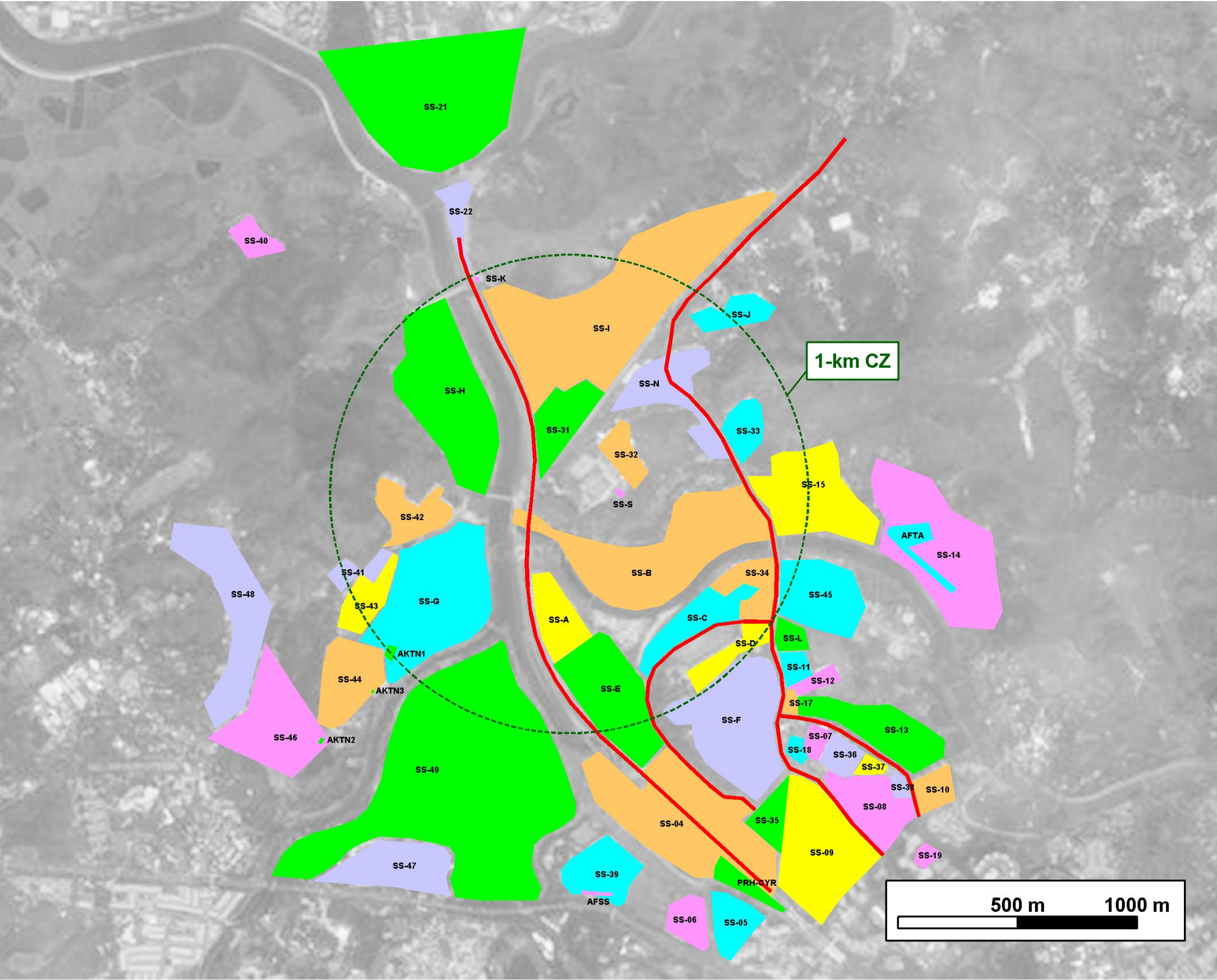


Appendix 9.1 Population Distribution and Population Assumptions

Figure 1 Construction Stage - Case 1 (2023, No NDAs Development) and Operation Stage - Case 4 (2032, No NDAs Development)



Population Assumptions

Construction Stage - Case 1 (2023 no NDA): Surrounding population projected at 2023 (no NDAs development). It aims to obtain the background risk level without NDAs development. Population in the vicinity of SSWTW is updated and projected to the future year.

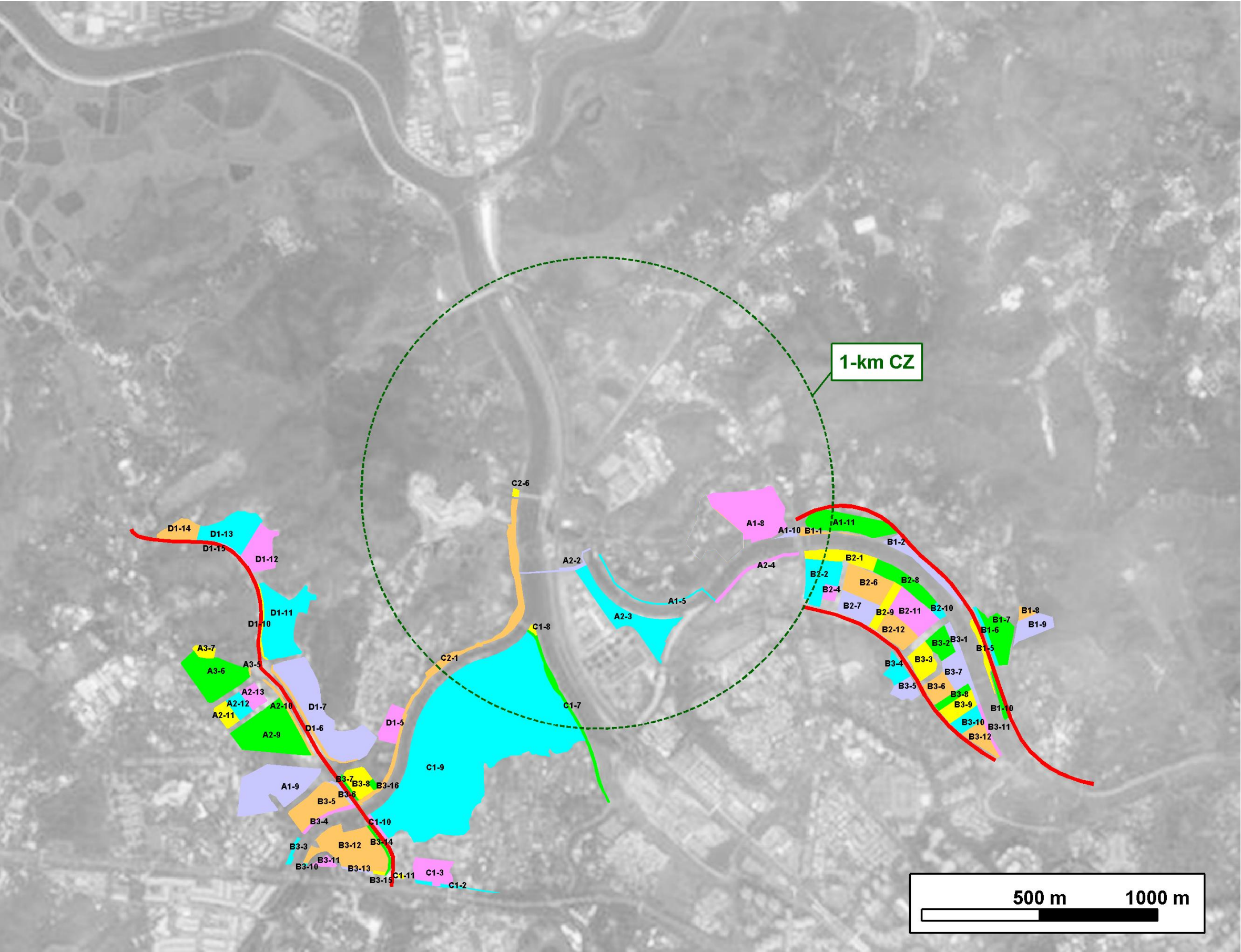
Operation Stage - Case 4 (2032 no NDA): Surrounding population projected at 2032 (no NDAs development). It aims to obtain the background risk level without NDAs development. Population in the vicinity of SSWTW is updated and projected to the future year.

Ref.	Name	Population (2012)	Population (2023)	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor ¹	No. of Storeys	Remark
SS-A	Abattoir	278	278	278	100%	65%	65%	65%	65%	0.95	1	4	Population adopted from the Reassessment Study
SS-B	Ponds and Agriculture Land	150	150	150	100%	50%	50%	70%	50%	0.95	1	2	Site survey
SS-C	Agriculture Land	10	10	10	100%	50%	50%	70%	50%	0.95	1	2	Site survey
SS-D	Man Kok Village	540	609	672	100%	50%	50%	70%	50%	0.99	1	3	About 45 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-E	Existing Sewage Treatment Works - Operation phase	66	66	66	17%	50%	50%	17%	100%	0.95	1	3	Population adopted from the Reassessment Study
	Existing Sewage Treatment Works - Construction phase	0	40	0	0%	100%	100%	0%	100%	0.00	1	1	Construction phase for integration works for the existing SWHSTW, Estimate 40 workers at the construction site
SS-F	Sheung Shui Village	4800	5413	5973	100%	50%	50%	70%	50%	0.99	1	3	About 400 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-G	Ponds and Agriculture Land	30	30	30	100%	50%	50%	70%	50%	0.95	1	2	Site survey
SS-H	Houses Squatters and Ponds	150	150	150	100%	50%	50%	70%	50%	0.95	1	1	Site survey
SS-I	Agricultural Land	290	290	290	100%	50%	50%	70%	50%	0.95	1	2	Population adopted from the Reassessment Study
SS-J	Border District Police Headquarters	150	150	150	50%	100%	100%	50%	100%	0.99	1	4	Population adopted from the Reassessment Study
SS-K	Lo Wu Staff Quarters	84	84	84	100%	50%	50%	70%	50%	0.99	1	4	Population adopted from the Reassessment Study
SS-L	Government Office & Quarantine	129	129	129	2%	20%	20%	5%	100%	0.95	1	6	Population adopted from the Reassessment Study
SS-N	Open Storage and Vehicle Repairing	60	60	60	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-S	WTW Staff Quarters	40	40	40	100%	50%	50%	70%	50%	0.99	1	1	Population adopted from the Reassessment Study
SS-04	Bus Depot & Industrial Area	7123	7123	7123	2%	20%	20%	5%	100%	0.98	1	5	Population adopted from the Reassessment Study
SS-05	Choi Po Court	5638	5638	5638	100%	50%	50%	70%	50%	0.99	1	33	2006 by-census
SS-06	Tai Tau Leng Village	720	812	896	100%	50%	50%	70%	50%	0.99	1	3	About 60 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-07	Industrial Training Center	1170	1170	1170	0%	50%	50%	0%	100%	1.00	1	7	Population adopted from the Reassessment Study
SS-08	North District Sports Ground	864	864	864	0%	50%	50%	70%	50%	0.50	1	4	Population adopted from the Reassessment Study
SS-09	Shek Wu Hui Residential Buildings & Offices	6086	6086	6086	95%	50%	50%	65%	50%	0.95	1	5	2006 by-census. Estimate average 5 storeys.
SS-10	Woodland Crest	1816	1816	1816	100%	50%	50%	70%	50%	0.99	1	9	2006 by-census
SS-11	2 Fung Kai Secondary Schools	1131	1131	1131	0%	50%	50%	0%	100%	0.98	1	3	Estimation from public info on internet
SS-12	2 Fung Kai Primary Schools	1379	1379	1379	0%	50%	50%	0%	100%	0.98	3.3	3	Estimation from public info on internet
SS-13	Tin Ping Shan Tsuen	1800	2030	2240	100%	50%	50%	70%	50%	0.99	1	3	About 150 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-14	Sheung Shui Wa Shan (Village)	720	812	896	100%	50%	50%	70%	50%	0.99	1	3	About 60 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-15	Hung Kiu San Tsuen	360	406	448	100%	50%	50%	70%	50%	0.99	1	3	About 30 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per

Ref.	Name	Population (2012)	Population (2023)	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor	No. of Storeys	Remark
													storey.
SS-17	Fung Kai kindergarten	452	452	452	0%	50%	50%	0%	100%	0.98	3.3	2	Estimation from public info on internet
SS-18	Fung Kai Liu Man Shek Tong Secondary School	1188	1188	1188	0%	50%	50%	0%	100%	0.98	1	9	Estimation from public info on internet
SS-19	Shek Wu Hui Public (Primary) School	829	829	829	0%	50%	50%	0%	100%	0.98	3.3	7	Estimation from public info on internet
SS-21	Shenzhen	20000	20000	20000	50%	90%	90%	100%	50%	0.90	1	10	Estimated population in area of Shenzhen within 1 km of Lo Wu station
SS-22	Lo Wu Station	8000	8000	8000	20%	100%	100%	100%	50%	0.90	1	2	Assume population equivalent to 2 crush-loaded trains + staff of immigration department.
SS-31	Ponds	5	5	5	100%	50%	50%	70%	50%	0.95	1	1	Site survey
SS-32	Open Storage and Vehicle Repairing	15	15	15	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-33	Open Storage and Vehicle Repairing	25	25	25	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-34	Open Storage and Vehicle Repairing	30	30	30	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-35	Shek Wu Hui Playground	100	100	100	4%	40%	40%	100%	40%	0.00	1	1	Site survey
SS-36	Tsui Lai Garden	6515	6515	6515	100%	50%	50%	70%	50%	0.99	1	29	2006 by-census
SS-37	Fung Kai Care and Attention Home for the Elderly	354	354	354	100%	100%	100%	100%	100%	1.00	3.3	7	Estimation from public info on internet
SS-38	Lee Chi Tat Memorial School (Primary)	1038	1038	1038	0%	50%	50%	0%	100%	0.98	3.3	7	Estimation from public info on internet
SS-39	Tsung Pak Long	840	947	1045	100%	50%	50%	70%	50%	0.99	1	3	About 70 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-40	Liu Pok Village	360	406	448	100%	50%	50%	70%	50%	0.99	1	3	About 30 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-41	Lo Wu Saddle Club	40	40	40	5%	50%	50%	100%	70%	0.20	1	1	Estimation from public info on internet
SS-42	Lo Wu Correctional Institution	2039	2039	2039	95%	95%	95%	100%	100%	100% (night and peak) 85% (weekend day) 92% (working day)	1 (Immobile)	4	The redeveloped LWCI will contain a maximum of 1,400 inmates, 554 staff and 85 visitors, according to "Project Profile for Reuse of Treated Sewage Effluent from Redeveloped Lo Wu Correctional Institution, 2008".
SS-43	Tsung Yuen (Village)	360	406	448	100%	50%	50%	70%	50%	0.99	1	3	About 30 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-44	Ho Sheung Heung (Village)	1800	2030	2240	100%	50%	50%	70%	50%	0.99	1	3	About 150 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-45	Open Storage and Vehicle Repairing	35	35	35	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-46	Open Storage	70	70	70	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-47	Yin Kong Tsuen (Village)	780	879	970	100%	50%	50%	70%	50%	0.99	1	3	About 65 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-48	Open Storage	100	100	100	0%	50%	50%	0%	100%	0.00	1	1	Site survey
SS-49	Ponds and Agriculture Land	50	50	50	100%	50%	50%	70%	50%	0.95	1	2	Site survey
SS-R	MTR East Rail	3809	3809	3809	20%	100%	100%	50%	50%	1.00	1	1	Population adopted from the Reassessment Study (crush-loaded train)
SS-O	Jockey Club Road	376	296	324	7%	100%	25%	15%	15%	0.00	1	1	Year 2012: Estimation from ATC 2011. Year 2023 and 2032: Estimation from the NDA development traffic forecast (without NDA development scenario).
SS-P	Man Kam To Road	592	580	680	7%	100%	25%	15%	15%	0.00	1	1	Year 2012: Estimation from ATC 2011. Year 2023 and 2033: Estimation from the NDA development traffic forecast (without NDA development scenario).

Ref.	Name	Population (2012)	Population (2023)	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerabl e Populatio n Factor	No. of Storeys	Remark
SS-Q	Po Wan Road	13	47	54	26%	100%	100%	61%	61%	0.00	1	1	Year 2012: Estimation from ATC 2011. Year 2023 and 2034: Estimation from the NDA development traffic forecast (without NDA development scenario).
SS-TPRd	Tin Ping Road	32	112	124	7%	100%	25%	15%	15%	0.00	1	1	Year 2012: Estimation from ATC 2011. Year 2023 and 2035: Estimation from the NDA development traffic forecast (without NDA development scenario).
PRH-CYR	Public Rental Housing at Choi Yuen Road	0	2800	2800	100%	50%	50%	70%	50%	0.99	1	27 - 30	Approved development
AFSS	Approved Development - Village Houses at Tsung Pak Long	0	7	7	100%	50%	50%	70%	50%	0.99	1	3	Approved development
AFTA	Approved Development - Village Houses at Sheung Shui Wa Shan	0	24	24	100%	50%	50%	70%	50%	0.99	1	3	Approved development
AKTN1	Approved Development - Village Houses at Ho Sheung Heung - Site 1	0	20	20	100%	50%	50%	70%	50%	0.99	1	3	Approved development
AKTN2	Approved Development - Village Houses at Ho Sheung Heung - Site 2	0	7	7	100%	50%	50%	70%	50%	0.99	1	3	Approved development
AKTN3	Approved Development - Village Houses at Ho Sheung Heung - Site 3	0	4	4	100%	50%	50%	70%	50%	0.99	1	3	Approved development

Figure 2 Construction Stage - Case 2 (2023, NDAs Population Only) and Operation Stage - Case 5 (2032, NDAs Population Only)



Population Assumptions

Construction Stage - Case 2 (2023 NDA only): Forecast population at NDAs at 2023 only. The purpose is to investigate the additional risk caused by the NDAs development.

Operation Stage - Case 5 (2032 NDA only): Forecast population at NDAs at 2032 only. The purpose is to investigate the additional risk caused by the NDAs development.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Indoor Ratio	Vulnerable Population Factor	No. of Storeys	Remarks
FLN-A1-5	Amenity	45	45	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-A1-8	Government Police Driving and Traffic Training Complex	0	375	3%	100%	100%	3%	100%	20%	1	7	Estimated population from HKPF.
	Government Police Driving and Traffic Training Complex Construction	25	0	0%	100%	100%	0%	100%	0%	1	1	Estimate 25 workers at the construction site of HKPF facilities.
FLN-A1-10	Amenity	7	7	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-A1-11	Government Weapon Training Division	0	90	0%	100%	100%	0%	100%	50%	1	5	Estimated population from HKPF.
	Government Weapon Training Division Construction	20	0	0%	100%	100%	0%	100%	0%	1	1	Estimate 20 workers at the construction site of HKPF facilities.
FLN-A2-2	Amenity	27	27	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-A2-3	Sewage Plant Extension	0	20	17%	50%	50%	17%	100%	95%	1	1	Estimated population by the Design Engineer.
	Sewage Plant Extension Construction	40	0	0%	100%	100%	0%	100%	0%	1	1	Estimate 40 workers at the construction site of sewage plant extension work.
FLN-A2-4	Amenity	31	31	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-B1-1	Open Space	10	10	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-B1-2	Open Space	29	29	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-B1-5	Open Space	34	34	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B1-6	Amenity	32	32	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
FLN-B1-7	Residential Zone 2	1039	2079	100%	50%	50%	70%	50%	99%	1	10 - 15	NDA plan
FLN-B1-8	Residential Zone 4	24	24	100%	50%	50%	70%	50%	99%	1	3	NDA plan. Village Resite
FLN-B1-9	Residential Zone 3	217	435	100%	50%	50%	70%	50%	99%	1	8 - 12	NDA plan.
FLN-B1-10	Open Space	24	24	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B2-1	Open Space	130	130	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B2-2	Public Transport Depot and Potential RCP	203	203	2%	20%	20%	5%	100%	98%	1	6	Estimated 200 employees working in PTD and 3 employees working in RCP.
FLN-B2-4	Government Reserve	0	0	\	\	\	\	\	\	\	5	Government Reserve.
FLN-B2-6	Public Rental Housing	2163	4326	100%	50%	50%	70%	50%	99%	1	20 - 25	NDA plan.
FLN-B2-7	Public Rental Housing	1970	3941	100%	50%	50%	70%	50%	99%	1	25 - 35	NDA plan.
	Care and Attention Home for Severely Disabled Persons	60	60	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan -Care and Attention Home for Severely Disabled Persons. Capacity = 50 (from G/IC Assessment) Assume no. of staff = 10 (1 home manager, 2 ancillary workers, 4 Care workers, 1 nurse and 2 Health workers) based on info from Legislative Council Bills Committee on Residential Care Homes (Persons with Disabilities) Bill LC Paper No. CB(2)80/10-11(01) dated 27 September 2010
	Kindergarten	226	226	0%	50%	50%	0%	100%	99%	3.3	1	Population estimated from NDA plan.
FLN-B2-8	Open Space	159	159	4%	40%	40%	100%	40%	0%	1	1	Playground. Assume 0.01 person/m2.
FLN-B2-9	Open Space	82	82	4%	40%	40%	100%	40%	0%	1	1	Playground. Assume 0.01 person/m2.
FLN-B2-10	Open Space	23	23	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B2-11	Public Rental Housing	2417	4294	100%	50%	50%	70%	50%	99%	1	20 - 25	NDA plan.
FLN-B2-12	Public Rental Housing	1863	3727	100%	50%	50%	70%	50%	99%	1	25 - 35	NDA plan.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Indoor Ratio	Vulnerable Population Factor	No. of Storeys	Remarks
	Day Care Centre for the Elderly	53	53	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan - Day Care Centre for the Elderly. Assume Staff: Elderly = 1:3 based on info from Hong Kong Council of Social Service and Health and Welfare Bureau.
	Hostel for Severely Disabled Persons	59	59	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan - Hostel for Severely Disabled Persons. Capacity = 50 (from G/IC Assessment) Assume no. of staff = 9 (1 home manager, 2 ancillary workers, 3 Care workers, 1 nurse and 2 Health workers) based on info from Legislative Council Bills Committee on Residential Care Homes (Persons with Disabilities) Bill LC Paper No. CB(2)80/10-11(01) dated 27 September 2010
	Post Office	6	6	2%	20%	20%	5%	100%	95%	1	1	NDA plan - Post office Assume no. of staff = 6 based on Public Accounts Committee Report.
FLN-B3-1	Open Space	49	49	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B3-2	Public Rental Housing	969	1939	100%	50%	50%	70%	50%	99%	1	20 - 25	NDA plan.
FLN-B3-3	Public Rental Housing	1492	2985	100%	50%	50%	70%	50%	99%	1	25 - 35	NDA plan.
	Hostel for Moderately Mentally Handicapped Persons	54	54	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan - Hostel for Moderately Mentally Handicapped Persons Capacity = 50 (from G/IC Assessment) Assume no. of staff = 4 (1 home manager, 1 ancillary workers, 2 Care workers) based on info from Legislative Council Bills Committee on Residential Care Homes (Persons with Disabilities) Bill LC Paper No. CB(2)80/10-11(01) dated 27 September 2010
FLN-B3-4	Educational Primary School	414	829	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
FLN-B3-5	Educational Primary School	414	829	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
FLN-B3-6	Residential Zone 2 (with Commercial)	586	1173	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
	Kindergarten	226	226	0%	50%	50%	0%	100%	99%	3.3	1	Population estimated from NDA plan for kindergartens: 6 classrooms (2 x 60 half-day places + 4 x 20 full-day places), 200 children + 21 teachers. Assume 5 staff.
FLN-B3-7	Residential Zone 2	585	1171	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
FLN-B3-8	Open Space	50	50	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
FLN-B3-9	Residential Zone 2	591	1183	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
FLN-B3-10	Educational Secondary School	650	1301	0%	50%	50%	0%	100%	98%	1	8	Population estimated from NDA plan.
FLN-B3-11	Open Space	32	32	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B3-12	Educational Primary School	414	829	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
FLN-BP	FLN Bypass	0	336	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
FLN-LR1to4	FLN LR1 to LR4	36	52	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
KTN-A1-9	Residential Zone 2	2857	5715	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
KTN-A2-9	Residential Zone 2	2575	5150	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.

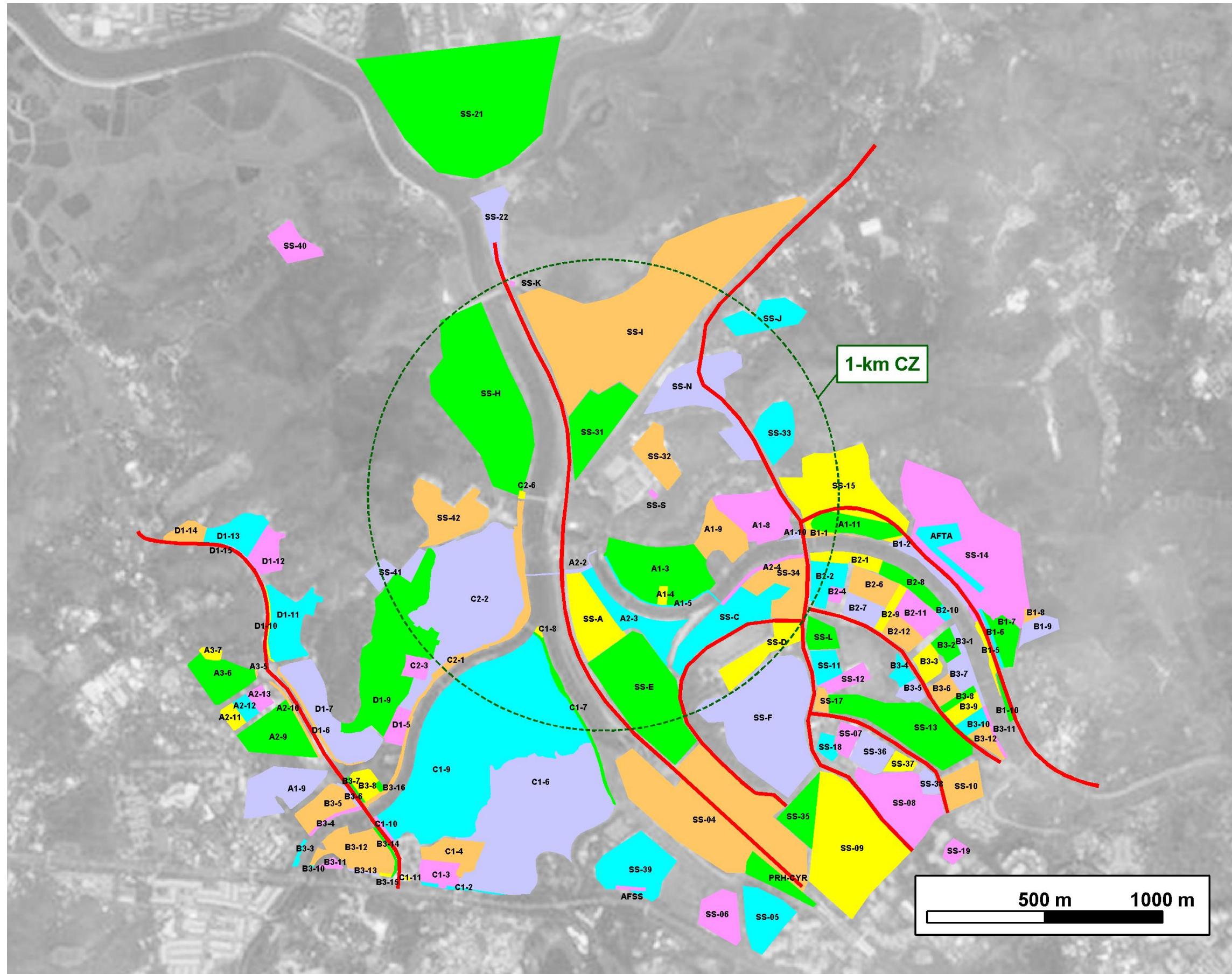
Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Indoor Ratio	Vulnerable Population Factor	No. of Storeys	Remarks
KTN-A2-10	Amenity	39	39	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-A2-11	Educational Primary School	416	833	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
KTN-A2-12	Educational Primary School	416	833	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
KTN-A2-13	Educational Secondary School	643	1287	0%	50%	50%	0%	100%	98%	1	8	Population estimated from NDA plan.
KTN-A3-5	Amenity	3	3	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-A3-6	Residential Zone 2	1958	3917	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
KTN-A3-7	Rural Residential Zone 4	26	52	100%	50%	50%	70%	50%	99%	1	2	NDA plan.
KTN-B3-3	Open Space	16	16	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
KTN-B3-4	Open Space	33	33	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
KTN-B3-5	Commercial Research and Development	1267	2534	2%	20%	20%	5%	100%	98%	1	4 - 10	NDA planned for a low density business park development to provide employment and economic opportunities for the NDA capitalising on the NDA's proximity to the Mainland as well as to the LMC Loop.
KTN-B3-6	Amenity	15	15	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-7	Amenity	13	13	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-8	Hotel and Conference Facilities	558	1117	100%	50%	50%	70%	50%	99%	1	4 - 10	Population estimated from NDA plan.
	Post Office	6	6	2%	20%	20%	5%	100%	95%	1	1	NDA plan - Post office Assume no. of staff = 6 based on Public Accounts Committee Report.
KTN-B3-10	Amenity	2	2	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-11	Amenity	44	44	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-12	Commercial Research and Development	2088	4177	2%	20%	20%	5%	100%	98%	1	4 - 10	NDA planned for a low density business park development to provide employment and economic opportunities for the NDA capitalising on the NDA's proximity to the Mainland as well as to the LMC Loop.
KTN-B3-13	Amenity	14	14	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-14	Amenity	24	24	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-15	Petrol Filling Station	19	19	40%	100%	100%	70%	50%	20%	1	1	Population estimated from NDA plan.
KTN-B3-16	Visitor Center	210	210	0%	100%	100%	100%	100%	50%	1	1	Long Valley Core Area, Area for Wetland Enhancement Works and Area for Facilities Supporting the Nature Park.
KTN-C1-2	Earth God Shrine of Kam Tsin Tsuen	33	33	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-C1-3	Comprehensive Development Area	70	141	100%	50%	50%	70%	50%	99%	1	3 (incl. 1 storey car park)	NDA plan. Enchi Lodge and Earth God Shrine of Kam Tsin Tsuen.
KTN-C1-7	Open Space	54	54	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-C1-8	Open Space	5	5	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-C1-9	Nature Park	90	90	0%	100%	100%	100%	100%	0%	1	1	Long Valley Core Area, Area for Wetland Enhancement Works and Area for Facilities Supporting the Nature Park.
KTN-C1-10	Amenity	13	13	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-C1-11	Vegetable Market and Credit Co-operative Society	600	600	2%	70%	70%	100%	70%	95%	1	1	Assume no. of member = 200 (claimed by Arup); Assume no. of customers = 400 based on site survey of similar market at Shek Wu Hui Market.
KTN-C2-1	Open Space	113	113	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-C2-6	Open Space	3	3	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-D1-14	Government Reserve	0	0	\	\	\	\	\	\	\	\	Government Reserve.
KTN-D1-15	Amenity	22	22	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Indoor Ratio	Vulnerable Population Factor	No. of Storeys	Remarks
KTN-D1-5	Residential Zone 4	119	119	100%	50%	50%	70%	50%	99%	1	3	NDA plan. Village Resite
KTN-D1-6	Amenity	56	56	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-D1-7	Residential Zone 2	3549	7098	100%	50%	50%	70%	50%	99%	1	21 - 25	NDA plan.
KTN-D1-10	Amenity	17	17	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-D1-11	Residential Zone 2	2502	5005	100%	50%	50%	70%	50%	99%	1	20	NDA plan.
KTN-D1-12	Potential Activity Centre	0	180	0%	50%	50%	70%	50%	50%	1	2	Population estimated from community sports website.
KTN-D1-13	Potential Activity Centre	0	40	0%	50%	50%	70%	50%	50%	1	2	Population estimated from community sports website.
KTN-PD2	KTN PD2	0	356	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
KTN-PD3	KTN PD3	0	240	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
KTN-PD4	KTN PD4	0	136	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).

Note:

(1) At Year 2023, population in new residential/commercial development areas of NDA Development Package 2 to 5 (KTN South, KTN North, FLN East and FLN West) is conservatively assumed to be 50% of the planned population. Scheduled periods of site formation, construction and development of these areas is 2018 ~ 2031.

Figure 3 Construction Stage – Case 3 (2023, NDAs + Surrounding Population) and Operation Stage – Case 6 (2032, NDAs + Surrounding Population)



Population Assumptions

Construction Stage - Case 3 (2023 NDA + Surrounding): Surrounding population projected at 2023 + forecast population at NDAs at 2023. This case considers the overall risk level in the future with the NDAs development.

Operation Stage - Case 6 (2032 NDA + Surrounding): Surrounding population projected at 2032 + forecast population at NDAs at 2032. This case considers the overall risk level in the future with the NDAs development.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor	No. of Storeys	Remark
SS-A	Abattoir	278	278	100%	65%	65%	65%	65%	95%	1	4	Population adopted from the Reassessment Study
SS-C	Agriculture Land	10	10	100%	50%	50%	70%	50%	95%	1	2	Site survey
SS-D	Man Kok Village	609	672	100%	50%	50%	70%	50%	99%	1	3	About 45 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-E	Existing Sewage Treatment Works - Operation phase	66	66	17%	50%	50%	17%	100%	95%	1	3	Population adopted from the Reassessment Study
	Existing Sewage Treatment Works - Construction phase	40	0	0%	100%	100%	0%	100%	0%	1	1	Construction phase for integration works for the existing SWHSTW, Estimate 40 workers at the construction site
SS-F	Sheung Shui Village	5413	5973	100%	50%	50%	70%	50%	99%	1	3	About 400 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-H	Houses Squatters and Ponds	150	150	100%	50%	50%	70%	50%	95%	1	1	Site survey
SS-I	Agricultural Land	290	290	100%	50%	50%	70%	50%	95%	1	2	Population adopted from the Reassessment Study
SS-J	Border District Police Headquarters	150	150	50%	100%	100%	50%	100%	99%	1	4	Population adopted from the Reassessment Study
SS-K	Lo Wu Staff Quarters	84	84	100%	50%	50%	70%	50%	99%	1	4	Population adopted from the Reassessment Study
SS-L	Government Office & Quarantine	129	129	2%	20%	20%	5%	100%	95%	1	6	Population adopted from the Reassessment Study
SS-N	Open Storage and Vehicle Repairing	60	60	0%	50%	50%	0%	100%	0%	1	1	Site survey
SS-S	WTW Staff Quarters	40	40	100%	50%	50%	70%	50%	99%	1	1	Population adopted from the Reassessment Study
SS-04	Bus Depot & Industrial Area	7123	7123	2%	20%	20%	5%	100%	98%	1	5	Population adopted from the Reassessment Study
SS-05	Choi Po Court	5638	5638	100%	50%	50%	70%	50%	99%	1	33	2006 by-census
SS-06	Tai Tau Leng Village	812	896	100%	50%	50%	70%	50%	99%	1	3	About 60 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-07	Industrial Training Center	1170	1170	0%	50%	50%	0%	100%	100%	1	7	Population adopted from the Reassessment Study
SS-08	North District Sports Ground	864	864	0%	50%	50%	70%	50%	50%	1	4	Population adopted from the Reassessment Study
SS-09	Shek Wu Hui Residential Buildings & Offices	6086	6086	95%	50%	50%	65%	50%	95%	1	5	2006 by-census. Estimate average 5 storeys.
SS-10	Woodland Crest	1816	1816	100%	50%	50%	70%	50%	99%	1	9	2006 by-census
SS-11	2 Fung Kai Secondary Schools	1131	1131	0%	50%	50%	0%	100%	98%	1	3	Estimation from public info on internet
SS-12	2 Fung Kai Primary Schools	1379	1379	0%	50%	50%	0%	100%	98%	3.3	3	Estimation from public info on internet
SS-13	Tin Ping Shan Tsuen	2030	2240	100%	50%	50%	70%	50%	99%	1	3	About 150 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-14	Sheung Shui Wa Shan (Village)	812	896	100%	50%	50%	70%	50%	99%	1	3	About 60 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-15	Hung Kiu San Tsuen	406	448	100%	50%	50%	70%	50%	99%	1	3	About 30 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-17	Fung Kai Kindergarden	452	452	0%	50%	50%	0%	100%	98%	3.3	2	Estimation from public info on internet
SS-18	Fung Kai Liu Man Shek Tong Secondary School	1188	1188	0%	50%	50%	0%	100%	98%	1	9	Estimation from public info on internet
SS-19	Shek Wu Hui Public (Primary) School	829	829	0%	50%	50%	0%	100%	98%	3.3	7	Estimation from public info on internet
SS-21	Shenzhen	20000	20000	50%	90%	90%	100%	50%	90%	1	10	Estimated population in area of Shenzhen within 1 km of Lo Wu station
SS-22	Lo Wu Station	8000	8000	20%	100%	100%	100%	50%	90%	1	2	Assume population equivalent to 2 crush-loaded trains + staff of immigration department.
SS-31	Ponds	5	5	100%	50%	50%	70%	50%	95%	1	1	Site survey
SS-32	Open Storage and Vehicle Repairing	15	15	0%	50%	50%	0%	100%	0%	1	1	Site survey
SS-33	Open Storage and Vehicle Repairing	25	25	0%	50%	50%	0%	100%	0%	1	1	Site survey
SS-34	Open Storage and Vehicle Repairing	30	30	0%	50%	50%	0%	100%	0%	1	1	Site survey
SS-35	Shek Wu Hui Playground	100	100	4%	40%	40%	100%	40%	0%	1	1	Site survey
SS-36	Tsui Lai Garden	6515	6515	100%	50%	50%	70%	50%	99%	1	29	2006 by-census

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor	No. of Storeys	Remark
SS-37	Fung Kai Care and Attention Home for the Elderly	354	354	100%	100%	100%	100%	100%	100%	3.3	7	Estimation from public info on internet
SS-38	Lee Chi Tat Memorial School (Primary)	1038	1038	0%	50%	50%	0%	100%	98%	3.3	7	Estimation from public info on internet
SS-39	Tsung Pak Long	947	1045	100%	50%	50%	70%	50%	99%	1	3	About 70 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-40	Liu Pok Village	406	448	100%	50%	50%	70%	50%	99%	1	3	About 30 village houses (700 sq ft) identified from Centamap. Assume 3 storeys and 4 ppl per storey.
SS-41	Lo Wu Saddle Club	40	40	5%	50%	50%	100%	70%	20%	1	1	Estimation from public info on internet
SS-42	Lo Wu Correctional Institution	2039	2039	95%	95%	95%	100%	100%	100% (night and peak) 85% (weekend day) 92% (working day)	1 (Immobile)	4	The redeveloped LWCI will contain a maximum of 1,400 inmates, 554 staff and 85 visitors, according to "Project Profile for Reuse of Treated Sewage Effluent from Redeveloped Lo Wu Correctional Institution, 2008".
SS-R	MTR East Rail	3809	3809	20%	100%	100%	50%	50%	100%	1	1	Population adopted from the Reassessment Study (crush-loaded train)
SS-O	Jockey Club Road	244	296	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
SS-P	Man Kam To Road	552	696	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
SS-Q	Po Wan Road	31	27	26%	100%	100%	61%	61%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
SS-TPRd	Tin Ping Road	84	132	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
PRH-CYR	Public Rental Housing at Choi Yuen Road	2800	2800	100%	50%	50%	70%	50%	99%	1	27 - 30	Approved development
AFSS	Approved Development - Village Houses at Tsung Pak Long	7	7	100%	50%	50%	70%	50%	99%	1	3	Approved development
AFTA	Approved Development - Village Houses at Sheung Shui Wa Shan	24	24	100%	50%	50%	70%	50%	99%	1	3	Approved development
FLN-A1-3	Agricultural land	77	77	100%	50%	50%	70%	50%	95%	1	2	Population estimated from site survey and the NDA plan.
FLN-A1-4	Man Ming Temple	3	3	0%	20%	20%	100%	70%	0%	1	1	Site survey. A small temple.
FLN-A1-5	Amenity	45	45	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-A1-8	Government Police Driving and Traffic Training Complex	0	375	3%	100%	100%	3%	100%	20%	1	7	Estimated population from HKPF.
	Government Police Driving and Traffic Training Complex Construction	25	0	0%	100%	100%	0%	100%	0%	1	1	Estimate 25 workers at the construction site of HKPF facilities.
FLN-A1-9	Agricultural land	44	44	100%	50%	50%	70%	50%	95%	1	2	Based on site survey of similar agricultural land
FLN-A1-10	Amenity	7	7	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-A1-11	Government Weapon Training Division	0	90	0%	100%	100%	0%	100%	50%	1	5	Estimated population from HKPF.
	Government Weapon Training Division Construction	20	0	0%	100%	100%	0%	100%	0%	1	1	Estimate 20 workers at the construction site of HKPF facilities.
FLN-A2-2	Amenity	27	27	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-A2-3	Sewage Plant Extension	0	20	17%	50%	50%	17%	100%	95%	1	1	Estimated population by the Design Engineer.
	Sewage Plant Extension Construction	40	0	0%	100%	100%	0%	100%	0%	1	1	Estimate 40 workers at the construction site of sewage plant extension work.
FLN-A2-4	Amenity	31	31	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-B1-1	Open Space	10	10	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-B1-2	Open Space	29	29	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
FLN-B1-5	Open Space	34	34	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B1-6	Amenity	32	32	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
FLN-B1-7	Residential Zone 2	1039	2079	100%	50%	50%	70%	50%	99%	1	10 - 15	NDA plan
FLN-B1-8	Residential Zone 4	24	24	100%	50%	50%	70%	50%	99%	1	3	NDA plan. Village Resite
FLN-B1-9	Residential Zone 3	217	435	100%	50%	50%	70%	50%	99%	1	8 - 12	NDA plan.
FLN-B1-10	Open Space	24	24	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor	No. of Storeys	Remark
FLN-B2-1	Open Space	130	130	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B2-2	Public Transport Depot and Potential RCP	203	203	2%	20%	20%	5%	100%	98%	1	6	Estimated 200 employees working in PTD and 3 employees working in RCP.
FLN-B2-4	Government Reserve	0	0	\	\	\	\	\	\	\	5	Government Reserve.
FLN-B2-6	Public Rental Housing	2163	4326	100%	50%	50%	70%	50%	99%	1	20 - 25	NDA plan.
	Public Rental Housing	1970	3941	100%	50%	50%	70%	50%	99%	1	25 - 35	NDA plan.
FLN-B2-7	Care and Attention Home for Severely Disabled Persons	60	60	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan -Care and Attention Home for Severely Disabled Persons. Capacity = 50 (from G/IC Assessment) Assume no. of staff = 10 (1 home manager, 2 ancillary workers, 4 Care workers, 1 nurse and 2 Health workers) based on info from Legislative Council Bills Committee on Residential Care Homes (Persons with Disabilities) Bill LC Paper No. CB(2)80/10-11(01) dated 27 September 2010
	Kindergarten	226	226	0%	50%	50%	0%	100%	99%	3.3	1	Population estimated from NDA plan.
FLN-B2-8	Open Space	159	159	4%	40%	40%	100%	40%	0%	1	1	Playground. Assume 0.01 person/m2.
FLN-B2-9	Open Space	82	82	4%	40%	40%	100%	40%	0%	1	1	Playground. Assume 0.01 person/m2.
FLN-B2-10	Open Space	23	23	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B2-11	Public Rental Housing	2417	4294	100%	50%	50%	70%	50%	99%	1	20 - 25	NDA plan.
	Public Rental Housing	1863	3727	100%	50%	50%	70%	50%	99%	1	25 - 35	NDA plan.
	Day Care Centre for the Elderly	53	53	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan - Day Care Centre for the Elderly. Assume Staff: Elderly = 1:3 based on info from Hong Kong Conuncil of Social Service and Health and Welfare Bureau.
FLN-B2-12	Hostel for Severely Disabled Persons	59	59	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan - Hostel for Severely Disabled Persons. Capacity = 50 (from G/IC Assessment) Assume no. of staff = 9 (1 home manager, 2 ancillary workers, 3 Care workers, 1 nurse and 2 Health workers) based on info from Legislative Council Bills Committee on Residential Care Homes (Persons with Disabilities) Bill LC Paper No. CB(2)80/10-11(01) dated 27 September 2010
	Post Office	6	6	2%	20%	20%	5%	100%	95%	1	1	NDA plan - Post office Assume no. of staff = 6 based on Public Accounts Committee Report.
FLN-B3-1	Open Space	49	49	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B3-2	Public Rental Housing	969	1939	100%	50%	50%	70%	50%	99%	1	20 - 25	NDA plan.
	Public Rental Housing	1492	2985	100%	50%	50%	70%	50%	99%	1	25 - 35	NDA plan.
FLN-B3-3	Hostel for Moderately Mentally Handicapped Persons	54	54	100%	100%	100%	100%	100%	100%	3.3	1	NDA plan - Hostel for Moderately Mentally Handicapped Persons Capacity = 50 (from G/IC Assessment) Assume no. of staff = 4 (1 home manager, 1 ancillary workers, 2 Care workers) based on info from Legislative Council Bills Committee on Residential Care Homes (Persons with Disabilities) Bill LC Paper No. CB(2)80/10-11(01) dated 27 September 2010
FLN-B3-4	Educational Primary School	414	829	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
FLN-B3-5	Educational Primary School	414	829	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
FLN-B3-6	Residential Zone 2 (with Commercial)	586	1173	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor	No. of Storeys	Remark
	Kindergarten	226	226	0%	50%	50%	0%	100%	99%	3.3	1	Population estimated from NDA plan for kindergartens: 6 classrooms (2 x 60 half-day places + 4 x 20 full-day places), 200 children + 21 teachers. Assume 5 staff.
FLN-B3-7	Residential Zone 2	585	1171	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
FLN-B3-8	Open Space	50	50	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
FLN-B3-9	Residential Zone 2	591	1183	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
FLN-B3-10	Educational Secondary School	650	1301	0%	50%	50%	0%	100%	98%	1	8	Population estimated from NDA plan.
FLN-B3-11	Open Space	32	32	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
FLN-B3-12	Educational Primary School	414	829	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
FLN-BP	FLN Bypass	0	336	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
FLN-LR1to4	FLN LR1 to LR4	36	52	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
KTN-A1-9	Residential Zone 2	2857	5715	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
KTN-A2-9	Residential Zone 2	2575	5150	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
KTN-A2-10	Amenity	39	39	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-A2-11	Educational Primary School	416	833	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
KTN-A2-12	Educational Primary School	416	833	0%	50%	50%	0%	100%	98%	3.3	8	Population estimated from NDA plan.
KTN-A2-13	Educational Secondary School	643	1287	0%	50%	50%	0%	100%	98%	1	8	Population estimated from NDA plan.
KTN-A3-5	Amenity	3	3	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-A3-6	Residential Zone 2	1958	3917	100%	50%	50%	70%	50%	99%	1	15 - 20	NDA plan.
KTN-A3-7	Rural Residential Zone 4	26	52	100%	50%	50%	70%	50%	99%	1	2	NDA plan.
KTN-B3-3	Open Space	16	16	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
KTN-B3-4	Open Space	33	33	4%	40%	40%	100%	40%	0%	1	1	Riverside promenade area.
KTN-B3-5	Commercial Research and Development	1267	2534	2%	20%	20%	5%	100%	98%	1	4 - 10	NDA planned for a low density business park development to provide employment and economic opportunities for the NDA capitalising on the NDA's proximity to the Mainland as well as to the LMC Loop.
KTN-B3-6	Amenity	15	15	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-7	Amenity	13	13	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-8	Hotel and Conference Facilities	558	1117	100%	50%	50%	70%	50%	99%	1	4 - 10	Population estimated from NDA plan.
	Post Office	6	6	2%	20%	20%	5%	100%	95%	1	1	NDA plan - Post office Assume no. of staff = 6 based on Public Accounts Committee Report.
KTN-B3-10	Amenity	2	2	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-11	Amenity	44	44	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-12	Commercial Research and Development	2088	4177	2%	20%	20%	5%	100%	98%	1	4 - 10	NDA planned for a low density business park development to provide employment and economic opportunities for the NDA capitalising on the NDA's proximity to the Mainland as well as to the LMC Loop.
KTN-B3-13	Amenity	14	14	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-14	Amenity	24	24	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-B3-15	Petrol Filling Station	19	19	40%	100%	100%	70%	50%	20%	1	1	Population estimated from NDA plan.
KTN-B3-16	Visitor Center	210	210	0%	100%	100%	100%	100%	50%	1	1	Long Valley Core Area, Area for Wetland Enhancement Works and Area for Facilities Supporting the Nature Park.

Ref.	Name	Population (2023) ⁽¹⁾	Population (2032)	Night	Jammed Peak	Peak Hour	Weekend Day	Working Day	Portion Indoors	Vulnerable Population Factor	No. of Storeys	Remark
KTN-C1-2	Earth God Shrine of Kam Tsin Tsuen	33	33	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-C1-3	Comprehensive Development Area	70	141	100%	50%	50%	70%	50%	99%	1	3 (incl. 1 storey car park)	NDA plan. Enchi Lodge and Earth God Shrine of Kam Tsin Tsuen.
KTN-C1-4	Village Type Development	217	435	100%	50%	50%	70%	50%	99%	1	3	NDA plan. Yin Kong Tsuen (Village)
KTN-C1-6	Long Valley	40	40	100%	50%	50%	70%	50%	95%	1	2	Population estimated from site survey and the NDA plan.
KTN-C1-7	Open Space	54	54	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-C1-8	Open Space	5	5	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-C1-9	Nature Park	90	90	0%	100%	100%	100%	100%	0%	1	1	Long Valley Core Area, Area for Wetland Enhancement Works and Area for Facilities Supporting the Nature Park.
KTN-C1-10	Amenity	13	13	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-C1-11	Vegetable Market and Credit Co-operative Society	600	600	2%	70%	70%	100%	70%	95%	1	1	Assume no. of member = 200 (claimed by Arup); Assume no. of customers = 400 based on site survey of similar market at Shek Wu Hui Market.
KTN-C2-1	Open Space	113	113	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-C2-2	Long Valley	30	30	100%	50%	50%	70%	50%	95%	1	2	Population estimated from site survey and the NDA plan.
KTN-C2-3	Disused village school	5	5	0%	50%	50%	100%	50%	0%	1	1	Disused village school, currently a temporary car park; Pkg 2
KTN-C2-6	Open Space	3	3	2%	20%	20%	100%	20%	0%	1	1	Riverside promenade area.
KTN-D1-14	Government Reserve	0	0	\	\	\	\	\	\	\	\	Government Reserve.
KTN-D1-15	Amenity	22	22	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-D1-5	Residential Zone 4	119	119	100%	50%	50%	70%	50%	99%	1	3	NDA plan. Village Resite
KTN-D1-6	Amenity	56	56	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-D1-7	Residential Zone 2	3549	7098	100%	50%	50%	70%	50%	99%	1	21 - 25	NDA plan.
KTN-D1-9	Village Type Development	2236	2236	100%	50%	50%	70%	50%	99%	1	3	NDA plan. Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery.
KTN-D1-10	Amenity	17	17	4%	40%	40%	100%	40%	0%	1	1	Assume 0.01 person/m2.
KTN-D1-11	Residential Zone 2	2502	5005	100%	50%	50%	70%	50%	99%	1	20	NDA plan.
KTN-D1-12	Potential Activity Centre	0	180	0%	50%	50%	70%	50%	50%	1	2	Population estimated from community sports website.
KTN-D1-13	Potential Activity Centre	0	40	0%	50%	50%	70%	50%	50%	1	2	Population estimated from community sports website.
KTN-PD2	KTN PD2	0	356	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
KTN-PD3	KTN PD3	0	240	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).
KTN-PD4	KTN PD4	0	136	7%	100%	25%	15%	15%	0%	1	1	Year 2023 and 2032: Estimation from the NDA development traffic forecast (NDA development scenario).

Note:

(1) At Year 2023, population in new residential/commercial development areas of NDA Development Package 2 to 5 (KTN South, KTN North, FLN East and FLN West) is conservatively assumed to be 50% of the planned population. Scheduled periods of site formation, construction and development of these areas is 2018 ~ 2031.

Population Evolution without NDAs Development

Ref	Name	Annual Growth Rate	Base Population Data	Base Population Year	Population (2012)	Population (2023)	Population (2032)
SS-A	Abattoir	0.0%	278	2006	278	278	278
SS-B	Ponds and Agriculture Land	0.0%	150	2012	150	150	150
SS-C	Agriculture Land	0.0%	10	2012	10	10	10
SS-D	Man Kok Village	1.1%	540	2012	540	609	672
SS-E	Sewage Treatment Works	0.0%	66	2006	66	66	66
SS-F	Sheung Shui Village	1.1%	4800	2012	4800	5413	5973
SS-G	Ponds and Agriculture Land	0.0%	30	2012	30	30	30
SS-H	Houses Squatters and Ponds	0.0%	150	2012	150	150	150
SS-I	Agricultural Land	0.0%	290	2006	290	290	290
SS-J	Border District Police Headquarters	0.0%	150	2006	150	150	150
SS-K	Lo Wu Staff Quarters	0.0%	84	2006	84	84	84
SS-L	Government Office & Quarantine	0.0%	129	2006	129	129	129
SS-N	Open Storage and Vehicle Repairing	0.0%	60	2012	60	60	60
SS-S	WTW Staff Quarters	0.0%	40	2006	40	40	40
SS-04	Bus Depot & Industrial Area	0.0%	7123	2006	7123	7123	7123
SS-05	Choi Po Court	0.0%	5638	2006	5638	5638	5638
SS-06	Tai Tau Leng Village	1.1%	720	2012	720	812	896
SS-07	Industrial Training Center	0.0%	1170	2006	1170	1170	1170
SS-08	North District Sports Ground	0.0%	864	2006	864	864	864
SS-09	Shek Wu Hui Residential Buildings & Offices	0.0%	6086	2006	6086	6086	6086
SS-10	Woodland Crest	0.0%	1816	2006	1816	1816	1816
SS-11	2 Fung Kai Secondary Schools	0.0%	1131	2012	1131	1131	1131
SS-12	2 Fung Kai Primary Schools	0.0%	1379	2012	1379	1379	1379
SS-13	Tin Ping Shan Tsuen	1.1%	1800	2012	1800	2030	2240
SS-14	Sheung Shui Wa Shan (Village)	1.1%	720	2012	720	812	896
SS-15	Hung Kiu San Tsuen	1.1%	360	2012	360	406	448
SS-17	Fung Kai Kindergarten	0.0%	452	2012	452	452	452
SS-18	Fung Kai Liu Man Shek Tong Secondary School	0.0%	1188	2012	1188	1188	1188
SS-19	Shek Wu Hui Public (Primary) School	0.0%	829	2012	829	829	829
SS-21	Shenzhen	0.0%	20000	2012	20000	20000	20000
SS-22	Lo Wu Station	0.0%	8000	2012	8000	8000	8000
SS-31	Ponds	0.0%	5	2012	5	5	5
SS-32	Open Storage and Vehicle Repairing	0.0%	15	2012	15	15	15
SS-33	Open Storage and Vehicle Repairing	0.0%	25	2012	25	25	25
SS-34	Open Storage and Vehicle Repairing	0.0%	30	2012	30	30	30
SS-35	Shek Wu Hui Playground	0.0%	100	2012	100	100	100
SS-36	Tsui Lai Garden	0.0%	6515	2006	6515	6515	6515
SS-37	Fung Kai Care and Attention Home for the Elderly	0.0%	354	2012	354	354	354
SS-38	Lee Chi Tat Memorial School (Primary)	0.0%	1038	2012	1038	1038	1038
SS-39	Tsung Pak Long	1.1%	840	2012	840	947	1045
SS-40	Liu Pok Village	1.1%	360	2012	360	406	448
SS-41	Lo Wu Saddle Club	0.0%	40	2012	40	40	40
SS-42	Lo Wu Correctional Institution	0.0%	2039	2012	2039	2039	2039
SS-43	Tsung Yuen (Village)	1.1%	360	2012	360	406	448
SS-44	Ho Sheung Heung (Village)	1.1%	1800	2012	1800	2030	2240

Ref	Name	Annual Growth Rate	Base Population Data	Base Population Year	Population (2012)	Population (2023)	Population (2032)
SS-45	Open Storage and Vehicle Repairing	0.0%	35	2012	35	35	35
SS-46	Open Storage	0.0%	70	2012	70	70	70
SS-47	Yin Kong Tsuen (Village)	1.1%	780	2012	780	879	970
SS-48	Open Storage	0.0%	100	2012	100	100	100
SS-49	Ponds and Agriculture Land	0.0%	50	2012	50	50	50

Overlapped Area between the Existing Population and the NDAs Development

Existing Population		Land Lots in the NDAs Development		Remark
Ref	Name	Ref	Name	
SS-B	Ponds and Agriculture Land	FLN-A1-3	Agricultural land	Existing population is replaced by NDA population
		FLN-A1-4	Man Ming Temple	
		FLN-A1-5	Amenity	
		FLN-A1-8	Government (Police Driving and Traffic Training Complex)	
		FLN-A1-9	Agricultural land	
		FLN-A1-10	Amenity	
SS-G	Ponds and Agriculture Land	KTN-C2-2	Long Valley	Existing population is replaced by NDA population
SS_41	Lo Wu Saddle Club	KTN-G1-6	Lo Wu Saddle Club - Site 1	Keep Existing population as there is no further development in NDA plan
		KTN-G1-7	Lo Wu Saddle Club - Site 2	
SS_42	Lo Wu Correctional Institution	KTN-G1-8	Lo Wu Correctional Institution	Keep Existing population as there is no further development in NDA plan
SS-43	Tsung Yuen (Village)	KTN-D1-9	Village Type Development	Existing population is replaced by NDA population
SS-44	Ho Sheung Heung (Village)	KTN-C2-3	Disused village school	Existing population is replaced by NDA population
		KTN-D1-9	Village Type Development	
SS-45	Open Storage and Vehicle Repairing	FLN-B2-2	Public Transport Depot and Refuse Collection Point	Existing population is replaced by NDA population
		FLN-B2-4	Government Service Centre and Hostel	
		FLN-B2-6	Public Rental Housing	
		FLN-B2-7	Public Rental Housing	
		FLN-B2-9	Open Space	
SS-46	Open Storage	KTN-D1-6	Amenity	Existing population is replaced by NDA population
		KTN-D1-7	Residential Zone 2	
		KTN-A2-9	Residential Zone 2	
SS-47	Yin Kong Tsuen (Village)	KTN-B3-12	Commercial Research and Development	Existing population is replaced by NDA population
		KTN-B3-14	Amenity	
		KTN-B3-15	Petrol Filling Station	
		KTN-C1-3	Comprehensive Development Area	
		KTN-C1-4	Village Type Development	
SS-48	Open Storage	KTN-A2-12	Educational Primary School	Existing population is replaced by NDA population
		KTN-A2-13	Educational Secondary School	
		KTN-D1-11	Residential Zone 2	
		KTN-D1-12	Potential Activity Centre	
		KTN-D1-13	Potential Activity Centre	
		KTN-D1-15	Amenity	
SS-49	Ponds and Agriculture Land	KTN-B3-10	Amenity	Existing population is replaced by NDA population
		KTN-B3-11	Amenity	
		KTN-B3-12	Commercial Research and Development	
		KTN-C1-6	Long Valley	
		KTN-C1-9	Nature Park	
AKTN1	Approved Development - Village Houses at Ho Sheung Heung - Site 1	KTN-D1-9	Village Type Development	Existing population is replaced by NDA population
AKTN2	Approved Development - Village Houses at Ho Sheung Heung - Site 2	KTN-D1-6	Amenity	Existing population is replaced by NDA population
AKTN3	Approved Development - Village Houses at Ho Sheung Heung - Site 3	KTN-D1-9	Village Type Development	Existing population is replaced by NDA population