This assignment has been designed to enable learners studying construction related programmes an introduction to the different technological concepts used to enable the construction of building elements; from substructure to completion, by understanding the different functional characteristics and design considerations to be borne in mind when selecting the most suitable technological solution. You are employed as an Architectural Technician by a partnership firm of Consultants, comprising Architects, Landscape Architects, Architectural Technologist, Structural Engineers and Quantity Surveyors. The Practice has accepted an appointment with the Local Borough Council to design and develop a new medical centre in the Birmingham area. You are involved in the design and construction of Richmond Medical Centre in the Bordesley Green Area, the site is approximately 6 miles to the city centre and is closely connected to the city centre and motorway network. The drawing of the Medical Centre complex is available on Moodle. The land proposed for the new build has previously been used as a public house with some industrial units, so the site has been classified as a brownfield site. It will be necessary therefore to undertake a thorough site and ground investigation before building can commence. Your employer has asked you to produce a ‘design consideration’ report to be distributed to new employees. The document is to consider the functional requirements and design selection criteria for different elements of typical commercial building.

The report should contain the following: • Evaluate how the functional characteristics and design selection criteria impact on the eventual design solution • Prepare a design report identifying superstructure, substructure and civil engineering structures necessary for a given building construction project. • Appraise how the distribution of the primary services impact on the overall design of the building. (Primary Service appraisal should be in the form of a Brochure / leaflet) This document should also consider the following elements of the superstructure: • Walls • Roofs • Floors – ground and intermediate • Windows and door • Staircases • Finishes • Substructure and remediation work • Services distribution and installation