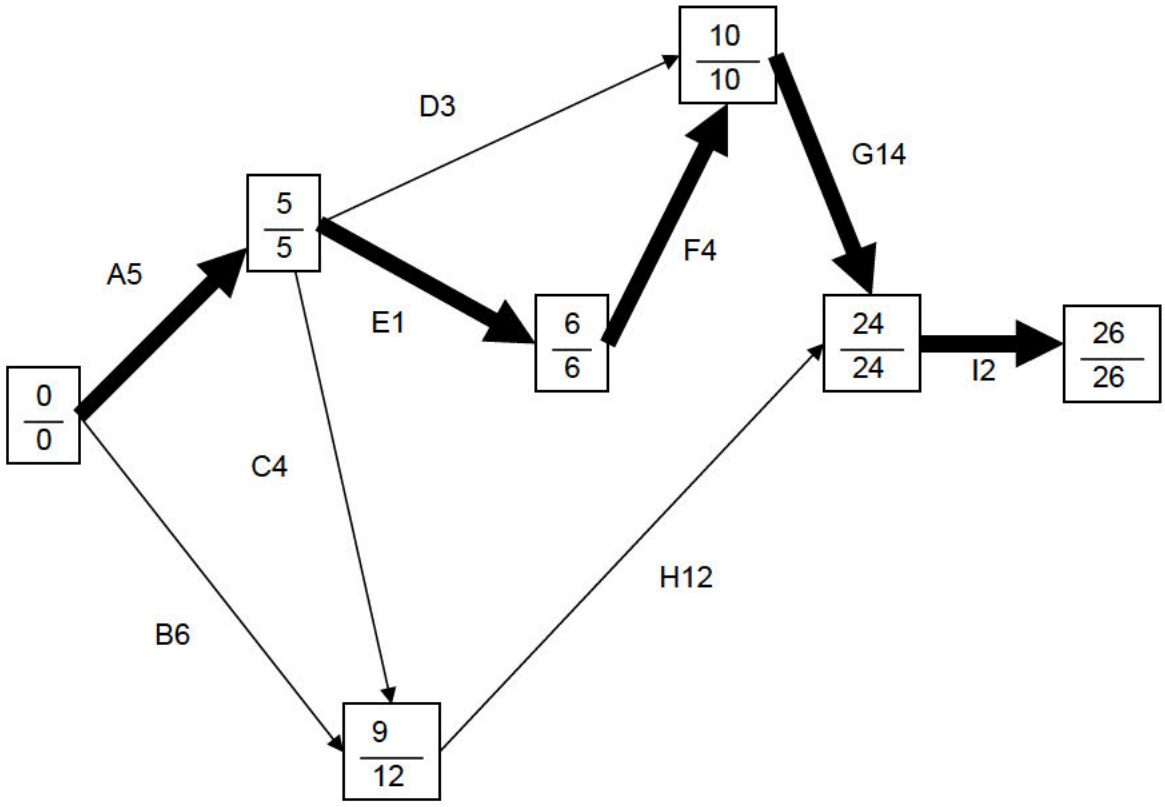
Student 2: High Merit

NZQA Intended for teacher use only

Precedence Table

	Activity	Time (weeks)	Preceded by
A	Prepare the drawings	5	
B	Identify tenants	6	
C	Develop Prospectus	4	A
D	Select construction company	3	A
E	Prepare resource consents	1	A
F	Obtain resource consents	4	E
G	Build mall	14	D,F
H	Finalise contracts with tenants	12	B,C
I	Tenants move in	2	G,H



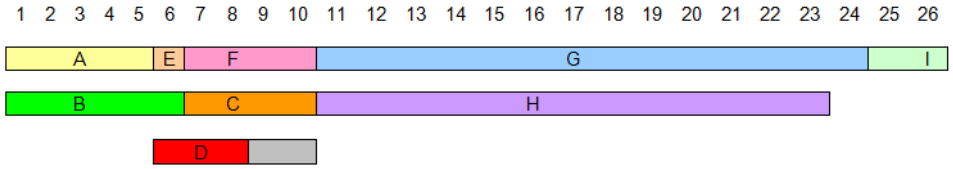
1

The critical path is: A, E, F, G, I

Minimum time = 26 weeks

2

Minimum number of workers required = 3



3

Recommended time the manager can visit and see at least 3 different tasks in action = 6, 7, 8, 9 and 10 as it would depend on task D start time. For example if Task D started week 6 then the supervisor would see Task E, task B and task D. If Task D started in week 7 than the supervisor would see task F, Task C and Task D etc.

4

For task D the total and free float is 2 weeks. Therefore if task D is delayed by 2 or less weeks there will be no effect as it will not change the earliest start time for a preceding task or alter the critical path. However, if the task is delayed for more than 2 weeks it will become part of the new critical path (A – D – G – I) which means the minimum finishing time will be extended.

	Free float	Total Float
A	0	0
B	3	6
C	0	3
D	2	2
E	0	0
F	0	0
G	0	0
H	3	3
I	0	0

5

The above total shows the float (weeks that could be used as delays). This could cause implications for the scheduling of supervisors because if they exceed the float they will need to either extend their hours of hire new staff depending on the time of the delay.