

AUSTRALIAN CAPITAL TERRITORY

BUILDING ACT 1972

**DISALLOWABLE INSTRUMENT FOR THE
PURPOSES OF 27(1)**

EXPLANATORY STATEMENT

NO. 116 of 1994

It is a requirement of the *Building Act 1972* (the Act) that all work undertaken on a project shall be in accordance with the Building Code. The Building Code is made up of the Building Code of Australia (BCA) and an ACT Appendix to the BCA. The BCA and its ACT Appendix consist of sections numbered from A to H. Each section includes Objectives that set out the purpose of this part of the BCA. Subsection 27(1) of the Act provides that the Minister may exempt a government agency from the application of all or any provisions of the Building Code.

The present instrument under subsection 27(1) exempts the Public Works and Services Group, which is a government agency, from the application of provisions of the Building Code in respect of the building works at the Woden Valley Hospital known as the Northern and Southern Pedestrian Links.

The segment of the BCA that is affected is Subclause C1 1(a) and the following considerations are involved.

The physical constraints imposed by operational requirements and existing structures at Woden Valley Hospital prevent the redevelopment from completely complying with the BCA. Complete compliance is not considered necessary for some of the buildings to perform within acceptable safety standards.

Part of the reconstruction that does not comply is the fire safety of the Northern Link between the D and T Building and the existing link between Building 1 and Buildings 10 and 11 and the

Southern Link between the Diagnostic and Treatment Building (the D and T Building) and Building 1

The Project Manager engaged Philip Chun and Associates, who are building surveying consultants and experts in the interpretation of, and preparing recommendations on, building regulations, to examine the implications of constructing the two new Links in unprotected steel instead of Type A fire-resisting construction. The BCA prescribes Fire Resistance Levels (FRLs), which measure the ability of building elements to maintain levels of (a) structural adequacy (b) integrity and (c) insulation in a fire. Elements are graded by the time that they can fulfil set requirements in these three categories when subjected to a standard fire test. To provide the FRL prescribed by the BCA the steel of the links would be protected by concrete, sprayed coatings or mechanically applied material such as plasterboard and fibrous cement or by other methods.

The consultant's function was to recommend what works were necessary to ensure that fire safety requirements of the BCA were met and BCA objectives achieved and what exemptions from the Code were appropriate. The consultant proposed an exemption from the requirements of the BCA. A report with supporting documentation has been examined by ACT Public Works, the ACT Fire Brigade, the ACT Building Controller and the Project Director of the ACT Public Hospitals Redevelopment Project, all of whom have given their written approval.

There is an existing three-storey link between Building 1 and Buildings 10 and 11, which is constructed in unprotected steel. The new Northern Link is at Level 3 and connects with the D and T building at its western end and to the link between Building 1 and Buildings 10 and 11 at its eastern end. The Northern Link is constructed in unprotected steel and partly supported by the existing concrete roof of Building 1. The remainder of the Link is in the form of a bridge, suspended by its own structure consisting of unprotected steel. Between the D and T Building and Building 1 the floor of this Link bridge is constructed of reinforced concrete.

The Southern Link consists mainly of one level with a small two-level section at the D and T Building end. This Link connects to Level 3 of Building 1 at its eastern end and to Level 3 of the D and T Building at its western end. The lower and shorter portion connects to Level 2 of both buildings. The portion of Level 3 of the Southern Link that is supported by the existing concrete roof of Building 1 is constructed in unprotected steel. Where the shorter portion of the Southern Link becomes a two-level structure, the spanning structural steel supporting its upper level is fire-rated.

The whole of both Links is protected by sprinklers and the Links are separated from Building 1 and the D and T Building by construction that has a FRL for structural adequacy, integrity and insulation each of 120 minutes. Doorways in this construction are protected in accordance with Clause 3.5 of the BCA, which requires openings for doors in fire-rated walls to be protected by doors that have the same FRL as the walls, except for the insulation level, and the doors to close automatically in the event of fire. This Clause reduces the insulation level for fire doors to 30 minutes and the insulation level of the doors installed is 60 minutes.

There are no windows in the Links where the distance between the window openings and openings in Building 1 or in the D and T Building is 4 metres or less. Therefore the protection by wall-wetting sprinklers prescribed in Clause 3.4 is not required.