# Perth-Darwin National Highway 

Bullsbrook to Bindoon - Initial Alignment Development


Alignment Definition Study

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## Introduction

For many years planning work has been in progress to develop a transport route for the Perth Darwin National Highway (PDNH) that will service long-term transport needs between the Perth metropolitan area, Western Australia's north west and the Northern Territory.
This work has been and will continue to be undertaken by the Federal and State governments as a joint planning initiative.
In the early 1990s a corridor study concluded that the existing Great Northern Highway corridor, with bypasses around the Swan Valley and rural townsites was the most suitable for the National Highway.

While preliminary planning has looked at the PDNH route as a whole, to overcome the complexities of developing a precise route over such a vast distance, planning for the highway has been grouped into a number of sections.

The focus of this study and brochure is from Maralla Road, south of Bullsbrook to Calingiri Road, north of Bindoon or the Bullsbrook to Bindoon section.


## Background

## While previous planning work undertaken in the late 1990 s set a general 500 metre corridor for this section of highway including the adoption of the Outer Bullsbrook Route, some areas of the alignment are being further investigated including:

- The highway alignment at/adjacent to Muchea (between existing Great Northern Highway and Ellenbrook);
- The highway connection to Brand Highway north of Muchea; and
- The location of the Brockman River crossing.

Furthermore, consideration is being given to the type and location of connections to future major developments including the employment node planned east of Muchea and Chittering New Town.

During 2003 the Department for Planning and Infrastructure (DPI) with Main Roads Western Australia, City of Swan, Shire of Chittering and Shire of Gingin began work to develop a more precise reservation for the PDNH, building on previous planning works.

In early 2004, Main Roads on behalf of DPI initiated an Alignment Definition Study to determine a more precise road reservation for the future highway. The study is being overseen by a Steering Committee that consists of representatives from State and and Local Government and Community Liaison Groups (CLGs), while technical work is being carried out by GHD.

Defining a more precise road reservation is required to enable the highway alignment to be included in the Metropolitan Region Scheme (MRS) and relevant Town Planning Schemes (TPS).

In brief the work being undertaken includes developing road design concepts along the general 500m corridor, land protection plans, and a report detailing the planning process.

During May and June 2004 general project information was circulated through the study area including the Bullsbrook, Muchea, Wannamal and Bindoon townsites and surrounding areas. It is now time to involve the community in further refining the highway alignment. As part of this document an initial highway alignment (within about a 100 metre road reserve) has been outlined, within a refined corridor.

The refined highway corridor has been developed through more detailed technical work and through input from the CLGs, and was endorsed by the Steering Committee in September 2004.

The initial alignment outlined has been developed based on known constraints including landforms, environmentally sensitive areas, dwellings and terrain. However, over the coming months more detailed on-ground survey work and investigations will be carried out to verify and update this information.

## Purpose of this material

## This brochure has been produced to present the work undertaken to date and to enable members of the community to examine and comment on the initial highway alignment.

You are encouraged to examine this alignment in relation to the refined corridor and comment on the alignment using your experiences and knowledge of the local area/s.

While viewing planning information that may affect your property and/or lifestyle it is important to note that there is some flexibility within the refined corridor for the initial alignment. However, the initial alignment has given consideration to known engineering, environmental and social constraints.

It is also important to note that the initial highway alignment has been developed taking into account future development along and adjacent to the highway route, and is largely consistent with the various local and regional planning schemes. Furthermore, many issues or constraints that may be identified can be managed through innovative design and construction methods that will be developed when the highway route moves closer to construction.

## Planning for the Future

The Perth-Darwin National Highway is an important link in the state and national road network enhancing transport efficiencies between the Perth metropolitan area, the northern region of Western Australia and the Northern Territory. The national highway currently follows the Great Northern Highway alignment starting at Roe Highway in Midland as a two lane road designed to rural standards with limited opportunities for future upgrading to National Highway standards.

In the coming years, anticipated urban growth and other developments in the north east corridor of the Perth metropolitan area and beyond are expected to increase traffic congestion, reduce social amenity and the serviceability of the existing national highway route.

As a result advanced planning for future road improvements is required including providing for future bypasses around the Swan Valley area and rural townsites such as Bullsbrook, Muchea and Bindoon.

Although the PDNH is not likely to be constructed for many years it is important to plan the route and reserve land within the MRS and relevant town planning schemes to guide development through the area now, and in the future.

The first studies to examine potential highway alignments between Midland and Muchea began in 1991, and resulted in the southern section of the PDNH alignment between Reid Highway and Maralla Road being included in the North-East Corridor Structure Plan (DPUD, 1994) and later included in the MRS in December 1994.

The previously completed Alignment Selection Study looked at several options to enable the general 500 metre corridor to be selected between Maralla Road and Calingiri Road. This corridor was selected based on technical investigations and community consultation.

In 2002 the Government endorsed the general 500 metre highway corridor between Maralla Road and Calingiri Road, the subject of this study. The corridor was determined following an Alignment Selection Study and extensive consultation as part of the North East Corridor Extension Strategy (NECES), which looked at broader land use planning through this area. Other land use issues raised as part of the NECES, which are relevant to the development of the PDNH were the Muchea Employment Node, located to the east of the Muchea townsite, and the Chittering New Town area, located south of Bindoon between the proposed PDNH and Great Northern Highway.


## The Alignment Definition Study

The alignment definition study is the current phase of the planning work being undertaken to develop a more precise road reservation (nominally 100 metres) for the PDNH between Bullsbrook and Bindoon.

This study includes undertaking detailed investigations to resolve any outstanding road reserve location issues and will more precisely define the land needed for the future highway providing greater certainty for landowners and local government.

Work completed has included reviewing all previous studies undertaken such as preliminary environmental impact assessments, indigenous and non-indigenous heritage, and social and engineering issues.

To date detailed desktop constraints mapping of the general 500 metre corridor has been developed and discussed with key stakeholders including the CLG's and local government to determine further key land and social constraints.

Using this information the initial highway alignment and refined corridor as outlined in Pages 12, 13 and 14 has been developed for discussion and further technical review.

Involving the community in this study is a critical component to developing an appropriate highway alignment within the existing corridor. The feedback received on the initial highway alignment during this comment period will be used to further refine the constraints mapping and ultimately the highway reservation.


## Meeting future design and road standards

This study proposes that the highway be designed to freeway standards between Maralla Road and the Brand Highway connection, as a dual carriageway between Brand Highway and Gray Road and as a single (two lane) carriageway from this point to Calingiri Road. The highway reserve will also allow for a rapid transit system up to Chittering New Town Access with stations at major road interchanges.

The study currently proposes grade separated interchanges at major road crossings. That is, where the highway will go under or over the side road and north and south connections will be provided, similar to interchanges on the metropolitan freeway system.

Other intersections are proposed as at-grade, which are intersections that do not have a bridge or flyover. These intersections are proposed at:

- Teatree Road;
- Gray Road;
- Mooliabeenee Road;
- Cook Road/Cullalla Road;
- Bindoon Moora Road;
- Hay Flat Road (west); and
- Great Northern Highway.


## How the initial highway alignment was selected

In the first part of this study, an initial highway alignment (about 100 metres wide) was determined using information collected during a review of all the previous studies, as well as consultation and known land use, engineering, social and environmental constraints.
This initial alignment has been developed for discussion purposes and provides a guide for more detailed on-ground investigations to be carried out over the coming months.


## Alternative Alignment Concepts

While the general 500 metre corridor is largely set, previous planning studies and work undertaken earlier in this study, identified that the highway corridor required further investigation at three specific locations, the details of the resulting concepts have been described below.

Site I:Alignment near Muchea
On the east side of Muchea between the existing Great Northern Highway (GNH) and Ellenbrook, previous studies had located the PDNH corridor along the existing GNH, which required the future route to cross GNH at two locations. On review it was noted that the adoption of this concept would also make it difficult to provide a grade separated interchange between Brand Highway and Muchea East Road and that a complex network of service roads would be required, increasing overall construction area and road surface.

Subsequently an alternative alignment located further west was developed, separating the existing GNH and the proposed PDNH and providing improved opportunities for connection between the new and existing road network, including the future Muchea employment node. Three alternative connections to the Muchea Employment Node and existing road network have been developed for further investigation (see Figure 1).

At this time a wider corridor (about one kilometre) has been adopted to enable a detailed analysis of the area to be undertaken. This will include looking at vegetation, hydrology, local road connections and drainage issues.

## Site 2:The Brand Highway Connection

During the Alignment Selection Study the PDNH/Brand Highway connection was proposed near Ioppolo Road, reducing the length that PDNH and Brand Highway ran in parallel, avoiding the Muchea townsite and existing development at Tiwest.

However, further investigation has shown that the Ioppolo Road area has major environmental constraints, which include being bounded by proposed A-class environmental reserves. As a result three alternative road connections further south have been developed for investigation (see Figure 1).

## Site 3:The Brockman River Crossing/Other Northern Alignment Concepts

Consultation with the Wannamal community during the previous study identified that the community was not supportive of the general 500 m corridor's proposed crossing point at the Brockman River. Further consultation through the north CLG identified an alternative PDNH alignment crossing the Brockman River further to the north.

Other comments received that are unrelated to the Brockman River crossing but impact on the highway alignment south and east of the river will also be further investigated.

In total four alignment concepts between Cook Road and Calingiri Road have now been identified for evaluation during the next phase of the study (see Figure 3), they are:

- north of Cook Road an alignment adjacent to the railway to reduce property severance impacts
- northerly crossing of the Brockman River
- an alternative northern alignment between Head Road and Hay Flat Road to avoid a private water source
- an alternative northern alignment between Hay Flat Road and Calingiri Road to avoid impacting on the Udumung Nature Reserve.


## Community Consultation

## Steering Committee

As part of the previous Alignment Selection Study a Steering Committee was formed to oversee and guide the planning process. In 2003 with the initiation of the Alignment Definition Study the Steering Committee was reconvened to assist with study progress.

The committee consists of representatives from the City of Swan, Shire of Chittering, Shire of Gingin, Department of Environment, North and South CLGs, DPI, Federal Department of Transport and Regional Services and Main Roads.

At the end of the study the committee will recommend a reservation for the future PDNH between Maralla Road, Bullsbrook and Calingiri Road, Bindoon to the Government for endorsement.

In undertaking this task, the committee's role is to:

- provide advice and direction by reviewing information provided during the study,
- represent the interests and provide the expertise of the stakeholder agencies and ensure that the study considers all necessary issues.
- consider the likely impacts of the PDNH alignment in the definition of the highway reservation,
- recommend a required highway reservation to the Western Australian Planning Commission.


## Community Liaison Groups

In May 2004 CLG nominations were called and 20 responses were received (Group South - Bullsbrook to Muchea (10) and Group North - Muchea to Bindoon(10)) for Community Liaison Groups.

Based on nominations two groups were selected that represent the land, business and other interests of the project area. The groups were split into south and north areas based on the MRS and local government boundaries. The southern group is focusing on the section of the alignment between Maralla Road and the City of Swan boundary and the northern group is concentrating on the alignment from the City of Swan boundary north to Bindoon.

The CLGs will be involved in each aspect of the decision making process regarding the detailed planning of the highway's alignment within the corridor and the definition of a reservation for the future highway. However, the groups will not be responsible for approving the final road alignment.

The CLG's provide a forum for representatives from the community, industry, local government and other key stakeholders to work closely with DPI and Main Roads to ensure that the project meets the needs of road users and the local communities, as well as the needs of the environment.

The first CLG meetings for each group were held in July 2004 where an initial highway alignment was presented based on desktop studies and known environmental and land use information. These meetings were used as a forum to discuss the initial alignment and provided group members with the ability to identify potential issues or concerns. This enabled the technical consultant to further refine the initial alignment before presenting it for broader public discussion.

The South CLG meeting was held at Bullsbrook on 8 July 2004 and the major group issues were:

- Maralla Road: Curvature of alignment north of Maralla Road was questioned. Alignment has been developed to avoid a Bush Forever site and Environmental Policy Protection (EPP) wetland. It was requested that the significance of the bushforever site be investigated during on-ground survey.
- Warbrook Road/Stock Road: The initial alignment presented indicated that a connection would be provided at Warbrook Road. However, it was raised at the CLG meeting that the North East Corridor Extension Study (NECES) identified that the connection to the PDNH in this area would be provided at Stock Road. The preferred location for a connection to the PDNH in this area will need to be investigated in further detail as part of the study.
- Bush Plan No 97 located about 1.5 kilometres north of Neaves Road: Suggested that the initial alignment be moved to the west where vegetation is sparser and not so unique. This alternative alignment (see Figure 1) will be investigated during the next phase of the study and the corridor which will be subject to detail investigations will be widened in this area.
- Ellen Brook: Although the proposed crossing of Ellen Brook is outside the southern area, CLG members expressed concern about the proximity of the initial alignment to Ellen Brook.

The north CLG meeting was held at Chittering Shire Chambers on 29 July 2004 and the major group issues were:

- Muchea west option: It was suggested that an alternative corridor to the west of Muchea be reviewed as a number of constraints (system six wetland area and RAAF Weapons Range) in this area have changed since the previous planning was completed. While this corridor is outside the scope of the current study, the request was reviewed by Main Roads and DPI. This review identified that while some constraints had changed, there were still factors that meant the government endorsed corridor remained favoured. This direction was endorsed by the Steering Committee in September 2004.
- Muchea corridor and Brand Hwy connection options: Concerns were expressed on the proximity of the initial alignment to Ellen Brook and the increased impacts that this alignment would have on adjacent landowners. The study corridor has been widened through this area to allow alternative alignments closer to the existing GNH to be investigated.
- Mooliabeenee Road: The type of connection to be provided at this location was questioned and a request was made to consider upgrading the highway connection to an interchange rather than staggered T intersection. It is suggested that this would better accommodate the mix of traffic and future higher traffic volumes as the road is an important east-west route. This will be investigated as part of the study.
- Brockman River Crossing: An alternative alignment crossing the Brockman River further to the north was identified and will be investigated as part of this study.


## Where to from here

Once detailed investigations and the current community consultation are complete the technical consultant will begin work to refine the PDNH alignment based on detailed environment, social and engineering information gathered.

Once the PDNH alignment has been refined based on the findings of this detailed technical analysis and in light of community comment further details will be presented to the broader community and stakeholders for review. This is expected to occur in mid 2005.

Following stakeholder feedback the PDNH alignment and road reserve will be finalised and presented to government for endorsement.

## You are encouraged to participate in the consultation on the initial alignment of the PDNH between Bullsbrook and Bindoon by commenting on the proposals within this brochure.

Public comments will be used to assist in refining the initial alignment so that a nominal 100 metre road reservation can be determined.

You can obtain further information about the initial alignment and previous consultation and studies undertaken by attending the public displays or by contacting Main Roads Community Relations representative Miranda Nikolich on (08) 94576073.

In recent months land owners should have been contacted regarding the study by GHD Consultants which is undertaking the technical work.

Alternatively you can contact members of the CLG to discuss your concerns with someone who knows your local area. The names and contact details of CLG members are outlined below.

To submit your comments please fill out the attached comment form and send to the provided reply paid address by 15 December 2004. Please note no postage stamp is required.

Main Roads Western Australia
Perth Darwin National Hwy Study
Reply Paid 6202
East Perth WA 6892

South Community Liaison Group

| Name | Organisation | Phone/Fax/Mobile |
| :--- | :--- | :--- |
| Dallas Lynch | Ellenbrook Catchment Management Group | Ph: 95710300 |
| David Lombardo | Bullsbrook/Chittering Chamber of Commerce | Ph: 93888108350 |
| Rochelle Farrell | Landowner | Mob: 0418927022 |
| Jacquie Moran | Landowner | Mob: 0404687707 |
| Timothy Wright | West Bullsbrook Residents \& Ratepayers Assn | Mob: 0412873447 |
| Greg Rowe | Greg Rowe and Associates | Ph: 95712277 |
| Dale Allcock | Landowner Representative | Mob: 0417938149 |
| Doug Kennedy | North Swan Landcare District Committee (NSLCDS) 92211991 |  |
| Martin Richardson | City of Swan | $\mathrm{Ph}: 92429100$ |

## Further general study information

Miranda Nikolich
Ph: 94576073
Fx: 94578073
Email: miranda@creative-express.com.au

North Community Liaison Group

| Name | Organisation | Phone/Fax/Mobile |
| :---: | :---: | :---: |
| Denzel Huxtable | Bullsbrook/Chittering Chamber of Commerce | Ph: 95711067 |
| Lance Stagbouer | Bindoon Community Progress Assn | Ph: 95762001 <br> Mob: 0428762101 |
| James Cray | Property owner | Ph: 95762067 <br> Mob: 0408022685 |
| David Dewar | Resident/property owner | Ph: 95762035 |
| Gloria Glover | Property owner/resident | Ph: 96559036 |
| Veronica Verrall | Wannamal Community Centre | Ph: 96557044 |
| Chantelle DeLaHaye | Tiwest | Ph: 95719226 |
| Neil Hearn | Property owner and local Roy Western Real Estate Representative | $\begin{aligned} & \text { Ph: } 95710017 \\ & 0428482277 \end{aligned}$ |
| Roasanna Hindmarsh | Wannamal Lake Catchment Group | Ph: 95710400 |
| Judi Tomlinson | Shire of Chittering | Ph: 95714140 <br> Mob: 0402015573 |

## Displays

Public displays/information sessions will be held at:

| Location | Date |
| :--- | :--- |
| Bindoon Agricultural Show | Saturday 23 October 2004 <br> Times 10am to 3.30pm <br> Staffed Information Session |
| Shire of Chittering Offices | 25 to 29 October (Unstaffed) <br> (Normal opening hours) |
| Bullsbrook Community Library | 1 to 5 November (Unstaffed) <br> (Normal opening hours) |
| Bullsbrook Community Hall (Lowery Park) | Saturday 30 October 2004 <br>  <br> Staffed Information Session <br> $10 a m ~ t o ~ 2 p m ~$ |
| Muchea Hall | Saturday 6 November 2004 <br>  <br> 10am to 2pm <br> Staffed Information Session |
| City of Swan Foyer | 8 to 12 November 2004 (Unstaffed) <br> (Normal opening hours) |
| Midland Library | 13 to 21 November 2004 (Unstaffed) <br> Saturday 13 November <br> 10am to 2pm |

The initial road alignment maps




## What comes next in the highway's planning process

This Alignment Definition Study is part of a larger planning process that is undertaken for all new major roads.

The process is summarised as:

## Corridor Study

In the early 1990s a corridor study concluded that the existing Great Northern Highway corridor, with bypasses around the Swan Valley and rural townsites was the most suitable for the National Highway.

## Alignment Selection Study

In the late 1990's an alignment selection study was undertaken to select a general corridor for the National Highway.

## Alignment Definition Study (This study)

This study is being undertaken to define road reservation requirements for the National Highway.

## Protection of Road Reservation

When the Alignment Definition Study is complete action will start to include the road reservation in the metropolitan and local planning schemes.

## PDNH and the land acquisition and compensation process


#### Abstract

As a reservation for the PDNH has not yet been defined there are no processes/mechanisms available to enable landowners that may be impacted by the future highway to seek compensation. However, some certainty will be provided once the current Alignment Definition Study identifies a reservation for the PDNH by late 2005.


## Within the Metropolitan Region Scheme (MRS)

Once a reservation has been identified, under the provision of the MRS there are several options available to the owners of reserved land:

1. Retain ownership and continue 'business as usual' at the affected property until it is needed for the public purpose. Property owners may complete any development or subdivision of the property that was approved prior to the reservation coming into affect (excluding the reserved land area).
2. Sell the property on the open market to another person(s). The Western Australian Planning Commission (WAPC) recognises that due to the reservation this may be difficult and, subject to acquisition priorities and the availability of funds, may be willing to consider the purchase of a reserved property if an owner is unable to achieve a private sale on the open market.
3. Offer the land for sale to the WAPC through a process of negotiated purchase. Subject to acquisition priorities and the availability of funds, WAPC may be willing to consider the acquisition of a reserved property. The property would be purchased at current market value had it not been affected by the reservation, with the value determined by independent valuations.
4. Make a claim for compensation for injurious affection following the WAPC's refusal of a development application or approval of a development application subject to conditions that are unacceptable to the applicant. In such cases the WAPC may elect to purchase the property instead of paying compensation with the purchase price being determined in the same way as that used for negotiated purchase.

## Outside the MRS

It is proposed to include the PDNH reservation in the Shire of Chittering's Town Planning Scheme.
However, currently there is no formal mechanism and/or funding source for the State Government to deal with requests for compensation from landowners affected by future road reservations in areas outside region schemes. DPI is currently working to identify an agreed mechanism and funding source in this respect. Owners affected will be advised when a formal funding mechanism has been determined, however, if you are affected and suffering undue hardship such as financial difficulties, health problems or a change in work circumstances you should contact the WAPC.

Who to contact
For further information about the land acquisition and compensation process contact the WAPC - Land Asset Management Branch - Property Services Manager Mr Dale Hall 92647533

## Perth Darwin National Highway Comment Form

If you would like to submit comments on the initial Perth Darwin National Highway alignment between Maralla Road, south of Bullsbrook and Calingiri Road, north of Bindoon please fill out this form and return to the reply paid address provided by I 5 December 2004. Please note no postage stamp required.

## Main Roads Western Australia

Perth Darwin National Hwy Study
Reply Paid 6202
EAST PERTH WA 6892
You are encouraged to review the information presented and provide comments on how you consider the initial alignment may be improved within the refined corridor.

Public comments will be used to assist with refining the initial alignment so that a nominal 100 metre road reservation can be determined for inclusion in the Metropolitan Region Scheme and relevant town planning schemes.

## Questions

1. (a) Do you support the initial alignment proposed between Maralla Road and the City of Swan local government boundary?


If no, why not?
b) Do you support the highway's initial alignment proposed between the City of Swan local government boundary and Calingiri Road?


If no, why not? $\qquad$
2. Which alternative Brand Highway connection do you prefer, and why? Please tick.

Option 1


Option 2
Option 3
3. Which section of the highway most interests you? Please tick.


Whole alignment
 Marralla Rd to Naves Rd

Neaves Rd to MucheaMuchea to Ioppolo Rd
 Ioppolo Rd to Mooliabeenee Rd
 Mooliabeenee Rd to Cullalla RdCullalla Rd to Calingiri Rd
4. Please outline any additional comments/issues relating to the proposed PDNH.
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