edge consult

THE PLANNING PROCESS

THE FOUR C'S.

CONSULTATION
PLANNING

COMMUNICATION
PROGRAMMING

CONTROL
REPORTING

CO-ORDINATION
PEOPLE
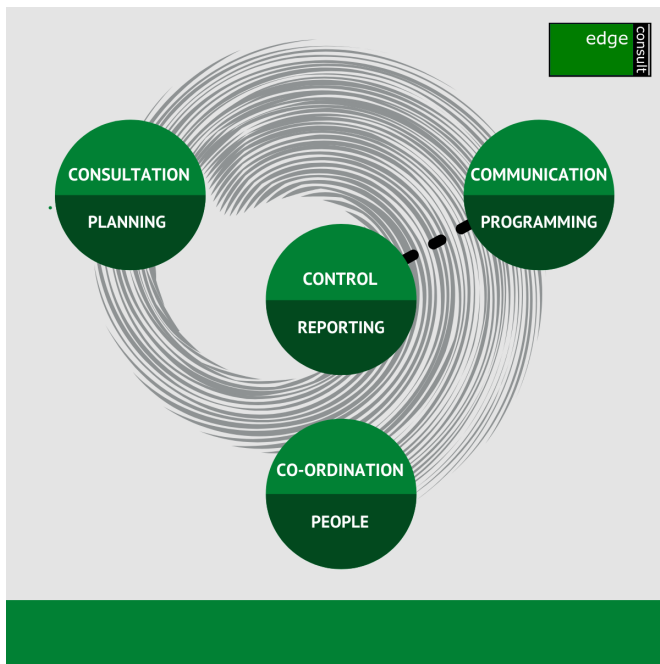
At Edge, we believe the planning process can be summarised with our **Four C** approach. The process is a spiral and it is repeated until the programme has been agreed upon. In simple terms it is as follows:
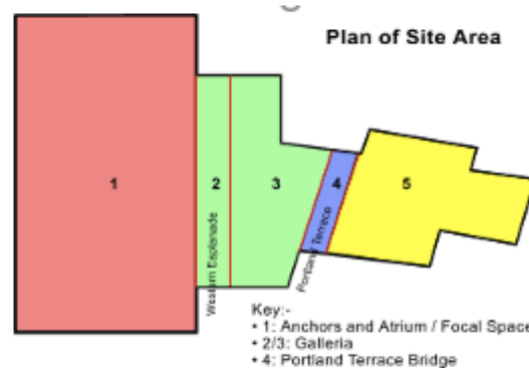
Consultation

This relates to the start of the Planning process and it starts by having discussions with the principal stakeholders for the project. At this stage, one identifies their thoughts and direction on how they want to plan the project. Discussions may include identifying any preferences they may have with the approach being considered. Initially, this relates to the strategic and logistic issues and as it is repeated it then drills down to review specific tasks. Logic, durations, resources, and interfaces.

Communication

After the initial consultation, it may be appropriate to develop a plan to reflect the approach being discussed. At this stage it might simply be a site plan with the access and egress or the phasing and priorities marked over it, arguably this is the first programme.

Plan of Site Area

Key:-
- 1: Anchors and Atrium / Focal Space
- 2/3: Galleria
- 4: Portland Terrace Bridge

Then as the consultations develop the first drafts of the programme will be created. The plans and programmes are the communication tool that enables people to access the information and reflect on the proposal before moving on to the next stage of the programme development.

Coordination

With the initial bare bones of a programme in hand then one can begin to coordinate the plan with wider stakeholders, to identify essential dependencies, resource concerns and key interfaces.

This then returns to the Consultation planning discussions.

The Spiral Process has started.

The Consultation planning discussions develop the more detailed coordination information and as before at some point, it is time to take stock and a Programme is produced to Communicate the programme thus far. This document is ideal for further discussions with the wider Stakeholders, and this is the Coordination process. This spiral process continues until the programme is acceptable. Then the fourth C – Control can begin.

Control, a programme without a comprehensive control mechanism in place is nothing more than an expression of the good intentions of the Team. The well-considered plan is virtually valueless without monitoring and reporting. Edge has prepared a separate paper on Monitoring.

Listed below are the 12 steps of Planning which is a more detailed review of the 4Cs process. Edge hopes that an understanding of the principles of Planning with improve your ability to construct successful project programmes.

1. Strategy / Logistics / Access
2. Work Breakdown Structure
3. Identify activity or process
4. Logic
5. Estimation
6. 1st Programme analysis
7. Resource review
8. Interface coordination
9. Review and amend Programme
10. Constructive compression
11. Coordinate and Agree
12. Programme issue
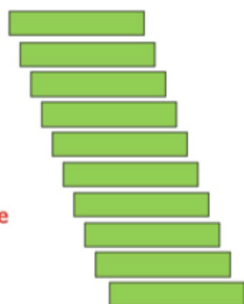
1 Strategy: The Programme starts with the strategic approach. In Construction this can be as simple as how will access and egress be gained, where will site accommodation be placed and the logistics of moving the workforce and materials around the site.

2 The Work Break Down Structure sounds all very technical but in everyday language, it is how the work will be divided up to manage and how to procure the work, i.e. sub-contractor packages. A good understanding of this at the set-up will enable the planner to use sort codes to obtain pertinent sub-sections of the programme in the future and structure the programme in a manner that makes sense to the proposed way of working.

The Programme should be structured in a way to enable the appropriate level of the reader to review and understand the relevant details. For this to happen the planner must have developed a clear coding structure for all the activities to allow the recall of relevant information.

3 The Identification of all the Activities and Processes required to be carried out. This can be done as a brainstorming exercise. For a simple project, this could provide a conclusion in the form of a list of activities with a timetable attached. A more complex project with parallel and overlapping activities is likely to require a bar chart format. Edge recommends that all bar charts are best derived from a programme network and the use of critical path analysis.

4 Logic. Next, the Team need to consider the logic. As the team discuss the order of sequence they will often identify further activities that had not been identified. Some tasks will be linear, some can be run in parallel and others can overlap with one another. This process can be carried out as a hand-drawn network or by direct input into a computer. For larger group facilitation meetings a large screen or post-it notes on a display board can be an effective means of communication. We have prepared a separate paper on the importance of baseline programmes being networked.

5 Estimation of the duration is next. These may be unrefined initially but they are worth considering at this stage as they may affect the logic. Activities with a very long duration may require breaking down so that the activities can overlap more to allow activities to progress concurrently.

To determine the duration, you may need to carry out some further work with the various experts allocated to the project. Failing access to these experts then you may want to break down the process further to allow a reasonable estimation for the duration.

This need not be shown on the programme, but it is good practice to keep these assumptions for future reference.

A duration can be obtained either by calculation from quantities or established performance standards or by advice from specialists. Many organisations collect actual performance data. This is often the best source of information as the managers can judge the level of effort required to achieve duration by reference to similar performances in the past.

A duration calculated from quantities does however require judgement, as say 100 hours in one situation might be completed by 10 men in 10 hours whereas an alternative situation might only accommodate 2 men who would take 50 hours. In many industries, work-study is used for both planning and bonus systems. This can include very detailed time and method study of activities to more approximate activity-sampling techniques.

6 First Programme Analysis: By this stage one moves to the second C - the Communication part of the process, it is helpful for those involved to have a bar chart presentation of the work done so far. This is sometimes called a programme run and is simply the first run of the programme based on the data input to date. It invariably needs further refinement, but it is a good place to assess what the programme is beginning to look like. Invariably the programme will have a few runs to get it in a format and period for further development.

7 Resource Review

The planner and project team should identify known areas where resources are expected to be a limiting factor. Resources can be limited by either physical constraints on-site or market conditions. The pinch point resources need to be discussed and agreed upon first and these will potentially determine the critical path. Depending on the scale and complexity of the project will determine what level of resource planning will be required for the remaining tasks.

If there are many parallel activities the resources may become the main project driver. If this is so you will need to prioritise the activities that will benefit the project by being completed early and those activities that are least important that can be carried out later. Whilst the critical path process should help identify these criteria it will not always stand alone. The planner should consider further criteria such as political, control, value and complexity. The planner should not ignore the political issues if, for example, they are a concern to the main project stakeholder.

Control can be a determining factor in the same way, e.g. if certain elements of the project are dependent on outside bodies who are not within your control then it might be prudent to plan these early. If computer systems are to be employed to analyse the resources, then these priorities will enable a more meaningful result.

8 Identify all Interfaces.

In addition to the logical interfaces within the project, there will often be further links to other projects, sub-projects and links and or resources for these need to be identified and coordinated.

9 Review, Appraise and Amend.

As the programme develops it is advisable to review it to ensure that the WBS and other leading issues are still appropriate. There may be a need for further headings and sub-sections that were not considered at the early stages. The grouping may include zones or areas of the project or specialist trades that were included in the original plan.

It is advisable to review the plan against the original objectives and constraints. This may lead to further adjustments being required to the critical path to improve certain strings of events.

It is prudent to study the programme at this stage as a holistic document before proceeding to the next stage.

10 Constructive Programme Compression

From the critical path analysis, it may be apparent that the project's duration and logic need to be given further consideration.

Generally, if the duration of a project needs to be reduced to improve the value of the project or to meet key objectives then the activities on the critical path with the longest duration should be considered first. Avoid the temptation to simply work from the start of the project, as this will simply make all the early activities more vulnerable to failure

It may be that more overlap is required to achieve the Project's objectives in terms of timescale. If this is the case, then some time may be required to review other projects or even a work-study exercise carried out.

As amendments are recommended, they should be applied to the programme one at a time. Progressively adjusting the data and ensuring the programme is re-analysed to identify any change in the direction of the critical path. Excessive editing will reduce levels of float in the programme and can cause several sub-critical paths to emerge. This will increase the risk profile of the programme. If the project is to succeed, it is important that people do not become unrealistically bullish.

11 Coordination and Agreement

It is important that the project activities and durations are ultimately agreed with those who have the responsibility for carrying out the work, ensuring their ownership and commitment. This relates to the third C listed above, the Coordination Process.

A well-prepared programme will communicate the basis for coordinating the efforts of each contributor to the plan.

For this to be effective each contributor must buy into the plan. A plan prepared as a series of drafts with comments from all parties will improve both the quality of the plan together with the commitment and understanding of all. Good coordination is vital to successful planning.

12 Programme Issue / The Hierarchy of Programmes.

The planning will be carried out at various levels within an organisation. The organisation or business leaders may require a summary project plan and the Project Manager responsible for the delivery of the project as a whole. The coding set up to reflect the Work Break Down Structure can ensure the relevant sections of the programme can be extracted and issued as appropriate.

In some instances it may be that more detailed information is required for a specific section or element and provided the data is matched with the Master Programme / Baseline then these can be developed via further sub plans, which depending on the contract time might be incorporated into the baseline.
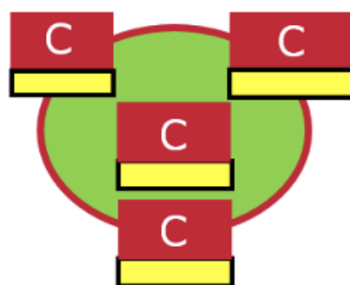
On very large projects it can be appropriate to agree to a rolling programme approach where the detail for subsequent works can be more fully developed nearer the time with the specialist involved. This then can be incorporated into the main programme as the detail is rolled out.

The Fourth and final C relates to Control which is the monitoring procedure that is depicted as the Centre of the Spiral as this is the target of the process, to produce a robust plan that is tough enough to stand up under the pressure all the potential uncertainty and changes that can occur during the progress of a project and still represent a genuine meaningful model to achieve the desired project success.

If these procedures are understood and implemented you will both "Plan to Succeed" and also you will be "Planning to Protect" your contractual position.