

Imagine

Stonehaven

**Stonehaven
Capacity Study
Appendix**

STONEHAVEN CAPACITY STUDY

Appendix 1

Goal Achievement Matrix – The Assessment of Options by Locality

Contents

Area	Locality Nos.
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Goal Achievement Matrix: Locality

1

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square		✓		2000 metres	
		4. distance to employment node		✓		2940 metres	
		5. distance to schooling	✓			2630 metres	
		6. distance to OS			✓		
		7. distance to potential OS		✓			
		8. distance from railway station		✓		2740 metres	
		9. distance to existing bus routes	✓				
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	10. linearity for potential new bus routes		✓			
		11. shortness of routes		✓			
		12. ease of slopes		✓			
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	13. avoidance of nasty crossing points				✓	
		14. proximity to railway		✓			
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		
		● availability of drainage	17. ease of providing drainage		✓		
● avoidance of flooding		18. flooding potential				✓	
		19. likely spill-over downstream				✓	
● loss of natural and built resources		20. quality of agricultural land lost			✓		
		21. quality of biodiversity lost			✓		
		22. minerals sterilised				✓	
		23. historic buildings / arch. affected				✓	Part of site within Ury House Designed Landscape
● limited waste of resources		24. cost of overcoming constraints			✓		
		25. provision of new services			✓		
● likely resolution of existing problems		26. enhancement of heritage			✓		
Social	● accessibility of services	27. distance to Market Square			✓		
		28. distance to employment node			✓		
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services	✓				
	● balance of community	32. balance of land uses provided			✓		
		33. integration of new with original town	✓				
	● sense of place	34. response to genius loci	✓				
		35. visual considerations			✓		
		36. disturbance from traffic			✓		
37. response to urban grain				✓			
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			7	48	21	76 = 67%	

Goal Achievement Matrix: Locality

2

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square		✓		1772 metres	
		4. distance to employment node		✓		2712 metres	
		5. distance to schooling	✓			2402 metres	
		6. distance to OS		✓			
		7. distance to potential OS		✓			
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			2512 metres	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes		✓			
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓			
13. avoidance of nasty crossing points				✓			
● accessibility of business land	14. proximity to railway	✓					
	15. proximity to GSJ on A90	✓					
Resources	● availability of water supply	16. ease of providing water		✓			
	● availability of drainage	17. ease of providing drainage		✓			
	● avoidance of flooding	18. flooding potential			✓		
		19. likely spill-over downstream			✓		
		● loss of natural and built resources	20. quality of agricultural land lost		✓		
			21. quality of biodiversity lost		✓		
	22. minerals sterilised				✓		
		23. historic buildings / arch. affected			✓		
	● limited waste of resources	24. cost of overcoming constraints		✓			
		25. provision of new services		✓			
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services	27. distance to Market Square		✓			
		28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS		✓			
		31. provision of new services		✓		Opportunity for employment land and has good access	
	● balance of community	32. balance of land uses provided		✓			
		33. integration of new with original town	✓				
	● sense of place	34. response to genius loci	✓				
		35. visual considerations		✓			
		36. disturbance from traffic		✓			
37. response to urban grain			✓				
Biodiversity	● response to nature	38. likely contribution to OS strategy	✓				
Totals			9	46	18	73 = 64%	

Goal Achievement Matrix: Locality 3
Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓				
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square		✓		1610 metres	
		4. distance to employment node		✓		2550 metres	
		5. distance to schooling	✓			2240 metres	
		6. distance to OS			✓		
		7. distance to potential OS		✓			
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station		✓		2350 metres	
		9. distance to existing bus routes		✓			
		10. linearity for potential new bus routes	✓				
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes			✓		
		12. ease of slopes		✓			
		13. avoidance of nasty crossing points			✓		
	● accessibility of business land	14. proximity to railway		✓			
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
● availability of drainage		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost		✓			
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints		✓			
		25. provision of new services		✓			
● likely resolution of existing problems		26. enhancement of heritage		✓			
	27. distance to Market Square		✓				
Social	● accessibility of services	28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services	✓				
		32. balance of land uses provided	✓				
	● balance of community	33. integration of new with original town		✓			
		34. response to genius loci	✓				
	● sense of place	35. visual considerations	✓				
		36. disturbance from traffic	✓				
		37. response to urban grain		✓			
Biodiversity	● response to nature	38. likely contribution to OS strategy	✓				
Totals			11	36	27	74	

Goal Achievement Matrix: Locality

4

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓				
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square			✓	1406 metres	
		4. distance to employment node		✓		2346 metres	
		5. distance to schooling	✓			2036 metres	
		6. distance to OS			✓		
		7. distance to potential OS	✓				
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station		✓		2146 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes		✓			
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓			
		13. avoidance of nasty crossing points			✓		
	● accessibility of business land	14. proximity to railway		✓			
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
● avoidance of flooding		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost			✓		
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints		✓			
		25. provision of new services			✓		
● likely resolution of existing problems		26. enhancement of heritage		✓			
		27. distance to Market Square			✓		
Social	● accessibility of services	28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services			✓		
		32. balance of land uses provided		✓			
	● balance of community	33. integration of new with original town			✓		
		34. response to genius loci			✓		
	● sense of place	35. visual considerations			✓		
		36. disturbance from traffic			✓		
		37. response to urban grain		✓			
		38. likely contribution to OS strategy		✓			
Biodiversity	● response to nature		✓				
Totals			5	28	57	90 = 71%	

Goal Achievement Matrix: Locality

5

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	<ul style="list-style-type: none"> shelter from cold winds potential for passive solar gain 	1. planting or landform	✓				
		2. direction of slope		✓			
Energy	<ul style="list-style-type: none"> proximity to services 	3. distance to Market Square			✓	1335 metres	
		4. distance to employment node		✓		2275 metres	
		5. distance to schooling	✓			1965 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	<ul style="list-style-type: none"> ease of providing public transport Linearly circular bus route in new location. (See EDG) 	8. distance from railway station		✓		2075 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes			✓		
		<ul style="list-style-type: none"> ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut) 	11. shortness of routes			✓	
			12. ease of slopes			✓	
			13. avoidance of nasty crossing points			✓	
		<ul style="list-style-type: none"> accessibility of business land 	14. proximity to railway			✓	
			15. proximity to GSJ on A90	✓			
	Resources	<ul style="list-style-type: none"> availability of water supply availability of drainage 	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
<ul style="list-style-type: none"> avoidance of flooding 		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
		<ul style="list-style-type: none"> loss of natural and built resources 	20. quality of agricultural land lost		✓		
21. quality of biodiversity lost					✓		
22. minerals sterilised					✓		
23. historic buildings / arch. affected					✓		
<ul style="list-style-type: none"> limited waste of resources 		24. cost of overcoming constraints		✓			
		25. provision of new services		✓			
<ul style="list-style-type: none"> likely resolution of existing problems 		26. enhancement of heritage		✓			
Social	<ul style="list-style-type: none"> accessibility of services 	27. distance to Market Square			✓		
		28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services	✓				
	<ul style="list-style-type: none"> balance of community 	32. balance of land uses provided	✓				
		33. integration of new with original town			✓		
	<ul style="list-style-type: none"> sense of place 	34. response to genius loci			✓		
		35. visual considerations			✓		
		36. disturbance from traffic			✓		
37. response to urban grain				✓			
Biodiversity	<ul style="list-style-type: none"> response to nature 	38. likely contribution to OS strategy			✓		
Totals			6	20	66	92 = 81%	

Goal Achievement Matrix: Locality

6

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope		✓			
Energy	● proximity to services	3. distance to Market Square		✓		1665 metres	
		4. distance to employment node		✓		2605 metres	
		5. distance to schooling	✓			2295 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓	2405 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes			✓		
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes			✓		
		12. ease of slopes			✓		
		13. avoidance of nasty crossing points			✓		
	● accessibility of business land	14. proximity to railway			✓		
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		
		● availability of drainage	17. ease of providing drainage		✓		
● avoidance of flooding		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected		✓			
● limited waste of resources		24. cost of overcoming constraints		✓			
		25. provision of new services		✓			
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services	27. distance to Market Square		✓			
		28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services			✓		
	● balance of community	32. balance of land uses provided			✓		
		33. integration of new with original town			✓		
	● sense of place	34. response to genius loci			✓		
		35. visual considerations			✓		
		36. disturbance from traffic			✓		
37. response to urban grain				✓			
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			3	26	66	95 = 83%	

Goal Achievement Matrix: Locality

7

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
 (Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform			✓		
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square		✓		2780 metres	
		4. distance to employment node			✓	1410 metres	
		5. distance to schooling	✓			1690 metres	
		6. distance to OS		✓			
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station		✓		1680 metres	
		9. distance to existing bus routes		✓			
		10. linearity for potential new bus routes		✓			
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓			
		13. avoidance of nasty crossing points		✓			
	● accessibility of business land	14. proximity to railway		✓			
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
● availability of drainage		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost			✓		
		21. quality of biodiversity lost			✓	Part of the site is on a SESA/SIN environment designation	
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints		✓			
		25. provision of new services		✓			
● likely resolution of existing problems		26. enhancement of heritage		✓			
	27. distance to Market Square		✓				
Social	● accessibility of services Distance is used for WEIGHTING	28. distance to employment node			✓		
		29. distance to schooling	✓				
		30. distance to OS		✓			
		31. provision of new services	✓				
		32. balance of land uses provided		✓			
	● balance of community	33. integration of new with original town		✓			
		34. response to genius loci			✓		
	● sense of place	35. visual considerations		✓			
		36. disturbance from traffic	✓				
		37. response to urban grain		✓		Adjacent to Kirkton of Fetteresso	
Biodiversity	● response to nature	38. likely contribution to OS strategy		✓			
Totals			5	42	36	83 = 73%	

Goal Achievement Matrix: Locality

8

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓			Open	
	● potential for passive solar gain	2. direction of slope	✓			North East slope	
Energy	● proximity to services	3. distance to Market Square		✓		2822m (left) under existing bridge – 2914m (right) under viaduct	
		4. distance to employment node		✓		1456m (left) – 1544m (right)	
		5. distance to schooling	✓			1736m (left) – 1824 m (right)	
		6. distance to OS		✓		Dunnottar woods, playing fields	
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station		✓		1796m (left) – 1884m (right)	
		9. distance to existing bus routes	✓			1311m (left) – 1399m (right)	
		10. linearity for potential new bus routes			✓	Wide and open	
	● ease of pedestrian/cycle routes Follow ‘Proximity to services’ routes (or shortcut)	11. shortness of routes		✓		Direct, but long (distance from Toucks I)	
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway	✓			1796m (left) – 1884m (right)	
		15. proximity to GSJ on A90		✓			
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
	27. distance to Market Square		✓		2822m (left) – 2914m (right)		
Social	● accessibility of services Distance is used for WEIGHTING	28. distance to employment node		✓		1456m (left) – 1544m (right)	
		29. distance to schooling		✓		1736m (left) – 1824 m (right)	
		30. distance to OS		✓			
		31. provision of new services	✓			However, it is a large site and adjacent to the main road links are to Kirkton of Fetteresso and between Stonehaven.	
	● balance of community	32. balance of land uses provided		✓		Slope is a constraint	
		33. integration of new with original town		✓		Adjacent to Kirkton of Fetteresso	
	● sense of place	34. response to genius loci			✓	Good views of Stonehaven and sea	
		35. visual considerations	✓			Adjacent to Kirkton of Fetteresso and A90	
		36. disturbance from traffic	✓			Adjacent to road and railway line.	
		37. response to urban grain	✓			It will be uphill and require careful design	
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			11	36	27	74 = 65%	

Goal Achievement Matrix: Locality

9

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓		Shelter belt	
	● potential for passive solar gain	2. direction of slope	✓			North East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3069m (left) – 3143m (right)	
		4. distance to employment node		✓		1699m (left) – 1773m (right)	
		5. distance to schooling		✓		1979m (left) – 2053m (right)	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓		2039m (left) – 2113m (right)
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes				✓	Wide and open
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes			✓		
		12. ease of slopes			✓		Gently sloping
		13. avoidance of nasty crossing points			✓		Have to cross over the A90 and go along Broomhill Road
	● accessibility of business land	14. proximity to railway			✓		2039m (left) – 2113m (right)
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water			✓	Reservoir, upgrade of water distribution required.
			17. ease of providing drainage			✓	On-site SUDS required and upgrade of sewerage distribution works required.
● availability of drainage		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost			✓		
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
		24. cost of overcoming constraints	✓				Road widening and/or new bridge over Cheyne Burn
● limited waste of resources		25. provision of new services	✓				
	26. enhancement of heritage			✓			
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			3069m (left) – 3143m (right)	
		28. distance to employment node		✓		1699m (left) – 1773m (right)	
		29. distance to schooling		✓		1979m (left) – 2053m (right)	
		30. distance to OS			✓		
		31. provision of new services			✓		
	● balance of community	32. balance of land uses provided			✓		It is a large site
		33. integration of new with original town	✓				Links to Kirkton of Fetteresso via existing road
	● sense of place	34. response to genius loci			✓		Good views of Stonehaven and sea.
		35. visual considerations			✓		
		36. disturbance from traffic			✓		
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			8	34	39	81 = 71%	

Goal Achievement Matrix: Locality

10

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓		Dips in places	
	● potential for passive solar gain	2. direction of slope		✓		East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3234m (left) – 3101m (right)	
		4. distance to employment node		✓		1864m (left) – 1731m (right)	
		5. distance to schooling		✓		2144m (left) – 2011m (right)	
		6. distance to OS			✓		
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓	2204m (left) – 2071m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	Wide and open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2204m (left) – 2071m (right)	
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			3234m (left) – 3101m (right)	
		28. distance to employment node		✓		1864m (left) – 1731m (right)	
		29. distance to schooling		✓		2144m (left) – 2011m (right)	
		30. distance to OS		✓			
		31. provision of new services			✓		
	● balance of community	32. balance of land uses provided			✓	It is a large site	
		33. integration of new with original town	✓			Not adjacent to any settlements and A90 divides this site in two.	
	● sense of place	34. response to genius loci		✓			
		35. visual considerations		✓			
		36. disturbance from traffic	✓				
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			8	34	36	78 = 68%	

Goal Achievement Matrix: Locality

11

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform			✓	Shelter belt	
	● potential for passive solar gain	2. direction of slope	✓			North East slope	
Energy	● proximity to services	3. distance to Market Square		✓		2533m (left) – 3342m (right)	
		4. distance to employment node		✓		2163m (left) – 1972m (right)	
		5. distance to schooling		✓		2443m (left) – 2252m (right)	
		6. distance to OS		✓			
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station		✓		2503m (left) – 2312m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	Adj to good road network	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2503m (left) – 2312m (right)	
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected	✓			Archaeological cropmark	
● limited waste of resources		24. cost of overcoming constraints			✓		
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage	✓					
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square		✓		2533m (left) – 3342m (right)	
		28. distance to employment node		✓		2163m (left) – 1972m (right)	
		29. distance to schooling		✓		2443m (left) – 2252m (right)	
		30. distance to OS		✓			
		31. provision of new services		✓			
	● balance of community	32. balance of land uses provided		✓		Noise and vehicle movements area constraint for dwellings	
		33. integration of new with original town		✓		GSJ	
	● sense of place	34. response to genius loci		✓			
		35. visual considerations		✓			
		36. disturbance from traffic	✓				
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy		✓			
Totals			7	44	27	78 = 68%	

Goal Achievement Matrix: Locality

12

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓			Open landscape	
	● potential for passive solar gain	2. direction of slope		✓		East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3289m (left under bridge) – 3363m (right under viaduct)	
		4. distance to employment node		✓		1919m (left) – 1993m (right)	
		5. distance to schooling		✓		2199m (left) – 2273m (right)	
		6. distance to OS			✓		
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location.	8. distance from railway station		✓		2259m (left) – 2333m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	Wide and open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2259m (left) – 2333m (right)	
		15. proximity to GSJ on A90		✓			
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING (x2)	27. distance to Market Square	✓			3289m (left) – 3363m (right)	
		28. distance to employment node		✓		1919m (left) – 1993m (right)	
		29. distance to schooling		✓		2199m (left) – 2273m (right)	
		30. distance to OS			✓		
		31. provision of new services			✓	Central location. Possibly suitable for a school	
	● balance of community	32. balance of land uses provided			✓	It is a large site	
		33. integration of new with original town	✓			But good links via GSJ and Kirkton of Fetteresso	
	● sense of place	34. response to genius loci		✓			
		35. visual considerations		✓			
		36. disturbance from traffic			✓		
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			8	34	39	81 = 71%	

Goal Achievement Matrix: Locality

13

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓			Open	
	● potential for passive solar gain	2. direction of slope		✓		East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3512m (left) – 3482m (right)	
		4. distance to employment node		✓		2142m (left) – 2112m (right)	
		5. distance to schooling		✓		2422m (left) – 2392m (right)	
		6. distance to OS		✓			
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓	2482m (left) – 2452m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	Wide and open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2482m (left) – 2452m (right)	
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● availability of drainage		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● avoidance of flooding		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● loss of natural or built resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● limited waste of resources	26. enhancement of heritage		✓				
	27. distance to Market Square	✓			3512m (left) – 3482m (right)		
Social	● accessibility of services Distance is used for WEIGHTING	28. distance to employment node		✓		2142m (left) – 2112m (right)	
		29. distance to schooling		✓		2422m (left) – 2392m (right)	
		30. distance to OS		✓			
		31. provision of new services			✓	Central location, and possibly suitable for a school or infrastructure	
	● balance of community	32. balance of land uses provided			✓	(3) It is a large site	
		33. integration of new with original town	✓			But good links via GSJ	
	● sense of place	34. response to genius loci			✓		
		35. visual considerations			✓		
		36. disturbance from traffic			✓		
		37. response to urban grain	✓				
	Biodiversity	● response to nature	38. likely contribution to OS strategy			✓	
Totals			8	32	42	82 = 72%	

Goal Achievement Matrix: Locality

14

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓			Open	
	● potential for passive solar gain	2. direction of slope		✓		East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3588m (left) – 3649m (right)	
		4. distance to employment node		✓		2218m (left) – 2279m (right)	
		5. distance to schooling		✓		2498m (left) – 2559m (right)	
		6. distance to OS		✓			
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓	2558m (left) – 2619m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2558m (left) – 2619m (right)	
		15. proximity to GSJ on A90		✓			
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
		● availability of drainage	17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
		● loss of natural or built resources	20. quality of agricultural land lost		✓		
			21. quality of biodiversity lost			✓	
			22. minerals sterilised			✓	
● limited waste of resources		23. historic buildings / arch. affected			✓		
		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
● likely resolution of existing problems		25. provision of new services	✓				
	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			3588m (left) – 3649m (right)	
		28. distance to employment node		✓		2218m (left) – 2279m (right)	
		29. distance to schooling		✓		2498m (left) – 2559m (right)	
		30. distance to OS		✓			
		31. provision of new services			✓		
	● balance of community	32. balance of land uses provided		✓		Good road links to the GSJ	
		33. integration of new with original town	✓			But GSJ	
	● sense of place	34. response to genius loci			✓		
		35. visual considerations			✓		
		36. disturbance from traffic			✓		
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			8	36	36	81 = 71%	

Goal Achievement Matrix: Locality

15

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓		If shelter belt	
	● potential for passive solar gain	2. direction of slope	✓			North East Slope	
Energy	● proximity to services	3. distance to Market Square	✓			3799m (left) – 3788m (right)	
		4. distance to employment node		✓		2429m (left) – 2418m (right)	
		5. distance to schooling		✓		2709m (left) – 2698m (right)	
		6. distance to OS	✓				
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station		✓		2769m (left) – 2758m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes		✓		Narrow, but on existing road	
	● ease of pedestrian/cycle routes Follow ‘Proximity to services’ routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2769m (left) – 2758m (right)	
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● availability of drainage		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
● limited waste of resources		25. provision of new services	✓				
	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			3799m (left) – 3788m (right)	
		28. distance to employment node		✓		2429m (left) – 2418m (right)	
		29. distance to schooling		✓		2709m (left) – 2698m (right)	
		30. distance to OS	✓				
	● balance of community	31. provision of new services		✓			
		32. balance of land uses provided		✓		Long site suitable for more than one land use	
		33. integration of new with original town	✓			But good links via GSJ	
	● sense of place	34. response to genius loci		✓			
		35. visual considerations		✓			
36. disturbance from traffic			✓				
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy		✓			
Totals			10	42	24	76 = 67%	

Goal Achievement Matrix: Locality

16

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform			✓	Shelter belt	
	● potential for passive solar gain	2. direction of slope		✓		East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3730m (left) – 3834m (right)	
		4. distance to employment node		✓		2360m (left) – 2464m (right)	
		5. distance to schooling		✓		2640m (left) – 2744m (right)	
		6. distance to OS		✓			
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓	2700m (left) – 2804m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	Wide and open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway		✓		2700m (left) – 2804m (right)	
		15. proximity to GSJ on A90		✓			
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
		● availability of drainage	17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			3730m (left) – 3834m (right)	
		28. distance to employment node		✓		2360m (left) – 2464m (right)	
		29. distance to schooling		✓		2640m (left) – 2744m (right)	
		30. distance to OS		✓			
		31. provision of new services			✓	It could provide new areas of public open space or a school	
	● balance of community	32. balance of land uses provided			✓	It is a large site	
		33. integration of new with original town	✓			But good links via Kirkton of Fetteresso (north) and GSJ towards the south.	
	● sense of place	34. response to genius loci			✓		
		35. visual considerations		✓			
		36. disturbance from traffic			✓		
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			7	36	39	82 = 72%	

Goal Achievement Matrix: Locality

17

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓		Trees sheltering northern part of site	
	● potential for passive solar gain	2. direction of slope		✓		East slope	
Energy	● proximity to services	3. distance to Market Square	✓			3956m (left) – 4090m (right)	
		4. distance to employment node		✓		2586m (left) – 2720m (right)	
		5. distance to schooling		✓		2866m (left) – 3000m (right)	
		6. distance to OS		✓			
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			2926m (left) – 3060m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes			✓	Wide and open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway	✓			2926m (left) – 3060m (right)	
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● availability of drainage		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected		✓		Archaeology – possible ring ditch, faint cropmark	
● limited waste of resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage	✓					
	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			3956m (left) – 4090m (right)	
28. distance to employment node			✓		2586m (left) – 2720m (right)		
29. distance to schooling			✓		2866m (left) – 3000m (right)		
30. distance to OS			✓				
31. provision of new services			✓		Could conform to public open space		
● balance of community	32. balance of land uses provided			✓	It is a large site		
	33. integration of new with original town	✓			Poor links		
	● sense of place	34. response to genius loci			✓		
		35. visual considerations	✓				
36. disturbance from traffic				✓			
● response to nature	37. response to urban grain	✓					
	38. likely contribution to OS strategy			✓			
Totals			12	32	30	74 = 65%	

Goal Achievement Matrix: Locality

18

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform			✓	Shelter belt and sloping	
	● potential for passive solar gain	2. direction of slope	✓			North East slope	
Energy	● proximity to services	3. distance to Market Square	✓			4307m (left) – 4437m (right)	
		4. distance to employment node		✓		2937m (left) – 3067m (right)	
		5. distance to schooling	✓			3217m (left) – 3347m (right)	
		6. distance to OS		✓			
		7. distance to potential OS			✓	Large site – good possibilities	
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			3277m (left) – 3407m (right)	
		9. distance to existing bus routes	✓				
		10. linearity for potential new bus routes	✓			Wide and open	
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓		Gently sloping	
		13. avoidance of nasty crossing points		✓		Have to cross over the A90 and go along Broomhill Road	
	● accessibility of business land	14. proximity to railway	✓			3277m (left) – 3407m (right)	
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		Reservoir, upgrade of water distribution required.
			17. ease of providing drainage		✓		On-site SUDS required and upgrade of sewerage distribution works required.
● avoidance of flooding		18. flooding potential			✓	Sloping ground	
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost		✓			
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓			Road widening and/or new bridge over Cheyne Burn	
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓			4307m (left) – 4437m (right)	
		28. distance to employment node		✓		2937m (left) – 3067m (right)	
		29. distance to schooling	✓			3217m (left) – 3347m (right)	
		30. distance to OS		✓			
		31. provision of new services	✓				
	● balance of community	32. balance of land uses provided	✓			Site is on the edge of the search area and is small	
		33. integration of new with original town	✓			Poor links	
	● sense of place	34. response to genius loci			✓		
		35. visual considerations		✓			
		36. disturbance from traffic			✓		
37. response to urban grain		✓					
Biodiversity	● response to nature	38. likely contribution to OS strategy	✓				
Totals			17	24	27	68 = 60%	

Goal Achievement Matrix: Locality

19

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square		✓		1838 metres	
		4. distance to employment node		✓		2978 metres	
		5. distance to schooling	✓			2908 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			3018 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes	✓				
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes			✓		
		12. ease of slopes		✓			
		13. avoidance of nasty crossing points			✓		
	● accessibility of business land	14. proximity to railway		✓			
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
● availability of drainage		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost			✓		
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints		✓		Road widening	
		25. provision of new services			✓		
● likely resolution of existing problems		26. enhancement of heritage		✓			
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square		✓			
		28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services		✓		Access will have to be improved	
	● balance of community	32. balance of land uses provided		✓		Limited access for employment land users	
		33. integration of new with original town		✓		Pedestrian links required	
	● sense of place	34. response to genius loci	✓				
		35. visual considerations			✓		
		36. disturbance from traffic	✓				
37. response to urban grain			✓				
Biodiversity	● response to nature	38. likely contribution to OS strategy		✓			
Totals			7	32	45	84	

Goal Achievement Matrix: Locality

20

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope			✓		
Energy	● proximity to services	3. distance to Market Square		✓		2150 metres	
		4. distance to employment node	✓			3290 metres	
		5. distance to schooling	✓			3220 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			3330 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes	✓				
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes			✓		
		12. ease of slopes		✓			
		13. avoidance of nasty crossing points			✓		
	● accessibility of business land	14. proximity to railway		✓			
		15. proximity to GSJ on A90	✓				
	Resources	● availability of water supply	16. ease of providing water	✓			
		● availability of drainage	17. ease of providing drainage	✓			
● avoidance of flooding		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
		● loss of natural and built resources	20. quality of agricultural land lost			✓	
			21. quality of biodiversity lost			✓	
			22. minerals sterilised			✓	
● limited waste of resources		23. historic buildings / arch. affected			✓		
		24. cost of overcoming constraints	✓			New bridge required for vehicles/ road widening	
● likely resolution of existing problems		25. provision of new services			✓		
	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square	✓				
		28. distance to employment node	✓				
		29. distance to schooling		✓			
		30. distance to OS			✓		
		31. provision of new services		✓		However, access must be improved	
	● balance of community	32. balance of land uses provided	✓			Issue of noise from A90 & access must be considered	
		33. integration of new with original town		✓			
	● sense of place	34. response to genius loci	✓				
		35. visual considerations		✓			
		36. disturbance from traffic		✓			
37. response to urban grain			✓				
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			12	22	45	91 = 80%	

Goal Achievement Matrix: Locality

21

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope		✓			
Energy	● proximity to services	3. distance to Market Square		✓		2453 metres	
		4. distance to employment node	✓			3593 metres	
		5. distance to schooling	✓			3523 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			3633 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes			✓		
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes		✓			
		13. avoidance of nasty crossing points		✓			
	● accessibility of business land	14. proximity to railway		✓			
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
● availability of drainage		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
		20. quality of agricultural land lost		✓			
● loss of natural and built resources		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints		✓			
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
	27. distance to Market Square		✓				
Social	● accessibility of services Distance is used for WEIGHTING	28. distance to employment node	✓				
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services		✓		The site crosses the A92 and becomes more separate from Stonehaven	
		32. balance of land uses provided			✓	It is a large site with access to the A90	
	● balance of community	33. integration of new with original town	✓				
		34. response to genius loci		✓			
	● sense of place	35. visual considerations			✓		
		36. disturbance from traffic		✓			
		37. response to urban grain	✓				
		38. likely contribution to OS strategy			✓		
Biodiversity	● response to nature			✓			
Totals			8	32	42	82 = 72%	

Goal Achievement Matrix: Locality

22

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope		✓			
Energy	● proximity to services Distance to site from across node D =1800	3. distance to Market Square		✓		2350 metres	
		4. distance to employment node	✓			3490 metres	
		5. distance to schooling	✓			3420 metres	
		6. distance to OS		✓		Part of the site identified in the local plan for employment use	
		7. distance to potential OS		✓			
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			3530 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes		✓			
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes	✓				
		13. avoidance of nasty crossing points		✓			
	● accessibility of business land	14. proximity to railway	✓				
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		
			17. ease of providing drainage		✓		
● availability of drainage		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
● loss of natural and built resources		20. quality of agricultural land lost			✓		
		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓				
		25. provision of new services	✓				
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square		✓			
		28. distance to employment node	✓				
		29. distance to schooling	✓				
		30. distance to OS		✓			
		31. provision of new services	✓			The site is almost isolated	
	● balance of community	32. balance of land uses provided		✓		Fragmented site (2 roads cut through)	
		33. integration of new with original town		✓		New road required	
	● sense of place	34. response to genius loci		✓			
		35. visual considerations		✓			
		36. disturbance from traffic		✓			
37. response to urban grain				✓			
Biodiversity	● response to nature	38. likely contribution to OS strategy	✓				
Totals			12	34	27	73 = 64%	

Goal Achievement Matrix: Locality 23

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)
(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform	✓				
	● potential for passive solar gain	2. direction of slope		✓			
Energy	● proximity to services	3. distance to Market Square		✓		2191 metres	
		4. distance to employment node	✓			3331 metres. The local plan allocates part of the site as employment use.	
		5. distance to schooling	✓			3261 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station	✓			3371 metres	
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes		✓			
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes		✓			
		12. ease of slopes	✓				
		13. avoidance of nasty crossing points		✓			
	● accessibility of business land	14. proximity to railway	✓				
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		
		● availability of drainage	17. ease of providing drainage		✓		
● avoidance of flooding		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
		20. quality of agricultural land lost			✓		
● loss of natural and built resources		21. quality of biodiversity lost			✓		
		22. minerals sterilised			✓		
		23. historic buildings / arch. affected			✓		
● limited waste of resources		24. cost of overcoming constraints	✓				
		25. provision of new services			✓		
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square		✓			
		28. distance to employment node	✓				
		29. distance to schooling	✓				
		30. distance to OS			✓		
	● balance of community	31. provision of new services			✓	Once access has been improved into Stonehaven there will be good opportunities for development	
		32. balance of land uses provided			✓	It is a large site with good access from the A90	
	● sense of place	33. integration of new with original town		✓		New Road required	
		34. response to genius loci		✓			
		35. visual considerations		✓			
		36. disturbance from traffic		✓			
37. response to urban grain			✓		Part of the site is allocated as employment land in ALP.		
Biodiversity	● response to nature	38. likely contribution to OS strategy			✓		
Totals			9	28	45	82 = 72%	

Goal Achievement Matrix: Locality

24

Ratings on a scale of 3: 3 good; 2 average; 1 bad. All distances (GSJ excepted)

(Take average of crow flight precinct rating together with transport node distance unless otherwise stated)

	Criteria	Sub-Criteria	1	2	3	Notes	
Climate	● shelter from cold winds	1. planting or landform		✓			
	● potential for passive solar gain	2. direction of slope		✓			
Energy	● proximity to services	3. distance to Market Square		✓		1520 metres	
		4. distance to employment node		✓		2560 metres	
		5. distance to schooling	✓			2590 metres	
		6. distance to OS			✓		
		7. distance to potential OS			✓		
	● ease of providing public transport Linearly circular bus route in new location. (See EDG)	8. distance from railway station			✓		2690 metres
		9. distance to existing bus routes			✓		
		10. linearity for potential new bus routes			✓		
	● ease of pedestrian/cycle routes Follow 'Proximity to services' routes (or shortcut)	11. shortness of routes			✓		
		12. ease of slopes	✓				
		13. avoidance of nasty crossing points			✓		
	● accessibility of business land	14. proximity to railway			✓		
		15. proximity to GSJ on A90			✓		
	Resources	● availability of water supply	16. ease of providing water		✓		
		● availability of drainage	17. ease of providing drainage		✓		
● avoidance of flooding		18. flooding potential			✓		
		19. likely spill-over downstream			✓		
		● loss of natural and built resources	20. quality of agricultural land lost			✓	
			21. quality of biodiversity lost			✓	
22. minerals sterilised					✓		
23. historic buildings / arch. affected				✓			
● limited waste of resources		24. cost of overcoming constraints	✓				
		25. provision of new services			✓		
● likely resolution of existing problems	26. enhancement of heritage		✓				
Social	● accessibility of services Distance is used for WEIGHTING	27. distance to Market Square		✓			
		28. distance to employment node		✓			
		29. distance to schooling	✓				
		30. distance to OS			✓		
		31. provision of new services			✓	Site will have good access to Stonehaven once the road is upgraded	
	● balance of community	32. balance of land uses provided			✓	Large site with good access from A90	
		33. integration of new with original town		✓			
	● sense of place	34. response to genius loci		✓			
		35. visual considerations			✓	Adjacent to main road into Stonehaven	
		36. disturbance from traffic		✓			
37. response to urban grain			✓				
Biodiversity	● response to nature	38. likely contribution to OS strategy		✓			
Totals			4	32	54	90 = 79%	