

TV RECEPTION SURVEY REPORT

Supplement March 2019
Additional test points in the potential impact zone

THIS PRE- CONSTRUCTION TV RECEPTION SURVEY WAS CARRIED OUT BY:

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DATE OF SURVEY: 5th March 2019
SCS JOB: 153588

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EXECUTIVE SUMMARY

Additional test point Information has been recorded on the 4th March 2019, this highlights aerial signal information to record baseline conditions for future reference within the area we expect to be affected by the proposed development.

During the test results it was noted that the existing building at the development site has been partially demolished/removed and at the time of testing was approximately only consisting of 5 storey height, (this was originally consisting of a 12-storey building when test results were taken in October 2017) and when completed is to consist of a 16-storey building.

As the site already had a large structure previously and tv reception in the area would have already been affected to a degree we do not envisage a great change to baseline conditions from the existing report.

We do expect there to be some UHF signal blocking as the new building will be larger than the original structure, but this will be contained within the expected 'potential Impact zone'.

Any widescale complaints in the area would require to be examined to ascertain if 55 Portland street is the cause of the complaint or if it is due to other building developments in the locality due to other building developments nearby.

Please note that when tower cranes are used on site these may cause interference on a greater scale than the completed development. This interference would be for the duration of time that the tower cranes are present.

FIELD SURVEY METHOD

Tests are carried out at a selection of locations in the potential impact zone.

Test results are recorded regarding television signal strength and quality: -

Strength is recorded in: dBμv

Quality is recorded in: VBER (Standard definition SD)

LBER (High definition HD)

Due to the rollout of the 4G Networks all results are recorded with a CAI approved benchmarked aerial with a balun and LTE filter

All tests are carried out at a 10m height above ground level.

The direction and type of existing viewers' television aerials is noted.

A bearing and distance to the proposed development is recorded at each test point location, for comparison with the bearing and distance to the television transmitter serving the area.

Existing obstructions to television reception are noted.

FIELD SURVEY EQUIPMENT

The field survey is carried out using the following equipment: -

- Specialist vehicle complete with telescopic mast
- 360° Antenna rotator
- 14 Element CAI approved wideband UHF antenna with balun and LTE filter, one vertical and one horizontal polarisation
- 20m x WF100 twin screened CAI approved coaxial cable
- Televes spectrum analyser/field strength meter
- Ordnance survey maps
- Garmin GPS receiver
- Compass
- Digital camera
- Digital terrestrial television decoder

PHOTO A: The developments location

Existing building (12 storeys) October 2017



Existing building (approx 5 storeys) March 2019



PHOTO B: View directly to the north of the development



PHOTO C: View directly to the east of the development



PHOTO D: View directly to the south of the development



PHOTO E: View directly to the west of the development



TEST POINT 1a

Location Bloom Street/car park
NGR: SJ 84289 97867
Alt: 45 m
Mast Height: 10 m

LOCATION	BEARING	DISTANCE
Winter Hill Transmitter	308°	24.3 km
Development	300°	0.1 km

Visible Existing Aerial Arrays: High gain aerials on 2m and 3m masts, mounted at rooftop height on 2 storey properties, directed towards the Winter Hill Transmitter

Visible Existing Obstructions: Various multi-storey buildings in the general direction of the Winter Hill Transmitter

WINTER HILL TRANSMITTER - REPORT

Channel	Frequency	MUX	Format	Level (dB μ V)	CN dB	MER	VBER	LBER	Quality
31	554.0	COM7	HD	47	32	19		-2	Pass
37	602.0	COM8	SD	53	35	20	-8		Pass
49	698.0	ARQA	SD	55	37	24	-7		Pass
50	706.0	BBCA	SD	53	31	21	-8		Pass
54	737.8	BBCB	HD	47	32	17		-2	Marginal
55	746.0	ARQB	HD	44	29	20		-2	Pass
56	754.0	LM	SD	36	20	17	-4		Fail
58	770.0	SDN	SD	45	27	21	-5		Marginal
59	778.0	D3+4	SD	43	27	21	-5		Marginal

Television reception has low signal strengths and corruption is being received

VISIBLE TV AERIAL LOCATED IN THE AREA OF TEST POINT 1a



TEST POINT 2a

Location Sackville street
NGR: SJ 84351 97837
Alt: 44 m
Mast Height: 10 m

LOCATION	BEARING	DISTANCE
Winter Hill Transmitter	310°	24.3 km
Development	310°	0.2 km

Visible Existing Aerial Arrays: high gain aerials on 2m and 3m masts, mounted at rooftop height on 3 storey properties, directed towards the Winter Hill Transmitter

Visible Existing Obstructions: Various multi-storey buildings/Trees in the general direction of the Winter Hill Transmitter

WINTER HILL TRANSMITTER - REPORT

Channel	Frequency	MUX	Format	Level (dB μ V)	CN dB	MER	VBER	LBER	Quality
31	554.0	COM7	HD	52	36	21		-2	Pass
37	602.0	COM8	SD	51	28	21	-5		Pass
49	698.0	ARQA	SD	54	36	21	-7		Pass
50	706.0	BBCA	SD	54	30	23	-8		Pass
54	737.8	BBCB	HD	52	31	20		-2	Pass
55	746.0	ARQB	HD	48	31	20		-2	Pass
56	754.0	LM	SD	44	27	25	-7		Pass
58	770.0	SDN	SD	48	30	21	-7		Pass
59	778.0	D3+4	SD	48	31	20	-8		Pass

Television reception has low signal strengths and corruption is being received

VISIBLE TV AERIAL LOCATED IN THE AREA OF TEST POINT 2a



TEST POINT 3a

Location Bloom/Sackville street
NGR: SJ 84334 97861
Alt: 44 m
Mast Height: 10 m

LOCATION	BEARING	DISTANCE
Winter Hill Transmitter	308°	24.5 km
Development	301°	0.2 km

Visible Existing Aerial Arrays: high gain aerials on 2m and 3m masts, mounted at rooftop height on 3 storey properties, directed towards the Winter Hill Transmitter

Visible Existing Obstructions: Various multi-storey buildings in the general direction of the Winter Hill Transmitter

WINTER HILL TRANSMITTER - REPORT

Channel	Frequency	MUX	Format	Level (dB μ V)	CN dB	MER	VBER	LBER	Quality
31	554.0	COM7	HD	49	32	19		-2	Pass
37	602.0	COM8	SD	52	31	21	-7		Pass
49	698.0	ARQA	SD	54	35	25	-8		Pass
50	706.0	BBCA	SD	56	35	28	-8		Pass
54	737.8	BBCB	HD	53	37	24		-2	Pass
55	746.0	ARQB	HD	45	22	20		-2	Pass
56	754.0	LM	SD	37	20	19	-4		Fail
58	770.0	SDN	SD	51	34	24	-8		Pass
59	778.0	D3+4	SD	47	30	21	-8		Pass

Television reception has low signal strengths and corruption is being received

VISIBLE TV AERIAL LOCATED IN THE AREA OF TEST POINT 3a



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TEST POINT 4a

Location Richmond street (south)
NGR: SJ 84313 97815
Alt: 44 m
Mast Height: 10 m

LOCATION	BEARING	DISTANCE
Winter Hill Transmitter	310°	24.45km
Development	315°	0.2 km

Visible Existing Aerial Arrays: high gain aerials on 3m masts, mounted at rooftop height on 2 storey properties, directed towards the Winter Hill Transmitter

Visible Existing Obstructions: Various multi-storey buildings/Land in the general direction of the Winter Hill Transmitter

WINTER HILL TRANSMITTER - REPORT

Channel	Frequency	MUX	Format	Level (dB μ V)	CN dB	MER	VBER	LBER	Quality
31	554.0	COM7	HD	55	37	28		-3	Pass
37	602.0	COM8	SD	61	40	29	-7		Pass
49	698.0	ARQA	SD	59	40	25	-8		Pass
50	706.0	BBCA	SD	58	35	22	-8		Pass
54	737.8	BBCB	HD	54	38	20		-2	Pass
55	746.0	ARQB	HD	50	30	19		-2	Pass
56	754.0	LM	SD	41	24	21	-5		Marginal
58	770.0	SDN	SD	48	30	21	-5		Pass
59	778.0	D3+4	SD	45	30	31	-8		Pass

Television reception is of an acceptable quality and strength

VISIBLE TV AERIAL LOCATED IN THE AREA OF TEST POINT 4a



TEST POINT 5a

Location Richmond street
NGR: SJ 84331 97836
Alt: 44 m
Mast Height: 10 m

LOCATION	BEARING	DISTANCE
Winter Hill Transmitter	309°	24.3 km
Development	334°	0.3 km

Visible Existing Aerial Arrays: high gain aerials on 3m masts, mounted at rooftop height on 2 storey properties, directed towards the Winter Hill Transmitter

Visible Existing Obstructions: Various multi-storey buildings in the general direction of the Winter Hill Transmitter

WINTER HILL TRANSMITTER - REPORT

Channel	Frequency	MUX	Format	Level (dB μ V)	CN dB	MER	VBER	LBER	Quality
31	554.0	COM7	HD	49	29	20		-2	Pass
37	602.0	COM8	SD	54	33	20	-8		Pass
49	698.0	ARQA	SD	54	36	21	-8		Pass
50	706.0	BBCA	SD	57	33	20	-7		Pass
54	737.8	BBCB	HD	51	31	19		-2	Pass
55	746.0	ARQB	HD	48	30	19		-2	Pass
56	754.0	LM	SD	45	24	21	-7		Marginal
58	770.0	SDN	SD	50	32	20	-7		Pass
59	778.0	D3+4	SD	50	33	19	-8		Pass

Television reception has low signal strengths and corruption is being received

VISIBLE TV AERIAL LOCATED IN THE AREA OF TEST POINT 5a



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CONCLUSIONS for Supplement March 2019

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During the test results it was noted that the existing building at the development site has been partially demolished/removed and was approximately only consisting of 5 storey height, this was originally consisting of a 12-storey building when test results were collated in October 2017 and when completed is to consist of a 16-storey building.

As the site already had a large structure previously and tv reception in the area would have already been affected to a degree we do not envisage a great change to baseline conditions from the existing report. We do expect there to be some UHF signal blocking as the new building will be larger than the original structure but this will be contained within the expected 'potential Impact zone' Any widescale complaints in the area would require to be examined to ascertain if 55 Portland street is the cause of the complaint or if it is due to other building developments in the locality due to other building developments nearby.

Please note if tower cranes are used on site these could cause interference on a greater scale than the completed development. This interference would be for the duration of time that the tower cranes are present.

Adjacent Buildings

The development already has a building in place which would already be blocking UHF signals to a certain extent and although the development is to be increased in height and width, we do not envisage a great change/increase to UHF signal blocking.

There will be a minimal increase in impact, and this zone although minor could slightly affect terrestrial television reception, this covers an area to the southeast of the development.

Most of the potential impact zone covers a Car Park area where we do not envisage any issues.

However, a portion of the potential impact zone covers a small area of bloom street/ and Richmond street and subsequently mitigation may be required. (please see Potential Impact 1)

Please refer to the Mitigation section of the Original report 2017 for possible remedies to rectifying terrestrial television reception issues.

POTENTIAL IMPACT ZONE – MAP 1

