

# **MANGO HILL INFRASTRUCTURE DEVELOPMENT CONTROL PLAN**

**Precinct Plan No. 045**

**for**

**Town Centre Frame “Q” Precinct -  
Bruce Highway Frontage**

**North Lakes Development**

**15 September 2010**

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**1.0 Introduction and Statutory Context**

- 1.1** The Mango Hill Infrastructure Development Control Plan (DCP) provides a process for development of land in the DCP area and for the creation of a Precinct within any part of the DCP area chosen by the Principal Developer.
- 1.2** The Principal Developer must prepare and lodge a Precinct Plan with Council for approval in accordance with the relevant provisions of the DCP.
- 1.3** This document constitutes the Precinct Plan for the **Town Centre Frame “Q” Precinct – Bruce Highway Frontage** (Precinct Plan).
- 1.4** The area and boundaries of this Precinct are notional only. The general location of the Precinct within the DCP Structure Plan is shown on *Figure 1 – Planning Context*. The Precinct is bounded by:
- (i) Land outside the DCP to the north which will be incorporated into future development within this Precinct Plan;
  - (ii) Kerr Road Connection to north;
  - (iii) Mason Street and Precinct Plan 040: Town Centre Frame “L” to the east; and
  - (iv) The Bruce Highway to the south.
- 1.5** The DCP, approved precinct plans and approved sector plans are to be read in conjunction with the planning scheme and Council’s local laws, policies and codes and to the extent the DCP, precinct plans and sector plans do not modify provisions of the Council’s planning scheme, local laws, policies and codes they will apply to the DCP area.
- 1.6** To the extent the provisions of the Council’s planning scheme, local laws, policies or codes are modified by the DCP, precinct plans or sector plans, then the provisions of the DCP, the precinct plans or sector plans will prevail.
- 1.7** Development in the precinct must comply with the provisions of the Precinct Plan.

## **2.0 DCP Interpretation**

### **2.1 STRUCTURE PLAN**

The Precinct is located within the Town Centre Frame area of the DCP as depicted on *Figure 2 – Structure Plan Context*.

*Figure 3 – Precinct Plan Map* and the associated text, provide a more detailed interpretation of the Structure Plan by providing information about the general location and interrelationship of structural elements such as land uses, major roads and open space for the Precinct. The Precinct Plan illustrates the generalised design intent and development layout of the Precinct in accordance with the planning framework set out in the DCP.

### **2.2 DESIRED ENVIRONMENTAL OUTCOMES (DEOs)**

The DEOs of relevance to this Precinct are outlined in the following sections of the DCP:

- Section 5.1 (Town Centre Frame) - section 5.1.1 (a) and (b) and section 5.1.2 (a), (b), (f), (g) and (h);
- Section 10.1 (Transport and Circulation) – section 10.1.2 (a), (b), (d) and (f); and
- Section 11.1 (Environmental Protection) – section 11.1.2 (a), (c), (d) and (e).

This Precinct satisfies the relevant DEOs by providing-

- (i) a range of complimentary employment opportunities, facilities and services that are not provided for in the Town Centre Core, as well as a gradual transition in land use and intensity from the Town Centre Core to the edge of the Town Centre Frame, to reinforce the role of the Core;
- (ii) a high standard of urban amenity through quality siting, design and finish of buildings and structures, suitable advertising signage and extensive landscaping;
- (iii) a high level of flexibility in planning for future development within the Precinct via development which is designed to be easily adapted for a range of alternative uses as circumstances change over time;
- (iv) secondary access roads which maximise vehicular, bicycle and pedestrian safety, convenience and efficiency; and
- (v) sustainable development initiatives for the management of environmental risks within the Precinct.

### **2.3 PLANNING INTENT**

The Planning Intent of the Town Centre Frame is set out in Section 5.2 of the DCP. It is anticipated that the location of the Precinct, adjacent to the Bruce Highway, should encourage uses that benefit from high visibility and accessibility. The car-orientated and fast-food outlet, retail showrooms, hardware centre and vehicle sales yard uses are expected to be located within the Precinct. However, low-density commercial uses that require accessibility, may occupy the land fronting the proposed new access. The full range of Town Centre Frame land uses may also be considered if such land uses are compatible with the proposed built form. It is envisaged that commercial, rather than residential uses, be located within this Precinct as some uses proposed within the Precinct may not be compatible with residential amenity.

Land uses are to generally integrate with the Town Centre Core and should be integrated in functional and urban design terms with adjacent Precincts and provide a high level of aesthetics to the Bruce Highway.

Retail showrooms, while impact assessable, may be considered where it can be demonstrated not to have a negative impact on the Town Centre Core.

### **3.0 Development, Planning and Design Principles**

#### **3.1 GENERAL FORM OF DEVELOPMENT**

The Precinct is located in a highly accessible and visually prominent location within the town centre frame. It is also located at a key entrance to the North Lakes development and is an important area for aesthetic and functional reasons.

Distinctive architectural features and/or signage that generally announce the location of the Town Centre and the North Lakes development are encouraged to be located within the Precinct in order to capitalise on the Precinct’s visibility from the Bruce Highway. Signage that is visible from key roads is to be controlled to maintain an appearance appropriate to the overall image of North Lakes.

The architecture of any development within the Precinct should be contemporary, with variations in building form achieved by use of roof lines, shading and other features. Indoor and outdoor spaces should be linked by transition areas where possible. All buildings within this Precinct will have a compatible architectural character, with the consistency of the overall design character reinforced by materials, finishes, colours, and details that will combine to promote a strong sense of place.

Development within the Precinct should relate physically and functionally with each other in terms of architecture, location of major entries and changes in level. The development should feature the incorporation of horizontal and vertical variations in the facades with attractive entries and well-lit pedestrian access.

The built form and landscaping within the Precinct are to emphasise changes between the higher speed environment of the Bruce Highway and the lower speed nature of development within North Lakes.

The built form of the Precinct is intended to be of a lower density in comparison to other development within the Town Centre Frame. This is to be achieved through stand-alone buildings and landscaped areas. Larger lots, buildings and tenancies are envisaged for this Precinct than in the commercial development to the north and north east. As a result, development within the Precinct will generally require a more significant footprint for building platforms and ancillary areas such as parking, circulation and services.

For the purpose of vehicle sales, the development of enclosed showrooms are encouraged with adequate landscaping around the building to contribute to an attractive streetscape. Building setbacks are to accommodate changes in level between road pavement and building platforms. It is anticipated that several large building platforms may be established above retaining walls and/or batters within the Precinct.

Proposed buildings are to have street presence but may not necessarily provide active frontages, and due to the characteristics of the preferred land uses listed in Section 2.3 above, buildings may also have limited integration with the pedestrian streetscape. Where larger building façades facing the street do not incorporate entries, windows or similar elements providing visual relief; such facades must incorporate attractive visual elements by detail, articulation, materials, features etc, or incorporate varying setbacks that allow for additional landscaping.

Buildings are generally to be orientated to maximise energy efficiency and outdoor areas shall be located to receive adequate exposure to sunlight. Where possible, buildings shall incorporate sustainable development initiatives. Buildings are to be designed to accommodate a variety of different uses through techniques such as innovative floorplate design to allow flexible separation of spaces and compatible ceiling heights.

Unightly functional elements, including loading docks, waste storage, collection areas, air conditioning, roof plants and plant and building service areas require appropriate screening measures and are to be incorporated into overall building design. In particular roof plant is to be screened from major roads.

The built form within the Precinct should allow a high level of accessibility and convenience for pedestrians, cyclists and motor vehicles. The Precinct is to feature a highly inter-connected road and pathways network in order to minimise conflicts between vehicles and pedestrians, and to provide more direct access to uses. Direct access to the site fronting northern boundary (Mason Street) is to be restricted to areas that minimise interruptions to traffic flow and maximise vehicular, bicycle and pedestrian safety.

Access to the Precinct is limited to the Northern Boundary with no access from Mason Street and the Bruce Highway service road.

Consistency of overall design character within the Precinct and adjoining Precincts is to be achieved through integration of building design and urban spaces, and use of high quality materials, finishes, colours and details in order to promote a modern town centre with a strong sense of place.

The visual focus points of the Precinct are to be located at the eastern corners of the Precinct. It is intended that the Principal Developer provide entry features and landscaping to assist legibility and to strengthen the urban form of the Precinct, as well as the North Lakes development as a whole.

Consistent with the DCP, it is important that flexibility be maintained in order to enable future planning to respond to changing requirements of the community and the marketplace. Unless otherwise explicit in the Precinct Plan’s text, the Precinct Plan does not necessarily define the final nature or location of specific land uses, nor does it show the final location and extent of road networks.

### **3.3 GENERAL FORM OF DEVELOPMENT ALONG THE BRUCE HIGHWAY**

It is anticipated that uses located along the Bruce Highway may service both local residents and visitors from the wider region due to the high visibility and level of access. As such, car-orientated and fast food uses are preferred for sites along this frontage.

The appearance of the development along the Bruce Highway is important to the perceived amenity and atmosphere of North Lakes. Buildings should present an attractive façade to the Bruce Highway frontage. The less attractive components of development along this frontage, such as vehicle workshop areas, storage areas and loading docks, shall therefore be effectively screened from view.

The frontage treatment along the Bruce Highway is envisaged to include a landscape strip, surface carparks containing landscaping, and vehicular and pedestrian movement aisles with built form set in behind the frontage treatment. Additional car parking could be located behind buildings and pedestrian movement areas and are to be clearly defined. All surface carparks are to be shaded by canopy trees in accordance with the provisions of the DCP. Where vehicle sales yards are proposed, showrooms and external vehicle display areas may also form part of the site’s unified presentation to the street.

A service road along the frontage of the Precinct is located parallel to the Bruce Highway. The service road provides access to the Town Centre Frame, while minimising disruption to traffic flows. Access is not permitted along the service road frontage.

### **3.4 GENERAL FORM OF DEVELOPMENT FRONTING THE SECONDARY ACCESS ROADS**

The desired character of development fronting the secondary access roads is to be achieved through a variety of landscape and architectural designs and features for each individual building. However, some consistent elements to achieve architectural and landscape harmony is required. Integration of building design and urban spaces with appropriate lighting, signage and landscaping is intended to contribute to this desired sense of place. Additionally, consistency in the overall design character of proposed buildings is to be reinforced by materials, finishes, colours and details.

Buildings are to present an attractive façade to the street and where utility/service areas are proposed, they are appropriately screened and landscaped to minimise negative impacts on visual amenity and character.

The use of active frontages, a light and open building form and lightweight colonnades and awnings used as a means to extend indoor activities outdoor, are encouraged. Car parking areas should be designed as an attractive setting, which integrates paving, landscaping, shading and car parking spaces.

Where allotments provide a dual road frontage, the rear façade must be presented as an alternative façade to the development. The rear façade must orient to the street, contain attractive and varied design elements and include a landscape strip, surface carparks containing landscaping and vehicular and pedestrian movement aisles with built form set in behind the frontage treatment.



## **4.0 Landscape Concept**

### **4.1 LANDSCAPE CONCEPT PLAN MAP**

*Figure 4 – Landscape Concept Plan* provides a diagrammatic framework for the creation of a distinctive urban setting and character for the Precinct.

### **4.2 CONCEPT OVERVIEW**

Many of the functional elements of uses anticipated in this Precinct require buffering and screening to reduce their impacts upon the amenity and visual character of the Precinct. Landscaping within the Precinct should be used to soften the edge of built form and to disguise the anticipated building bulk, scale and mass of preferred uses within the Precinct. Planting species should be selected to achieve this purpose. Planting will be restricted to species that are capable of good growth and endurance in the commercial environment of the subject Precinct.

#### **4.2.1 Frontage to the Bruce Highway**

Random street tree planting and landscaping along the Bruce Highway frontage of the Precinct, which are to be provided by the Principal Developer, are shown indicatively on Figure 4 - Landscape Concept Plan. Landscaping is also required in private development sites to reinforce the landscaping proposed along Bruce Highway.

Landscaping, in particular street trees, should be located along the Bruce Highway frontage in order to soften and enhance the appearance of the built form without obscuring it from the road. This will be achieved by using street trees that generally have a canopy and a clear trunk set within low level planting. The location of trees and landscaping shall also form a transition between development in this Precinct.

Any planting adjacent to vehicular and pedestrian access points is to ensure vehicle drivers' sightlines are maintained.

#### **4.2.2 Frontage to Mason Street on the western boundary**

The location of street tree planting along the northern and western street frontage of the Precinct is shown indicatively on Figure 4 - Landscape Concept Plan. The road frontage is to be turfed, to create a high standard of presentation and a permeable landscaped setting, which blends with the streetscape planting of surrounding streetscapes. The landscaping of this area is intended to soften, enhance and provide scale to the built form without obscuring it from the road.

The location of trees and landscaping along Mason Street should form a transition between the high-level traffic environment of Bruce Highway Service Road and the lower level traffic of residential development to the north of the Precinct. Planting is to be restricted to species that are capable of good growth and endurance in the commercial environment of the Precinct.

The verges of the Mason Street to the east are to be consistently framed with appropriate landscape and canopy trees to provide a species-themed “boulevard” entry to North Lakes. Streetscape treatment should include generous footpaths, possible bus stops, street trees, on-street parking and lighting. The streetscape and planting theme along the eastern boundary should be distinct from other streets in the Town Centre and the Precinct. The “boulevard” is envisaged as a wide streetscape with a very open character. Street treatments and landscaping should clearly indicate the through-route nature of the road and give views to the parking entrances of development which may be accessed from the Unnamed Road on the northern boundary of the precinct.

Planting should also be selected to provide shade and should be of sufficient height and density to mitigate the potential appearance of building bulk which is expected for the preferred land uses within the Precinct.

#### **Frontage to Kerr Road connection**

Any planting adjacent to vehicular and pedestrian access points should address the transitional nature of proposed secondary access roads (Kerr Road Connection) on the northern boundary. Landscaping shall promote safety and low speeds, but with due concern for maintaining sightlines.

Landscaping may be required to buffer and screen functional elements of uses along these frontages to reduce their impacts upon the amenity and visual character of the Precinct.

#### **4.2.3 Pedestrian Linkages**

The intent of the landscaping of pedestrian areas is to create streetscape outcomes that are of a high standard, providing a comfortable and safe area for pedestrians. Where pedestrian links are identified as serving an overall purpose to assist pedestrian connectivity, provision should be made to create an inter-connected landscaped and pedestrian system.

Subsequent Sector Plan(s) and applications for Material Change of Use will specify how this integration shall occur in particular circumstances, but it may be for example, by common pedestrian pavement surfaces, special treatment of roadway surfaces, or a particular integrated style of landscaping for pedestrian legibility.

#### **4.2.6 Landscaped Car Park Areas**

Landscaping within carparking areas is to be provided in accordance with the DCP provisions and to define pedestrian connections between carparking areas, the streetscape and buildings. Car parking areas should be designed as a forecourt to the main building, integrating paving, landscaping, shading and car parks. Outdoor areas such as surface carparking should be extensively planted with canopy shade trees that are integrated with the planned network of landscaped pedestrian road frontage treatments.

The extensive use of shade trees and screening through car parking areas shall provide visual and physical relief from heat and glare, as well as contribute to the creation of an attractive urban landscape setting for all roads surrounding and within the Precinct.

Where vehicle sales yards are proposed, landscaping would be limited to the edge of the external vehicle display areas and be in keeping with the overall landscape requirements for the relevant street or road frontage. Landscaping and general appearance of vehicle sales yards must be consistent with the character of the North Lakes development. Use of large displays, such as temporary objects used to gain attention to the sales yards, are not appropriate to the North Lakes development. The installation of hail/ shade cloth to protect display vehicles is also encouraged, provided that the appearance is in keeping with the overall development.

#### **4.2.7 Landscape Buffer Planting**

Unightly functional elements, including loading docks, waste storage, collection areas and plant and building service areas require appropriate screening measures and are incorporated into overall building design, where possible.

## **5.0 Environmental Management**

The following objectives and performance indicators provide a summary of the environmental issues that will need to be considered as part of the detailed planning and design for development within the Precinct, particularly at the Sector Plan stage.

### **5.1 ENVIRONMENTAL MANAGEMENT OBJECTIVES**

#### **5.1.1 Objectives**

- (i) To encourage energy efficiency in order to minimise greenhouse gas generation;
- (ii) To encourage development which incorporates environmentally sustainable initiatives; and
- (iii) To manage and mitigate environmental risk.

#### **5.1.2 Performance Indicators**

For all development within this Precinct, environmental management during the design phase, construction and post-construction phases, should:

- (i) implement energy efficient design elements in buildings, including overall building design, building orientation to maximise use of positive climatic conditions such as access to sunlight and prevailing breezes, shading including overhangs, skylights and non-reflective materials, building materials and mechanical and electrical plants to improve energy efficiency;
- (ii) implement building energy management systems which contribute to overall building energy efficiency;
- (iii) adopt effective air pollution mitigation measures to comply with the Environmental Protection Act, Environmental Protection Policy (Air) and other relevant legislation in relation to dust, smoke, fumes and gases, where necessary;
- (iv) ensure construction activities comply with Council’s Policy LP32;
- (v) implement effective noise mitigation measures to comply with the Environmental Protection Act, Environmental Protection Policy (Noise) and other relevant legislation where necessary.;
- (vi) ensure high levels of environmental quality are achieved through water management for example in the maintenance of landscaped areas;
- (vii) ensure noise generated from development is reasonable for the type of use;
- (viii) ensure buildings used for purposes that require low noise intrusion, including residential uses, are designed to adequately ameliorate noise from external sources within and external to the Precinct;
- (ix) implement suitable waste storage and disposal measures in accordance with Council regulations;

- (x) implement design elements and buffer treatments to control the obtrusive effects of outdoor lighting where it is likely to adversely affect residential amenity and traffic safety;
- (xi) implement management and maintenance actions in accordance with Best Management Practice to minimise site-generated dirt/mud on public roads, particularly after rain periods;
- (xii) ensure environmental management structures or control devices, such as gross pollutant traps, waste disposal bins, flues and the like, do not detract from the overall visual character of the Town Centre Frame or the immediate locality.

## **5.2 STORMWATER MANAGEMENT OBJECTIVES**

### **5.2.1 Objective**

To manage the quality and quantity of stormwater within and from the Precinct so as not to cause a nuisance or annoyance to any person, prevent erosion and flooding, maximise soil infiltration and minimise overland flow.

### **5.2.2 Performance Indicators**

Implement management systems which seek to control the quality and quantity of surface water in compliance with the:

- (i) *Environmental Protection Act 1994* and the *Environmental Protection Policy (Water)* and other relevant legislation;
- (ii) Planning Scheme, Local Laws, the Design Manual and policies except where Clause 2.6 of the Mango Hill Infrastructure Agreement applies;
- (iii) Mango Hill Infrastructure Agreement;
- (iv) Performance objectives of the Freshwater Creek Catchment Management Plan;
- (v) Freshwater Management Plan;

### **5.3 EARTHWORKS MANAGEMENT OBJECTIVES**

#### **5.3.1 Objective**

To adopt appropriate environmental management practices to avoid, or mitigate and manage, the potential adverse affects of earthworks and related land development activities.

#### **5.3.2 Performance Indicators**

For all development within this Precinct, earthworks management during construction and post-construction should:

- (i) identify the extent of acceptable earthworks activities consistent with the protection of overall environmental values and prepare designs complying with these limitations;
- (ii) implement appropriate soil erosion and sediment control protection measures and monitor and maintain these;
- (iii) manage the excavation and reshaping (bulk earthworks) to establish a finished surface profile that seeks to minimise the environmental impact of the earthworks on the surrounding environment; and
- (iv) comply with the Environmental Protection Act 1994, Environmental Protection Policies and other relevant legislation, as necessary.

## **6.0 Generic Land Uses**

As required by Section 2.3.2 (f) of the DCP, the intended desirable and undesirable generic land uses for the Precinct are:

### **6.1 DESIRABLE LAND USES**

- (i) car park;
- (ii) car wash;
- (iii) commercial services;
- (iv) community premises;
- (v) fast food;
- (vi) office;
- (vii) shop;
- (viii) restaurant;
- (ix) retail nursery;
- (x) hardware centre;
- (xi) vehicle hire depot; and
- (xii) vehicle sales yards.

### **6.2 UNDESIRABLE LAND USES**

- (i) residential uses; and
- (ii) retirement village.

## **7.0 Infrastructure**

### **7.1 INFRASTRUCTURE TO BE PROVIDED**

The following infrastructure is to be provided in the Precinct in accordance with the Mango Hill Infrastructure Agreement (MHIA), the Mango Hill Infrastructure Agreement – Main Roads (MHIA-MR), the Mango Hill Infrastructure Agreement (Queensland Transport), and the rezoning conditions.

#### **7.1.1 Roads**

- (i) Mason Street to be constructed to the final standard from Endeavour Boulevard to the Bruce Highway service road;
- (ii) Road frontage to the Sector Plan inclusive of the intersection with Mason Street, to be dedicated and constructed to the appropriate standard in accordance with the MHIA;
- (iii) Bikeways and pathways to be provided along constructed roads in accordance with the MHIA..

(refer to *Figure 5 – Road Layout*)

#### **7.1.2 Water Supply**

- (i) Reticulation systems along all internal roads to service all properties in the Precinct;
- (ii) Those sections of the mains shown on *Figure 6 – Water Supply Headworks*, necessary to service the anticipated demand in the Precinct; and
- (iii) Water headworks contributions.

#### **7.1.3 Sewerage**

- (i) Trunk gravity main from the existing Council sewerage infrastructure to connect with each lot in the Precinct as shown on *Figure 7 – Sewerage Headworks*; and
- (ii) Sewerage headworks contributions.

#### **7.1.4 Stormwater**

- (i) Stormwater management works progressively in accordance with the Stormwater Management Plan for Tributary C as approved by Council; and
- (ii) Stormwater drainage systems to roads and lots.

#### **7.1.5 Electricity Supply and Communications**

- (i) Allow for underground electricity distribution to all properties within the Precinct, by Energex or another appropriate supplier of electricity;



- 
- (ii) Arrange for the provision of underground conduits along all road verges within the Precinct and adjacent roads to meet the anticipated demands of the DCP area.

**7.2 INFRASTRUCTURE AFFECTED OR REQUIRED BY PRECINCT DEVELOPMENT**

- (i) The development of the Precinct may place demands on the following infrastructure:
- Roads external to the DCP area and the Precinct;
  - Water supply infrastructure;
  - Sewerage infrastructure;
  - Stormwater infrastructure;
  - Parks;
  - Community facilities;
  - Electricity and gas supply;
  - Communications systems; and
  - State Government Infrastructure.
- (ii) The infrastructure described in clause 7.1 above, together with the obligations of the Principal Developer under infrastructure agreements will mitigate the adverse affects on the above infrastructure.

**7.3 HOW THE REQUIRED INFRASTRUCTURE RELATES TO THE INFRASTRUCTURE AGREEMENTS**

The infrastructure agreements describe the infrastructure that must be provided by the Principal Developer as part of its obligations to provide infrastructure, as envisaged by Chapter 12 of the DCP. The works described in clause 7.1 of this document are the Principal Developer’s obligations under the rezoning conditions and the infrastructure agreements.

**8.0 Preliminary Infrastructure Program****8.1 PRELIMINARY PROGRAM FOR INFRASTRUCTURE PROVISION**

- (i) The Principal Developer will provide all the infrastructure referred to in clause 7.1 of this document at times to satisfy the requirements of the MHIA. Initial infrastructure works are estimated to be constructed by December 2010.

**8.2 INFRASTRUCTURE TO BE PROVIDED AND THE INTENDED PROVIDER**

The following items of State Government infrastructure are to be provided by the Principal Developer in conjunction with the development of the Precinct in accordance with Infrastructure Agreements with the State Government. These include the provision of works to State-Controlled Roads.

- (i) The Principal Developer must contribute towards the cost of providing kerbside infrastructure associated with the public transport system. Such contribution is to be in accordance with the Infrastructure Agreement with the State Government.

**8.3 OTHER WORKS DEPENDENT ON INFRASTRUCTURE PROVISION**

There are no other works necessary to ensure the infrastructure required to service the development of this Precinct is provided.

**8.4 ESTIMATES OF WHEN OTHER WORKS DEPENDENT ON INFRASTRUCTURE PROVISION WILL NEED TO BE PROVIDED**

Not applicable – refer to Section 9.3 above.

**8.5 OTHER RELEVANT INFORMATION****8.5.1 Estimated Water and Sewerage Demands**

As required by the MHIA, the Principal Developer states as follows:

- (i) For the purpose of assessing water supply capacity, the estimated number of equivalent Tenements for this Precinct is 16.23ET.
- (ii) For the purpose of assessing sewerage capacity, the estimated number of Equivalent Persons for this Precinct is 32.46EP.