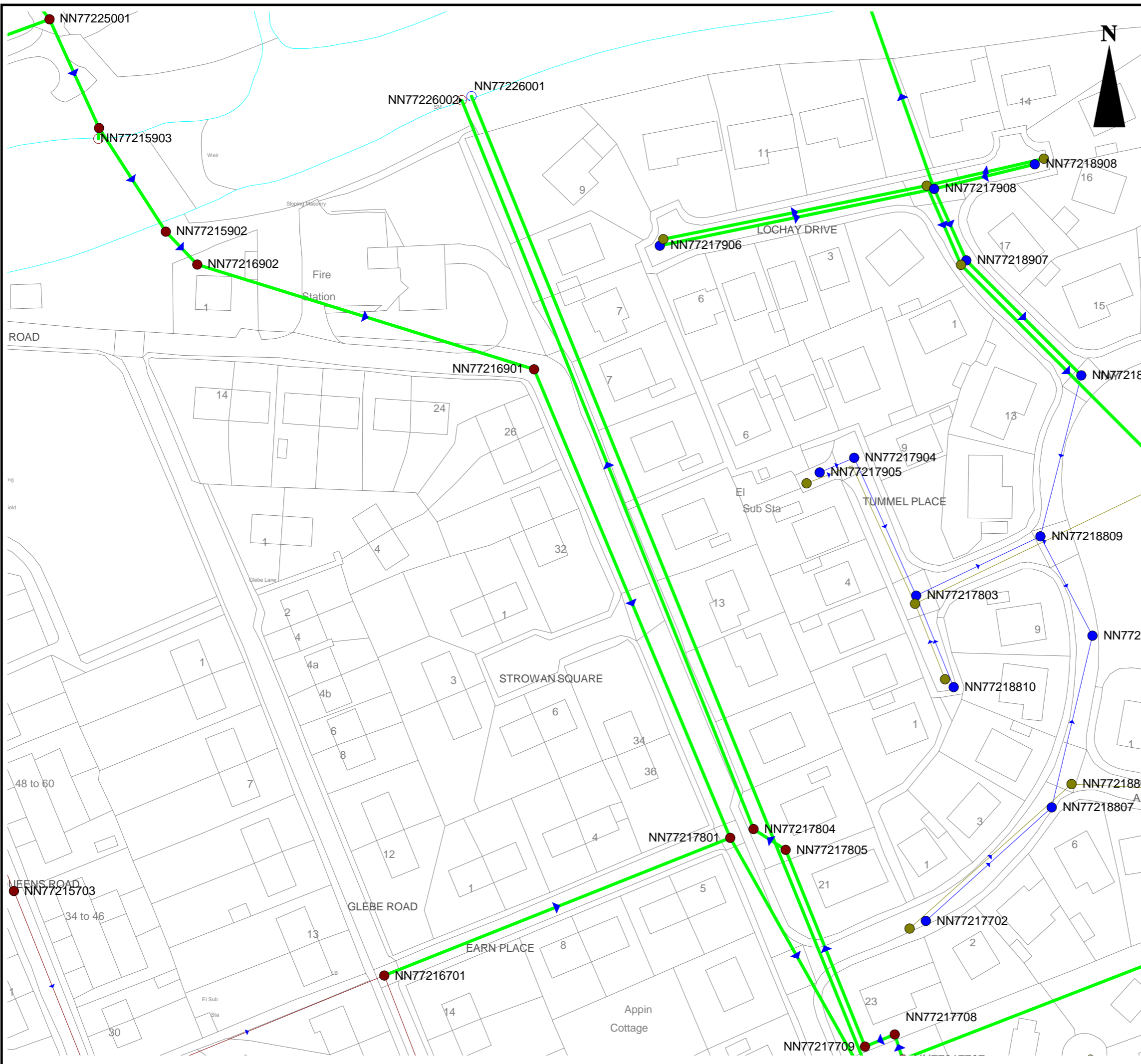
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- Proposed Foul Sewer
- Proposed Combined Sewer
- Proposed Surface Water Line
- Conduits to be surveyed by CCTV

**COMRIE AND DALGINROSS
FLOOD STUDY**

COMRIE_CCTV_SURVEY_001

Drawn CMC	Chk'd MD
Approved PS	
Scale NTS	REVISION
Date FEB 2015	B

building great relationships



LEGEND

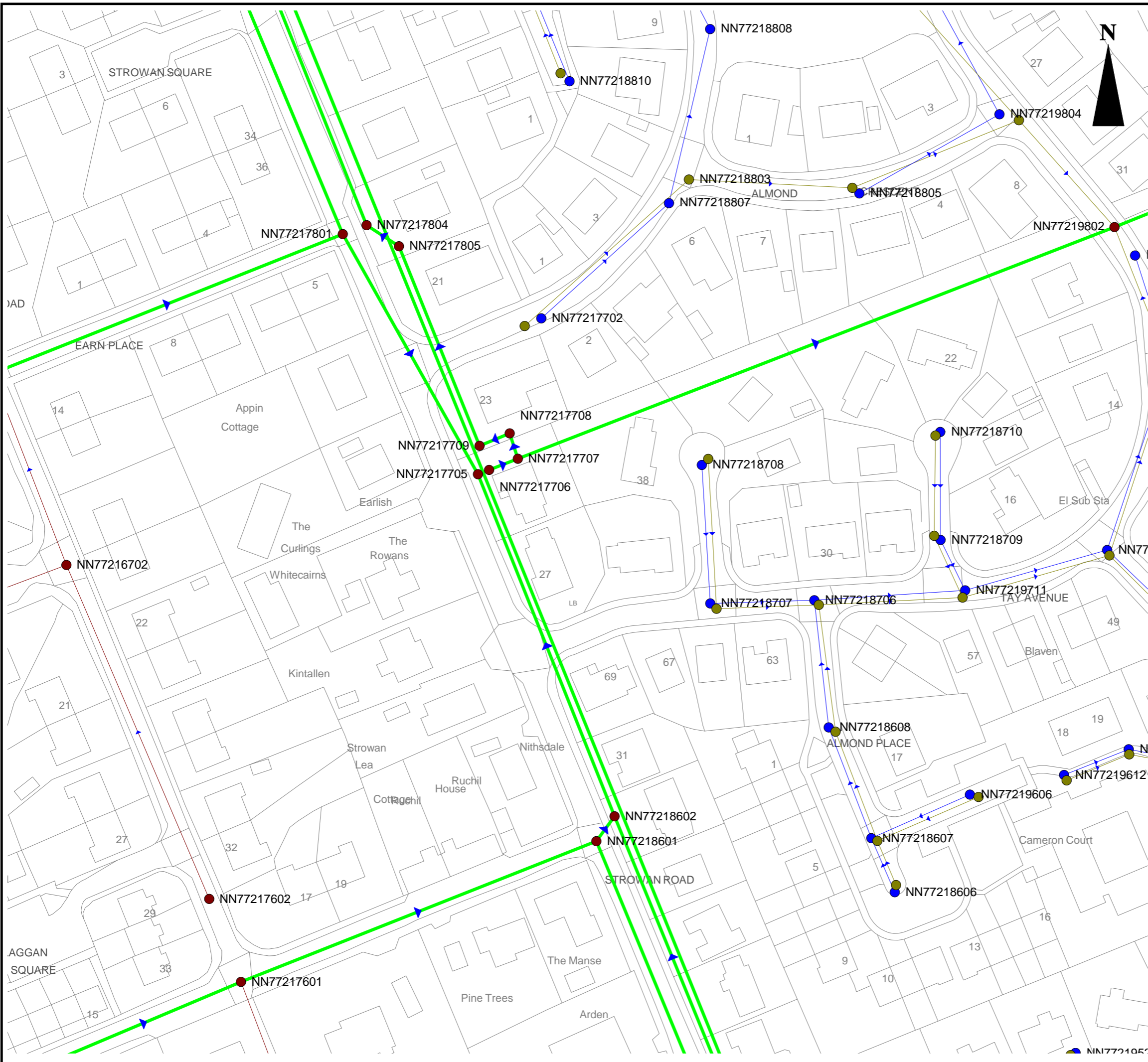
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_CCTV_SURVEY_002



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



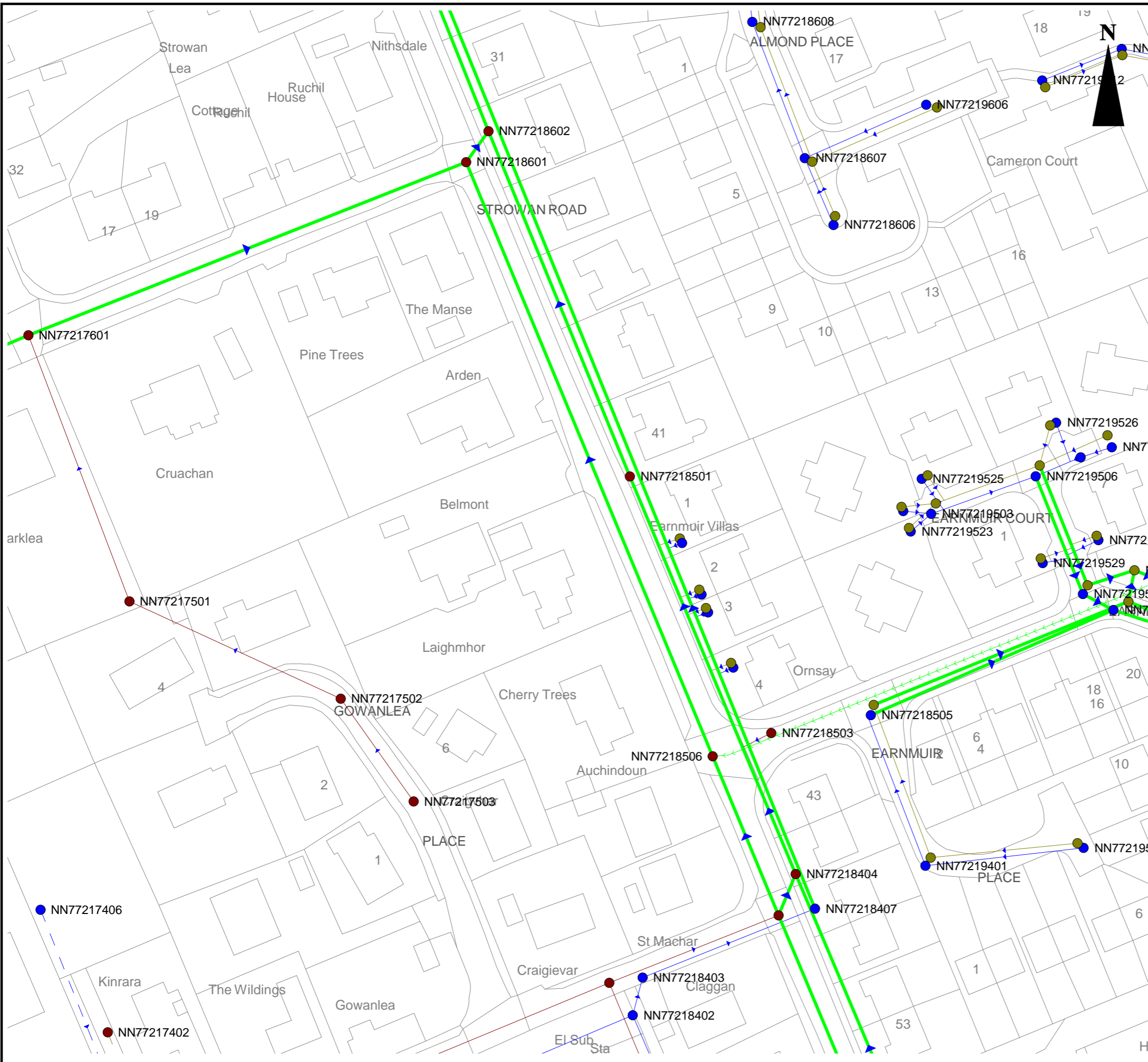
LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_CCTV_SURVEY_003

 building great relationships	Drawn	CMC	Chk'd	MD
	Approved	PS		
	Scale	NTS	REVISION	
	Date	FEB 2015	B	



LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_CCTV_SURVEY_004

 building great relationships	Drawn CMC Chk'd MD
	Approved PS
	Scale NTS REVISION B
	Date FEB 2015



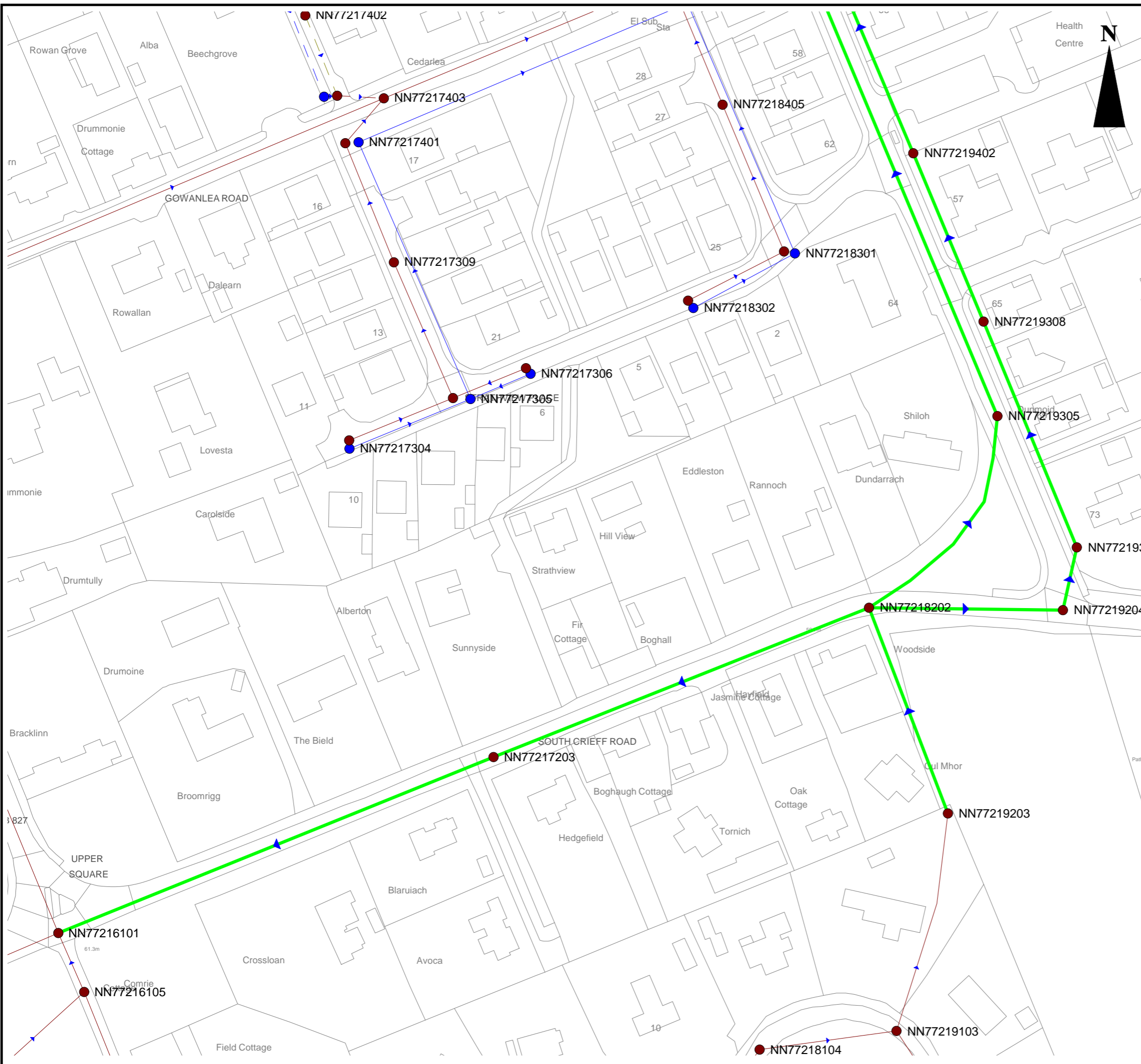
LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_CCTV_SURVEY_005

mouchel building great relationships	Drawn CMC	Chk'd MD
	Approved PS	
Scale NTS	REVISION	
Date FEB 2015	B	



LEGEND

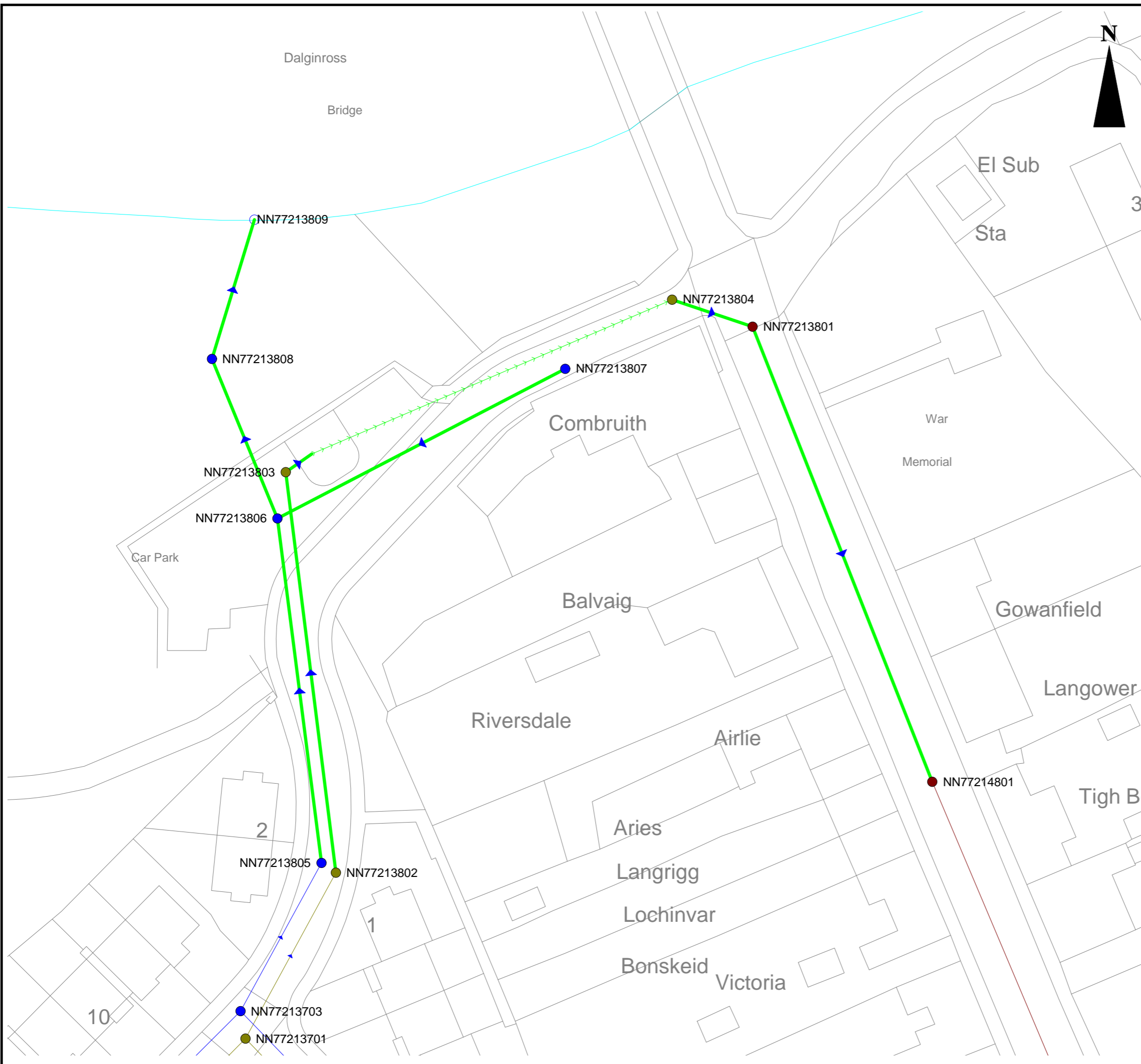
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_CCTV_SURVEY_006

Drawn CMC	Chk'd MD
Approved PS	
Scale NTS	REVISION
Date FEB 2015	B

building great relationships



LEGEND

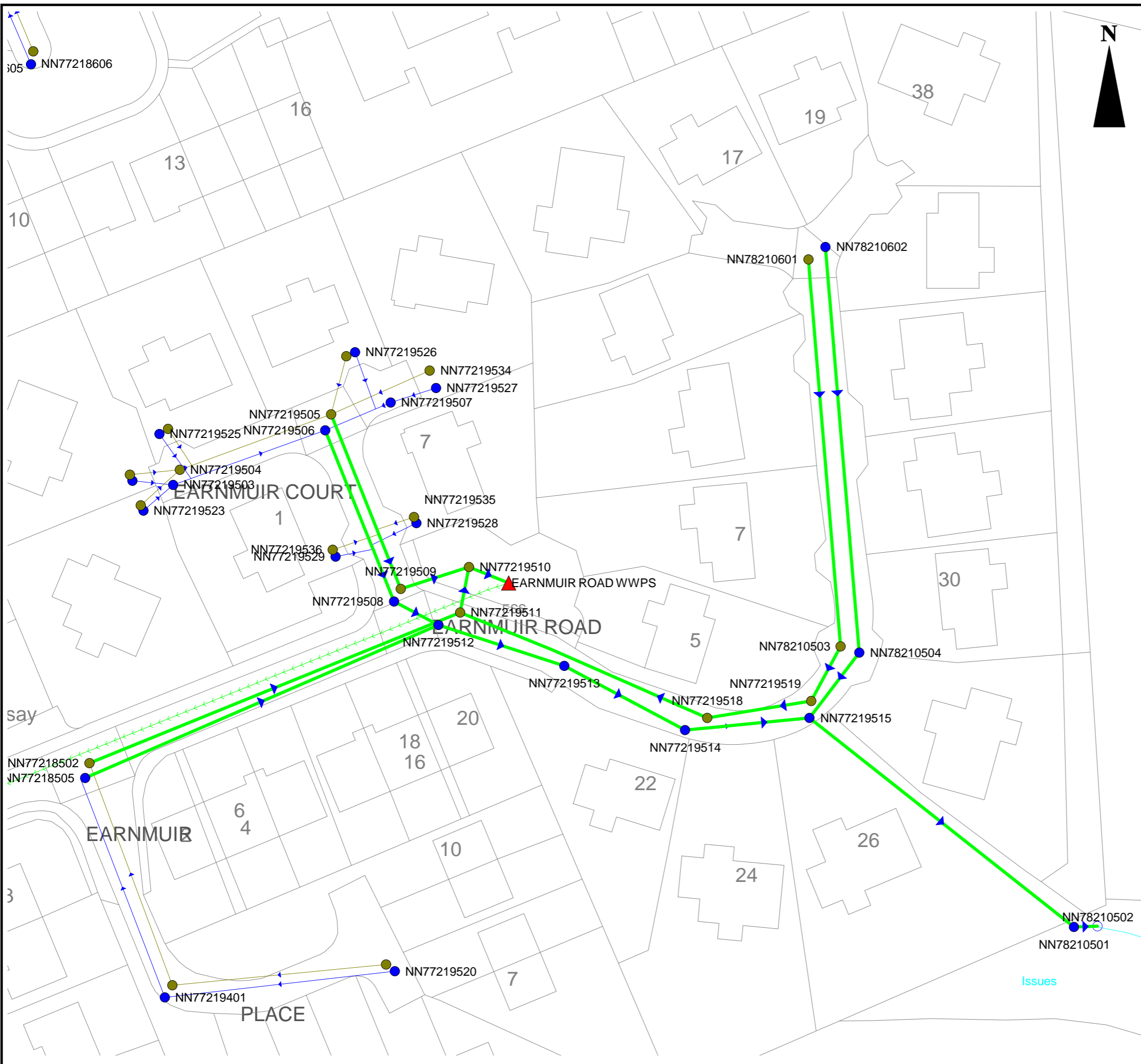
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- - - - - Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - - - Proposed Foul Sewer
- - - - - Proposed Combined Sewer
- - - - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

**COMRIE AND DALGINROSS
FLOOD STUDY**

COMRIE_CCTV_SURVEY_008



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



LEGEND

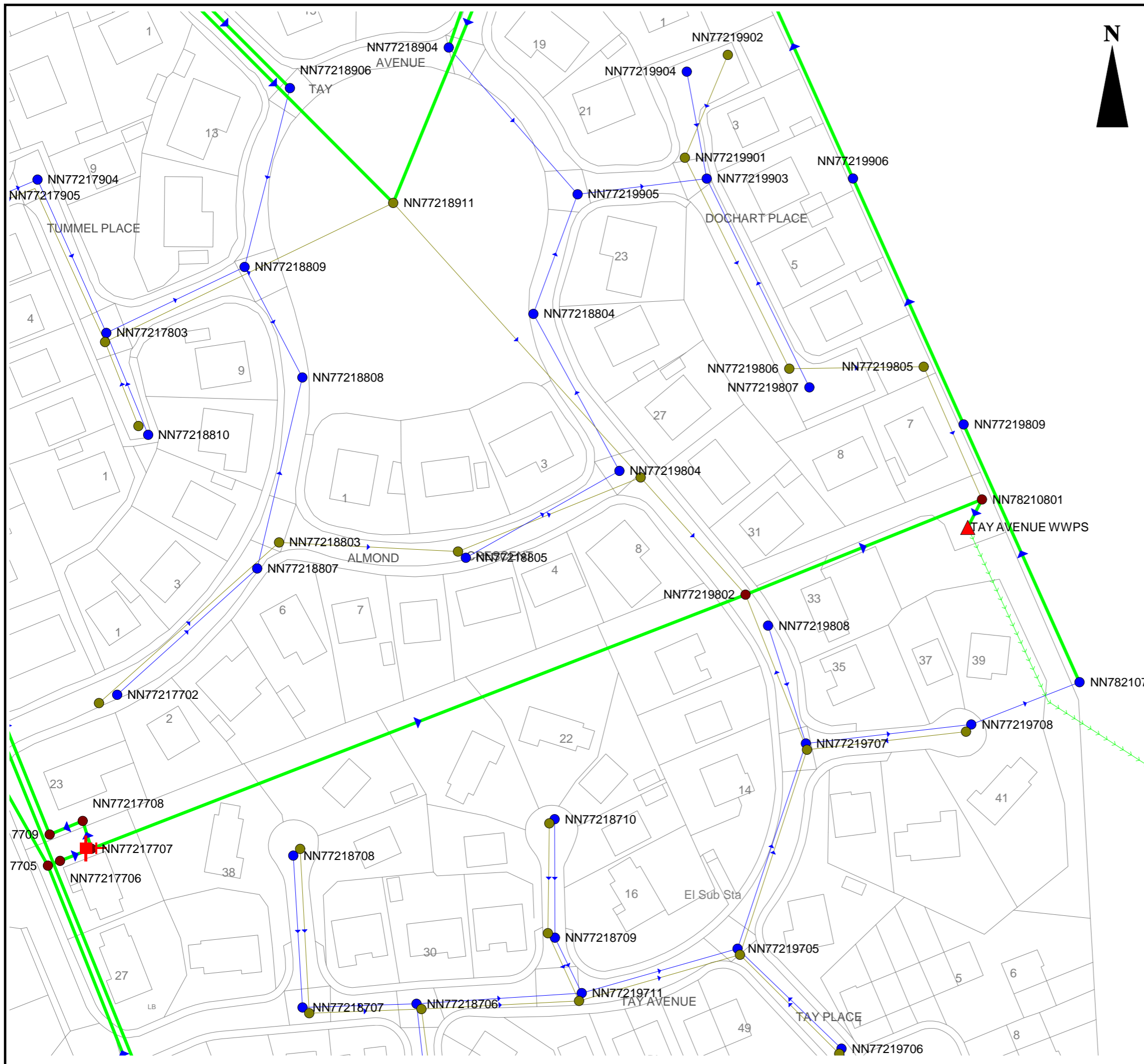
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_CCTV_SURVEY_009

Drawn CMC	Chk'd MD
Approved PS	
Scale NTS	REVISION
Date FEB 2015	B

building great relationships



LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Foul manhole
- Surface Water manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- Conduits to be surveyed by CCTV unit

**COMRIE AND DALGINROSS
FLOOD STUDY**

COMRIE_CCTV_SURVEY_010



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	

Ancillary Surveys

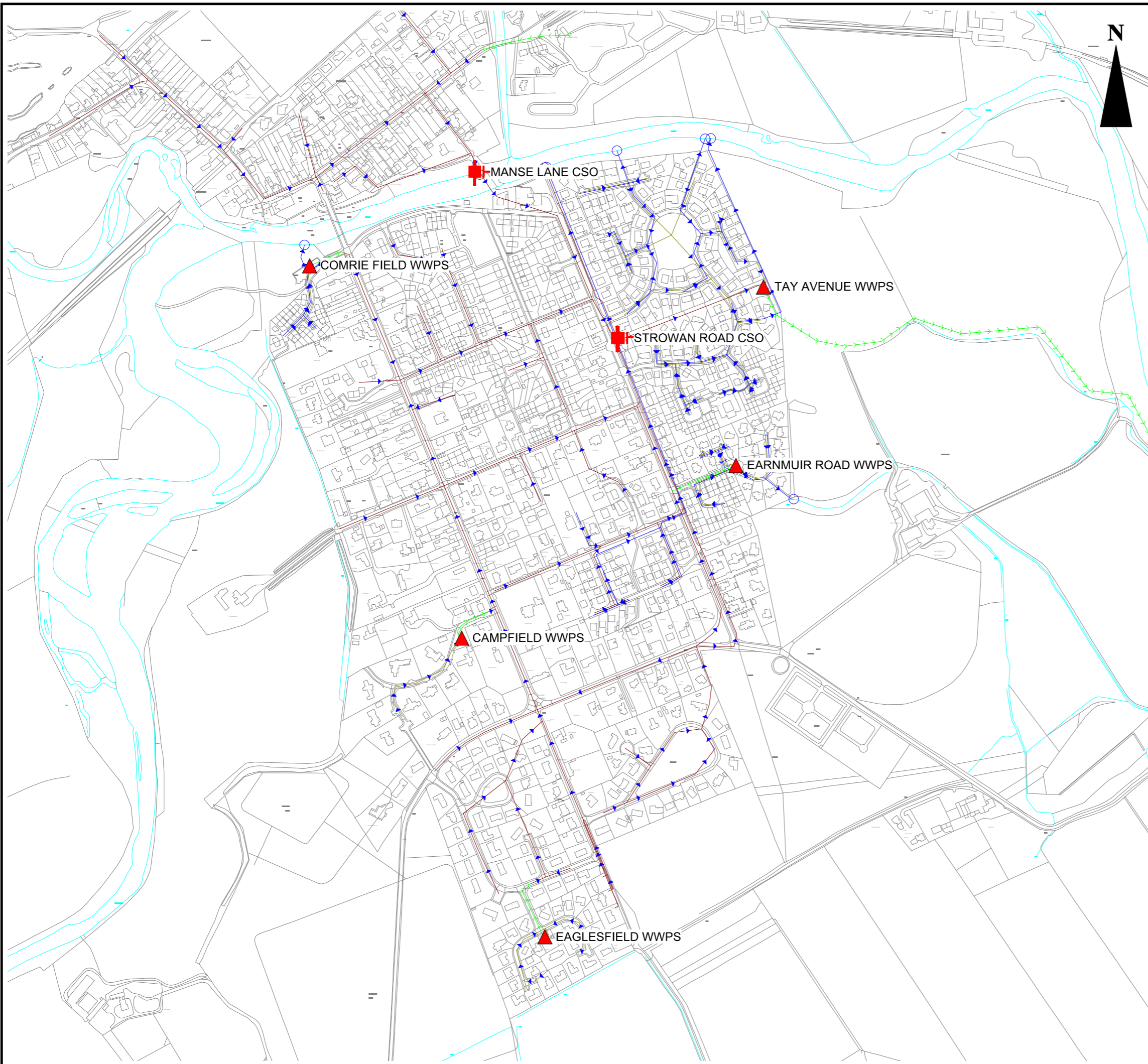
**Comrie and Dalginross
Flood Study**

Project
Project Engineer
Contact No.

Claire McArtney
01698 802850

Date 17/02/2015
Revision B

Ancillary Name	Location	Cover level from GIS	Depth from GIS	Survey Type	Drawing No.	System Type	x	y	Comments
STROWAN ROAD CSO	Strowan Road	Unknown	Unknown	CSO	COMRIE Ancillary Survey 001	Combined	277789	721748	
TAY AVENUE WWPS	Tay Avenue	Unknown	Unknown	PS including drop test	COMRIE Ancillary Survey 002	Combined	277998	721825	
EARNMUIR ROAD WWPS	Earnmuir Court	Unknown	Unknown	PS including drop test	COMRIE Ancillary Survey 003	Foul	277958	721559	
MANSE LANE CSO	Manse Lane	Unknown	Unknown	CSO	COMRIE Ancillary Survey 004	Combined	277576	721995	
COMRIE FIELD WWPS	Queens Road,	Unknown	Unknown	PS including drop test	COMRIE Ancillary Survey 005	Foul	277323	721857	
CAMPFIELD WWPS	Aros Field East	59.8mAOD	Unknown	PS including drop test	COMRIE Ancillary Survey 006	Foul	277549	721303	
EAGLESFIELD WWPS	Eaglesfield, Cowden Way	Unknown	Unknown	PS including drop test	COMRIE Ancillary Survey 007	Foul	277673	720858	



LEGEND

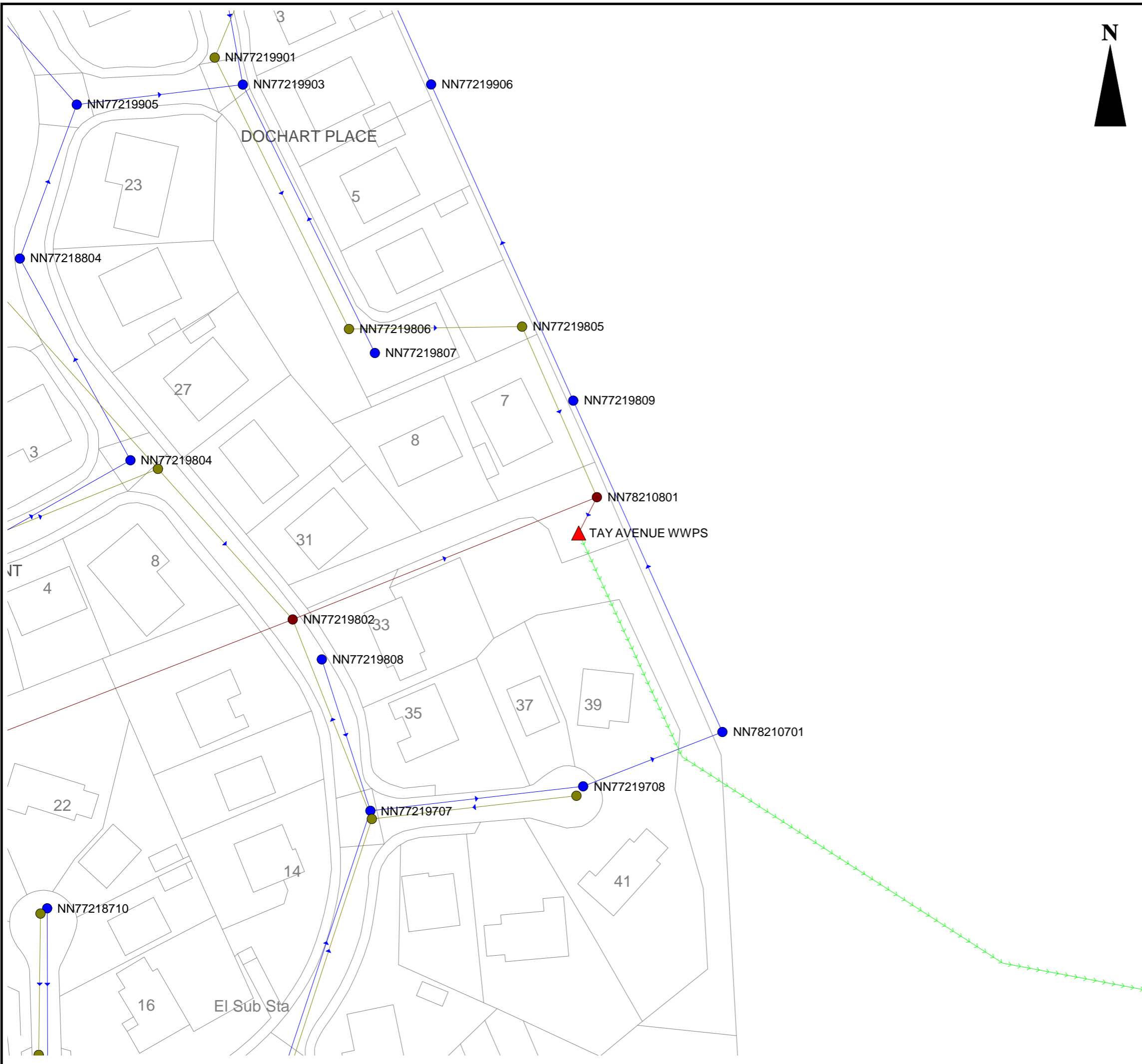
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- ★ Combined manhole
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- ▲ Pumping Station to be surveyed including drop test
- ⊕ CSO to be surveyed

**COMRIE AND DALGINROSS
FLOOD STUDY**

COMRIE Ancillary Survey Overview



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



LEGEND

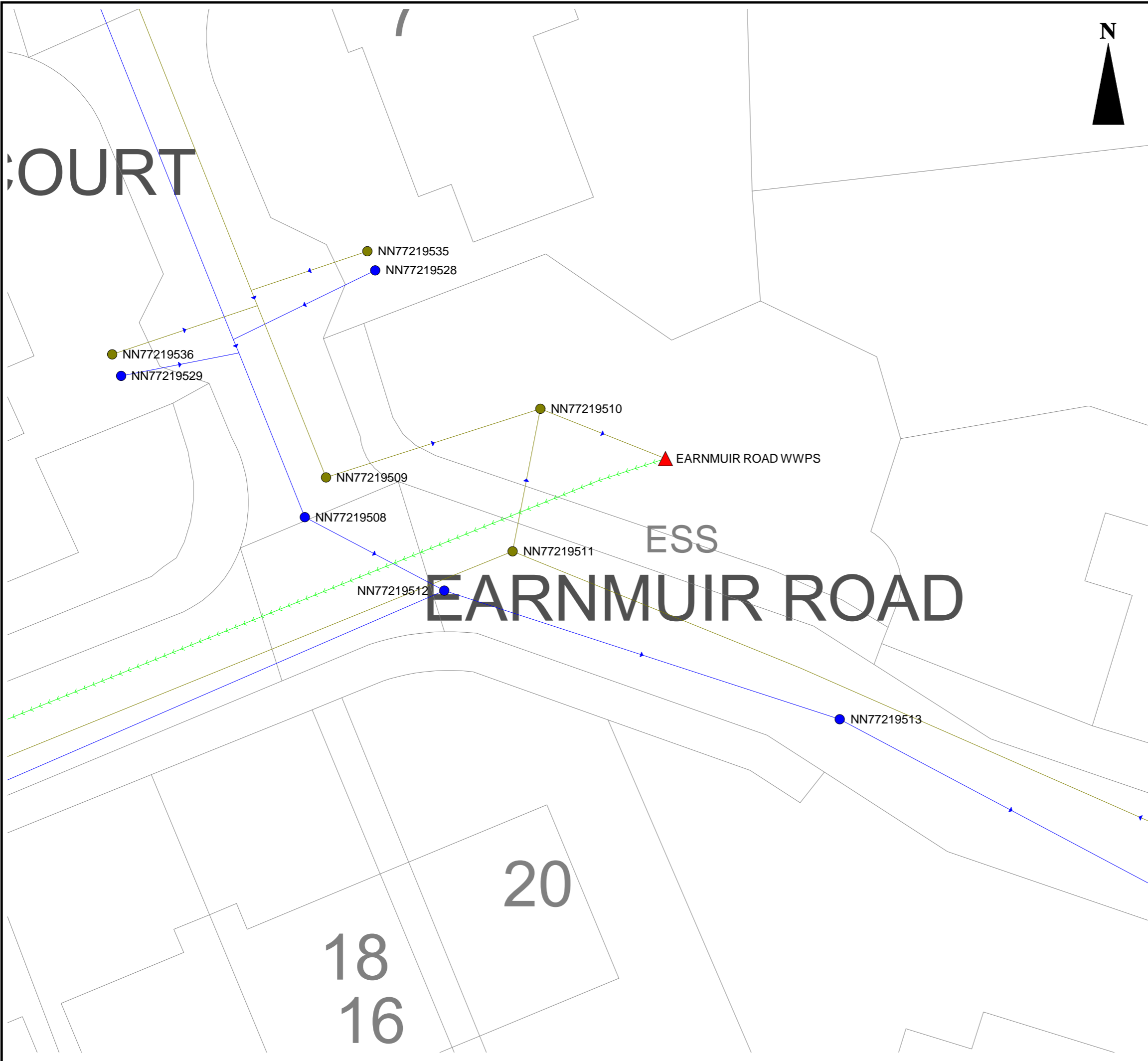
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Point
- Point
- - - - - Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - - - Proposed Foul Sewer
- - - - - Proposed Combined Sewer
- - - - - Proposed Surface Water Line
- ▲ Pumping Station to be surveyed including drop test
- ⊕ CSO to be surveyed

**COMRIE AND DALGINROSS
FLOOD STUDY**
















COMRIE_ANCILLARY_SURVEY_002



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



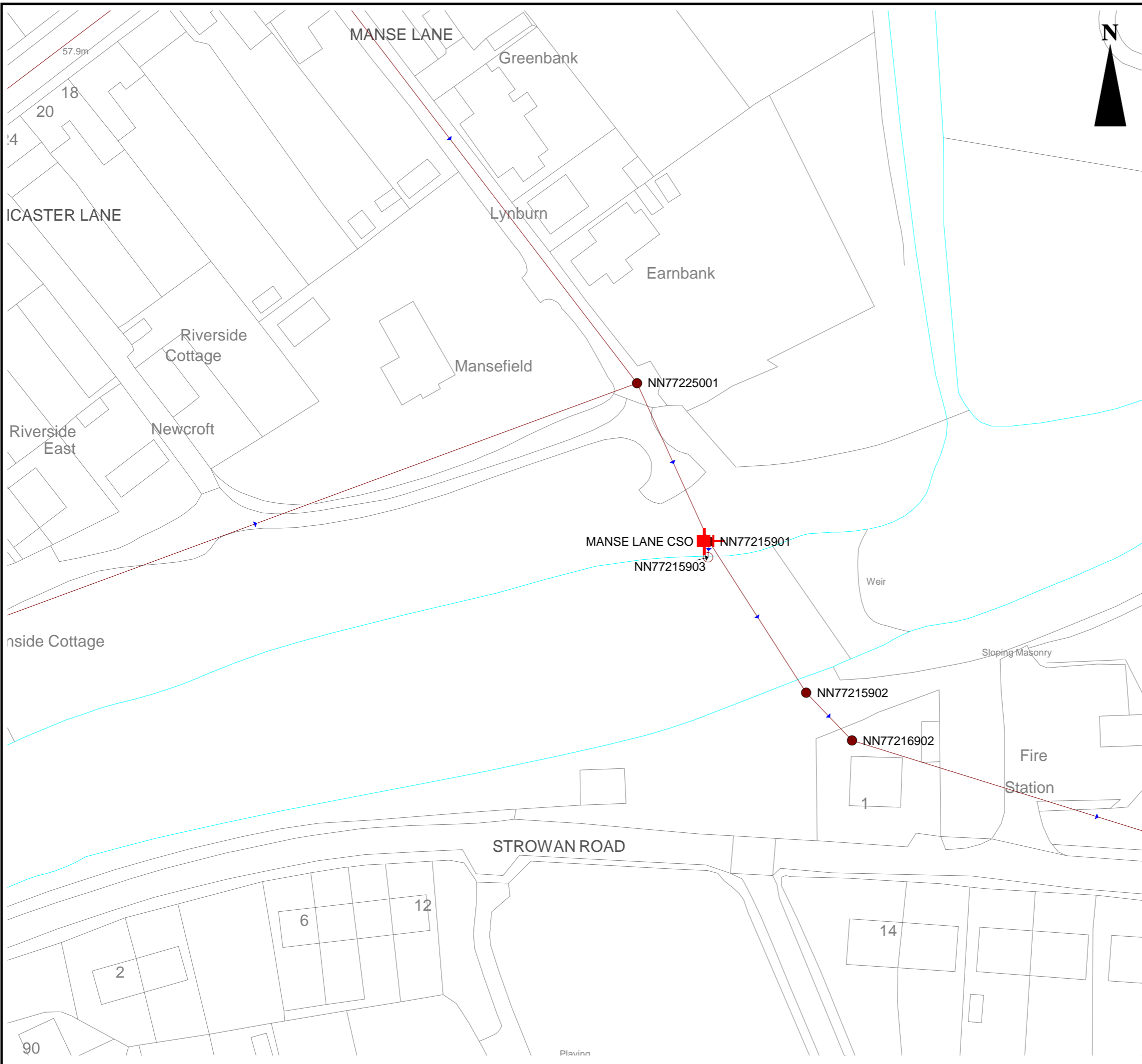
LEGEND

-  Surface Water Outfall
-  Treated Effluent Outfall
-  Combined Outfall
-  Combined manhole
-  Point
-  Point
-  Rising Main
-  Combined Sewer
-  Surface Water Line
-  Foul sewer
-  Proposed Foul Sewer
-  Proposed Combined Sewer
-  Proposed Surface Water Line
-  Pumping Station to be surveyed including drop test
-  CSO to be surveyed

**COMRIE AND DALGINROSS
FLOOD STUDY**

COMRIE_ANCILLARY_SURVEY_003

 building great relationships	Drawn CMC	Chk'd MD
	Approved PS	
Scale NTS	REVISION	
Date FEB 2015	B	



LEGEND

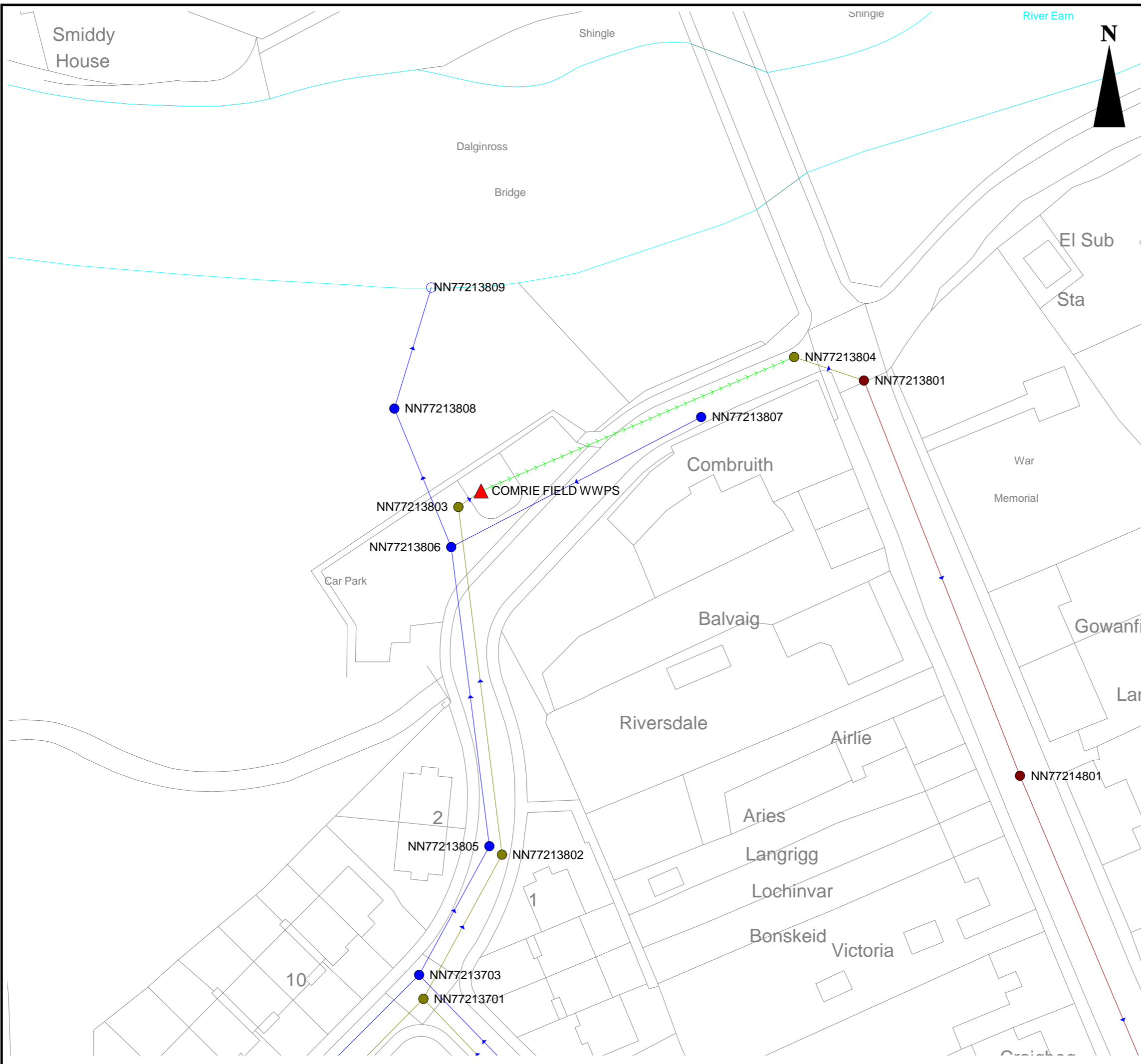
- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Point
- Point
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- - - Proposed Foul Sewer
- - - Proposed Combined Sewer
- - - Proposed Surface Water Line
- ▲ Pumping Station to be surveyed including drop test
- ⊕ CSO to be surveyed

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_ANCILLARY_SURVEY_004



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	



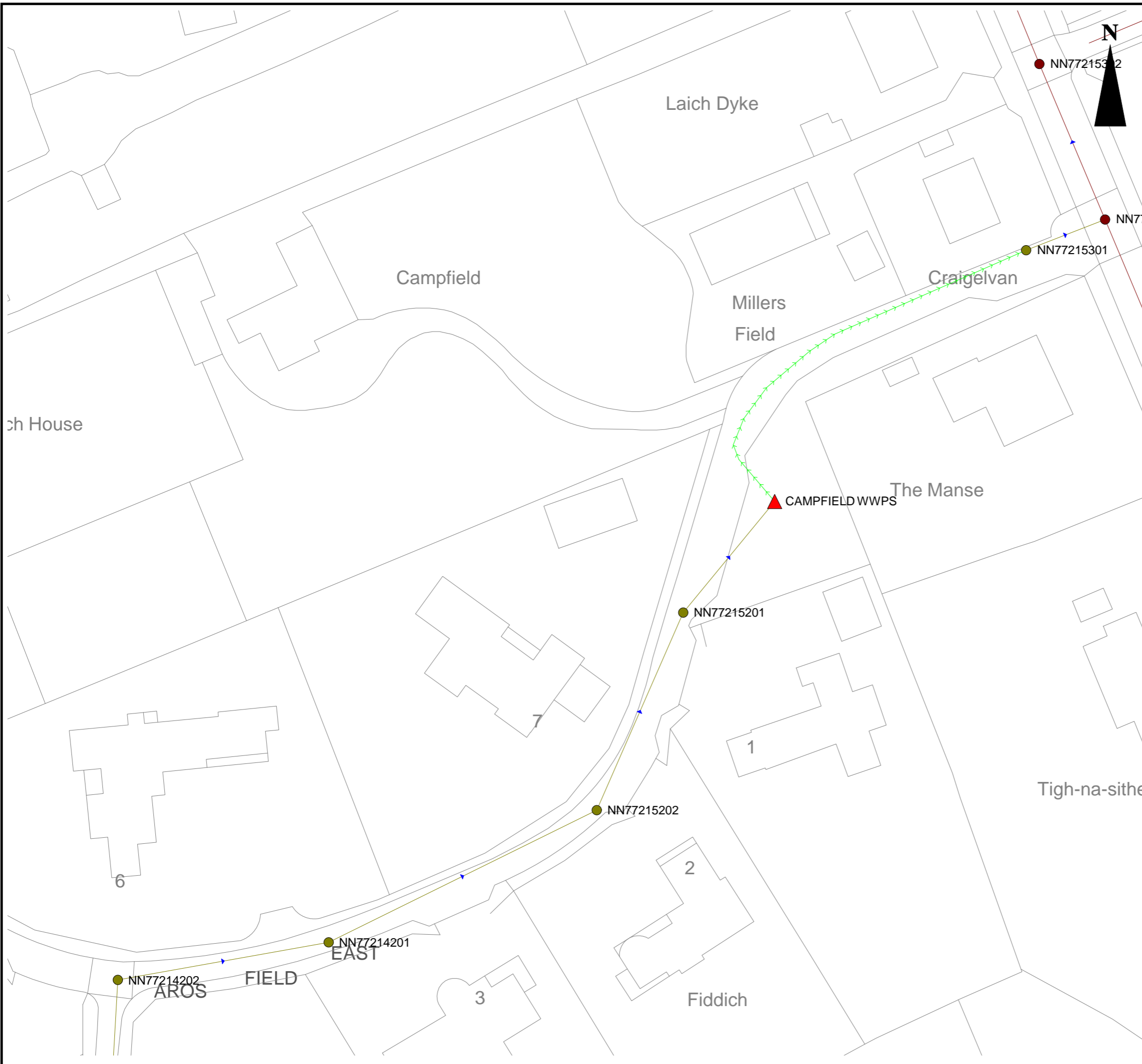
LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Point
- Point
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- Proposed Foul Sewer
- Proposed Combined Sewer
- Proposed Surface Water Line
- ▲ Pumping Station to be surveyed including drop test
- ⊕ CSO to be surveyed

COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_ANCILLARY_SURVEY_005

 building great relationships	Drawn	CMC	Chk'd	MD
	Approved	PS		
	Scale	NTS	REVISION	
	Date	FEB 2015	B	



LEGEND

- Surface Water Outfall
- Treated Effluent Outfall
- Combined Outfall
- Combined manhole
- Point
- Point
- Rising Main
- Combined Sewer
- Surface Water Line
- Foul sewer
- Proposed Foul Sewer
- Proposed Combined Sewer
- Proposed Surface Water Line
- ▲ Pumping Station to be surveyed including drop test
- ⊕ CSO to be surveyed

COMRIE AND DALGINROSS FLOOD STUDY
















COMRIE_ANCILLARY_SURVEY_006

mouchel building great relationships	Drawn	CMC	Chk'd	MD
	Approved	PS		
Scale	NTS		REVISION	
Date	FEB 2015		B	

EAGLESFIELD



LEGEND

-  Surface Water Outfall
-  Treated Effluent Outfall
-  Combined Outfall
-  Combined manhole
-  Point
-  Point
-  Rising Main
-  Combined Sewer
-  Surface Water Line
-  Foul sewer
-  Proposed Foul Sewer
-  Proposed Combined Sewer
-  Proposed Surface Water Line
-  Pumping Station to be surveyed including drop test
-  CSO to be surveyed

16

2

1

26

11

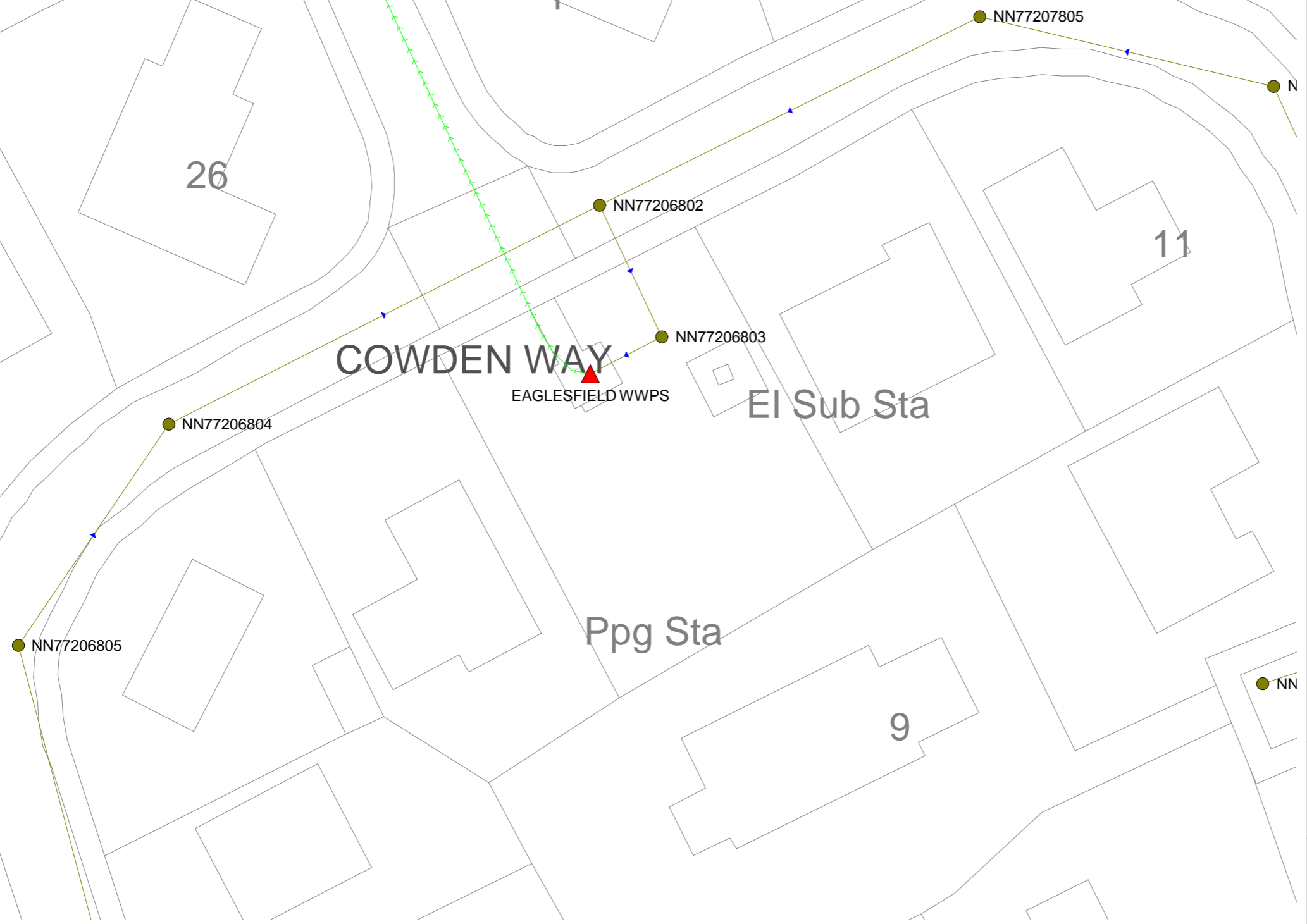
COWDEN WAY

EAGLESFIELD WWPS

EI Sub Sta

Ppg Sta

9



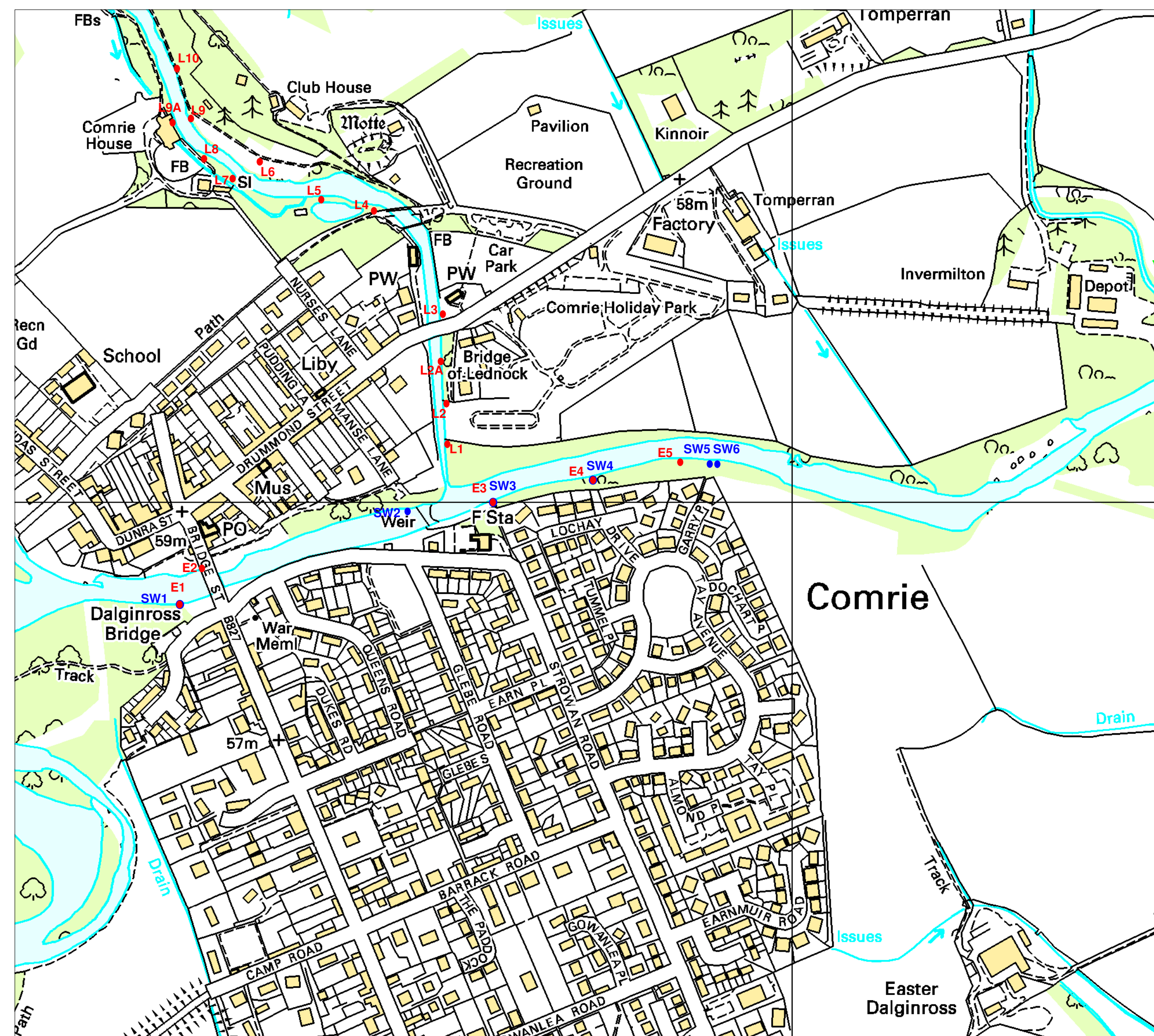
COMRIE AND DALGINROSS FLOOD STUDY

COMRIE_ANCILLARY_SURVEY_007



Drawn	CMC	Chk'd	MD
Approved	PS		
Scale	NTS	REVISION	
Date	FEB 2015	B	

Surface Water Outfall Locations



NOTES

Users should note that the flood plain extents were mapped at 1:10,000 scale, as appropriate to the level of investigation and are based on the information available at the time of survey.

LEGEND

- Surface water outfalls locations, (found during site walkover)
- Surface water outfalls - Scottish Water network maps (2008)

NOTE : Scottish Water network maps were not available for the River Lednock survey reach.

Maps show flood extents of the existing case scenario
Elevations above Ordnance Datum (Newlyn)

REV	DATE	REMARKS
1	18/02/2014	Draft

This map is reproduced by permission of Ordnance Survey on behalf of HMSO.
© Crown copyright and database right 2010. All rights reserved. Ordnance Survey Licence Number 100016971.



Comrie and Dalginross flood study

Location of surface water outfalls

Date of Issue: 19th February 2014

Scale at A3: Not to Scale



Outfall ID No: L1



Site: River Lednock

Pipe Description

Drain pipe for residences located on right bank of River Lednock

Location/Reference Object

119m downstream of Drummond street, right bank

Pipe Diameter

150mm

Grid Reference

277620, 722062

Comments

No visible outflow into channel.
Located directly under a smaller shed structure.



mouchel 
building great relationships

Outfall ID No: L2



Site: River Lednock

Pipe Description

Drain pipe for residences located on right bank of River Lednock

Location/Reference Object

74m downstream of Drummond street, right bank

Pipe Diameter

150mm

Grid Reference

277621, 722108

Comments

No visible outflow into channel.



Outfall ID No: L2a



Site: River Lednock

Pipe Description

Outfall pipe on left bank, no visible outflow

Location/Reference Object

28m downstream of Drummond Street, right bank

Pipe Diameter

150mm

Grid Reference

277615, 722154

Comments

Minimal flow



Outfall ID No: L3



River Lednock

Site:

Pipe Description

No headwall

Location/Reference Object

Upstream of Bridge of Lednock, on the right bank.

Pipe Diameter

150mm

Grid Reference

277619, 722206

Comments

No visible outflow from pipe.



mouchel 
building great relationships

Outfall ID No: L4



Site: River Lednock

Pipe Description

Pipe to drain surface water/small stream.

Location/Reference Object

Left bank, 150m upstream of Bridge of Lednock

Pipe Diameter

150mm

Grid Reference

277541, 722321

Comments

Visible flow from outfall, minor stream fed into River Lednock



mouchel 
building great relationships

Outfall ID No: L5



River Lednock

Site:

Pipe Description

Pipe to drain surface water/small stream.

Location/Reference Object

214m upstream of Bridge of Lednock, left bank

Pipe Diameter

300mm

Grid Reference

277482, 722356

Comments

Visible flow from outfall, minor stream fed into River Lednock



Outfall ID No: L6



Site: River Lednock

Pipe Description

Outfall to drain minor stream from footpath to main channel, blocked with leaves/mud

Location/Reference Object

306m upstream of Bridge of Lednock, right bank

Pipe Diameter

300mm

Grid Reference

277417, 722373

Comments

Minimal outflow into main channel.



mouchel 
building great relationships

Outfall ID No: L7



Site: River Lednock

Pipe Description

Two pipes submerged in watercourse. Unclear as to the purpose. Pipes connected to building

Location/Reference Object

315m upstream of Bridge of Lednock, right bank

Pipe Diameter

300mm x 2

Grid Reference

277389, 722357

Comments

Outflow unclear.



mouchel *iii*
building great relationships

Outfall ID No: L8



Site: River Lednock

Pipe Description

Outfall on right bank, to drain right bank

Location/Reference Object

355m upstream of Bridge of Lednock.

Pipe Diameter

150mm

Grid Reference

277354, 722378

Comments

No visible outflow from pipe



mouchel 
building great relationships

Outfall ID No: L9



Site: River Lednock

Pipe Description

Pipe discharging nearby stream
under footpath into main channel

Location/Reference Object

419m upstream of Bridge of Lednock,
right bank

Pipe Diameter

300mm

Grid Reference

277341, 772422

Comments

Low flow from pipe into channel,
blocked with some leaves and mud



Outfall ID No: L9A



Site: River Lednock

Pipe Description

Embankment/road drainage pipe

Location/Reference Object

Location next to Comrie House, 409m upstream of Bridge of Lednock, left bank

Pipe Diameter

150mm

Grid Reference

277321, 722417

Comments

No visible outflow



mouchel *iii*
building great relationships

Outfall ID No: L10



Site: River Lednock

Pipe Description

5 small pipes draining footpath into main channel.

Location/Reference Object

479m upstream of Bridge Lednock, right bank.

Pipe Diameter

150mm

Grid Reference

Comments

Minimal flow in all five pipes



Outfall ID No: E1



Site: River Earn

Pipe Description

Flap valve with timber supported headwall.

Location/Reference Object

34.5m upstream of Bridge street, left bank

Pipe Diameter

300mm

Grid Reference

277329, 721889

Comments

Minimal/no visible outflow into main channel



mouchel *iii*
building great relationships

Outfall ID No: E2



Site: River Earn

Pipe Description
Under bridge deck, two pipes providing outflow into main channel

Location/Reference Object
Under Bridge street (bridge), right bank

Pipe Diameter
150mm

Grid Reference
277352, 721927

Comments
Some outflow due to high levels of precipitation.
One pipe cracked.



Outfall ID No: E3



Site: River Earn

Pipe Description
Outflow with wing walls

Location/Reference Object
106m upstream of wier, left bank

Pipe Diameter
Pipe not visible due to poor visibility

Grid Reference
277701, 722008

Comments
No visibility due to poor weather conditions. Location identified using Scottish Water network maps



mouchel *iii*
building great relationships

Outfall ID No: E4



Site: River Earn

Pipe Description

No pipe visible from standing, water tricking through concrete structure into river channel.

Location/Reference Object

185m upstream of weir, left bank

Pipe Diameter

n/a

Grid Reference

277779, 722024

Comments

Scottish Water network maps identifies an outfall at this location. However, no pipe was visible. Conditions pose a risk to health and safety, so unable to access from the river bank.



mouchel *iii*
building great relationships

Outfall ID No: E5



Site: River Earn

Pipe Description

Flap valve, with head and wingwalls covered in rough grass.

Location/Reference Object

286m downstream of weir, left bank

Pipe Diameter

300mm

Grid Reference

277877, 722044

Comments

No visible flow into the river channel.
No closer access than from across the river

