

PART B – AEIS

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7. LAND USE AND INFRASTRUCTURE

7.1. State planning framework

7.1.1. *Sustainable Planning Act 2009*

A submission suggested that SunWater proposed to seek approval for the Project via a Community Infrastructure Designation (CID) under the Sustainable Planning Act 2009 (SP Act). To clarify, as stated in Section 1.11.1.2 of the EIS, SunWater presented the option of a CID as a potential approvals pathway, but did not formally propose to pursue it. SunWater has since determined that a CID is the preferred pathway. The process is explained in **Section 1.5.2.5** of Part B of the AEIS.

Western Downs Regional Council (WDRC) noted that water supply infrastructure was exempt development under the planning scheme of all four local government bodies affected by the Project. They clarified however that this exemption did not include various other components of the Project and in order to obtain approval, the locations of those components would need to be provided, along with the other information necessary for approval.

SunWater is not seeking approval for the construction camps through the EIS process. This will be the responsibility of the appointed Construction Contractor, and all necessary permits and approvals from Banana Shire Council (BSC) and WDRC will be sought as required.

SunWater are not proposing to open any new resource extraction areas related to the sand needed for bedding material along the pipeline, but instead will rely on purchasing the material from approved suppliers.

Permits for clay extraction areas and material lay-down areas will be sought from BSC and WDRC. The locations of potential clay extraction areas were provided in Chapter 2 of the EIS, while the location of material lay-down areas will be confirmed through negotiations with individual landholders and will be identified to Council at that stage.

7.1.2. *Strategic Cropping Land Act 2011 and State Planning Policy 1/12: Protection of Queensland's Strategic Cropping Land*

Numerous submissions stated that consideration of the requirements of the *Strategic Cropping Land Act 2011* (SCL Act) were inadequate in the EIS. At the time of writing the EIS, the legislative framework relating to the protection of SCL had not been introduced so the EIS reflected the ToR and the legislative instruments that existed at the time. Though introduced since the EIS was produced, the SCL Act has also since been repealed so it will not be addressed. The relevant Act is now the *Regional Planning Interests Act 2014* and its relevance to the Project is discussed in **Section 1.5** of Part B. In brief, the Act does not apply to the Project.

Similarly in December 2013 the single State Planning Policy (State PP) replaced all former State Planning Policies, including SPP 1/12: Protection of Queensland's Strategic Cropping Land, and SPP 1/92: Development and the Conservation of Agricultural Land.

7.1.3. Land Act 1994

At this stage of the Project, no approvals have been obtained for the Nathan Dam Pipeline, however the part of the pipeline that is the Woleebee Creek to Glebe Weir Pipeline has been separately approved and constructed with a 20 m easement obtained (refer to **Part C** of the AEIS). All relevant approvals under Commonwealth and State legislation for the construction and operation of the pipeline will be sought in a staged process prior to construction.

A public utility easement will be sought for both the full supply level (FSL) and the pipeline. The lands to be impacted by the refined pipeline alignment and proposed easements are identified in **Appendix B2** of the AEIS. The details of the proposed easements will be provided to DNRM following the AEIS.

7.1.4. State Planning Policy 1/92: Development and the Conservation of Agricultural Land

As noted in **Section 1.5** of Part B this SPP has been replaced by the State Planning Policy (2014) however a response to the issue as raised is provided.

A submission commented that Chapter 7 of the EIS did not adequately address impacts to Good Quality Agricultural Land (GQAL). An assessment of the impacts of the Project on GQAL was provided in Chapter 6 of the EIS. Section 6.1.4.2 of the EIS identified that the water storage area impacts 5,981 ha of Class A, 1,589 ha of Class B and 6,254 ha of Class C GQAL.

Section 6.1.5.2 of the EIS identified that the original pipeline alignment included in the EIS impacted on 347 ha of Class A, 175 ha of Class B and 91 ha of Class C GQAL. The revised Project scope and pipeline alignment (including termination of the pipeline near Warra, the Woleebee Creek to Glebe Weir Pipeline, and the realignment in Area 3) result in a reduction of impacts to GQAL. Assuming a worst case scenario of no agricultural activities being able to occur within a 15 m wide operational easement, the revised area of impacts of the pipeline on GQAL are 76 ha of Class A, 44 ha of Class B, and 105 ha of Class C, a reduction of approximately 63% of impacted GQAL. Additionally, as SunWater's standard easement agreement does not prohibit cropping activities, these areas of permanent impacts to Class A (crop land) and Class B (limited crop land) GQAL may be reduced further through the establishment of agreements between SunWater and the relevant landholder.

Section 6.2.1.2 and Section 6.2.2.2 of the EIS stated the Project meets the 'overriding need' definition in accordance with the *Planning Guidelines: The Identification of Good Quality Agriculture Land*.

Management and rehabilitation of GQAL during construction activities for the Project will be undertaken in accordance with the requirements of the Soil Management Protocols developed for the project. This is discussed further in **Chapter 6** of Part B of the AEIS.

7.2. Land use

7.2.1. Impacts to existing land uses

It is considered that the impacts of the construction and operation phases of the Project on existing land uses were adequately identified in Section 7.2.1.2 of the EIS for the FSL and Section 7.2.2.2 for the pipeline.

Mitigation measures addressing identified impacts were recommended in Section 7.2.1.5 for the dam and Section 7.2.2.5 for the pipeline.

Further clarification of impacts on agricultural land uses is provided in **Section 7.2.2**.

7.2.2. Impacts of the pipeline on agricultural land uses

The types of land uses impacted by the revised pipeline alignment are generally consistent with those reported in Section 7.1.3.4 of the EIS. However, the impacts to land uses are considerably reduced as a result of the following factors (refer to **Part C** of the AEIS):

- Approximately 76.7 km of pipeline with a 20 m wide easement in Area 1 and land at Pump Station 3 has been already obtained as part of the construction of the Woleebee Creek to Glebe Weir pipeline project, effectively removing the impacts from association with the Nathan Dam and Pipelines project.
- Termination of the pipeline near Warra instead of Dalby, which reduces the length by approximately 45 km. This area no longer impacted by the pipeline contained the highest amount of irrigated agriculture along the previous pipeline alignment.
- Realignment of the pipeline in Area 3 from the eastern to the western side of the highway. This significantly reduces potential impacts related to flooding and erosion but removes the opportunity for sections of the pipeline to be included within an existing road reserve to entirely within private property.

The total length of new pipeline included within the Project has been reduced from approximately 263 km to 149.3 km.

SunWater have undertaken investigations and planning to determine the most suitable alignment for the revised pipeline, including engaging with existing infrastructure providers. The placement of the pipeline alignment within existing easements is generally not supported by infrastructure providers, thus the alignment within private property adjacent the existing Warrego Highway and Western Queensland railway is the most suitable option available. Land use impacts and alienation of viable cropping land have been minimised by positioning the pipeline as close as possible to and parallel with the property boundary.

During construction of the pipeline, access tracks to reach the pipeline alignment will use the existing road network or farm access tracks (with landholder permission) as much as possible. Any new access required will be agreed with landholders and will be located to avoid existing agricultural activities as far as practicable. Ancillary activities required for the construction of the pipeline (such as material stockpiles or laydown areas) will operate only during the construction phase. Land used for ancillary activities will be remediated and rehabilitated following construction of the Project.

Once the pipeline has been constructed, soil remediation works of the construction easement and any areas disturbed outside of the construction easement will occur. Soil remediation works, including long term provisions for soil settlement, are described further in **Chapter 6**. Grazing access will be maintained over the majority of the pipeline easement (except areas occupied by above ground infrastructure) once the pipeline is operational.

The operational easement of the pipeline will be 15 m wide. This is to accommodate the pipeline, necessary above ground infrastructure, the maintenance track, and additional area to ensure access for machinery is

available if it is needed to conduct repairs. Many segments of the pipeline are adjacent to boundaries which currently contain landholder access tracks, firebreaks or stockpile areas. These existing tracks will be utilised as much as possible to avoid disturbances to cropping activities. Stockpiles of equipment, bales etc. which do not exceed the weight restriction will be allowed on the easement other than on the maintenance track but if emergency repairs to the pipeline are needed, the material would need to be rapidly removed.

SunWater's standard easement agreement excludes cropping land uses only within the area occupied by the maintenance track or above ground infrastructure. It also excludes deep ripping (but not ploughing) from the area directly above the underground segments of the pipeline. The maintenance track will have a total width of 3 m. The above ground infrastructure may typically be isolated structures hundreds of metres apart and with a footprint of several square metres.

Cropping activities that do not include deep ripping and are located outside of the maintenance track will be possible in the operational easement. The maintenance track would generally be placed immediately inside property boundaries where possible, such as when the easement aligns with a road or highway, to minimise impacts to agricultural activities.

It is recognised that construction of the pipeline will interfere with existing irrigation infrastructure on some properties. Consultation with landholders will be held early in the construction phase to develop plans to relocate irrigation pipes or channels (at SunWater's cost) to facilitate ongoing use. Particular attention would need to be paid to gravity-fed systems. Each property owner will be individually consulted to agree means to minimise impact to their property while also achieving the purposes of the easement.

Chapter 6 of the EIS identified the types of soils, and their characteristics, that will be affected during construction of the pipeline. Mitigation measures were provided in Section 6.2.2.2 specific to managing runoff and erosion along the pipeline alignment. Mitigation measures to manage impacts associated with runoff were also provided in Section 14.2.1.2 of the EIS. Further development of soil management strategies is provided in **Chapter 6** of Part B of the AEIS and the EMP (**Appendix B 29**).

7.2.3. Heavy farming equipment and machinery

The pipeline is designed and constructed to withstand damage from the loading equivalent to a T44 truck (44 tonnes). SunWater does not anticipate that farm machinery will impact the buried pipeline.

7.2.4. Downstream impacts to irrigated agriculture land uses

A submission suggested that impacts to downstream water harvesters could be mitigated by the provision of a supplemented water entitlement. The option of such a product and/or financial compensation (or indeed a mix) was noted in the EIS as being potentially available. Further investigations of how to compensate impacted water harvesters are reported in **Chapter 14**. Those investigations show that provision of a supplemented product to impacted water harvesters should be feasible without significantly impacting on other users or compliance with the Dawson Valley Water Supply Scheme. However, as each water harvesting entitlement behaves differently and is used by the landholders in a way which suits their individual property, SunWater's aim is that while a general commitment to compensation can be made, the structure of each compensation package must be individually tailored to each property and the needs of each landholder. This may include a supplemented supply

alternative should this be accepted by the landholder and be able to be made available at that location. The aim is that impacts to farm productivity downstream of the dam are minimised.

Impacts of the dam and its operation on existing supplemented user entitlements are positive overall. This relates to both an increase in the reliability of supply and better seasonal performance compared to the existing situation. Section 14.1.4.4 of the AEIS shows that while there is essentially no change to the Mean Annual Diversion from the scheme, the monthly reliability improves on average by 6% and is more equitable across the scheme. Further, Section 14.1.4.5 shows the impacts to the seasonality of medium priority irrigation diversions within each zone of the DVWSS and while median or wet years are essentially unchanged between Full Entitlement and With-dam scenarios, improvements in 20th percentile year (dry periods) are common and often substantial once the dam is operational. The few occasions which show decreased diversions at these times are in zones with relatively low total diversions. The ability of agricultural businesses to survive dry periods is therefore substantially enhanced and this is a critical factor in maintaining production.

7.2.5. Cumulative impacts on cropping productivity

One submission stated that the cumulative impact of other projects and activities on cropping productivity has not been considered.

Section 27.3.2 and Section 27.3.3 of the EIS considered the potential cumulative impacts associated with the Project at a local and regional scale including assessment of their potential effects over the short (construction phase) and long term (operations phase). A range of different projects within the catchment of the Project were considered in the cumulative impact assessment.

It is recognised that the Project will contribute to cumulative impact on dryland cropping productivity, GQAL and grazing production as the inundation of land by the water storage cannot be fully mitigated. There is very little irrigation currently practised within the proposed inundation area. The entitlement constitutes 2% of medium priority entitlements within the DVWSS or <1% of all medium priority entitlements plus unsupplemented water rights. Section 14.1.4.1. "Modelling Assumptions" states that the existing allocation (and unsupplemented entitlement within the proposed inundation area) is applied to the same locations in the "with dam" model. If not used at these sites the allocation will still be available within the DVWSS via trading hence there is unlikely to be a loss of irrigation production related to the dam inundation impacts.

The area of grazing land inundated by the water storage or impacted by the pipeline constitutes 0.45% of the total grazing land in Banana Shire Council or comparatively 0.22% of the total grazing land in Banana Shire and Western Downs Regional council areas (using Queensland Spatial information, DP current land use, accessed June 2016).

The impact of the pipeline has been minimised through co-location with existing infrastructure, location adjacent to property boundaries and minimising the area excluded from future cropping use.

It is also considered that the overall loss of GQAL and grazing production is indirectly offset by increased regional water security and economic benefits stemming from the Project as described in **Section 7.2.4** in relation to increased reliability and seasonality of supply for downstream irrigators. As noted in Section 7.3 of the EIS, the option of partial compensation to landholders impacted by the pipeline through provision of a stock

water supply is available and will be negotiated on an individual basis. This will assist with provision of a secure water supply to graziers.

On a regional basis the impact on agricultural productivity of the Project was assessed as minor. As a result of changes to the pipeline component of the Project (termination at Warra) the impacts specifically associated with that component are further reduced and the cumulative impact must also be commensurately reduced.

SunWater is committed to working with DAF to provide agricultural land constraint analysis information as required by the agency.

7.2.6. Pipeline alignment in Area 3

A number of submissions requested clarification of the pipeline alignment in Area 3 between Chinchilla and Dalby. The alignment and the termination point have substantially changed in this area since publication of the EIS. Those changes are described in **Part C** along with elaboration on the basis for the changes. The changes and their resultant impacts on land use and infrastructure are discussed above.

Part of the reason for the changes was to address drainage and erosion issues that were more potentially serious on the eastern side of the highway and railway and south of Warra. SunWater did not consider these issues as unresolvable but they are certainly of less concern from an engineering perspective (for the revised alignment) and the change allays landholder concerns in this regard and that in itself is a good outcome.

7.2.7. Management of surplus excavated trench material

Options for disposal of the surplus excavated trench material were discussed in Sections 2.4.3.2, 4.3.2 and to an extent in 6.2.2.2 of the EIS. The risks associated with sodic and dispersive subsoils were recognised as was the risk of redirection of surface flows as a result of mounding over the pipeline. SunWater has considered this issue further and it is addressed in **Chapter 6**. The significant reduction in pipeline length (**Part C**) simplifies the issue as less material will be available, increasing the chance that it can be utilised productively, such as in erosion rehabilitation works or landfill capping. An agency submission noted that several strategic gullies could be rehabilitated in Area 3 with proper attention to the design of the rehabilitation and to appropriate treatment of the imported soil material. This is addressed in **Chapter 6**.

7.3. Land tenure

Section 7.1.3.5 of the EIS stated that just under half of the pipeline easement will be located within existing road reserves, rail corridors and easements. The majority of the revised pipeline alignment is now located outside of these existing corridors and easements, traversing predominantly freehold and leasehold tenures.

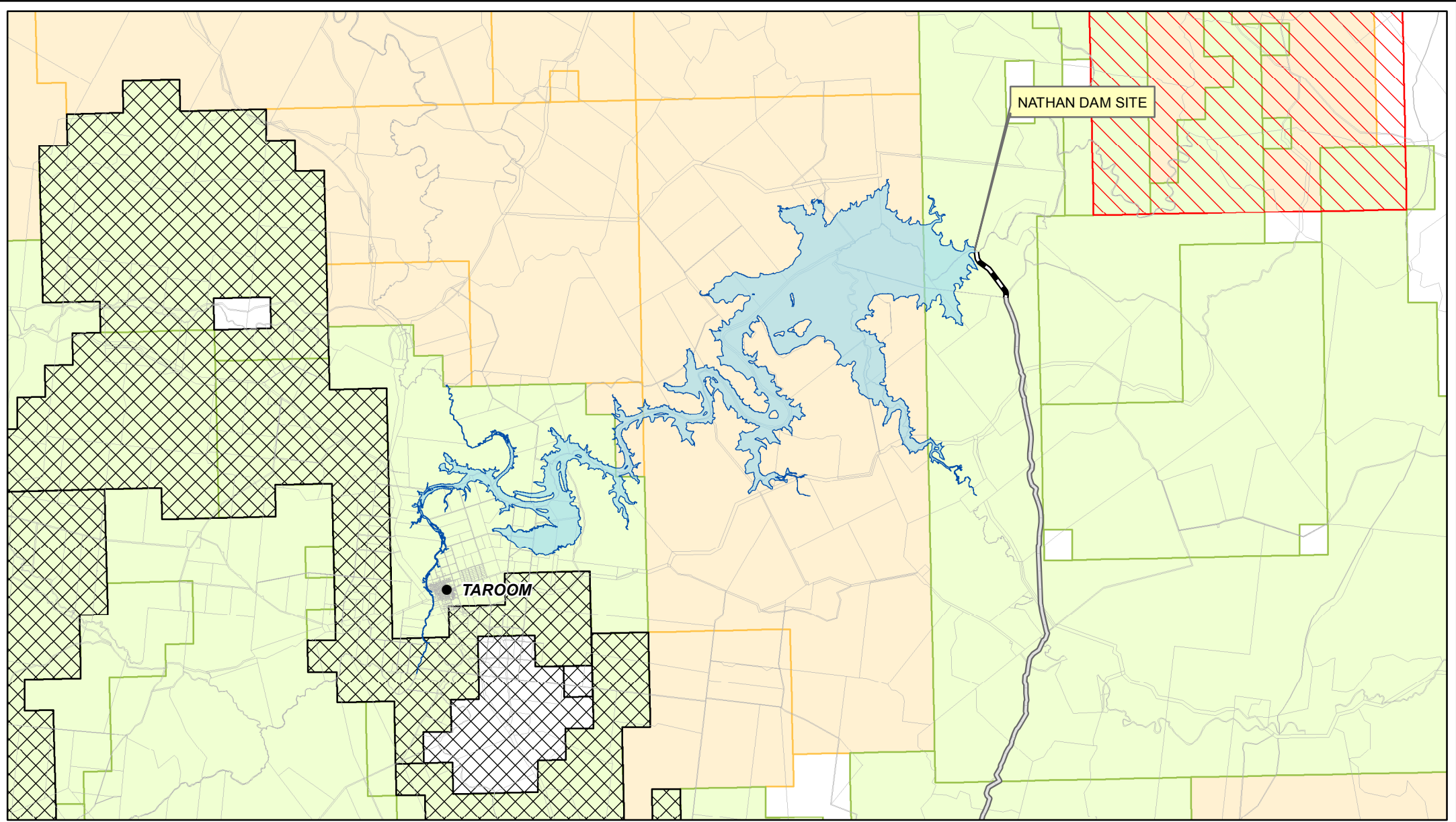
7.3.1. Mining and petroleum and gas tenures

Submissions on the EIS requested updates to figures showing the Project's impact on mining and petroleum and gas tenures as they had changed since the EIS was produced. Data was sourced from DNRM Interactive Resource and Tenure Maps.

Figure 7-1 and **Figure 7-2** show mining tenements over the water storage area and refined pipeline alignment based on 2016 data.

Figure 7-3 and **Figure 7-4** show petroleum and gas tenements over the water storage area and refined pipeline alignment based on 2016 data.

Section 403 of the *Mineral Resources Act 1989* requires the consent of the owner and holder of the mining claim or lease before the property can be entered. Sections 807 and 808 of the *Petroleum and Gas Act 2004* require consent from the pipeline licence holders before works can be undertaken. SunWater has been liaising with the relevant parties regarding access and will formalise consents prior to construction. Section 2.2.2 of the EIS noted that SunWater had agreement with Surat Gas Pipeline to co-locate along a 20 km section of their granted easement.



LEGEND

- Town
- Nathan – Warra Pipeline
- Woleebee - Glebe Weir Pipeline
- Full Supply Level (183.5 m AHD)
- Cadastre

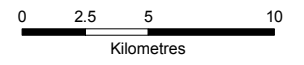
- Mineral Development Licence**
- Application
 - Granted

- Exploration Permit Coal**
- APPLICATION
 - GRANTED

- Exploration Permit Minerals**
- Application
 - Granted

Projection: GDA94 Zone 56

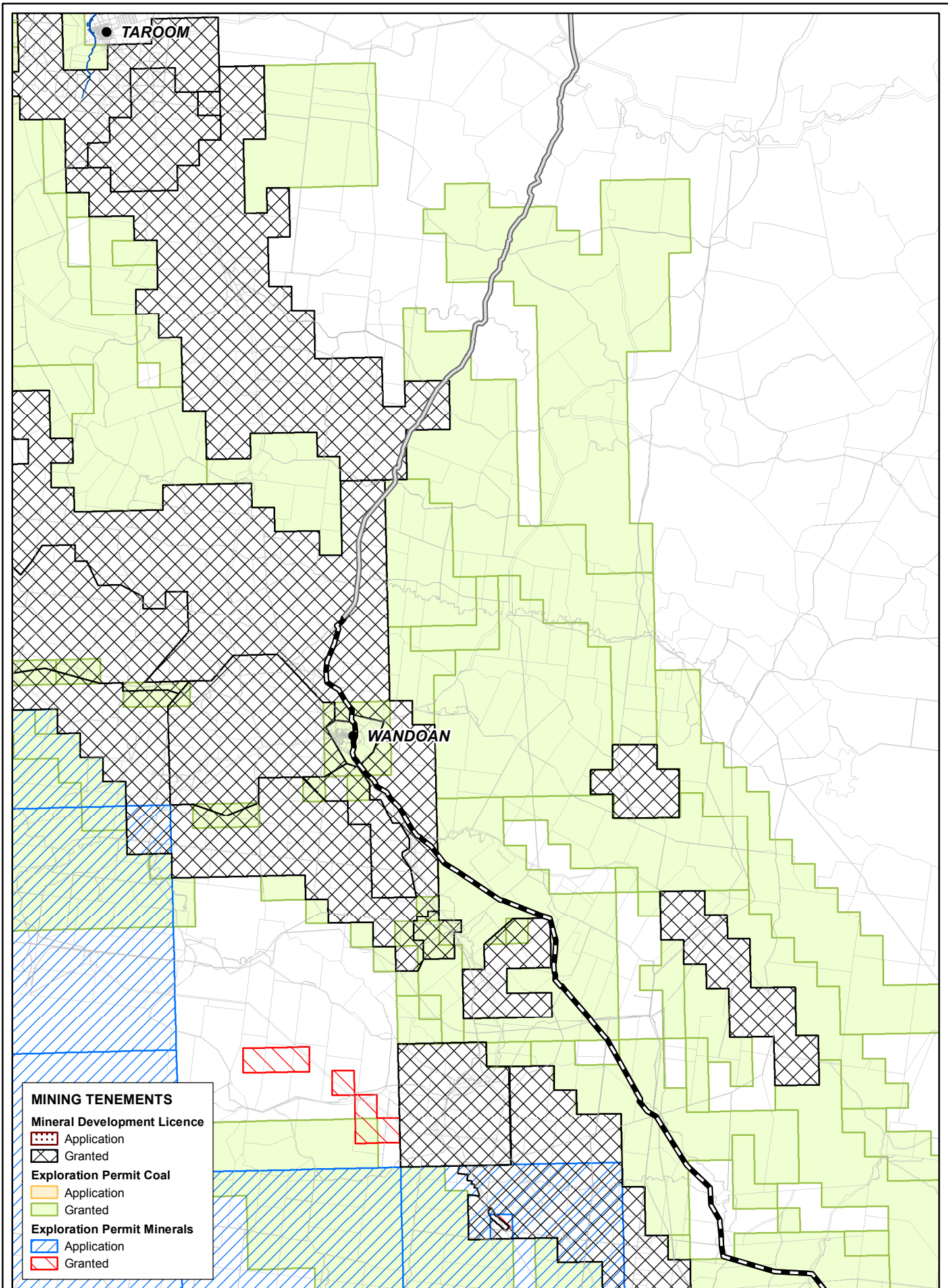
Figure 7-1



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ADDITIONAL INFORMATION TO THE
NATHAN DAM EIS
Mining Tenements - Dam



MINING TENEMENTS

Mineral Development Licence

- Application
- Granted

Exploration Permit Coal

- Application
- Granted

Exploration Permit Minerals

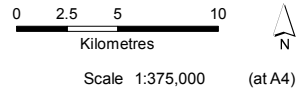
- Application
- Granted

LEGEND

- Town
- Nathan - Warra Pipeline
- Woleebee - Glebe Weir Pipeline
- Cadastre

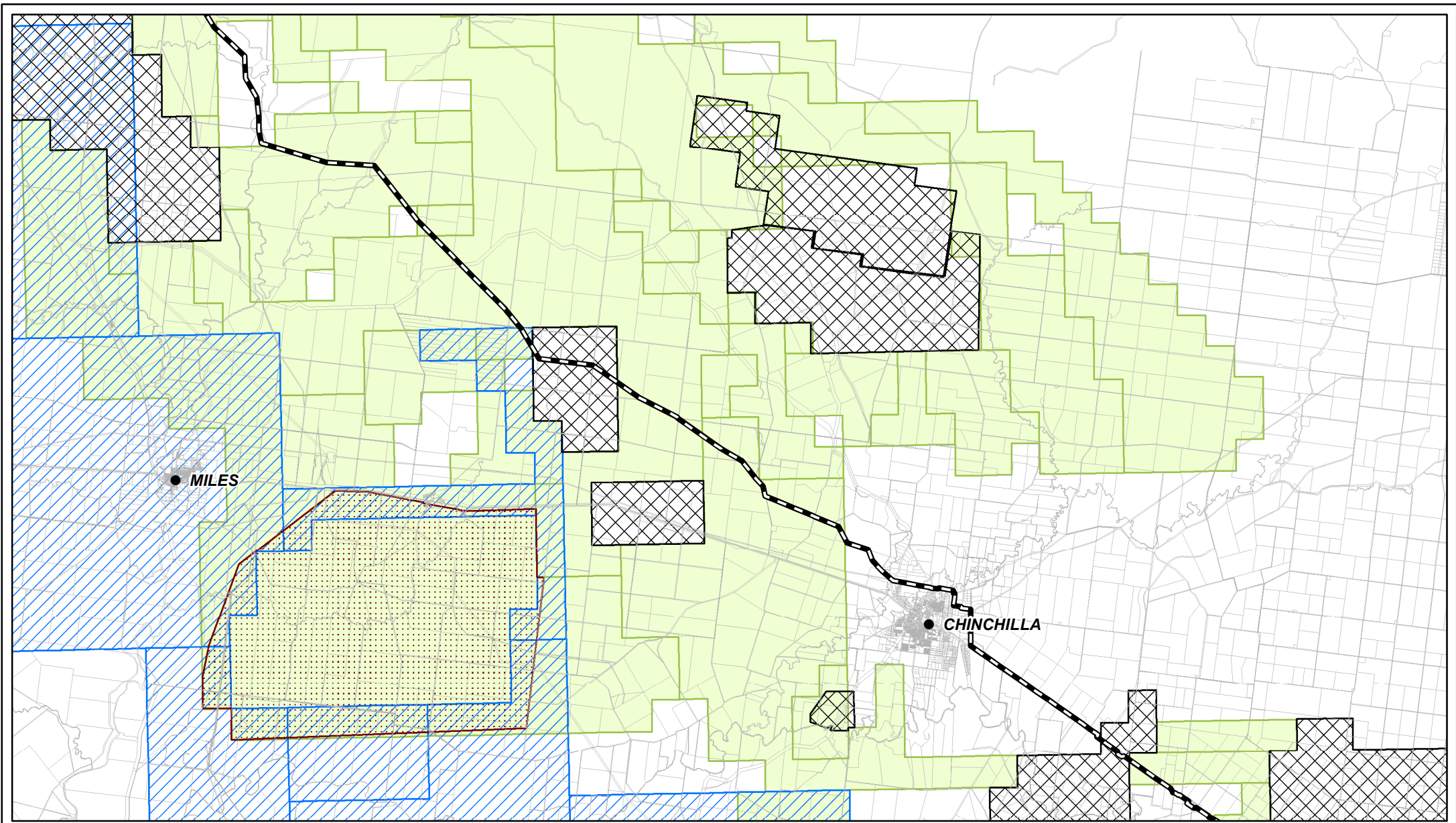
Projection: GDA94 Zone 56

Figure 7-2A



ADDITIONAL INFORMATION TO THE
NATHAN DAM EIS

Mining Tenements - Pipeline (Map A)



LEGEND

- Town
- Nathan – Warra Pipeline
- Cadastre

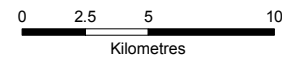
- Mineral Development Licence**
- ▨ Application
 - ▩ Granted

- Exploration Permit Coal**
- ▨ Application
 - ▩ Granted

- Exploration Permit Minerals**
- ▨ Application
 - ▩ Granted

Projection: GDA94 Zone 56

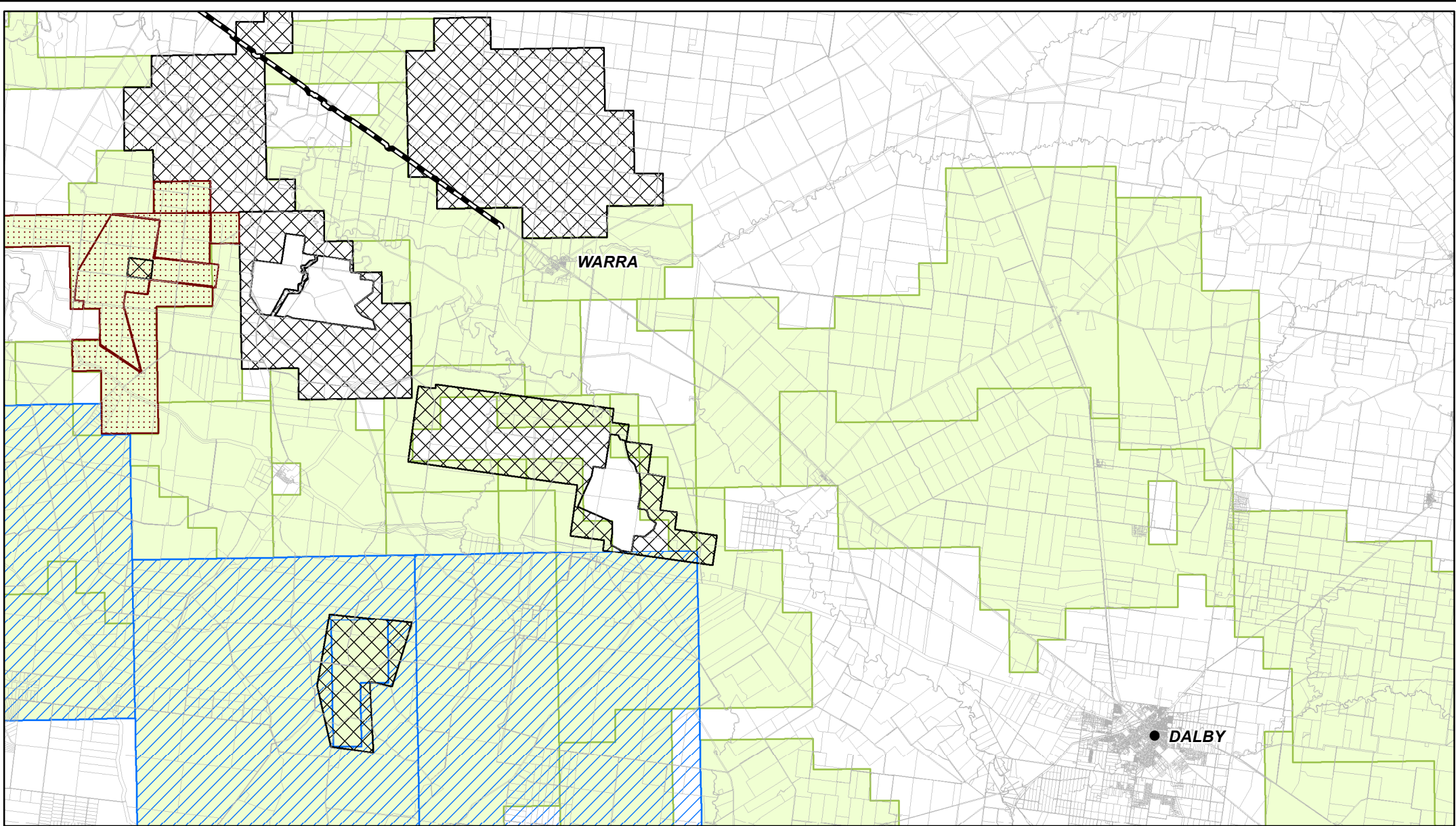
Figure 7-2B



Scale 1:300,000 (at A4)



ADDITIONAL INFORMATION TO THE
NATHAN DAM EIS
Mining Tenements - Pipeline (Map B)



LEGEND

- Town
- Nathan – Warra Pipeline
- Cadastre

Mineral Development Licence

- ▨ Application
- ▨ Granted

Exploration Permit Coal

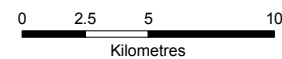
- ▨ Application
- ▨ Granted

Exploration Permit Minerals

- ▨ Application
- ▨ Granted

Projection: GDA94 Zone 56

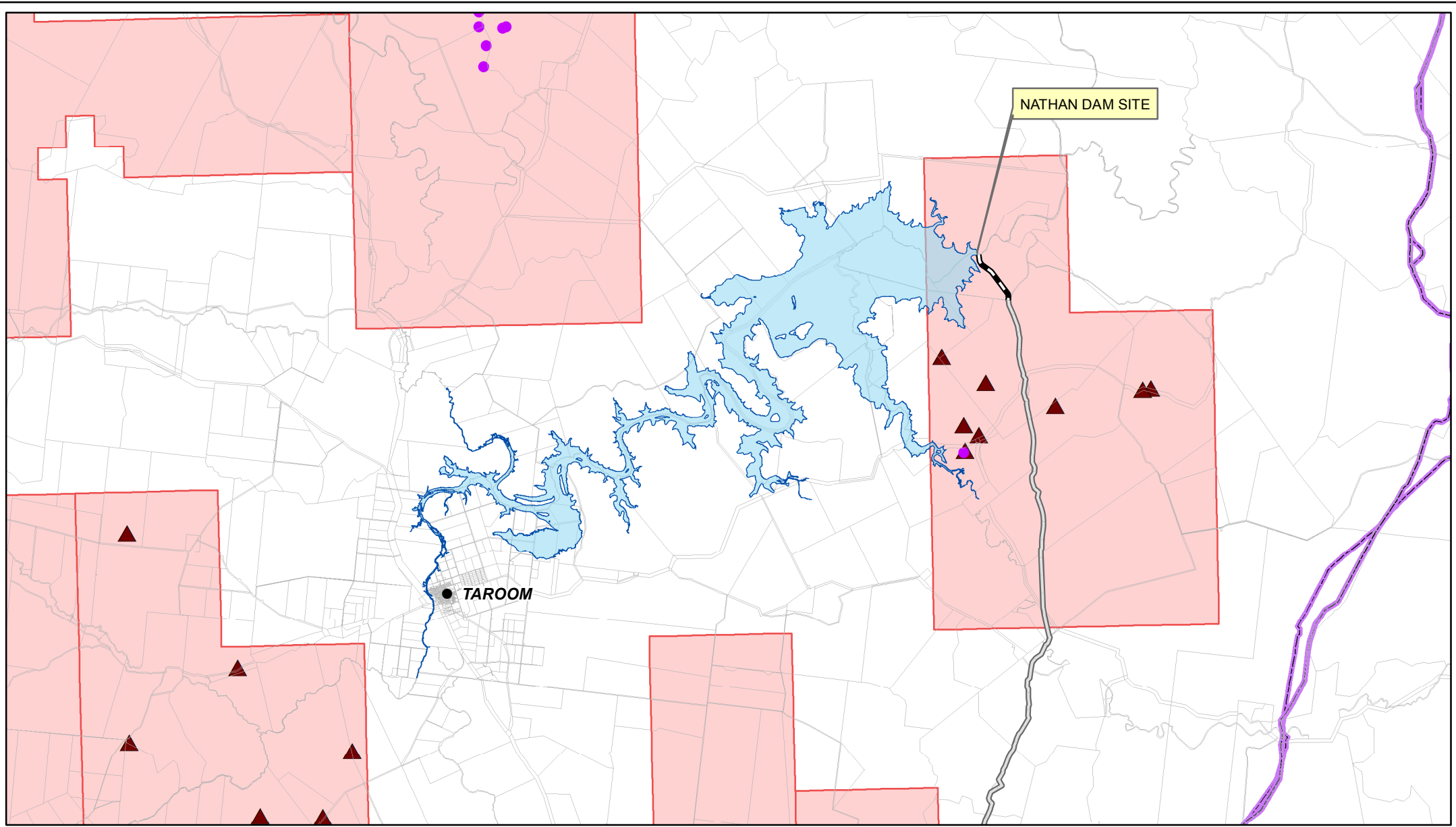
Figure 7-2C



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ADDITIONAL INFORMATION TO THE
NATHAN DAM EIS
Mining Tenements - Pipeline (Map C)



NATHAN DAM SITE

TAROOM

LEGEND

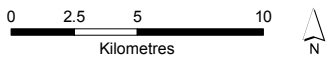
- Town
- Petroleum Exploration Well
- ▲ Coal Seam Gas Exploration Well
- Nathan – Warra Pipeline
- Woleebee - Glebe Weir Pipeline
- Petroleum Pipeline Licence

- Exploration Permit Petroleum**
- Application
 - Granted

- Full Supply Level (183.5 m AHD)
- Cadastre

Projection: GDA94 Zone 56

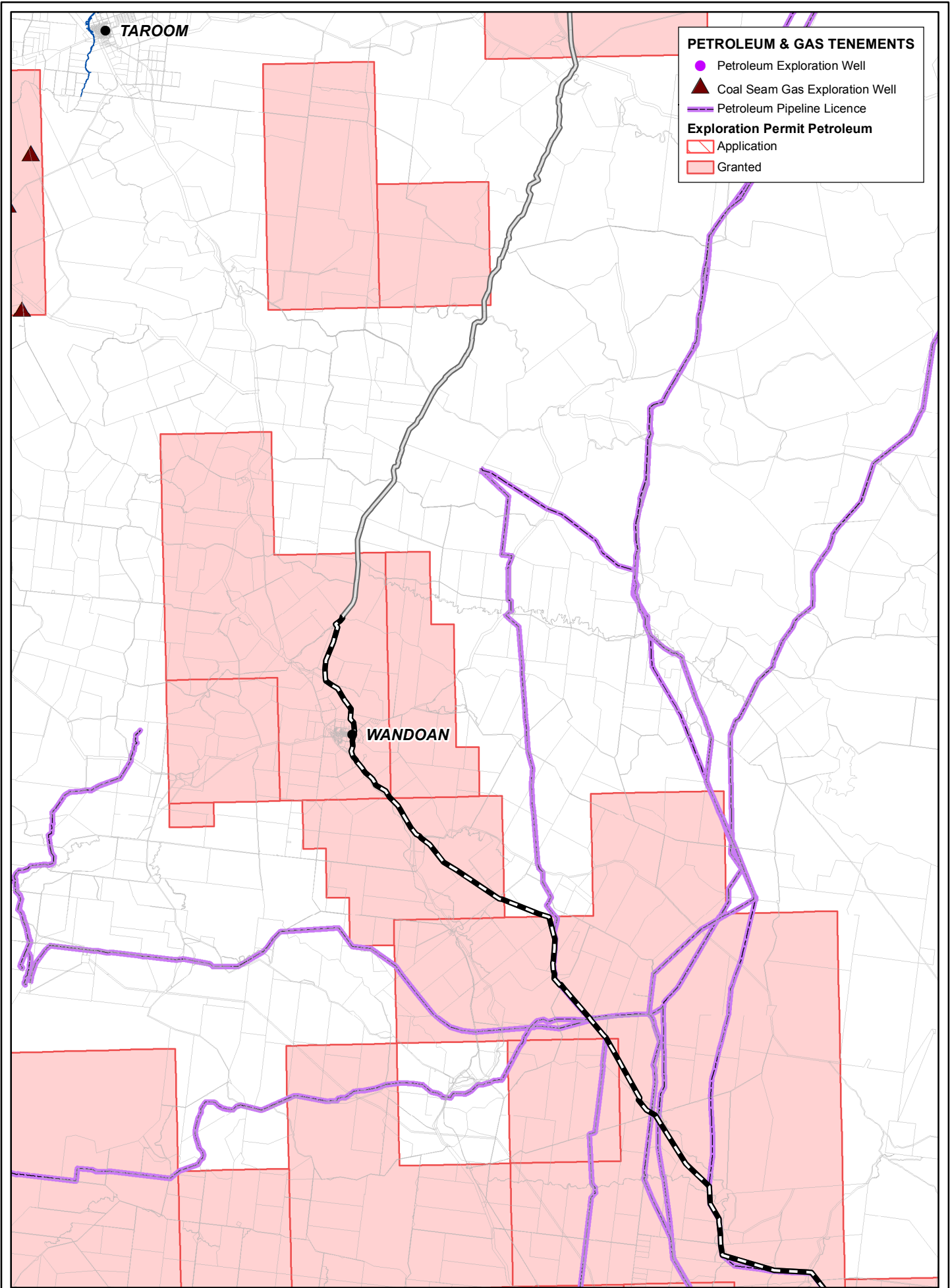
Figure 7-3



Scale 1:300,000 (at A4)



ADDITIONAL INFORMATION TO THE
NATHAN DAM EIS
Petroleum and Gas Tenements - Dam

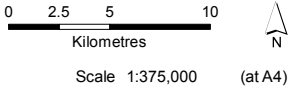


LEGEND

- Town
- Nathan - Warra Pipeline
- Woleebee - Glebe Weir Pipeline
- Cadastral

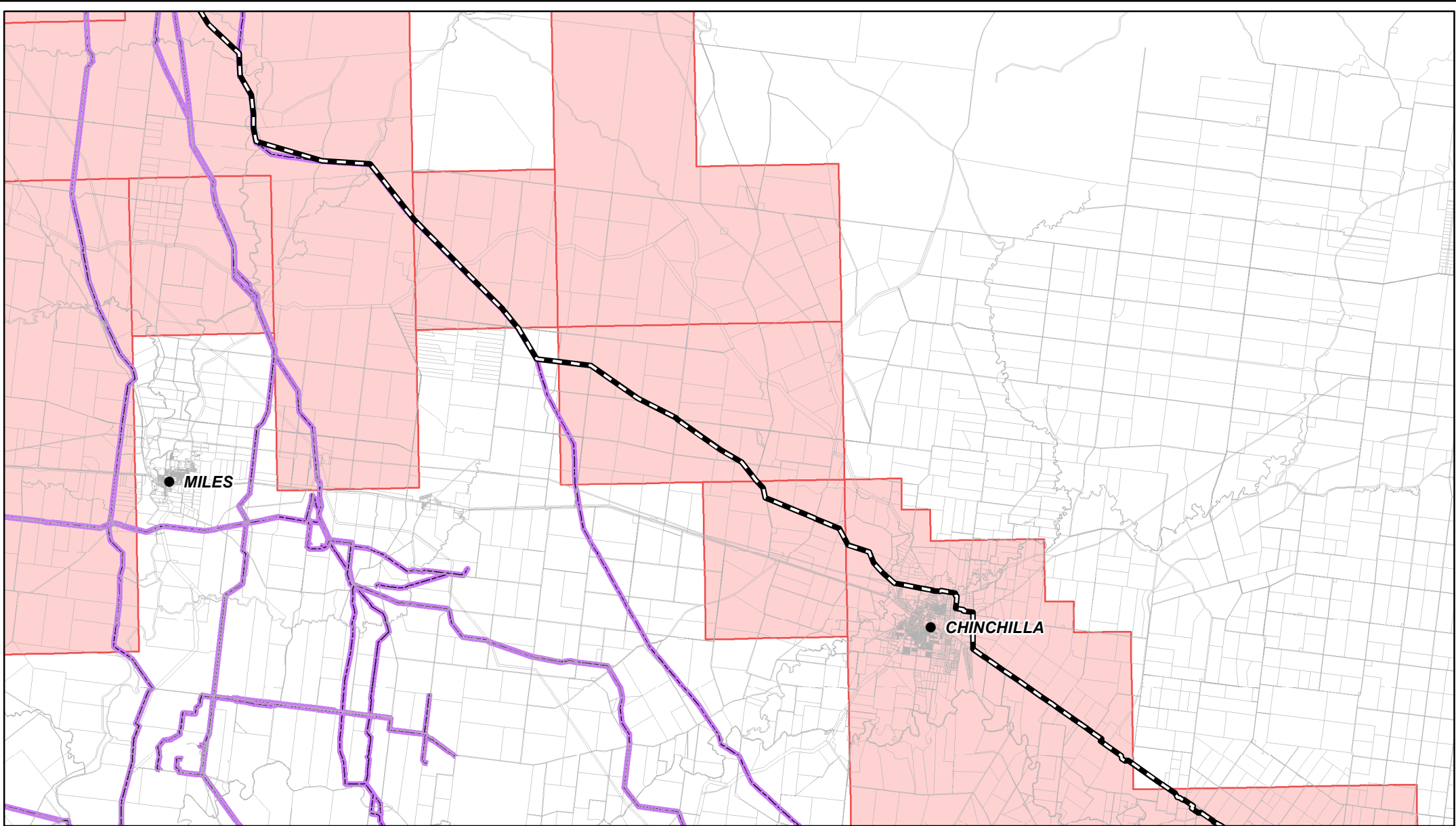
Projection: GDA94 Zone 56

Figure 7-4A



SKM SunWater
Making Water Work

ADDITIONAL INFORMATION TO THE
NATHAN DAM EIS
**Petroleum and Gas Tenements
- Pipeline (Map A)**

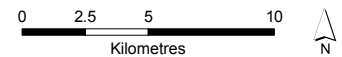


LEGEND


- Town
- Petroleum Exploration Well
- ▲ Coal Seam Gas Exploration Well
- Nathan – Warra Pipeline
- Petroleum Pipeline Licence
- Exploration Permit Petroleum
 - ▨ Application
 - ▨ Granted
- Cadastre

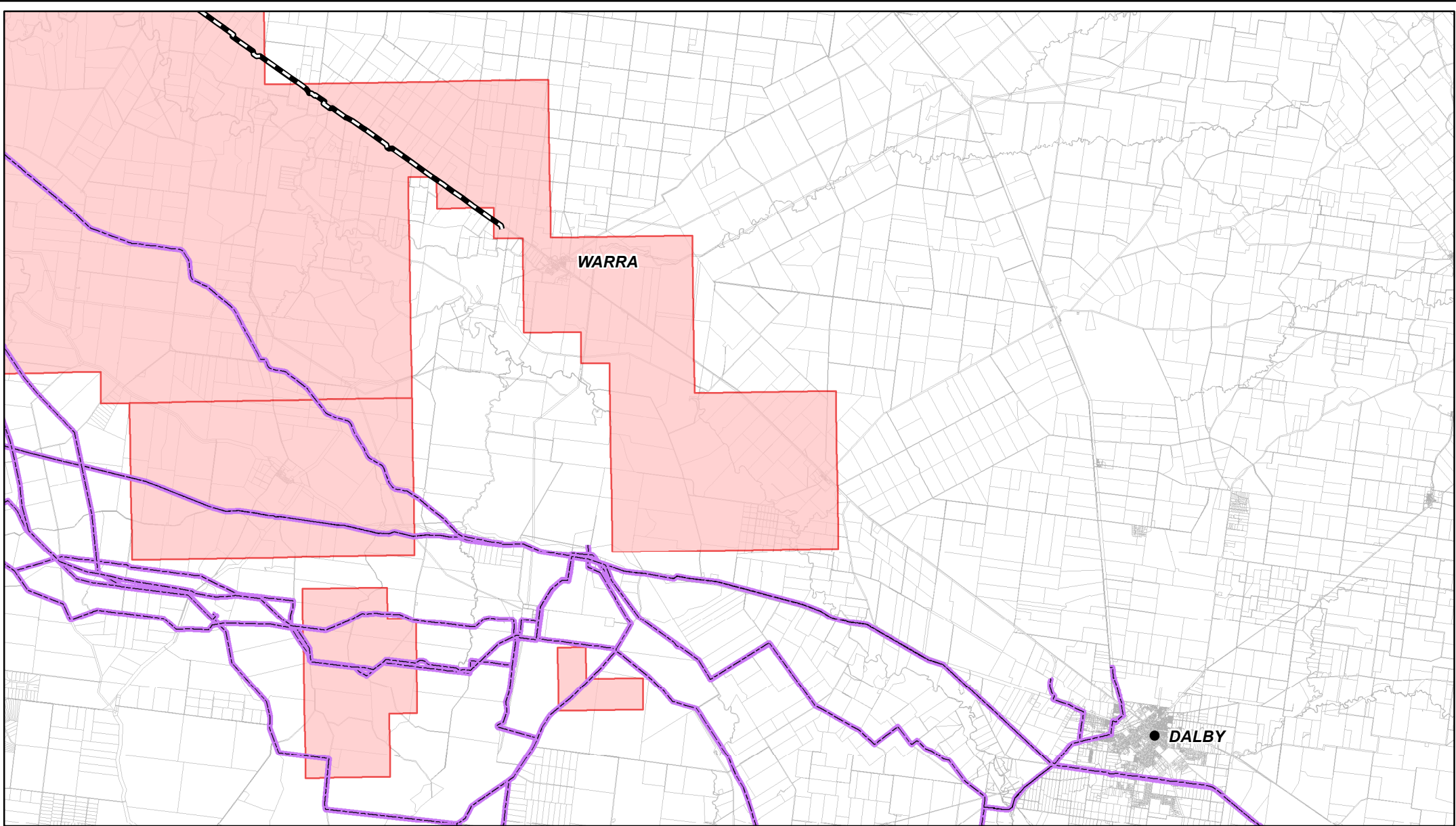
Projection: GDA94 Zone 56

Figure 7-4B



Scale 1:300,000 (at A4)


 Making Water Work
 ADDITIONAL INFORMATION TO THE
 NATHAN DAM EIS
**Petroleum and Gas Tenements
 - Pipeline (Map B)**

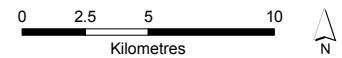


LEGEND


- Town
- Petroleum Exploration Well
- ▲ Coal Seam Gas Exploration Well
- Nathan – Warra Pipeline
- Petroleum Pipeline Licence
- Exploration Permit Petroleum
 - ▭ Application
 - ▭ Granted
- ▭ Cadastre

Projection: GDA94 Zone 56

Figure 7-4C



Scale 1:300,000 (at A4)


 Making Water Work
 ADDITIONAL INFORMATION TO THE
 NATHAN DAM EIS
**Petroleum and Gas Tenements
 - Pipeline (Map C)**

7.3.2. Stock routes

Submissions stated that it is unclear from the EIS if there is to be any temporary or permanent restriction on the stock route network during construction or operation of the Project. The stock routes affected by the water storage area and pipeline are shown in **Figure 7-5** and **Figure 7-6** and were listed in Section 7.1.3.5 of the EIS.

The water storage area would cause severance to the existing stock route along Cracow Road at the crossing of Cockatoo Creek and Bentley Creek (stock route reference number: 442BANA). Cracow Road will be raised and culverts installed where it crosses Cockatoo Creek and Bentley Creek to maintain operation of the stock route.

One submission requested Stony Crossing be noted as a major stock route used to access the Taroom Clearing Dip. Stony Crossing is located within the Leichhardt Highway road reserve (currently designated as a stock route, reference number: 423BANA) and is locally significant to the Taroom area. Section 14.2.3.1 of the EIS identified that once the dam is operational, the ford at Stony Crossing would be unpassable for approximately 57% of each year. Currently, the ford is cut on average six times per year during periods of elevated flow, which equates to approximately 16% of the year. SunWater will investigate the need to upgrade and raise the ford in consultation with the Stock Route Officer, Banana Shire Council.

Due to the revised Project scope and pipeline alignment, including truncation at Warra, the following stock routes will no longer be crossed by the pipeline:

- Warra-Canaga Creek Road at Warra (715WEST);
- Macalister-Bell Road at Macalister (714WEST); and
- Jandowae Road on the outskirts of Dalby (810WEST).

Additionally, the following stock routes are crossed by the Woleebee Creek to Glebe Weir Pipeline and will not have additional construction impacts as a result of the Project:

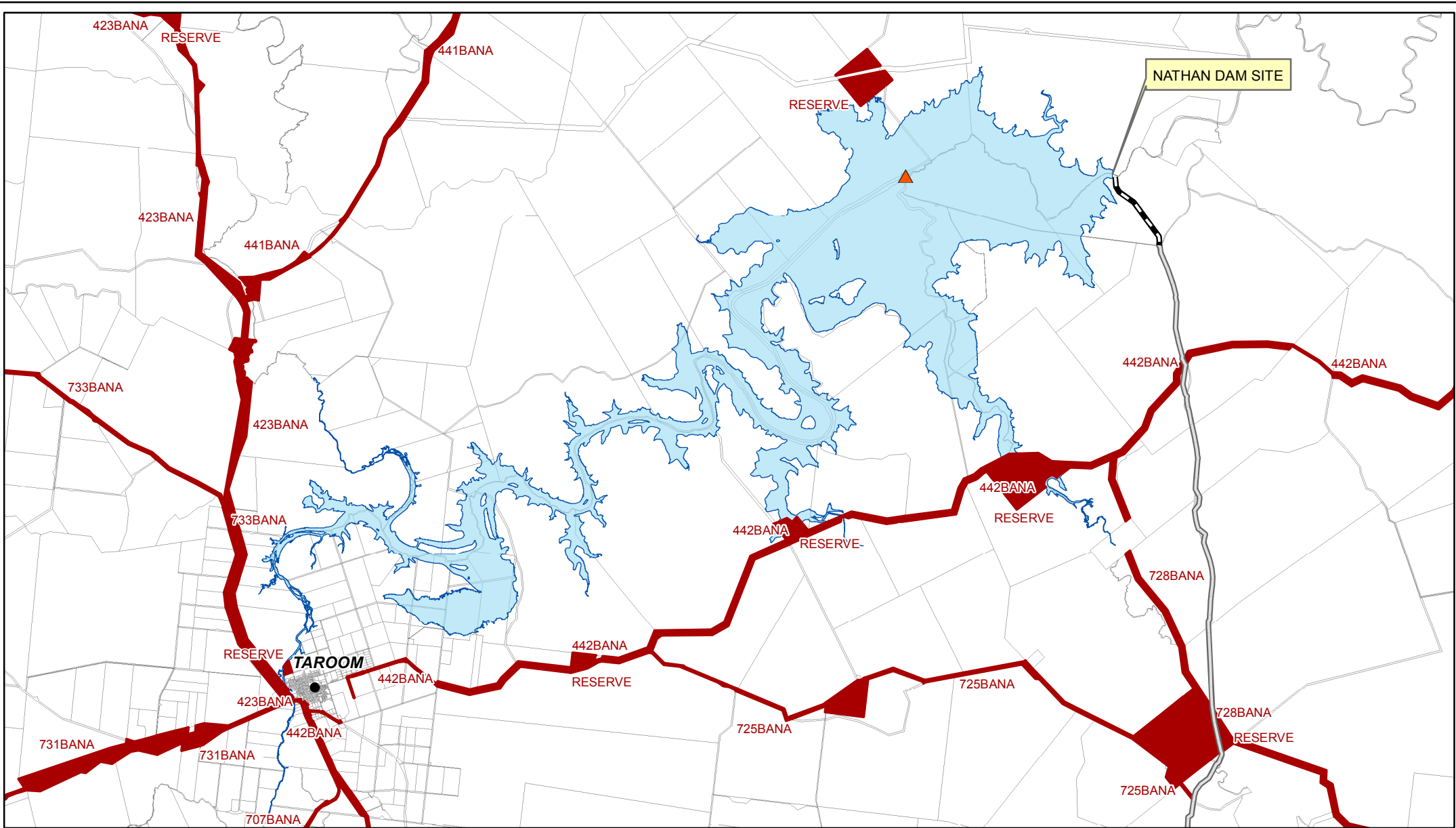
- 442BANA
- 728BANA
- 725BANA
- 722WEST

During the construction of the pipeline, temporary disruptions will be caused to the stock route network from trenching. All stock routes crossed by the pipeline, apart from the above, are detailed in Section 7.1.3.5 of the EIS. These are generally minor roads and will be crossed in a matter of days. Alternative access arrangements, should they be required, will be implemented to maintain access during construction activities.

To determine the suitable arrangements for maintenance of the stock routes at sites of road upgrade or temporary diversions of the stock routes during construction, the relevant Senior Lands Officer from DNRM and the Stock Route Officers, Banana Shire Council and Western Downs Regional Council will be consulted during the detailed design phase of the Project. This will include the development of suitable measures to mitigate the temporary disruptions during construction of the Project. SunWater has not identified that any access to watering facilities or other infrastructure will be impacted by the Project.



The entire stock route network impacted by the Project will be retained during both construction and operation of the Project.

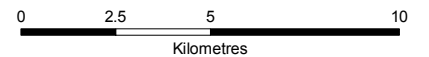


LEGEND

- Town
- Glebe Weir
- Nathan – Warra Pipeline
- Woleebee - Glebe Weir Pipeline
- Full Supply Level (183.5 m AHD)
- Cadastre
- Stock Routes and Reserves

Projection: GDA94 Zone 56

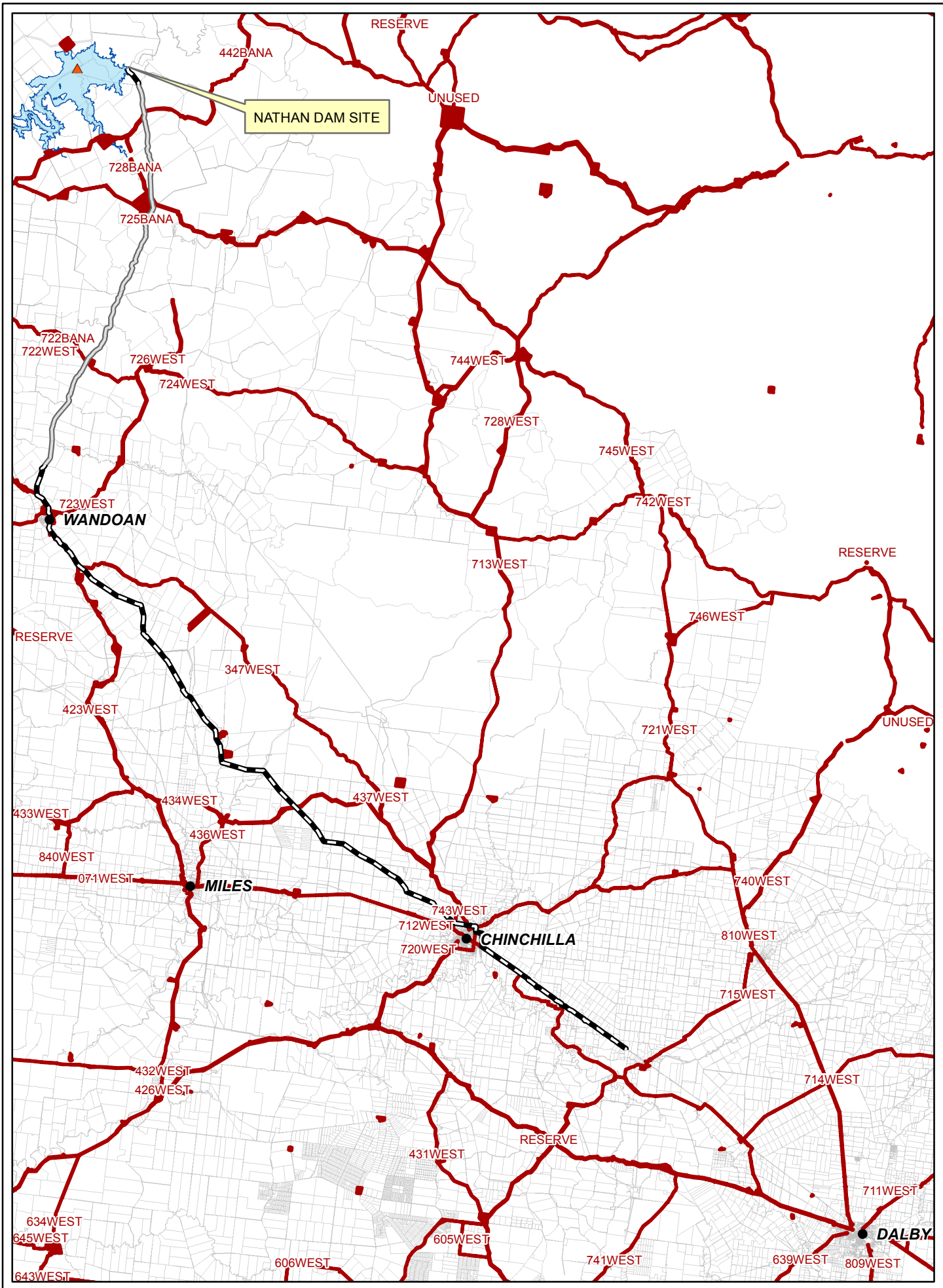
Figure 7-5



Scale 1:200,000 (at A4)



Additional Information to the
Nathan Dam EIS
Stock Routes - Dam



LEGEND

- Town
- ▲ Glebe Weir
- Nathan - Warra Pipeline
- Woleebee - Glebe Weir Pipeline
- Full Supply Level (183.5 m AHD)
- Cadastre
- Stock Routes and Reserves

Projection: GDA94 Zone 56

Figure 7-6

0 5 10 20
Kilometres

Scale 1:800,000 (at A4)

N

SKM SunWater
Making Water Work

Additional Information to the
Nathan Dam EIS

Stock Routes - Pipeline

7.3.3. Native Title

With relation to the revised pipeline alignment, the potential impacts on Native Title are generally consistent with Section 7.1.3.5 of the EIS.

7.3.4. Protected areas

With relation to the revised pipeline alignment, the potential impacts on protected areas are generally consistent with Section 7.1.3.6 of the EIS.

7.4. Infrastructure

With relation to the revised pipeline alignment, the potential impacts on infrastructure are generally consistent with the impacts reported in Section 7.1.3.7 of the EIS, with the exception being that the revised pipeline alignment no longer crosses the petroleum pipeline located along the Dalby Jandowae Road.

7.4.1. Roads

Submissions noted that the water storage area will have negative impacts to the local road network and that roads would need to be realigned and upgraded. Submissions also suggested that Stony Crossing would need to be raised and further investigations carried out to identify other sites requiring upgrades. Banana Shire Council requested that prior to the commencement of any significant construction works, a detailed traffic report is provided to Banana Shire Council for all local roads impacted by the dam and pipeline.

Section 2.2.3.1 of the EIS identified all roads impacted by the FSL and requiring realignment, upgrade or both. SunWater will prepare a detailed traffic report for all roads impacted by the FSL to be submitted to Banana Shire Council prior to any significant construction works, including:

- Road impact assessment;
- Road use management plan; and
- Maintenance program.

Impacts to the local road network are discussed in **Chapter 21** of Part B of the AEIS.

Stony Crossing is discussed above. SunWater will investigate the need to upgrade and raise the ford in consultation with stakeholders and Banana Shire Council.

7.5. Summary

SunWater's preference is to follow a CID process for land underpinning the Project following the release of the Coordinator-General's assessment report. The process is described in **Section 1.5.2.5** of Part B of the AEIS.

The EIS demonstrated the 'overriding need' definition in accordance with the *Planning Guidelines: The Identification of Good Quality Agriculture Land*. **Chapter 6** of Part B of the AEIS identified the impacts of the Project on GQAL and appropriate mitigation measures for its protection. SunWater will address the current legislative requirements related to agricultural land during the approvals process. The *Regional Planning Interests Act 2014* and State Planning Policy (2014) are described in **Section 1.5** (Part B of the AEIS).

It is considered that the impacts of the Project on existing land uses were sufficiently identified in Section 7.2.1.2 of the EIS for the water storage area and Section 7.2.2.2 for the pipeline. Mitigation measures based on identified impacts were provided in Section 7.2.1.5 for the water storage area and Section 7.2.2.5 for the pipeline and remain directly applicable to the revised pipeline alignment.

SunWater have undertaken investigations and planning to determine the most suitable alignment for the revised pipeline, including engaging with existing infrastructure providers. The alignment in private property adjacent the existing Warrego Highway and Western Queensland railway is the most suitable option available and now constitutes the preferred route.

Once the pipeline has been constructed, remediation works of the construction easement, and any areas disturbed outside of the construction easement, will occur. Access for grazing will not be restricted over the pipeline easement except areas occupied by aboveground infrastructure. Cropping land uses will not be possible within the area occupied by the maintenance track or aboveground infrastructure and practical considerations may mean a width of at least 3 m is lost (more if deep ripping is required).

No stock routes will be permanently impacted by the Project. The relevant Senior Lands Officer from DNRM and the Stock Route Officers from Banana Shire Council and Western Downs Regional Council will be consulted during the detailed design phase of the Project to ensure stock routes impacted by the Project will remain functional during both construction and operation.