

Planning and Fieldwork for Traversing works

- For small construction sites, horizontal survey control is usually provided by traversing.
- The first stage in the traverse is to carry out a reconnaissance which locates the positions of the stations – it is very important that this is done properly to ensure the adequate control is available on site and that it is in the right place. A site visit is an essential part of a reconnaissance.
- Other aspects of planning at this stage include making a decision as to the type of traverse to be used – polygon or link. For a polygon traverse, the origin for coordinates has to be chosen and an orientation defined. For a link traverse, existing control must be available.
- There are many different types of control point available for site work, ranging from a simple peg to an observation pillar – some care is needed when choosing these. Remember to take into account the length of the project, ground conditions, the accuracy required and whether vandalism is an issue.
- Traversing requires angles and distances to be measured – this can be done separately by theodolite and tape or simultaneously using a total station. With reference to the specification given for the accuracy of the traverse, suitable equipment has to be selected and correct field procedures adopted.
- When the fieldwork is completed, it is good practice to prepare an abstract of the traverse to show all of the information required for calculating the coordinates of the traverse stations from the measured angles and distances.