

PS-4-6

POSITION	QUALIFICATIONS
Workplace Safety and Health Coordinators (WSHC)	Please refer to qualification requirement as specified in Appendix A of General Specification. The Contractor shall provide WSHC who have tunnelling experience to supervise tunnelling works.
Environmental Control Officer (ECO)	Please refer to qualification requirement as specified in Appendix A of General Specification.
Licensed Electrical Worker	Minimum 3 years of relevant experience.
Licensed Cable Detection Worker (Part-time)	Minimum of 3 years of relevant experience.
Lifting Engineer	Please refer to qualification requirement as specified in Appendix A of General Specification.
Utility Engineer	Minimum 5 years of engineering experience in the relevant field, and at least 2 years of experience in the coordination with utility agencies for projects of similar scale, complexity and nature of work.
Design for Safety Professional (DfS Professional)/ Risk Management Facilitator (RMF)	Please refer to qualification requirement as specified in Appendix A of General Specification.
Planning and Programming Engineer	Minimum 5 years of experience in construction planning and programme coordination for infrastructure projects. Competent in the use of Primavera or any other stipulated scheduling software to develop, track and monitor the programme.

Working Examples (Computation at 25% Completion of RC Works)**Computation for RC workers with at least four (4) years of relevant working experience in Singapore**

The planned average number of RC workers deployed per day based on the accepted Manpower Resource Histogram (MRH). <i>Refer to Figure A</i>	= 36
The actual average number of RC workers with at least four (4) years of relevant working experience deployed on site per day based on the data retrieved from the Biometric System. <i>Refer to Figure B. All figures, included calculated averages, shall be rounded to nearest 1 decimal place.</i>	= 24.6
Percentage of actual RC workers with at least four (4) years of relevant working experience in Singapore deployed on site per day. <u>All figures calculated to nearest 1 decimal place.</u>	$= 24.6 / 36 \times 100\%$ $= 68.3\%$
<i>As the minimum requirement of 55% is met, there shall be no deduction.</i>	

Working Examples (Computation at 25% Completion of RC Works)**Computation for R1 RC workers**

The planned average number of RC workers deployed per day based on the accepted Manpower Resource Histogram (MRH). <i>Refer to Figure A.</i>	= 36
The actual average number of R1 RC workers deployed on site per day based on the data retrieved from the Biometric System. <i>Refer to Figure C. All figures, included calculated averages, shall be rounded to nearest 1 decimal place.</i>	= 4.4
Percentage of actual R1 RC workers deployed on site per day. <u>All figures calculated to nearest 1 decimal place.</u>	$= 4.4 / 36 \times 100\%$ $= 12.2\%$
<i>As the minimum requirement of 30% is not met, the amount of \$135,000 as per Table 4.3b shall be deducted.</i>	

Plan Duration for 25% of RC works

Month	Jan-15	Feb-15	Mar-15
Average RC workers per day	23	25	60

Overall Average $(23+25+60)/3 = 36$ RC workers per day

Figure A

Actual Duration for 25% of RC works

Month	Jun-15																														Jul-15	Aug-15	Sep-15	Oct-15	Nov-15
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
RC workers (> 4 Yrs Exp)	10	10	10	10	10	10	10	10	10	10	10	15	15	15	15	15	0	0	0	0	0	0	15	15	35	35	35	35	35	35					
Average per day	17.7																														15.0	70.0	10.0	20.0	15.0

Overall Average $(17.7+15.0+70.0+10.0+20.0+15.0)/6 = 24.6$ RC workers per day (> 4 Yrs Exp)

Figure B

Month	Jun-15																														Jul-15	Aug-15	Sep-15	Oct-15	Nov-15
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
R1 RC workers	2	2	3	2	3	0	0	0	0	0	0	4	4	4	4	4	0	0	0	0	0	0	5	5	5	5	10	10	10	10					
Average per day	5.1																														4.0	5.0	4.2	3.0	5.0

Overall Average $(5.1+4.0+5.0+4.2+3.0+5.0)/6 = 4.4$ R1 RC workers per day

Figure C

Note: For days where there are no RC works, they will be excluded from the average calculation.