



Harness Racing NSW

Proposed Tamworth Harness Racing Facility Servicing Strategy

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Appendices

Appendix A – Proposed Tamworth Harness Racing Facility Concept Plan

1. Introduction

1.1 Introduction

Harness Racing NSW has embarked on a redevelopment program for a number of existing harness racing tracks in NSW. This redevelopment program will see a number of new tracks being developed in country areas of NSW. Three towns were selected for redevelopment, given existing horse and trainer populations. In addition, these three towns represent strong areas of public participation at race meetings. Strategically, the three towns are centres of strong population growth.

The three towns are Bathurst, Wagga Wagga and Tamworth. Each track would be similar in size (1000m) and would enable country horses to 'graduate' to metropolitan tracks, particularly Menangle Park. All three tracks would be on new selected sites and not redevelopment of existing facilities. The vision for developing new track facilities at these centres is now reaching reality.

The Tamworth site is the last of the three tracks to be developed. However, to develop the new site at the corner of Burgmanns Lane and New England Highway, the land must be rezoned to permit the development.

GHD Pty Ltd has been engaged by Michael Brown Planning Strategies Pty Ltd to undertake a range of investigations to support the Planning Proposal for the rezoning of the Tamworth site.

This report has been prepared to investigate Water, Sewer, Power and Communications servicing strategy.

1.2 Background

The Tamworth site is a substantial land holding located on the outskirts of town, but close to the existing Australian Equine Centre (AEC). There are opportunities to leverage off the AEC and the site's location on the New England Highway. The site has a substantial frontage to this road of 570 metres, which allows for value adding to the site for future uses, other than harness racing.

Tamworth is a very strong equine region and therefore the provision of a new facility for harness racing strengthens the equine industry. Harness racing is extremely relevant to local strategies and objectives in meeting equine needs of the region.

Harness Racing NSW made a commitment to industry participants (trainers and drivers) to develop the site with a new track, grandstand, stable complex and ancillary facilities following purchase of the land. At the same time the development of the land would integrate with surrounding existing development and the future expansion of residential land at Tamworth South. The new track would also meet industry standards to provide improved safety and competitiveness for horses and drivers.

The vision was based on a number of desired outcomes for the Racing Precinct:

- To improve track facilities to new best practice standards.
- Realise the development potential of this strategically significant location and take advantage of the site's proximity to future growth in Tamworth and the Region.
- To retain the Participants within the New England Region.
- Provide new grandstand and stabling facilities for the public and participants.
- Improve safety for drivers and horses at Tamworth.

- Realise the potential for some trainers to relocate their existing stables to on-site.

1.3 Scope and limitations

This report: has been prepared by GHD for Harness Racing NSW and may only be used and relied on by Harness Racing NSW for the purpose agreed between GHD and the Harness Racing NSW for the purposes of supporting the Planning Proposal for the project.

GHD otherwise disclaims responsibility to any person other than Harness Racing NSW arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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GHD has not been involved in the preparation of the Planning Proposal Submission and has had no contribution to, or review of the Planning Proposal Submission other than in the Servicing Strategy report. GHD shall not be liable to any person for any error in, omission from, or false or misleading statement in, any other part of the Planning Proposal Submission.

2. Project Description

2.1 Site Details

The subject site is referred to as Lot 5 DP 1048585, Burgmanns Lane, South Tamworth. The site has a total area of 41.32 hectares. The site is located on the south eastern corner of the Burgmanns Lane and Goonoo Goonoo Road (New England Highway) intersection. The site generally slopes to the east from about 419 metres Australian Height Datum (AHD), adjacent to Goonoo Goonoo Road, towards the eastern boundary at 398m AHD. The site has been predominantly cleared with only limited vegetation, in the form of isolated trees, remaining.

The site has previously been used for agricultural purposes in the past and contains infrastructure related to agricultural use including fencing, tracks and accessways, dam, sheds and shelters. A dwelling has also been constructed on the site but has been abandoned for some time.

2.2 Proposal

Harness Racing NSW propose to construct a 1,000 metre harness racing track and associated facilities on the site. The proposed development is detailed below:

Site Facilities

The proposed development would include the construction of:

- 1,000 metre harness racing track, located in the eastern portion of the site
- Clubhouse
- Marquee
- Stables
- Parade ring

A site plan illustrating the layout of the proposed development is contained in Appendix A.

Access and Car Parking

The proposed development will be accessed from Burgmanns Lane via a roadway through the site. The intersection between the proposed access point and Burgmanns Lane would be located over 200 metres east of the Burgmanns Lane and Goonoo Goonoo Road (New England Highway) intersection.

The proposed development would provide 238 standard car parking spaces together with 42 truck and trailer parking spaces, located in the central portion of the site. All parking spaces would be located adjacent to the proposed clubhouse, stables and parade ring.

Landscaping

The proposed development would involve landscaping in and around the trotting track, the parking areas and in and around the clubhouse and parade ring.

3. Water Supply

3.1 Proposed water supply requirements

Typical water supply demands at the site for the proposed development are summarised as follows:

- Human potable usage - Maximum potable usage would be on the largest race meet day of the year where up to 150 people may be at the site. Based on Water Services Association of Australia design guidelines advising a conservative allowance of 180 L/person/day for a development like this and a race meet duration of 6 hours, this equates to an average day demand of 1.2 L/s. With the type of development and number of people, a peaking factor of 2 would apply to give an approximate peak hour demand of 2.4 L/s.
- Training facility usage – this would only be a small water component and would not coincide with race meets when peak demand would be experienced.
- Trotting track watering during race meets –this demand would be preferentially met with volumes stored in rainwater tanks that collect from the main building roof. Tankers would likely fill from an on-site storage tank may to buffer instantaneous flows from the TRC potable water network if there is not enough stored rainwater. During the largest race meet of the year, 7 x 8,500 L capacity tankers filling during the 6-hour period have been assumed. This equates to roughly 2.8 L/s if buffer storage tanks are installed.
- Fire flow –a fire flow of 10 L/s should be allowed for at a minimum service pressure of 10 m head (100 kPa). Typical minimum service pressures for peak demand without fire flow is 20 m head (200 kPa).

This results in a total peak hour potable demand rate of 5.2 L/s without the fire flow allowance.

3.2 Existing water infrastructure

Initial discussions with TRC have indicated that there is a DN250 watermain that runs along Goonoo Goonoo Road (fronting the development) that supplies the Kingswood reservoir in the Kingswood rural residential area (connecting watermain is approximately 3km long). Key levels to consider are as follows:

- Kingswood Reservoir bottom water level (BWL) – min 462 m AHD taken from GHD GIS data
- Elevation of proposed site main service point (near Goonoo Goonoo Road and Burgmann's Lane intersection) – 419 m AHD from site survey plans

3.3 Conclusion

Based on a conservative assumption of the fire flow occurring when there is peak demand in the rest of the Kingswood reservoir system (for instance 20 L/s), a total system demand of 30 L/s through 3 km of DN250 trunk watermain only results in 5 m pressure loss. This would provide a hydraulic grade line (HGL) at the proposed development site of approximately 457 m (reservoir BWL less the headloss). This translates to a service pressure at the connection point of approximately 38 m head and is well above the minimum service pressures listed above.

Therefore, water supply servicing to the site appears feasible from the existing system. The detailed requirements for the site connection and the need for storage tanks will be determined in the development application phase.

4. Sewer Servicing

4.1 Proposed sewer servicing requirements

The sewer demands for the site would be based on a proportion of the human potable usage listed in the section above that will go to sewer. This proportion (or 'discharge factor') would be agreed with TRC at the development application stage but is likely to be in the 50-80% range based on the individual future uses proposed.

4.2 Existing sewer infrastructure

Given that the existing reticulated sewer system operated by TRC is over 1.5km to the north of this site, an on-site sewer system is proposed.

The TRC On-Site Sewage Management Strategy 2008 indicates that either a septic or on-site reuse/irrigation system could be adopted.

A septic system could be used to collect sewage and have this periodically pumped out by tankers (for transport to the Westdale Wastewater Treatment Plant).

Alternatively, an on-site reuse/irrigation system (aerated wastewater treatment system) could be adopted to collect and treat flows then irrigate the treated effluent.

4.3 Conclusion

Either a septic or on-site reuse/irrigation system could be adopted to service the site. A decision on which approach will be accepted by TRC will be made in the development application phase.

5. Power Supply

5.1 Proposed power requirements

Typical power demands at the site for the proposed development are summarised as follows:

- Car park, and General Area Lighting – Carpark and general area lighting will require to be compliant with AS1158 for public lighting. It is estimated carpark and general area lighting will require approximately 10 -15kVA Maximum Demand (MD).
- Clubhouse – The clubhouse will likely include a small café/food area, administration offices and grandstand area. The total under roof area will be approximately 700m² requiring approximately 50 – 60kVA MD.
- Marquee – The Marquee will have an area of approximately 260m² requiring approximately 10 – 15kVA MD.
- Stables – The stables will only require fairly basic lighting and power requirements. With an approximate floor area of 2400m² it will require approximately 10 – 15kVA MD.

The result of the above analysis is that the site will have a demand of approximately 80 – 105kVA (or approximately 110 Amps to 140 Amps MD).

5.2 Existing power infrastructure

The site is well serviced with 11kV Overhead Power lines running along Burgmanns Lane (which also serviced the existing farm previously).

5.3 Conclusion

Based on the modest overall demand for the site and the proximity to an 11kV OH supply a pole top or kiosk substation will likely be required to be installed as part of the development. However the site is unlikely to require any additional upgrade to the Authority infrastructure and there appears to be no impediment for connection of a power supply to the proposed facility.

6. Communications

6.1 Proposed communications requirements

Typical telephone demands at the site for the proposed development are summarised as follows:

- Mobile Phone Reception
- Clubhouse – The clubhouse will likely require land line telephone service for the following:
 - Public Telephone
 - Admin Facilities (Fax, Voice x 2, Data, EFTPOS)
 - Security/Fire
 - Café Voice and EFTPOS

The result of the above analysis is that the site will have a demand of approximately 10 fixed telephone connections.

6.2 Existing communications infrastructure

The site has good mobile phone coverage and Telstra has infrastructure adjacent to service neighbouring properties (the actual number of spare lines adjacent to the site is unknown).

6.3 Conclusion

Based on the small amount of fixed lines required to service the site there appears to be no impediment for connection of the required communications and data lines for the proposed facility.

Appendices

Appendix A – Proposed Tamworth Harness Racing Facility Concept Plan

GHD

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