West Pilbara Iron Ore Project
Reconciliation of Vegetation Descriptions and Associated Vegetation Mapping

June 2010

Prepared for
API Management Pty Ltd

Astron Environmental Services
Level 1, 620 Newcastle Street
Leederville WA 6007
Phone: (08) 9228 4411
Fax: (08) 9228 4635
Email: perth@astron.com.au

Report Reference: 12009-10SRV1Rev0_100615

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Revision Status

Rev	Date	Description	Author	Reviewer	Approval
A	16/02/2010	Draft Issued For Client Review	J. Atkinson	W. Wishart	
B	29/04/2010	Revised Draft Issued for Client Review	J. Atkinson	W. Wishart	
0	15/06/2010	Final Issued for Information	J. Atkinson	M. Carey	W. Wishart

Report Reference: 12009-10SRV1Rev0_100615

Report Parameters	
Format	Word 2007
Network Location	P:\Reimbursible\API 12000\12009 West Pilbara Iron Ore Project Infill Vegetation Mapping\2010\Reports\Reconciliation\12009-09SRV1Rev0_100615 Vegetation Description Reconciliation Report.docx
Referencing	Harvard

Checking Status	
Text	IR
Figures	IR
Tabulations	IR
Calculations	NR
Statistics	NR

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Executive Summary

API Management Pty Ltd (API) is managing the Australian Premium Iron Joint Venture (API JV), on behalf of equal joint venture partners Aquila Resources Ltd (Aquila) and AMCI Holdings Australia Pty Ltd (AMCI). API holds a number of iron ore tenements in the western Pilbara area of Western Australia and proposes to mine iron ore from a number of resource areas (Catho Well, Trinity Bore, Cardo Bore East, Upper Cane, Cardo Bore North, Kens Bore, Jewel and Cochrane) and transport it via rail to a port location at Anketell Point.

Three consultants were engaged to conduct baseline vegetation and flora surveys for the West Pilbara Iron Ore Project (WPIOP), including:

- Western Botanical (resource areas and associated infrastructure sites; and, transport corridor from southern most deposits to Cape Preston);
- AECOM (northern most section of transport corridor approximately 100km to port site); and
- Astron Environmental Services (gas pipeline and southern access corridor).

As a result of using three separate consultants to report on the vegetation and flora across the WPIOP area, there was a considerable degree of variation in the scale of results produced, particularly in relation to consistency and the way vegetation units were described and mapped. To develop a single, meaningful and consistent assessment of the vegetation and flora of the WPIOP area, Astron Environmental Services was commissioned to undertake a reconciliation of the vegetation and flora data as reported by the three consultants.

Reconciliation was undertaken by comparing the raw data, vegetation descriptions and photos from each of the consultants' vegetation units, and reconciling them to 'association level' as outlined in the National Vegetation Inventory System (NVIS). Adjustments were then made to the WPIOP vegetation map with particular attention to the interfaces between survey areas to create a seamless map. Floristic data were combined to create complete data sets for vascular flora, priority flora, and introduced flora (weeds).

The reconciliation process resulted in:

- 141 vegetation associations were described and mapped, compared with a total of 249 vegetation units described by the three individual consultants;
- A total of 661 taxa (identified to species level) from 61 families were recorded across the WPIOP area. No DRF were recorded. Eight Priority listed flora species (one P2, five P3 and two P4) flora species were recorded;
- Nineteen weed species were recorded, including one declared plant species **Prosopis pallida* (Mesquite);

Finally, a risk assessment using a four point scaling system (Low, Moderate, High, Very High) rating the conservation value of each vegetation association was conducted. The Conservation Value Risk Assessment indicated that 28 vegetation associations were rated as High risk, 72 were rated as Moderate risk and 41 were rated as Low risk. None rated as Very High risk. Twenty two of the High Conservation Value vegetation associations occur on stony hills and breakaways. Two of the High Conservation Value vegetation associations are analogous with a Beard ecosystem description considered to be of high reservation priority in the three IBRA sub regions of the Pilbara.

Abbreviations

Abbreviation	Definition
AMCI	American Metals and Coal International
API	Australian Premium Iron
BOM	Bureau of Meteorology
DEC	Department of Environment and Conservation
DEH	Department of Environment and Heritage
DEWHA	Department of Environment, Heritage, Water and the Arts
DRF	Declared Rare Flora
EPA	Environmental Protection Authority
EPBC	Environment Protection Biodiversity Conservation Act
GIS	Geographical Information System
IBRA	Interim Biogeographical Regionalisation of Australia
JV	Joint Venture
NVIS	National Vegetation Information System
PEC	Priority Ecological Community
P2	Priority 2 flora
P3	Priority 3 flora
P4	Priority 4 flora
SAC	Southern Access Corridor
TEC	Threatened Ecological Community
WPIOP	West Pilbara Iron Ore Project

Definitions

The following terms are used throughout this document. The definitions listed explain intended meaning for this document only.

Term	Definition
Conservation Value Risk Rating	A quantitative approach to identifying relative conservation value of vegetation associations. Involves scoring the factors deemed to either increase or reduce the conservation value of vegetation associations
Post-reconciliation	Refers to the data and vegetation associations resulting from the reconciliation process.
Pre-reconciliation	Refers to the original data and vegetation units described by individual consultants following completion of the Level 2 flora and vegetation surveys.
Reconciled	Refers to vegetation associations or data that have been subject to the reconciliation process.
Reconciliation	The process of collating data from between or within consultants to create one consistent dataset. E.g amalgamating similar vegetation descriptions to create new vegetation associations; or combining information to create complete datasets, such as species lists.
Vegetation Association	A standardized structural description applied to vegetation (analogous to the NVIS Level 5) describing up to three dominant species in up to three dominant strata. In this report it relates to post-reconciliation vegetation data.
Vegetation Description	The description applied to individual vegetation units by any of the three consultants pre-reconciliation
Vegetation Unit	The 'unit' of vegetation as described and mapped by individual consultants following the Level 2 flora and vegetation surveys pre-reconciliation. These descriptions varied from NVIS sub – association to association level according to consultant.

Table of Contents

1. Introduction 1
1.1 Project Background 1
1.2 Reconciliation Background 2
1.3 Previous Studies 2
1.4 Scope and Objectives 3
1.5 Project Location 3
2. Relevant Legislation 5
3. Existing Environment 6
3.1 Climate 6
3.2 Land Systems 7
3.3 Interim Biogeographic Regionalisation for Western Australia 14
3.4 Beard Vegetation Mapping 14
3.5 Geology, Soils and Topography 15
3.6 Watercourses and Wetlands 15
4. Methods 16
4.1 Vegetation Unit Reconciliation 16
4.2 Vegetation Mapping 19
4.2.1 Reconciled vegetation mapping 19
4.2.2 Infill vegetation mapping 19
4.3 Data Reconciliation 20
4.4 Vegetation Association Conservation Value Risk Assessment 20
4.4.1 Background of Conservation Value Risk Assessment Approach 20
4.4.2 Developing Vegetation Association Conservation Value Risk Assessment 21
4.5 Assumptions 25
4.6 Limitations 26
5. Results 28
5.1 Reconciled Vegetation Associations 28
5.1.1 Reconciliation Statistics 28
5.2 Species Lists 30
5.2.1 Summary of Flora 30
5.2.2 Introduced Flora 31
5.2.3 Declared Rare and Priority Flora 32

5.3 Vegetation Association Conservation Value Risk Assessment 34
5.3.1 IBRA Reservation Priorities 37
6. Discussion 39
6.1 Vegetation Conservation Significance 39
6.1.1 Conservation Value Risk Rating 39
7. References 41

List of Figures

Figure 1: Location of West Pilbara Iron Ore Project (WPIOP). 4
Figure 2: Climate data for Karratha Airport (The Weather Co. 2009). 6
Figure 3: Climate data for Pannawonica (The Weather Co. 2009). 7
Figure 4: Process of Reconciliation of WPIOP Survey Data. 16
Figure 5: Process of Vegetation Description Reconciliation. 18

List of Tables

Table 1: Land Systems present in the Project Area. 8
Table 2: Summary of Pilbara Region land systems (Van Vreeswyk et al. 2004). 9
Table 3: Characteristics, codes and scores used in the Vegetation Conservation Value Risk Assessment. 23
Table 4: Scores associated with Conservation Value Risk Rating. 25
Table 5: Number of vegetation units pre- and post- reconciliation according to infrastructure area. 28
Table 6: Total number of vegetation units reconciles according to landform/ habitat type. 29
Table 7: Number of vegetation associations reconciled with units from within one consultant or between one or more consultants for Mine Area. 29
Table 8: Number of vegetation association reconciled with units from within one consultant or between one or more consultants for Transport Corridor. 30
Table 9: Number of vegetation units used to form reconciled vegetation association according to landform/ habitat type. 30
Table 10: Summary of taxa recorded within the mine and transport corridor. 31
Table 11: Taxa most frequently recorded in the project area. 31
Table 12: Introduced flora recorded within the mine and transport corridor survey areas. 32
Table 13: Priority Species Distribution in the Project Area. 33
Table 14: The total number of vegetation associations recorded for each Conservation Risk Value Rating. 34
Table 15: Vegetation Associations with a High Conservation Value Risk Rating. 34

Table 16: Number and % of High Conservation Value vegetation associations according to infrastructure area. 37

Table 17: Beard vegetation associations matching vegetation associations described in the Project Area. 38

Appendices

Appendix A: Reconciled Vegetation Mapping of the Project Area

Appendix B: Reconciled Vegetation Association Descriptions

Appendix C: Reconciliation Rationale

Appendix D: Reconciled Species List

Appendix E: Priority Flora Locations

Appendix F: Vegetation Association Conservation Value Risk Assessment

Appendix G: High Conservation Value Vegetation Associations

1. Introduction

1.1 Project Background

API Management Pty Ltd (API) is managing the Australian Premium Iron Joint Venture (API JV), on behalf of equal joint venture partners Aquila Resources Ltd (Aquila) and AMCI Holdings Australia Pty Ltd (AMCI). API holds a number of iron ore tenements in the western Pilbara area of Western Australia and proposes the development of the "West Pilbara Iron Ore Project Stage 1" (WPIOP) (the Project Area). The Project involves mining of iron ore from a number of resources on the western fringe of the Hamersley Ranges, between 35 and 85 km south of Pannawonica. A port is proposed at Anketell Point near Dixon Island from which iron ore would be exported. The Anketell Point Port Project was referred to the EPA and is subject to a separate Public Environmental Review (PER) process.

The WPIOP mine and transport corridor was referred by API to the Environmental Protection Authority (EPA) and it was determined that it be assessed under Part IV of the *Environmental Protection Act 1986* at the level of Public Environmental Review, with an 8 week review period. The Project proposal was also referred to the Department of Environment, Water, Heritage and the Arts (DEWHA) by API. DEWHA determined that the proposal was a controlled action and required approval under the *Environment Protection and Biodiversity Conservation Act 1999*.

Flora and vegetation surveys have been conducted by three consultants within the Project Area:

Western Botanical

- Resource areas associated with the West Pilbara Iron Ore Project (including Catho Well, Trinity Bore, Cardo Bore East, Upper Cane, Cardo Bore North, Kens Bore, Jewel and Cochrane);
- Infrastructure sites associated with the resource areas (including camp site, airstrip, administration etc);
- Rail alignment from between the southern-most deposits (Catho Well and Trinity Bore) to Cape Preston;
- Infrastructure sites associated with the rail alignment (including borrow pits, communication tower sites and associated access roads).

AECOM

- Approximately 100km of proposed rail alignment from 75km south west of Karratha to approximately 20km east of Karratha parallel to the North West Coastal Highway;
- Infrastructure sites associated with the rail alignment (including borrow pits, communication towers and construction camp sites).

Astron Environmental Services

- Southern Access Corridor, approximately 34 km in length (200m corridor) connecting Nanutarra Road with the southern-most resource areas;
- Gas pipeline spur, approximately 18 km in length (30 m corridor) connecting the Goldfields Gas Transmission pipeline to the proposed administration area;
- Infill rail and resource areas (including various disturbance footprint areas).

1.2 Reconciliation Background

Because the flora and vegetation surveys within the Project Area had been conducted by three different consultants, there was considerable variation in the interpretation of results, particularly in relation to defining and mapping vegetation units. To ensure consistency and continuity between surveyed areas, it was decided to reconcile the information from the three consultants to generate an assessment and map that would relate to the Project Area as a whole.

Astron was commissioned to conduct infill vegetation mapping of unsurveyed portions of the WPIOP, and to undertake reconciliation of data throughout the Project Area. Reconciliation of vegetation units from the three consultants was conducted to achieve the following objectives:

- Ensure the vegetation descriptions used by the three consultants were consistent (i.e. to the same NVIS level);
- Create one set of consistent vegetation codes;
- Create one set of vegetation maps incorporating all of the separate survey areas;
- Complete species lists (including priority and weed species lists), for the mine and rail corridor survey areas; and
- Provide a risk assessment based on the reconciled data.

The reconciliation process was intended to compliment the survey works conducted by the three consultants by creating one consistent dataset (see Section 1.4).

Numerical analysis conducted by Astron (2010) supported the reconciliation process. Results from the analysis indicated that within the mine area a relatively conservative approach had been taken in describing vegetation and that there was support for the reconciliation of vegetation descriptions.

1.3 Previous Studies

The information collected from the various flora and vegetation surveys conducted in the Project Area have been presented in a number of reports:

AECOM, 2009. *Proposed Anketell Point Rail Alignment, Associated Borrow Pits and Communication Towers. Level 2 Flora and Vegetation Assessment.* Unpublished draft report prepared for API Management Pty Ltd.

Astron Environmental Services, 2010a. *West Pilbara Iron Ore Project Southern Access Corridor Flora and Vegetation Survey.* Unpublished report in preparation for API Management Pty Ltd.

Astron Environmental Services. 2010b. *West Pilbara Iron Ore Project Gas Pipeline Flora and Vegetation Survey*. Consultants Report, Perth.

Western Botanical. 2009a. *Flora and Vegetation of the Proposed Cape Preston Rail Corridor, West Pilbara Iron Ore Project.* Consultants Report, Perth.

Western Botanical. 2009b. *Flora and Vegetation of the Proposed Mine Area and Associated Infrastructure, West Pilbara Iron Ore Project*. Consultants Report, Perth.

1.4 Scope and Objectives

The scope and objectives of the vegetation reconciliation and mapping aimed to:

- Undertake vegetation mapping in unsurveyed 'infill' areas by extrapolation from existing mapping;
- Undertake ground truthing of newly mapped areas;
- Compare vegetation units between consultants and where appropriate, reconcile vegetation units where similarities were noted;
- Create a comprehensive list of reconciled vegetation units (at a scale appropriate for the data provided) with new associated codes;
- Prepare vegetation mapping with new reconciled vegetation units and codes, with particular attention focused on the interface zones where separate surveys overlapped;
- Compile species lists representing the entire Project Area, using the data provided by the three consultants;
- Prepare a list of Declared Rare, Priority and conservation significant flora recorded, and their locations within the Project Area, using the data provided by the three consultants; and
- Conduct a risk assessment to determine the conservation value of the reconciled vegetation units identified in the Project Area.

1.5 Project Location

The WPIOP is located in the west Pilbara region of Western Australia, in the Shires of Ashburton and Roebourne. The Project Area extends from the Nanutarra – Wittenoom Road in the south (Southern Access Road) to approximately 20 km east of Karratha, where the WPIOP rail intersects the proposed Anketell Point port site. The Project traverses Karratha, Mardie, Mount Stuart, Mount Welcome, Red Hill, Wyloo and Yarraloola pastoral leases. The Project Area location is presented in Figure 1.

Figure 1: Location of West Pilbara Iron Ore Project (WPIOP).

2. Relevant Legislation

The principal legislation governing the Project in relation to the environment is:

- the *Environmental Protection Act* (EP Act) *1986*;
- the *Wildlife Conservation Act 1950*; and
- the *Environment Protection and Biodiversity Conservation Act* (EPBC Act) *1999*.

The EP Act is relevant to environmental protection in Western Australia. Its main objectives relate to the conservation, preservation, protection, enhancement and management of the environment and associated matters.

The EP Act specifies that clearing of native vegetation in Western Australia requires a permit. The clearing provisions of this Act are described in the *Environmental Protection Amendment Act 2003* (WA) and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (the Regulations). Since 8 July 2004, any clearing of native vegetation for mining or exploration activities has required a permit under Part V of the EP Act, except where exemptions are provided under Schedule 6 of the EP Act or Regulation 5 of the Regulations.

The Wildlife Protection Act is the statue relating to the conservation and legal protection of flora and fauna in Western Australia. It is the primary legislation aimed at protecting any plant that is native or declared to be flora under the Act, and also provides further special protection to threatened flora.

The Commonwealth EPBC Act provides a framework to protect and manage matters of national environmental significance. Matters of national environmental significance include nationally and internationally important flora, fauna, ecological communities, wetlands and heritage places. Where a proposed action is likely to impact on matters of national environmental significance then the proposed action is referred for formal assessment under the EPBC Act.

Other environmental legislation relevant to the flora and vegetation in the Project Area includes:

- *Conservation and Land Management Act 1984* (state conservation and land management);
- *Agriculture and Related Resources Protection Act 1976* (exotic species);
- *Wildlife Conservation (Fauna Protection) Amendment Act 2002* (protection of fauna); and
- *Mining Act 1978* (ground disturbing activities).

3. Existing Environment

3.1 Climate

The Project Area experiences an arid to semi–arid climate and although highly variable and unpredictable, is characterized by low rainfall and year-round high temperatures. A hot low pressure system dominates the Pilbara region in summer as a result of a seasonal shift of surface pressures over the Australian continent. This draws the Intertropical Convergence Zone southwards and brings south-westerly winds to the Project Area. At the same time, the warm Leeuwin Current promotes the formation of tropical cyclones with high winds and substantial rainfall. During winter, the continental high pressure systems bring easterly winds that result in some precipitation in the Pilbara (Van Vreeswyk *et al*., 2002).

The two weather stations closest to the Project Area are Karratha Airport and Pannawonica. The average temperature and rainfall records at these two locations are presented in Figures 2 and 3. During the summer months, the mean daily maximum temperatures in Karratha and Pannawonica are 34.6°C and 40.4°C respectively, with winter maximum daily temperatures of 26.9°C and 27.7°C. (BOM, 2009). Average annual rainfall at the two locations is 280.3 mm and 408.2 mm respectively. In Karratha, 185.7 mm (66 %) of the total annual rainfall falls between the beginning of December and the end of March, while in Pannawonica, 289.3 mm (71 %) of the total annual rainfall occurs during this time.

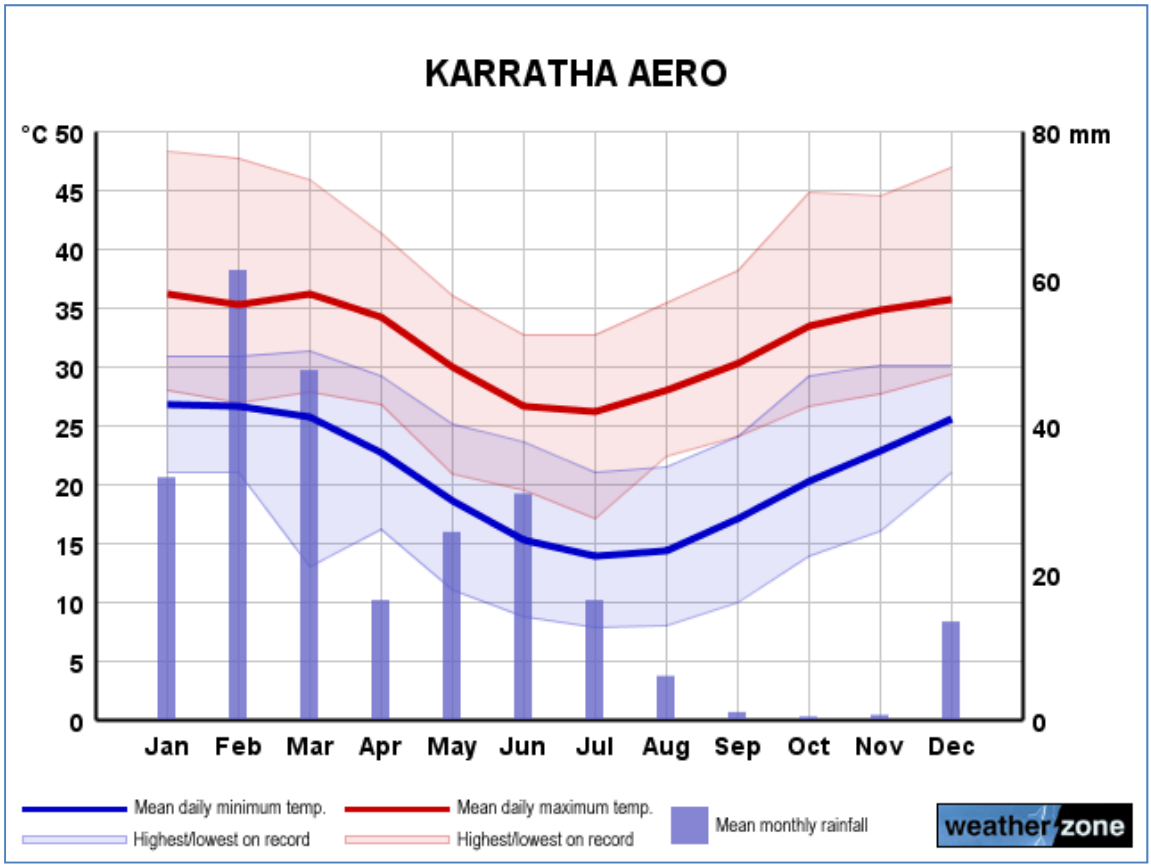

Figure 2: Climate data for Karratha Airport (The Weather Co. 2009).

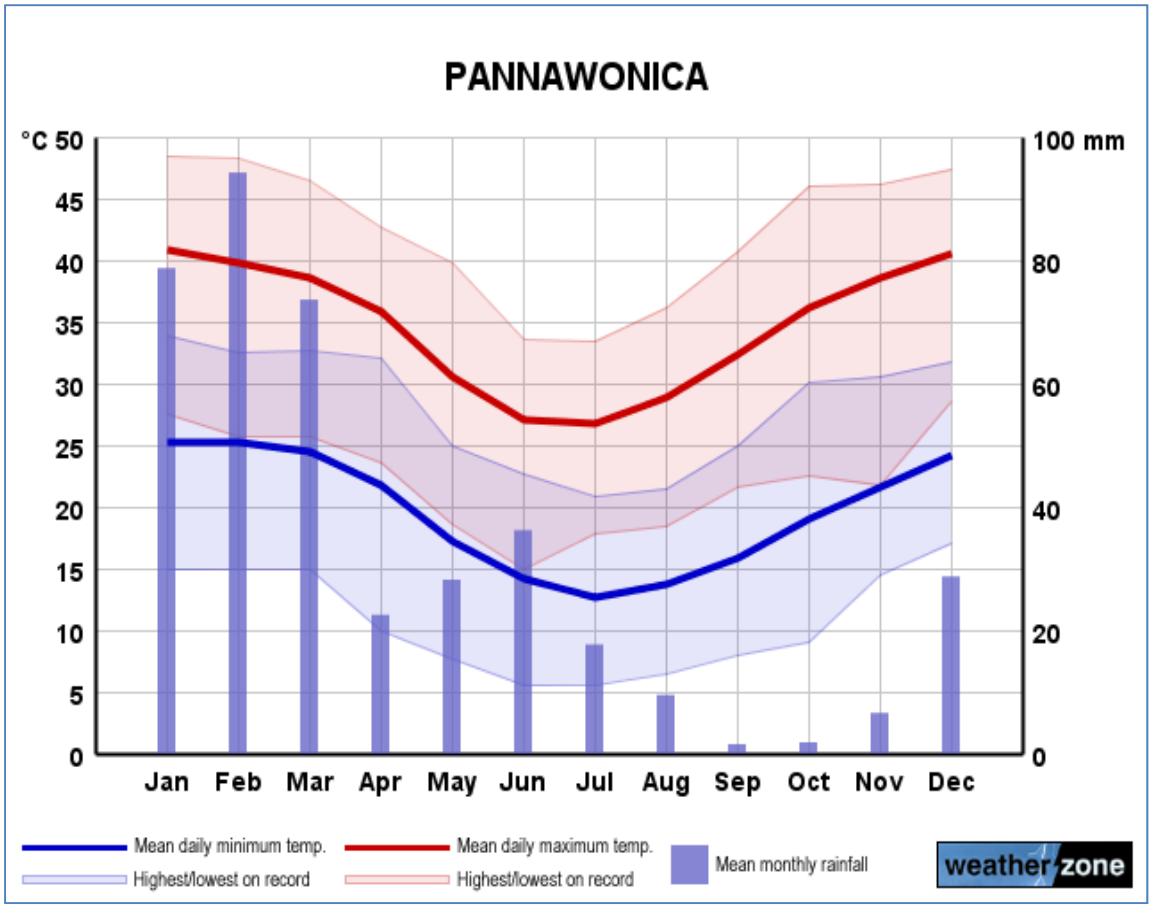

Figure 3: Climate data for Pannawonica (The Weather Co. 2009).

3.2 Land Systems

The Department of Agriculture (now referred to as the Department of Agriculture and Food) published inventory and condition surveys of lands in the Pilbara at a scale of 1:50 000 (Van Vreeswyk *et al.*, 2004). These surveys describe the biophysical characteristics of the region, which, combined with an evaluation of the condition of soils and vegetation, formed the basis to divide the region into a number of land systems. The Project Area is located across 14 land systems. Table 1 shows the land systems associated with the WPIOP mine areas and transport corridor.

Table 1: Land Systems present in the Project Area.

Land system	Total Area of Land System in Pilbara (ha)	Occurs in WPIOP mine areas	Occurs in WPIOP transport corridor
Boolgeeda Land System	993,096.17	✓	✓
Capricorn Land System	847,386.58	✓	✓
Horseflat Land System	328,758.09		✓
Mallina Land System	335,755.30		✓
Newman Land System	1,927,389.30	✓	✓
Nanutarra Land System	78,602.19		✓
Paraburdoo Land System	144,756.75		✓
Peedamulla Land System	59,200.75		✓
River Land System	525,671.26		✓
Robe Land System	129,680.85	✓	✓
Rocklea Land System	2,871,123.11	✓	✓
Ruth Land System	169,310.37		✓
Sherlock Land System	38,637.88		✓
Stuart Land System	283,629.65	✓	✓
Urandy Land System	131,975.62	✓	✓

The majority of the Project Area is located within the Robe, Boolgeeda, Rocklea, Urandy and Capricorn land systems. A summary of each land system in regard to landscape, topography and vegetation is presented in Table 2.

Table 2: Summary of Pilbara Region land systems (Van Vreeswyk et al. 2004).

Land System	Landforms	Vegetation
Boolgeeda (Stony lower slopes and plains below hills)	Low hills and rises	Hummock grassland of *Triodia* spp. with very scattered *Acacia* shrubs.
	Stony slopes and upper plains	Hummock grassland of hard *Triodia* spp. or scattered shrubs of *Acacia aneura*, *A. ancistrocarpa* and other *Acacia* spp. with hard and soft *Triodia* ground layer.
	Stony lower plains	Hummock grassland of hard *Triodia* spp. Also scattered / moderately closed tall shrubland of *A. aneura* with hard and soft *Triodia* ground layer.
	Groves	Moderately closed woodland or tall shrubland of *A. aneura* with sparse low shrubs and tussock grasses.
	Narrow drainage floors and channels	Scattered to closed tall shrublands / woodlands of *A. aneura*, *A. atkinsiana* and *Corymbia hamersleyana* with sparse low shrubs and hummock/tussock grassland.
Capricorn (Hills and ridges of sandstone and dolerite)	Ridges hills and upper slopes	Hummock grassland of hard and soft *Triodia* with scattered *A. inaequilatera* and other *Acacia* spp. and *Grevillea wickhamii*.
	Lower footslopes	As above.
	Stony Plains	Hummock grassland of hard *Triodia* spp. with scattered *Acacia* spp. shrubs.
	Narrow drainage floors and channels	Scattered tall shrubs / low woodland with *Acacia* spp., *C. hamersleyana* with numerous other shrubs and soft *Triodia*.
Horseflat (Gilgaied clay plains)	Stony rises and low hills	Hummock grasslands of *T. wiseana, T. brizoides.*
	Calcrete plains	Hummock grasslands of *T. wiseana* with isolated shrubs
	Gilgaied plains	Mostly tussock grasslands dominated by *Eragrostis xerophila* and other grasses such as *Chrysopogon fallax* and *Eriachne benthamii*.
	Non-gilgaied sometimes stony plains	Very scattered to scattered shrublands of *A. xiphophylla* with tussock grasses, mostly *E. xerophila*. Also patchy tussock and annual grasslands and hummock grasslands of *T. wiseana, T. longiceps*.
	Alluvial plains	Tussock grasslands with *E. xerophila, E. benthamii, C. fallax, *Cenchrus ciliaris*; also tussock grasslands with *Atriplex bunburyana*. Occasionally *Triodia* spp. hummock grasslands.
	Dissected slopes	Very scattered shrublands of *A. xiphophylla* with patchy tussock grasses. Also very sparse tussock grasslands and annual grasslands/ herbfields.
	Drainage depressions	Dense tussock grasslands including *E. benthamii, C. fallax* with occasional eucalypt trees and shrubs such as *V*achellia farnesiana*.

	Channels and minor river terraces	Fringing woodlands with *Eucalyptus camaldulensis, E. victrix* and *A. coriacea* over grasses **C. ciliaris, C. fallax* and *T. pungens*.
Mallina (Sandy surfaced alluvial plains)	Stony rises and low hills	Sparse hard spinifex hummock grasslands with isolated shrubs.
	Calcrete plains	Hummock grasslands of *T. wiseana* with isolated shrubs, less frequently with *T. pungens.*
	Sandy occasional alluvial plains with occasional claypans	Hummock grasslands predominantly of *T. pungens* with isolated shrubs such as *A. inaequilatera, A. ancistrocarpa, A. stellaticeps*. Less frequently hummock grasslands of *T. longiceps, T. secunda*.
	Gilgai plains	Tussock grasslands dominated by *E. xerophila*, also *E. benthamii* and *C. fallax*.
	Stony plains	Hummock grasslands of *T. pungens* or *T. wiseana* with isolated shrubs.
	Sandplains	Hummock grasslands of *T. pungens* or scattered to moderately closed *Acacia* spp. shrublands with prominent ground layer of spinifex or *Eragrostis eriopoda*.
	Drainage tracts, river terraces, banks and channels	Hummock grasslands of *T. pungens* with very scattered shrubs. Scattered to moderately closed *Acacia* spp. tall shrublands/woodlands with understoreys of spinifex and/ or tussock grasses *C. fallax, *C. ciliaris*. Also fringing grassy woodlands of *E. camaldulensis, E. victrix* along channels.
Newman land system (Rugged jaspilite plateau ridges and mountains)	Plateaux, ridges, mountains and hills	Hummock grassland of mixed hard *Triodia* with very scattered / scattered shrubs and trees including *Acacia* and *Senna* spp., *G. wickhamii*, and mixed eucalypts. Occasionally soft hummock grassland.
	Lower slopes	Similar to above.
	Stony plains	Hummock grassland of hard *Triodia* with isolated / very scattered shrubs of *Acacia* and *Senna* spp. and occasional eucalypt trees. Occasionally soft *Triodia* hummock grassland.
	Narrow drainage floors with channels	Smaller floors support *Triodia* hummock grassland with very scattered shrubs. Larger floors and channels support tall *Acacia* spp. shrublands / woodlands and *E. victrix* with tussock or hummock grass understorey.
Paraburdoo (Basalt derived stony gilgai plains)	Low basalt hills and ridges	Sparse *Acacia* spp. over low shrublands of *Corchorus walcottii*, *Ptilotus obovatus*, *Senna* spp., also *Triodia* hummock grassland with scattered *Acacia* shrubs.
	Upper interfluves and slopes	Scattered tall shrubs of *A. aneura* or *A. xiphophylla* with low shrubs including *Senna* and *Maireana* spp. Also *Triodia wiseana* with very scattered *Acacia* shrubs.
	Groves	Moderately closed / closed tall shrubland / woodland of *A. aneura* with sparse under shrubs and tussock grasses.

	Gilgai plains	Mixed tussock grassland with very scattered low shrubs, or scattered low tall shrublands of *A. xiphophylla* with tussock grass understorey.
	Drainage zones	Scattered tall shrubs of *A. aneura*, *A. xiphophylla* or *A. victoriae* with variable understorey including *Senna* and *Maireana* spp. Also *Triodia* hummock grassland with very scattered shrubs.
	Braided creeklines and channels	Closed tall shrubland or woodland of *A. citrinoviridis* over *Acacia* spp., *E. camaldulensis* with variable low shrubs and tussock grasses.
	Calcrete platforms	*Triodia* hummock grassland over scattered shrubs.
Peedamulla (Gravelly plains)	Rises and low hills	Hummock grasslands of *T. wiseana, T. lanigera* with isolated to very scattered *Acacia* spp. shrubs.
	Gravelly plains	Hummock grasslands of *T. wiseana, T. lanigera* with isolated to scattered shrubs including *A. atkinsiana*, other *Acacias* and *Grevillea wickhamii*. Occasionally hummock grasslands of *T. pungens* with shrubs. Also mid height shrublands of *A. xiphophylla* with *Triodia* spp. understorey.
	Stony gilgai plains	Tussock grasslands of *E. xerophila* and other perennial grasses or shrublands of *A. xiphophylla* with patchy tussock grass understorey.
	Drainage floors	Scattered to closed tall shrublands or low woodlands of *Acacia* and *Eucalyptus* spp. with *T. pungens* or tussock grass understorey.
River (Active floodplains and major rivers)	Sandy levees and sand sheets	Hummock grasslands of *T. pungens,* with very scattered to moderately closed shrubs such as *A. trachycarpa* and *A. inaequilatera*. Also tussock grasslands of **C. ciliaris, E. eriopoda* frequently with no shrubs, occasionally isolated to very scattered *Acacia* spp. shrubs and trees, or open eucalypt woodlands with grass understorey of **C. ciliaris.*
	Upper terraces	Hummock grasslands of hard and soft *Triodia* spp. frequently with no shrubs, occasionally isolated to very scattered *Acacia* spp. shrubs, and trees such as *Hakea lorea*.
	Floodplains and lower terraces	Tussock grasslands of **C. ciliaris* or hummock grasslands mainly of *T. pungens*. Also scattered to moderately closed *E. victrix* or *Acacia* spp. woodlands with prominent tussock grassland understorey of **C. ciliaris, C. fallax, Eulalia aurea* or hummock grassland of *T. pungens*.
	Stony plains	Hummock grassland of *Triodia* spp. with very scattered to scattered *Acacia* spp.. Also woodlands/ tall shrublands with *E. victrix, Acacia* spp. and tussock and hummock grasses.
	Minor and major channels	Channels have no vegetation. Banks have close or close fringing woodlands with *E. camaldulensis, E. victrix, Melaleuca argentea, M. glomerata, Sesbania formosa, A. coriacea* with understorey of sedges and grasses including *Cyperus vaginatus, *C. ciliaris* and *T. pungens*.
Robe (Low limonite mesas and buttes)	Low plateaux, mesas and buttes	Hummock grasslands of *T. pungens* with isolated to scattered *Acacia* and *Senna* spp. shrubs and occasional *E. leucophloia.*

	Lower slopes	Hummock grasslands of *T. wiseana, T. longiceps* with isolated to very scattered *Acacia* and *Senna* spp. shrubs. Occasionally hummock grasslands of *T. pungens*.
	Gravelly plains	Hummock grasslands of *T. wiseana, T. longiceps* with isolated to very scattered *Acacia* and *Senna* spp. shrubs. Occasionally hummock grasslands of *T. pungens.*
	Drainage floors and channels	Hummock grasslands of *T. pungens* with very scattered to moderately closed *Acacia* spp. shrubs. Also moderately closed *Eucalyptus* or *Acacia* woodlands/ tall shrublands with *T. pungens*.
Rocklea (Rugged basalt hills and dissected plateaus)	Hills, ridges, plateaux and upper slopes	Hummock grassland of hard or soft *Triodia* spp. with isolated to very scattered shrubs such as *Acacia inaequilatera* and *Senna* spp.
	Lower slopes	Hummock grassland of hard or soft *Triodia* spp. with isolated to very scattered shrubs such as *Acacia inaequilatera* and *Senna* spp.
	Stony plains and interfluves	Hummock grasslands of hard or soft *Triodia* spp. with isolated to very scattered shrubs such as *A. inaequilatera*. Occasionally grassy shrublands with *Acacia, Senna* and *Eremophila* spp.
	Gilgai Plains	Tussock grasslands with perennial grasses such as *Astrebla pectinata* and *Eragrostis xerophila*.
	Upper drainage lines	Hummock grasslands with hard or soft *Triodia* spp., with scattered *Acacia* spp. and *Corymbia hamersleyana*.
	Drainage floors and channels	Scattered to moderately closed tall shrublands or woodlands of *Acacia* and *Eucalyptus* spp. with mixed understorey shrubs and hummock grass or tussock grass understorey.
Ruth (Hills and ridges of volcanic and other rocks)	Hills, ridges and upper slopes	Hummock grasslands of *T. wiseana* or hard and soft *Triodia* spp. with isolated shrubs such as *A. inaequilatera, A. pyrifolia, A. orthocarpa*.
	Lower slopes and stony plains	Hummock grasslands of *T. wiseana, T. pungens* or T. spp., with isolated to very scattered *Acacia* and *Senna* spp. shrubs.
	Narrow drainage floors, creeklines and channels	Hummock grasslands of hard and soft *Triodia* spp. with scattered to moderately closed *Acacia, Senna* and *Indigofera* spp. shrubs and occasional *Eucalyptus* trees.
	Sandplains	Hummock grasslands of hard and soft *Triodia* spp. with isolated to scattered *Acacia* spp. shrubs.
Sherlock (Stony alluvial plains)	Stony plains with spinifex	Hummock grasslands of *T. wiseana* with isolated or very scattered shrubs. Minor gilgai areas support annual grasslands or herbfields with very scattered tussocks of *E. xerophila.*
	Stony alluvial plains with Snakewood	*A. xiphophylla* with understorey of low shrubs such as *Enchylaena tomentosa* and *Senna artemisioides*, and tussock grasses *E. xerophila* and *Enteropogon ramosus* or hummock grass *T. pungens*. Also hummock grasslands of *T. pungens* with isolated to scattered *Acacia* spp. shrubs.
	Gilgai plains	Tussock grasslands of *E. xerophila* and *E. benthamii* or shrublands of *A. xiphophylla* with tussock grass understorey.

	Drainage lines	Hummock grasslands of *T. pungens* with scattered shrubs and trees. Also scattered to moderately closed tall shrublands/ woodlands with species such as *A. trachycarpa, A. pyrifolia, E. victrix* and *H. lorea* with *T. pungens* understorey.
Stuart (Gently undulating stony plains)	Low hills	Hummock grasslands of *T. wiseana* with isolated or very scattered shrubs such as *A. atkinsiana, A. bivenosa.*
	Stony plains	Hummock grasslands of *T. wiseana, T. lanigera, T. brizoides* with isolated to scattered *Acacia* spp. and other shrubs. Less frequently *T. pungens.*
	Lower plains	Very scattered to scattered tall shrublands of *A. xiphophylla* with numerous low shrubs including *Enchylaena tomentosa, Maireana* and *Senna* spp. and hummock grasses *T. longiceps* and *T. pungens.* Also hummock grasslands of *T. longiceps* and *T. pungens* with very few shrubs.
	Drainage tracts	Hummock grasslands of *T. pungens* with scattered shrubs such as *A. bivenosa* and *A. victoriae*. Also moderately closed woodlands/ tall shrublands with *Eucalyptus*, *Acacia* spp. and tussock grasses such as *C. fallax.*
Urandy (Stony plains, alluvial plains and drainage lines)	Stony plains	Hummock grasslands of *T. pungens* with very scattered to moderately closed shrubs such as *A. aneura, A. ancistrocarpa, A. bivenosa* and *A. xiphophylla*.
	Alluvial plains	Hummock grasslands of *T. pungens* with isolated to scattered shrubs such as *A. victoriae, A. inaequilatera*, and *A. atkinsiana* and sparse *Eucalyptus* spp.
	Drainage zones and channels	Hummock grasslands of *T. pungens* or tall shrublands/ woodlands of *Acacia* and *Eucalyptus* spp. with hummock and tussock grass understoreys including *C. fallax* and **C. ciliaris.*

3.3 Interim Biogeographic Regionalisation for Western Australia

The Interim Biogeographic Regionalisation for Australia (IBRA) divides Australia into 85 bioregions and 403 subregions (Environment Australia, 2005). IBRA regions represent a landscape-based approach to classifying the land surface, including attributes of climate, geomorphology, landform, lithology, and characteristic flora and fauna. Specialist ecological knowledge, combined with appropriate regional and continental scale biophysical datasets were interpreted to describe these regions (McKenzie *et al*., 2002).

The Project Area occurs in the Pilbara bioregion and is more specifically associated with the following IBRA subregions:

- PIL1 – Chichester subregion is characterised by undulating Archaean granite and basalt plains and basaltic ranges. Plains support shrub steppe characterised by *Acacia inaequilatera* over *Triodia wiseana* hummock grasslands, while ranges are dominated by *Eucalyptus leucophloia* tree steppes (Kendrick and McKenzie, 2001).
- PIL3 – Hamersley subregion is characterised by dissected bold plateaux and ranges of flat-lying or moderately folded sandstone and quartzite. *Acacia aneura* (Mulga) low woodland over tussock grasses occurs on fine textured soils in valley floors, with *Eucalyptus leucophloia* (Snappy Gum) scattered over *Triodia brizoides* on the skeletal soils of the ranges (Kendrick, 2001).
- PIL4 – Roebourne subregion is characterised by Quarternary alluvial plains with grass savannas of mixed bunch and hummock grasses, and dwarf shrub steppe of *Acacia stellaticeps* over *Triodia pungens*, while Samphire, *Sporobolus* and Mangal occur on the marine alluvial flat (Kendrick and Stanley, 2001).

3.4 Beard Vegetation Mapping

The vegetation in the Project Area was broadly mapped as the Fortescue Botanical District of the Eremaean Botanical Province at a scale of 1:1,000,000 by Beard (1975). More specifically, the Project Area is associated with the following Beard physiographic units:

- Stuart Hills: Typically consists of plains, gently undulating pediplains extending out from breakaways and residuals capped by Robe pisolites, stony hills and steeply dissected pediments. Soils are often stony and shallow. Vegetation is dominated by *Triodia basedowii* and *T. wiseana* with scattered *Acacia* spp.
- Onslow Coastal Plain: Characterised by plains, sometimes with cracking clays; coastal areas consist of salt flats, tidal swamps and coastal sand dunes. Vegetation on plains is dominated by mosaics of *Acacia* spp. and *Hakea lorea* ssp. *lorea* over *T. pungens*; and *A. xiphophylla* with tussock grasses of *T. pungens*.
- Abydos Plain: Typified by a granite plain, also including alluvial plains, pediplains, low stony hills and dissected pediments and low granite outcrops and tors. The predominant vegetation is shrub steppe of *Acacia* spp. over *T. pungens.* *Triodia wiseana* becomes the dominant understorey species on stony rises and low hills.

3.5 Geology, Soils and Topography

The Project Area occurs in association with the Ashburton and Hamersley Basins. The formations present include Cainozoic sediments, Wyloo Group and Hamersley Group basement formations. The Wyloo group underlies the majority of the study area and outcrops in a broad northwest – southeast tract.

Four major soil landscapes were identified across the Project Area (Blandford, 2008):

- Mesa plateau system – formed by erosion of weathered channel iron deposits and containing skeletal soils. Ferricrete gravels dominate the soil material and surface soils tend to be strongly to moderately acidic;
- Debris slope and piedmont zone system – Debris slopes contain a complex system where the slope is mantled by erosion-resistant debris, weathered from the iron rich channel deposits;
- Pediment system – An erosion system masked by a thin layer of outwash debris, the characteristics of which are defined by the length of slope and upslope material. The profile morphology is well defined and the sediment is strongly influenced by gravels;
- Alluvial / colluvial plain system – A complex system characterised by the depositional environment, the nature of the sediments being deposited and the hydrologic system operating at the time. Many profiles display complex stratigraphy and small scale alluvial features such as cut and fill and in-filled scour channels.

3.6 Watercourses and Wetlands

No Ramsar listed wetlands or other nationally important wetlands occur within, or in close proximity to the Project Area (DEWHA, 2009).

A number of significant watercourses occur in the Project Area, including the Robe, Fortescue, Cane and Maitland Rivers which may flow following significant rainfall events and pool water for many months following. In addition, a number of named creeks are present, including Devil Creek, Duck Creek, McKay Creek, Peter Creek, Red Hill Creek, Urandy Creek, Wallanaring Creek and Yanyare Creek. These creeks are all ephemeral and only flow following significant seasonal rain.

4. Methods

The process undertaken to reconcile the flora and vegetation data for mapping and conservation assessment purposes is outlined and represented in a flowchart in Figure 4:

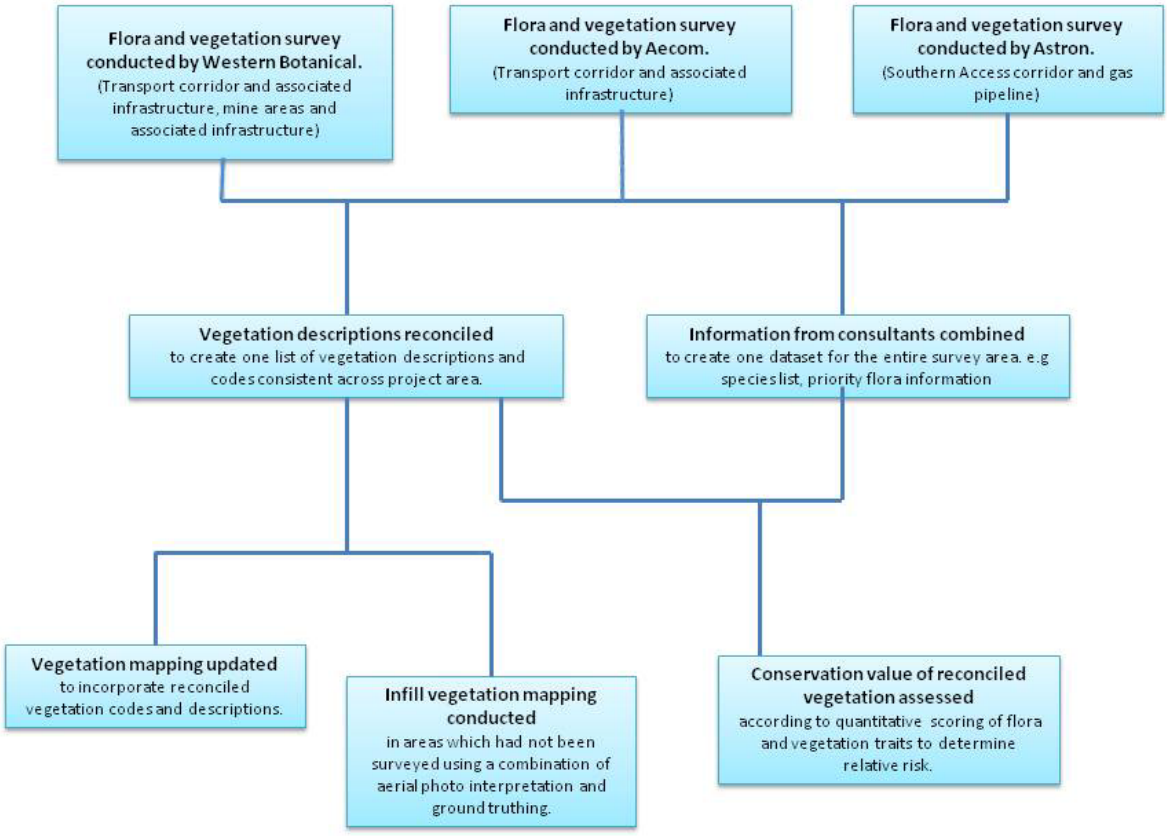

Figure 4: Process of Reconciliation of WPIOP Survey Data.

4.1 Vegetation Unit Reconciliation

The Project Area was surveyed in sections by three consultants: Western Botanical, AECOM and Astron. Vegetation units were described and mapped by each consultancy in their respective survey areas. Western Botanical described 200 vegetation units, AECOM described 19 units, and Astron described 30 units.

The vegetation units described by the three consultants were combined to create one dataset. This was done by categorising each of the vegetation descriptions according to broad landform types. Dominant floristic composition of each stratum (rather than height and foliage cover) was the main characteristic used to determine likeness between descriptions. To assist in categorising similar communities, all vegetation unit descriptions were assigned to a broad classification based on dominant overstorey and dominant understorey (classification analogous to NVIS broad floristic formation to sub-formation level) (DEH, 2003) e.g Mixed Acacias over soft spinifex. The composite species in each stratum were then reviewed (using a combination of the vegetation description and survey data) to group each unit according to similar floristics.

Where available, photographs from each vegetation unit were reviewed to further validate comparable descriptions and individual site habitat descriptions assessed to ensure they too were comparable. From all associated units within a grouping, up to three strata and up to three species from each strata, were incorporated to describe vegetation at the NVIS association level (DEH, 2003).

Preference was given to reconciling vegetation units believed to be under surveyed (no replicate survey sites) or where no permanent survey sites were established (i.e vegetation was described only from releves and vegetation descriptions/mapping notes). Similarly, vegetation believed to represent ecotones (i.e. transitional zones between vegetation associations) or from poorly positioned survey sites was favoured for reconciliation with other vegetation units.

The process described above is summarised as a flowchart in Figure 5.

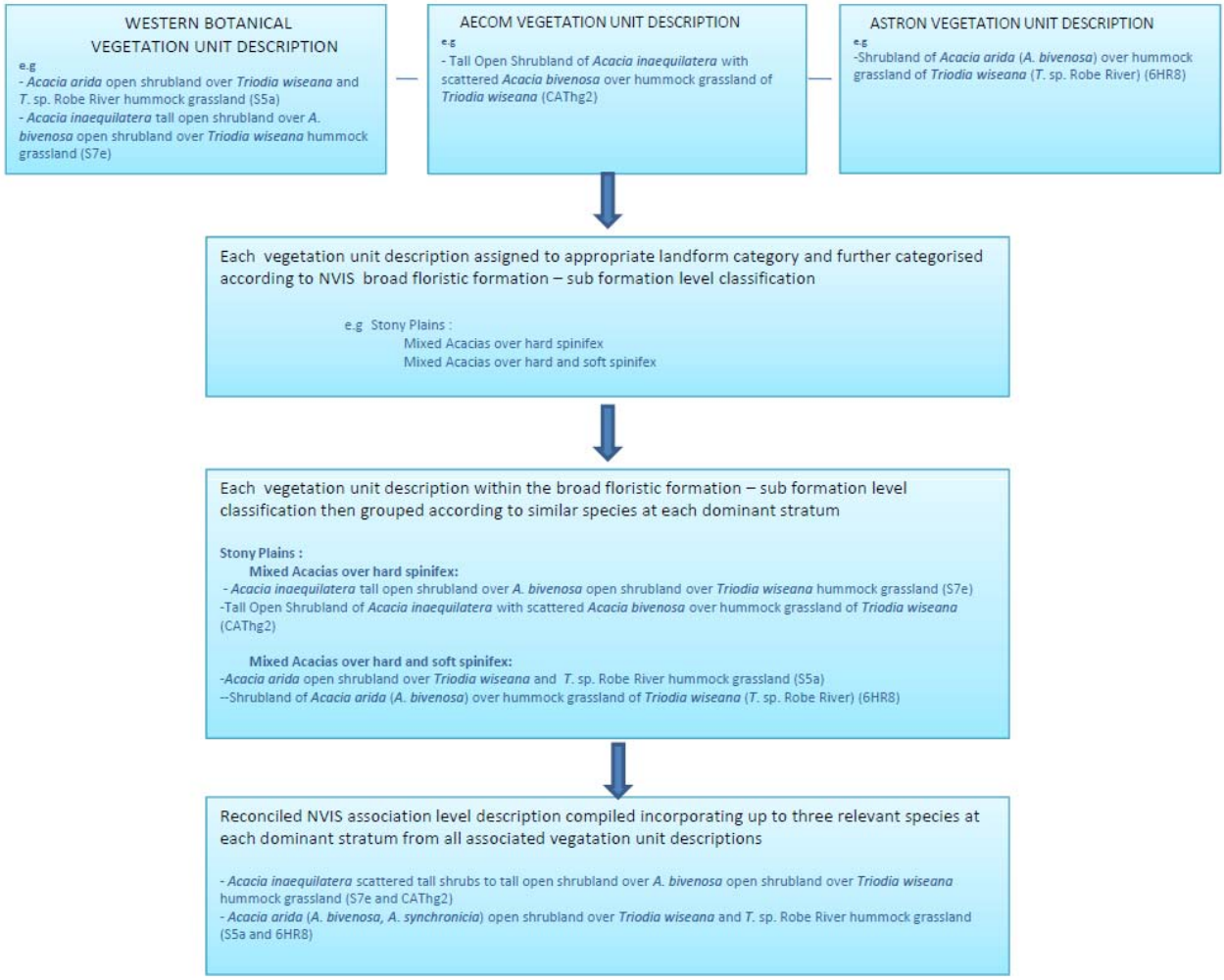

Figure 5: Process of Vegetation Description Reconciliation.

4.2 Vegetation Mapping

Two approaches were required to map the vegetation throughout the Project Area:

a) Re-coding vegetation units mapped by Western Botanical and AECOM to reflect the reconciled vegetation associations and where necessary, amalgamating codes and polygons;

b) Mapping infill areas where realignments had occurred or additional disturbance was proposed which had not been previously mapped.

The vegetation mapping conducted for this Project is presented in Appendix A.

4.2.1 Reconciled vegetation mapping

Once the reconciled vegetation descriptions and codes were created, it was necessary to update the vegetation mapping which had been previously done by the various consultants. A spreadsheet which showed the new vegetation units and codes post-reconciliation and shapefiles of the original vegetation mapping conducted by the various consultants was provided to CAD Resources in order to prepare the reconciled vegetation community mapping. The map reconciliation process involved reworking the original polygon boundaries defined by the various consultants to take account of the new reconciled vegetation codes and descriptions. The interfaces where survey areas merged or overlapped was specifically considered, to ensure continuity in the amalgamated vegetation mapping.

4.2.2 Infill vegetation mapping

Following the conclusion of each of consultants surveys, a number of additional sites (infill areas) required vegetation mapping. Infill vegetation mapping was completed in two phases:

- Desktop interpretation of aerial photography: colour aerial photographs at 1:10 000 scale were mapped by interpreting landforms and vegetation patterns with reference to the surrounding vegetation mapping completed by Western Botanical (2009a and 2009b). Boundaries between vegetation associations and associated codes were marked on aerial photographs in the office; and
- Selective ground truthing: a high proportion of sites (approximately 85 %) were ground truthed to test the accuracy of the desktop photo interpretation. Where necessary, changes to vegetation association boundaries or codes were made on aerial photographs in the field.

Infill vegetation mapping was completed using the reconciled vegetation codes and descriptions.

4.2.2.1 Aerial Photograph Interpretation

Colour aerial photography at 1: 10 000 scale, overlaid by draft vegetation mapping completed by Western Botanical in surrounding areas, was used to extrapolate vegetation mapping in infill areas. Interpretation was done by discerning vegetation patterns in association with landscape forms and features and extending the lines delineating vegetation communities in surrounding areas.

4.2.2.2 Ground truthing

An Arcpad Geographic Information System (GIS) with the survey corridor uploaded was used to locate the survey area boundaries on the ground and to assist in vegetation mapping. The photo interpretation was compared against field observations, and, where necessary, vegetation community boundaries were amended to reflect the patterns seen on site. A brief description of the vegetation present was noted for each site visited and colour photographs were taken. Although it was not practical to ground truth all infill areas (many were less than 0.2 ha and not readily accessed), as many sites as possible were ground truthed to determine how accurate the desktop photo interpretation was.

As the vegetation reconciliation had not yet been conducted, for the purpose of mapping, changes in vegetation observed while traversing the survey area were described based on dominant growth form, cover, height and dominant genus for upper, mid and ground strata (DEH, 2003), and noted for each site visited. These descriptions were then matched against the vegetation descriptions prepared by Western Botanical to maintain consistency. Not all of the Western Botanical vegetation descriptions were available at the time of the field surveys so some descriptions needed to be matched after the site visits were completed. Once the vegetation reconciliation had been completed, the codes were matched with new ones and the mapping updated.

4.3 Data Reconciliation

The data and information collected by the three consultants was combined to create one dataset for the entire Project Area, and where appropriate further delineated according to combined mine or transport corridor data. In particular, a complete species list, as well as lists of priority species and weed species were amalgamated and compiled. The flora data and results presented in this report were collated from the combined data sets.

4.4 Vegetation Association Conservation Value Risk Assessment

4.4.1 Background of Conservation Value Risk Assessment Approach

An assessment of vegetation conservation value was conducted by quantitatively scoring a range of the flora and vegetation characteristics of each vegetation association recorded in the Project Area. Broad-scale vegetation mapping of the Pilbara is at a coarse scale and therefore not comparable to the vegetation associations identified in the Project Area. Similarly, an 'across the board' approach to determining conservation value and therefore risk to vegetation is not available for the region. It was therefore decided to create a systematic ranking process as a means of conducting a strategic assessment of the conservation value (and therefore potential level of risk) of the vegetation associations recorded from the Project Area.

Few similar approaches have been published, presumably due to the inherent high level of diversity of habitat and therefore assets and threats; but also due to the subjectivity of such an approach. A similar system was used by Biota (2006) in association with the Mesa A transport corridor, Warramboo Deposit and Yarraloola Borefield Project, located to the east of the Project Area. This work was consulted and further developed with guidance from a range of higher level strategies and assessments (Kendrick, 2001; Kendrick and McKenzie, 2001; Kendrick and Stanley, 2001; DEC, 2006;

and Sparks et al., 2006) which provided further consideration of a range of factors. Experts from the DEC provided advice on the attributes and scoring system during the draft stage.

4.4.2 Developing Vegetation Association Conservation Value Risk Assessment

A number of assets or threats considered to contribute to the conservation value of vegetation within the Project Area were determined. The assets and threats identified were:

- *Representation*

  -Identifies how well the vegetation is represented:

  a) on a regional scale (Land Systems);

  b) within the conservation estate (according to IBRA); and

  c) within the survey area.

- *Rarity*

  -Identifies whether the vegetation is associated with Priority Flora, or flora considered uncommon in the habitat or area (such as range extensions).

- *Naturalness*

  -Identifies whether the vegetation is of high quality or has been subject to degrading pressures.

- *Distinctiveness*

  -Identifies whether the vegetation supports species specific to particular habitats (such as river species), or if the habitat is associated with a particular function (such as creeks providing drainage).

- *Sensitivity*

  - Identifies if the vegetation is susceptible to disturbance (such as changes to sheetflow).

- *Impact*

  -Identifies what proportion of the vegetation association within the Project Area occurs within the proposed disturbance footprint area.

Specific attributes were identified for each asset and threat. Each attribute was assigned a score and the sum of these scores was used to compare the conservation values of vegetation associations. The characteristics considered to have the greatest influence in determining the conservation value of a vegetation association were given the highest scores. Likewise, those characteristics considered

most detrimental to a vegetation association's conservation value were given the lowest scores. A summary of the characteristics and their corresponding scores is presented in Table 3.

Table 3: Characteristics, codes and scores used in the Vegetation Conservation Value Risk Assessment.

Asset / Threat	Individual Attribute Code	Description of Individual Attributes	Score
Representation	R*	Occurs within a Land System that has a restricted representation in the Pilbara (may occur within a specific part of the region and /or constitutes a small area)	3
	O*	Occurs within an area that is on the edge or beyond the normal distribution of that Land System	2
	W*	Occurs in a Land System is widespread in the Pilbara (may constitute a large area and /or have a broad occurrence)	1
	N*	Occurs within the normal distribution of that land system	1
	I	Vegetation community with High reservation priority in IBRA sub-region	2
	A	Low occurrence in the surveyed area, possibly due to being a restricted or minor habitat – e.g. mesas, creeklines, gullies and gorges	2
Rarity	P	Known to contain Priority flora	4
	U	Vegetation supports species uncommon in the habitat or region – e.g. range extensions	2
Naturalness	C	Condition excellent or very good - no or only very scattered weeds, no obvious evidence of degradation by introduced herbivores	1
	T	Substantially degraded e.g. by weed invasion (>10 % cover), heavy grazing	-3
Distinctiveness	L	Vegetation supports species restricted to the habitat – e.g. river species	2
	D	Significant surface drainage feature – e.g. rivers, moderate-sized creeklines	1
Sensitivity	S	Habitat particularly susceptible to other disturbances - e.g. changes to sheetflow, dust, erosion	1
Impact	VH	>75 % of vegetation association mapped for WPIOP is within disturbance footprint area	6
	H	51 – 75 % of vegetation association mapped for WPIOP is within disturbance footprint area	4
	M	26 – 50 % of vegetation association mapped for WPIOP is within disturbance footprint area	2
	ML	10 – 25 % of vegetation association mapped for WPIOP is within disturbance footprint area	1
	L	>1 – 9 % of vegetation association mapped for WPIOP is within disturbance footprint area	1

*Two scores would be recorded for Land Systems i.e. a vegetation association which occurs within a Land System that has a restricted representation in the Pilbara (may occur within a specific part of the region and /or constitutes a small area) (+3) may also occur on the edge or outside of the normal distribution of that land system (+2).

Vegetation associations recording the highest scores generally represented restricted habitat (such as mesas or creeks), supported Priority Flora and other uncommon species, were in very good to excellent condition and in the Project Area had a high proportion of their mapped area within the proposed disturbance footprint area.

The highest possible score (26) from the rating system would apply to a vegetation association with the following characteristics:

- *Representation:*
    - Occurs on a restricted and outlying land system; is a vegetation community with a high reservation priority in the IBRA sub region; and has a low occurrence in the surveyed area (+5, +2, +2).
- *Rarity:*
    - Supports Priority Flora; and supports flora uncommon in the locality (+4, +2);
- *Naturalness:*
    - Is not degraded by threatening process such as weeds (+1);
- *Distinctiveness:*
    - Supports flora restricted to that habitat; and is a significant drainage feature (+2, +1);
- *Sensitivity:*
    - Is susceptible to disturbance (+1);
- *Impact:*
    - Greater than 75 % of the vegetation association mapped within the surveyed area occurs within the disturbance footprint (+6)

The lowest possible score (0) would be recorded for a vegetation association with the following characteristics:

- *Representation:*
    - Occurs on a land system that is widespread, and within the normal distribution of that land system (+1, + 1);
- *Rarity:*
    - Is not known to support Priority Flora or flora uncommon in the locality (+0, +0);
- *Naturalness:*
    - Is considerably degraded by weeds (>10 %) (-3).
- *Distinctiveness:*
    - Does not support flora restricted to the habitat and is not significant for drainage (+0, +0);
- *Sensitivity:*

- Is not considered to be susceptible to indirect disturbance (+0);

- *Impact:*
  - Less that 9 % of the vegetation association mapped within the surveyed area occurs within the disturbance footprint (+1)

The scores for the various characteristics were recorded and added for each vegetation association. The perceived conservation value of each vegetation association was then recorded according to the classes presented in Table 4.

Table 4: Scores associated with Conservation Value Risk Rating.

Conservation Value Risk Rating	Score
Very High	20 - 26
High	13 - 19
Moderate	6 – 12
Low	0 - 5

4.5 Assumptions

A number of assumptions were made in relation to the data provided to Astron. These being:

- The quadrats, releves and mapping notes assigned to the various vegetation unit descriptions by each consultant were accurate (i.e. individual survey sites were not reassigned to communities other than previously specified);
- Data collected in the field was accurate (i.e. coordinates of Priority Flora)
- Species identification was accurate; and
- Habitat and landform descriptions were accurate.

4.6 Limitations

A number of limitations were encountered when reconciling the data collected from the three consultants. These include:

- Only the vegetation descriptions from the three consultants was reconciled i.e. no review was conducted on how quadrats had been assigned to their relevant vegetation unit by each consultant – this was assumed to be correct.
- In some cases vegetation units could reasonably be assigned to more than one habitat or landform type. For example, narrow run-off channels from mesas could either be assigned to 'minor creeklines' or 'stony hills and breakaways'. Appropriate assignment to landform was important as it ultimately affected the next stage of grouping similar units from within the same landform type and impacted on which descriptions became reconciled. For example:

  "*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* open scrub over *A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland" was a vegetation description associated with the 'minor creeklines' landform, whereas "*Acacia tumida* var. *pilbarensis, Grevillea wickhamii* ssp. *hispidula* tall shrubland over *Triodia wiseana* very open hummock grassland" is a very similar unit but was associated with the 'stony hills and breakaways' landform unit.

  Where this scenario occurred, vegetation units typically remained as they had been assigned by the surveying consultants, or where this information was not available they were matched according to most appropriate landform description. There were three instances where it was considered appropriate to move vegetation unit descriptions to another landform i.e the vegetation of a major creekline unit was better aligned with the descriptions associated with minor creeklines; and drainage features on mesas aligning better with creekline habitats than stony hills and breakaways.
- In some cases, vegetation units included species which did not appear to fit with the habitat description, for example *Acacia coriacea* ssp. *coriacea* in creeks (normally a coastal species). In this instance the species name provided by the surveying consultants was used and as a result some of the vegetation units do not comfortably match others.
- In some cases, species names in the raw survey data varied from species names in the vegetation unit description provided to Astron. For example a species was recorded as *Eucalyptus camaldulensis* in the quadrat species list but *E. victrix* in the vegetation description. In this instance, the species recorded in the vegetation unit description was used.
- Photographs and associated species lists were reviewed to assist in comparison. In some cases, neither a photograph nor raw survey data were available for a particular vegetation unit or quadrat. This restricted comparisons with some vegetation units, but in general adequate information was available to allow comparison.

- The identification and scoring of assets and threats to vegetation is subjective. The attributes described and the scores assigned to them are considered to be appropriate in the context of the Project and the desired assessment.

5. Results

5.1 Reconciled Vegetation Associations

Prior to the reconciliation, there were a total of 249 vegetation units described from the Project Area by Western Botanical, AECOM and Astron. The reconciliation process resulted in a reduction to 141 vegetation associations, as defined in the NVIS (DEH, 2003). The reconciled vegetation associations and descriptions are provided in Appendix B. The rationale for each reconciled vegetation association is presented in Appendix C. The vegetation maps produced in accordance with the reconciled vegetation associations (including the infill vegetation mapping) are presented in Appendix A.

5.1.1 Reconciliation Statistics

Of the 141 vegetation associations resulting from the reconciliation process, 58 (41.4 %) involved reconciliation of vegetation units (either within or between consultants) and 83 (58.6 %) did not involve reconciliation with other vegetation units. The number of vegetation units prior to reconciliation compared with the number of vegetation associations recognised following reconciliation for the various infrastructure areas, is presented in Table 5:

Table 5: Number of vegetation units pre- and post- reconciliation according to infrastructure area.

Infrastructure location	Total vegetation units pre reconciliation	Total vegetation associations post reconciliation	Number of vegetation associations involving reconciliation	% of vegetation associations involving reconciliation
Mine only	127	47	19	40.4
Transport corridor only	95	52	11	21.2
Mine and transport corridor	27	42	28	66.7
Total	**249**	**141**	**58**	**41.4**

The number of vegetation units reconciled according to infrastructure area and habitat / landform is presented in Table 6:

Table 6: Total number of vegetation units reconciles according to landform/ habitat type.

Landform / Habitat	Total number of vegetation associations post reconciliation	Reconciled vegetation associations occurring in Mine Only	Reconciled vegetation associations occurring in Transport Corridor Only	Reconciled vegetation associations occurring in both Mine and Transport corridor	Total Reconciled	Number of vegetation units unchanged with reconciliation
Minor Creeks	40	2	5	5	12	28
Major Creeks	21	0	0	1	1	20
Stony Plains	19	1	1	7	9	10
Stony Hills and Breakaways	49	14	3	13	30	19
Clay Plains	13	2	2	2	6	7

The stony hills and breakaways habitat had the greatest number of vegetation associations reconciled (61.2 % of vegetation associations involved reconciliation). The major creeks habitat had the least number of vegetation associations reconciled (4.7 % of vegetation associations involved reconciliation).

Reconciliation of vegetation units occurred using vegetation units from within consultants as well as between consultants (Tables 7 and 8). The reconciliation process not only identified similar vegetation units between consultancies, it also identified where there were similar units within individual consultancies.

Table 7: Number of vegetation associations reconciled with units from within one consultant or between one or more consultants for Mine Area.

Landform / Habitat	Vegetation associations reconciled within consultant	Vegetation associations reconciled between consultants*	Total
Minor Creeks	4	3	**7**
Major Creeks	0	1	**1**
Stony Plains	4	4	**8**
Stony Hills and Breakaways	15	13	**28**
Clay Plains	3	1	**4**
Total	**26**	**23**	

*These vegetation associations may also have involved reconciliation within consultants. See Appendix B

The majority of vegetation associations that involved reconciliation in the mine area were reconciled with vegetation units from the same consultant.

Table 8: Number of vegetation association reconciled with units from within one consultant or between one or more consultants for Transport Corridor.

Landform / Habitat	Vegetation associations reconciled within consultant	Vegetation associations reconciled between consultants*	Total
Minor Creeks	5	5	**10**
Major Creeks	0	1	**1**
Stony Plains	4	4	**8**
Stony Hills and Breakaways	3	13	**16**
Clay Plains	1	3	**4**
Total	**13**	**26**	

*These vegetation associations may have also involved reconciliation within consultants

The majority of vegetation associations that required reconciliation in the transport corridor were reconciled with vegetation units from more than one consultant.

The number of vegetation units reconciled to form new vegetation associations is presented in Table 9.

Table 9: Number of vegetation units used to form reconciled vegetation association according to landform/ habitat type.

Landform / Habitat	2 vegetation units	3 vegetation units	4 vegetation units	5 vegetation units	6 vegetation units
Minor Creeks	8	3	1	0	0
Major Creeks	1	0	0	0	0
Stony Plains	5	1	1	2	0
Stony Hills and Breakaways	13	6	8	2	1
Clay Plains	5	1	0	0	0

New vegetation associations most frequently resulted from the reconciliation of two vegetation units. The greatest number of units combined to form one reconciled vegetation association was six.

5.2 Species Lists

5.2.1 Summary of Flora

The reconciliation of all species lists resulted in a total of 661 species (identified to species level) from 61 plant families recorded in the Project Area, with 641 taxa recorded in the transport corridor, and 422 taxa recorded in the mine areas. A further 97 taxa (identified to only genus or family level due to inadequate material) were recorded. Complete species lists for the transport corridor and mine areas are provided in Appendix D. A summary of the number of families, genera, species and sub species recorded from both the mine and transport areas is presented in Table 10:

Table 10: Summary of taxa recorded within the mine and transport corridor.

Taxonomic Category	Total recorded within mine area	Total recorded within transport corridor
Family	45	54
Genera	131	170
Species	422	641
Sub-species	24	15

The dominant families included Poaceae (grasses), Papilionaceae (peas), Malvaceae (hibiscus), Mimosaceae (wattles) and Amaranthaceae (mulla mullas). The Acacias were the most frequently recorded genus.

The Western Australian Herbarium has recently revised its sequence and arrangement of collections with a number of changes to family classification. These changes are significant (such as the merging of Papilionaceae, Mimosaceae and Caesalpiniaceae into Fabaceae; and Sterculiaceae and Tiliaceae into Malvaceae). Because the data from this report were prepared using the former systematic structure, it has not been altered to reflect the new classification. The taxa most frequently recorded in the Project Area are listed in Table 11.

Table 11: Taxa most frequently recorded in the project area.

Family	**Number of taxa**
Poaceae (grasses)	97 (22)
Papilionaceae (peas)	73 (6)
Malvaceae (hibiscus)	59 (4)
Mimosaceae (wattles)	54 (2)
Amaranthaceae (mulla mullas)	47 (7)
TOTAL	**330 (41)**
Genus	**Number of taxa**
Acacia	50 (2)
Ptilotus	31 (4)
Sida	29 (3)
Hibiscus	25 (2)
Senna	25 (3)
Tephrosia	24 (2)
Euphorbia	17 (3)
Indigofera	17 (3)
TOTAL	**218 (22)**

( ) = number of taxa unable to be identified beyond family or genus level due to inadequate material (included in totals)

5.2.2 Introduced Flora

A total of 19 introduced (weed) species from 12 families were recorded in the Project Area. The Poaceae family (grasses) had five taxa and Asteraceae (daisies) and Curcubitaceae (cucumbers) both had two weed taxa represented in the Project Area. Of these, 18 weeds were recorded in the transport corridor and ten weeds were recorded in the mine areas (Table 12).

Table 12: Introduced flora recorded within the mine and transport corridor survey areas.

Species	Mine	Western Botanical Transport Corridor	AECOM Transport Corridor	Astron Transport Corridor
Aerva javanica			✓	
Argemone ochreleuca ssp. *ochreleuca*	✓	✓		✓
Asphodulus fistulosus		✓		
Cenchrus ciliaris	✓	✓	✓	✓
Cenchrus setiger	✓	✓		
Citrullus colocynthis		✓	✓	
Cucumis melo			✓	
Cucumis melo ssp. *agrestis*	✓	✓		
Cynodon dactylon		✓		
Echinochloa colona		✓		
Euphorbia hirta		✓		
Malvastrum americanum	✓	✓	✓	✓
Melochia pyramidata		✓		
Passiflora foetida ssp. *hispidula*		✓	✓	
Portulaca oleracea		✓	✓	
Prosopis pallida			✓	
Setaria verticillata	✓	✓		✓
Sonchus oleraceus		✓		
Vachellia farnesiana	✓	✓	✓	✓

*Taxonomy of the genus *Flaveria* has recently been reviewed. As a result *Flaveria australasica* has been synonymised to *Flaveria trinervia* which is recognised as a weed species. It has not been included in this table as at the time of survey it was considered a Priority species.

One Declared weed was recorded, **Prosopis pallida* (Mesquite). **Argemone ochroleuca* (Mexican Poppy) is a Declared Plant in other parts of the State, but not in the Shires of Ashburton or Roebourne (Department of Agriculture and Food, 2009).

5.2.3 Declared Rare and Priority Flora

No Declared Rare Flora (DRF) were recorded in the Project Area. A total of eight Priority Flora from six families were recorded in the Project Area; one Priority 2 species, five Priority 3 species and two Priority 4 species. Of these, four were recorded in the mine survey area and seven within the transport corridor, with two Priority Flora recorded within both the mine area and transport corridor. The distribution of all Priority Flora within the Project Area is presented in Table 13. GPS coordinate locations of all Priority flora is provided in Appendix E.

Table 13: Priority Species Distribution in the Project Area.

Species	Transport Corridor	Mine
Acacia glaucocaesia (P3)	✓	
Flaveria australasica ssp. *gilgae*(P3)	✓	
Goodenia nuda (P4)	✓	
Indigofera sp. Bungaroo Creek (S. van Leeuwen 4301) PN (P3)	✓	✓
Owenia acidula (P3)		✓
Rhynchosia bungarensis (P4)	✓	✓
Terminalia supranitifolia (P3)	✓	
Triodia sp. Robe River *(*M.E. Trudgen et al. MET 12367)(P3)	✓	✓
Vigna sp. Central (M.E. Tudgen 1626) (P2)	✓	

The taxonomy of the *Flaveria* genus has recently been reviewed and as such. *F. australasica* ssp. *gilgae* has been synomised with *F. trinervia* which is a weed species. As there is a degree conjecture regarding this nomenclature and classification (S. van Leeuwen pers. comm., Feb 2010) it has been included in the list of Priority flora recorded but not in the statistics.

The conservation status of a number of species has been reviewed since the consultants' reports were completed. This has resulted in a number of changes, including *Goodenia nuda* changing from P3 to P4 and *Rhynchosia bungarensis* changing from P3 to P4. *Triodia* sp. Robe River has been added to the Priority flora list, with a P3 conservation status.

Indigofera sp. Bungaroo Creek (S. van Leeuwen 4301) was recorded at nine locations, *O. acidula* at one location and *R. bungarensis* at four locations within the mine survey area. *T*. Sp. Robe River (M.E. Trudgen *et al*. MET 12367) was recorded from numerous locations on all of the resource areas except Catho Well. It was a dominant or co-dominant species in 20 reconciled vegetation associations mapped in the Project Area.

Within the transport corridor Survey area, *Acacia glaucocaesia* was recorded at one location, *G. nuda* at one location, *I*. sp Bungaroo Creek (S. van Leeuwen 4301) at seven locations, *R. bungarensis* at one location, *T. supranitifolia* at two locations, *T*. sp. Robe River at more than 100 locations and *Vigna* sp. Central at one location.

5.3 Vegetation Association Conservation Value Risk Assessment

The Conservation Value Risk Rating is presented in Appendix F. The lowest Conservation Value Risk Rating recorded in the Project Area was zero (recorded for three vegetation associations) and the highest rating recorded was 17 (recorded for two vegetation associations). No vegetation associations had a Very High Conservation Value Risk Rating, but a total of 28 vegetation associations were recorded as having a High Conservation Value Risk Rating. The number of vegetation associations recorded for each of the four Conservation Value Risk Ratings is presented in Table 14.

Table 14: The total number of vegetation associations recorded for each Conservation Risk Value Rating.

Conservation Risk Rating	Number of Vegetation Associations
Very High	0
High	28
Moderate	72
Low	41

The 28 vegetation associations recorded as having a High Conservation Risk Rating are listed in Table 15.

Table 15: Vegetation Associations with a High Conservation Value Risk Rating.

Vegetation Association	Vegetation Description	Score	Total Area Mapped (ha)	% Within Disturbance Footprint
HBr6	*Acacia inaequilatera* scattered tall shrubs to tall open shrubland over *Triodia wiseana* hummock grassland	16	4877.6	57.9
HBr10	*Acacia pruinocarpa* and *A. inaequilatera* high open shrubland over *Eremophila fraseri* ssp. *fraseri* low open shrubland over *Triodia wiseana* open hummock grassland	15	251.3	85.7
HBr11	*Acacia pruinocarpa* high open shrubland over *A. arida* open shrubland over *Triodia wiseana* open hummock grassland	13	51.1	55.3
HBr13	*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* scattered tall shrubs to tall open shrubland over *Triodia wiseana* very open hummock grassland	16	13.7	95.8
HBr20	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia bivenosa* scattered shrubs to shrubland over *Triodia wiseana* open hummock grassland to hummock grassland	13	1473.4	50.7
HBr22	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. pruinocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland	13	36.3	52.3

Vegetation Association	Vegetation Description	Score	Total Area Mapped (ha)	% Within Disturbance Footprint
HBr23	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis, A. pruinocarpa* tall shrubland over *Triodia wiseana* open hummock grassland	13	102.5	48.6
HBr28	*Acacia citrinoviridis, Stylobasium spathulatum* high shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. epactia* open hummock grassland	15	0.83	99.9
HBr29	*Corymbia ferriticola* ssp. *ferriticola* and *Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia citrinoviridis* and *Acacia aneura* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland to open hummock grassland	15	2.1	100
HBr30	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	32.1	92.7
HBr31	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia citrinoviridis* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	13	61.7	46.7
HBr33	*Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	13	188.4	41.7
HBr34	*Acacia bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) and *T. wiseana* open hummock grassland to hummock grassland	17	204	88
HBr35	*Acacia pruinocarpa, A. inaequilatera* (*A. citrinoviridis*) tall open shrubland over *Triodia wiseana, T.* sp Robe River (M.E. Trudgen MET 12,369) hummock grassland	15	80.8	99.9
HBr36	*Acacia inaequilatera* (*Petalostylis labicheoides*) scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	183.1	100
HBr37	*Acacia pruinocarpa* scattered tall shrubs to tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland to hummock grassland	15	120.1	84.1
HBr38	*Acacia tumida* var. *pilbarensis, Petalostylis labicheoides* tall shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	15	33	99.3
HBr40	*Acacia citrinoviridis* tall open shrubland over *A. bivenosa* open shrubland *Triodia wiseana, T. epactia* open hummock grassland	13	14.3	41.1
HBr41	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	50.6	100

Vegetation Association	Vegetation Description	Score	Total Area Mapped (ha)	% Within Disturbance Footprint
HBr46	*Eucalyptus leucophloia* ssp. *leucophloia, Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. citrinoviridis, Grevillea berryana* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T.* wiseana open hummock grassland	17	6.5	100
HBr47	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia maitlandii* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	6.15	100
HBr48	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia pruinocarpa* scattered tall shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	13	436.4	44.9
mDr2	*Acacia aneura* var. intermedia low woodland over *Eremophila forrestii* ssp. *forrestii* open shrubland over Triodia wiseana	15	0.7	64.3
RCr4	*Corymbia candida* ssp. *candida* and *C. hamersleyana* low open woodland over *Acacia colei* var. *colei* and *A. ancistrocarpa* high open shrubland over *Triodia epactia* very open hummock grassland	13	11.5	79.9
RCr8	*Eucalyptus camaldulensis* and *E. victrix* woodland to open forest over *Melaleuca linophylla, M. glomerata, Acacia ampliceps* high open shrubland over *Triodia epactia* scattered hummocks and *Cyperus vaginata* scattered sedges	13	66.8	7.1
RCr9	*Eucalyptus camaldulensis* var. *obtusa, E. victrix* woodland over *Triodia epactia* scattered hummocks over *Stemodia grossa* very open herbland	13	194.3	2.1
RCr10	*Corymbia hamersleyana* low open woodland over *Acacia bivenosa, A. citrinoviridis, A. pyrifolia* var. *pyrifolia* high shrubland over *Triodia epactia* open hummock grassland	13	82	9.3
SHr1	*Eucalyptus camaldulensis var. obtusa open forest over Acacia colei var. colei high open shrubland over Cenchrus ciliaris open tussock grassland*	14	0.56	99.7

Twenty two (78.5 %) of the High Conservation Value vegetation associations occurred in association with mesas and breakaways. Fourteen (50 %) of the vegetation associations rated as High Conservation Value are associated with *Triodia* sp. Robe River. Further assessment of the listed vegetation associations (Appendix G) identified that two identified as being of High Conservation Value (HBr6 and HBr20) are widespread and not considered to be at significant risk in this Project. Similarly, three of the High Conservation Value vegetation associations identified will have less than 10 % of the mapped area (within the WPIOP) disturbed.

Table 16 presents the number of High Conservation Value vegetation associations according to infrastructure area.

Table 16: Number and % of High Conservation Value vegetation associations according to infrastructure area.

Infrastructure Location	Total Number of Vegetation Associations Rated as High Conservation Value	% of High Conservation Value Vegetation Associations
Mine only	15	53.5
Transport Corridor only	4	14.2
Mine and Transport Corridor	9	32.1

The majority of High Conservation Value vegetation associations occur within the mine area only (53.5 %), with a further 14.2 % occurring in both the mine and transport corridor areas.

5.3.1 IBRA Reservation Priorities

Of the 28 vegetation associations with a High Conservation Risk Rating, two align with one of the Beard vegetation associations considered to be of High reservation priority in the relevant sub regions of the Pilbara region (Kendrick, 2001; Kendrick and McKenzie, 2001; Kendrick and Stanley, 2001). The Beard vegetation association analogous to those rated as High in the conservation risk assessment is presented in Table 17 with the reservation priority in the relevant Pilbara subregions.

Table 17: Beard vegetation associations matching vegetation associations described in the Project Area.

Beard Vegetation Association Code	Ecosystem Description	Reservation Priority in Chichester Subregion	Reservation Priority in Hamersley Subregion	Reservation Priority in Roebourne Subregion	Analogous WPIOP Vegetation Association Code	Analogous WPIOP Vegetation Association Description	Total Area Proposed to be Disturbed in WPIOP area (ha)
641	Medium woodland; coolibah and river gum	High	High	High	RCr8	*Eucalyptus camaldulensis* and *E. victrix* woodland to open forest over *Melaleuca linophylla, M. glomerata, Acacia ampliceps* high open shrubland over *Triodia epactia* scattered hummocks and *Cyperus vaginata* scattered sedges	4.7
					RCr9	*Eucalyptus camaldulensis* var. *obutsa, E. victrix* woodland over *Triodia epactia* scattered hummocks over *Stemodia grossa* very open herbland	4.0

6. Discussion

6.1 Vegetation Conservation Significance

The individual consultants reports prepared by Western Botanical (2009a and 2009b), AECOM (2009) and Astron (2010a and 2010b) should be referred to for further information on vegetation considered to be of conservation significance throughout the Project Area. The vegetation conservation significance information presented here is based only on the risk assessment conducted on the reconciled vegetation associations.

It should be noted that two revised lists of Priority Ecological Communities (PECs) in Western Australia were released in December 2009 and May 2010. In these, two communities: "Horseflat land system of the Roebourne Plains"; and "*Triodia* sp. Robe River assemblages of mesas of the Robe Valley" have been added as Priority 3 ecological communities (DEC, 2009 and DEC, 2010). All parts of the Horseflat land system that occur within the Project Area and are not otherwise classified as Priority 1 communities, are therefore considered to be Priority 3 Ecological Communities. All plant assemblages dominated by, or containing *T*. sp. Robe River, are considered to be Priority 3 communities (S. van Leeuwen, pers. comm., May 2010). Priority 3 communities are described as 'poorly known ecological communities' and are defined as:

(i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or:

(ii) Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrence may occur, much of it not under imminent threat, or;

(iii) Communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them (DEC, 2007).

6.1.1 Conservation Value Risk Rating

Twenty eight vegetation associations were rated as having a High Conservation Risk Ranking. Vegetation associations generally scored a High rating if they supported priority flora (and/or habitat restricted species), if they occurred in association with a restricted landform such as mesas or rivers and if a high proportion of the mapped extent (within the WPIOP) was proposed for clearing. Twenty four of the High rating associations occur within the mine area (either in mine area only or in both mine and transport corridor areas). These vegetation associations typically ranked as such due to the following attributes:

- The presence of *Triodia* sp. Robe River (P3);
- Association with mesas which are considered a restricted habitat;
- In Excellent condition; and/ or
- A high to very high proportion of the association is located within the disturbance footprint.

In addition, *Acacia citrinoviridis* was a dominant or co-dominant species in seven (31. 2 %) of the stony hills and breakaways vegetation associations. The presence of *A. citrinoviridis* on mesa landforms is considered unusual (it is usually recorded in association with creeks and drainage areas on plains) and may represent a relic community of the iron-rich palaeochannels (S. van Leeuwen. pers. comm. Jan, 2010).

Two of the vegetation associations identified as High Conservation Value (HBr6 and HBr20) are considered to be widespread in the Pilbara and not at significant risk of decline within the Project Area. Three of the major creekline vegetation associations identified as High Conservation Value (RCr8, RCr9 and RCr10) have less that 10 % of their mapped area (within WPIOP) within the disturbance footprint area.

6.1.2 IBRA Reservation Priorities

Two of the vegetation associations recorded in the Project Area are analogous with an ecosystem rated as being of High reservation priority according to IBRA subregion assessment (Kendrick, 2001; Kendrick and McKenzie, 2001; Kendrick and Stanley, 2001). The reservation priority is assessed based on the proportion of that vegetation association known to occur in conservation estates.

Reconciled vegetation associations RCr8 and RCr9 are analogous with Beard association 641 (Medium woodland; coolibah and river gum) considered under-represented in the conservation estate.

Vegetation association CPr12: "*Eragrostis xerophila, Dichanthium sericeum* ssp. *humilius* and *Xerochloa imberbis* mixed closed grassland over mixed very open herbland" is analogous with Beard association 175: "Short bunch grassland – savannah/grass plain (Pilbara)" which has a High reservation priority in the Chichester, Hamersely and Roebourne sub regions of the Pilbara (Kendrick and McKenzie, 2001; Kendrick, 2001; Kendrick and Stanley, 2010) .

The CPr12 vegetation association scored a Moderate Conservation Value Rating in this assessment and has <10 % of the mapped area (of WPIOP) proposed to be disturbed.

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Appendix A:
Reconciled Vegetation Mapping of the Project Area

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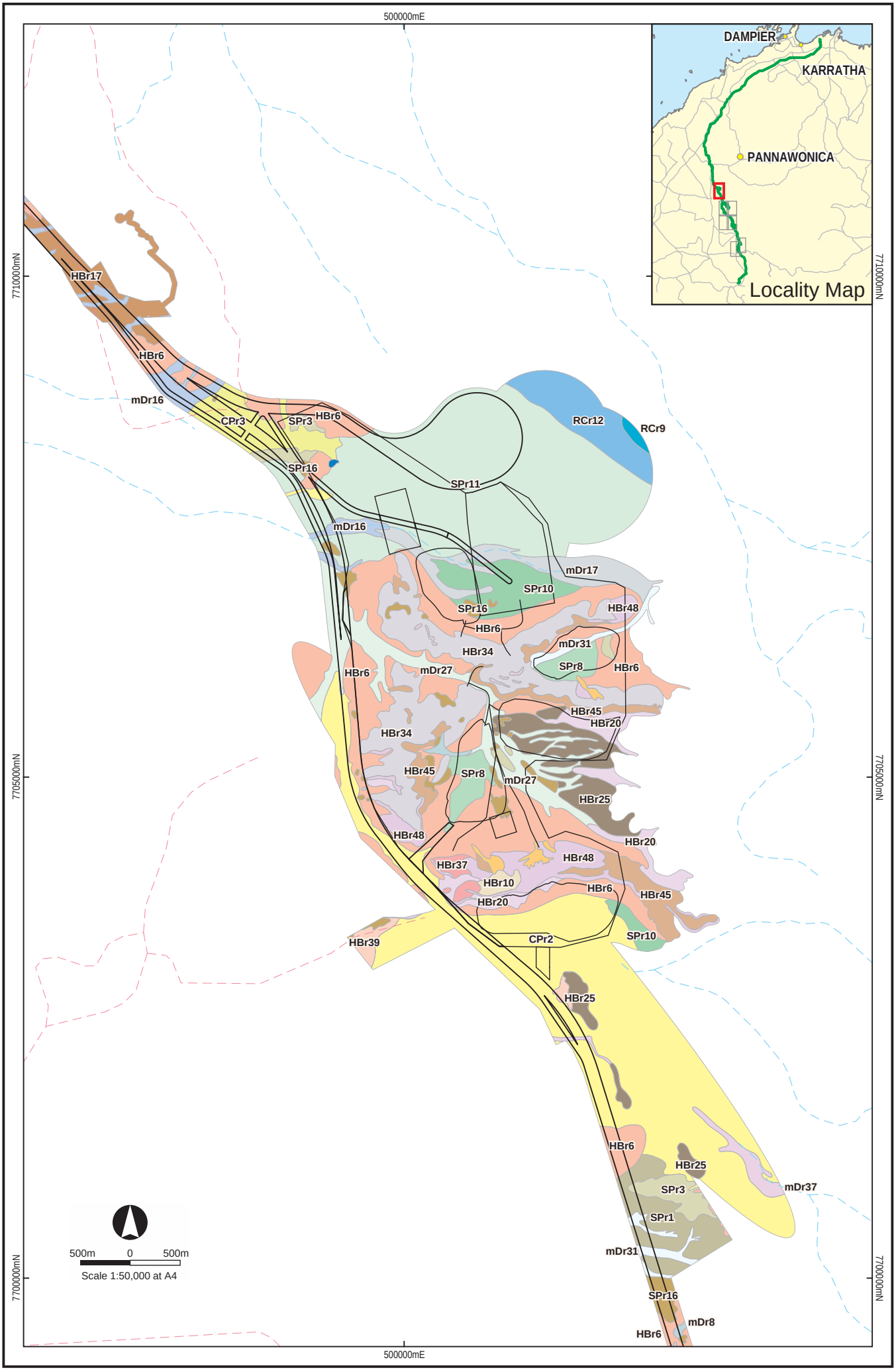

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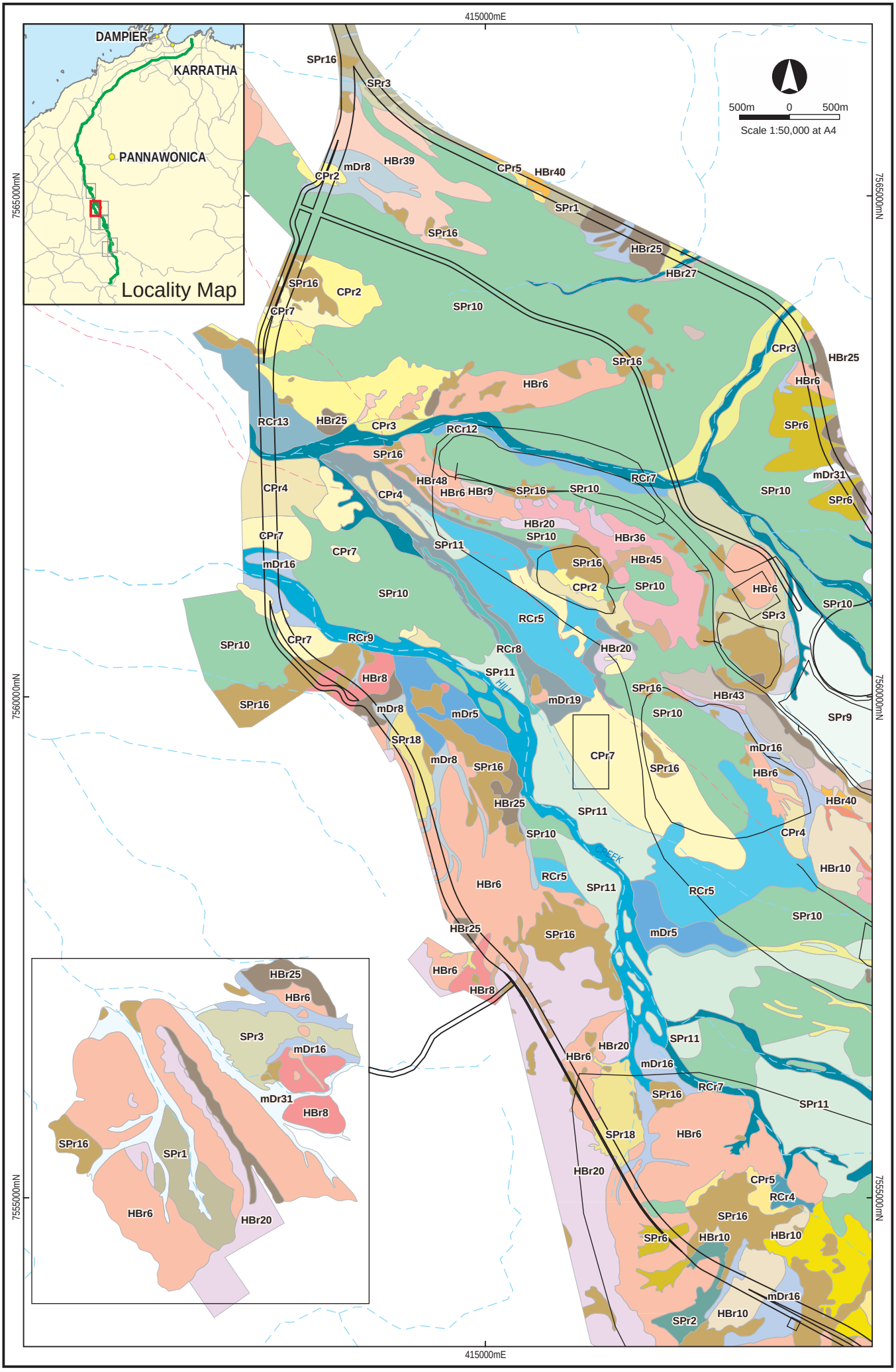
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7555000mN
DAMPIER
KARRATHA
PANNAWONICA
Locality Map
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Scale 1:50,000 at A4
SPr16
SPr3
mDr8
HBr39
CPr2
CPr5
HBr40
SPr1
HBr25
HBr27
SPr10
CPr7
CPr3
HBr6
RCr13
RCr12
SPr6
mDr31
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HBr8
SPr18
mDr5
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HBr43
SPr9
HBr40
HBr10
RCr4
SPr5
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HBr10
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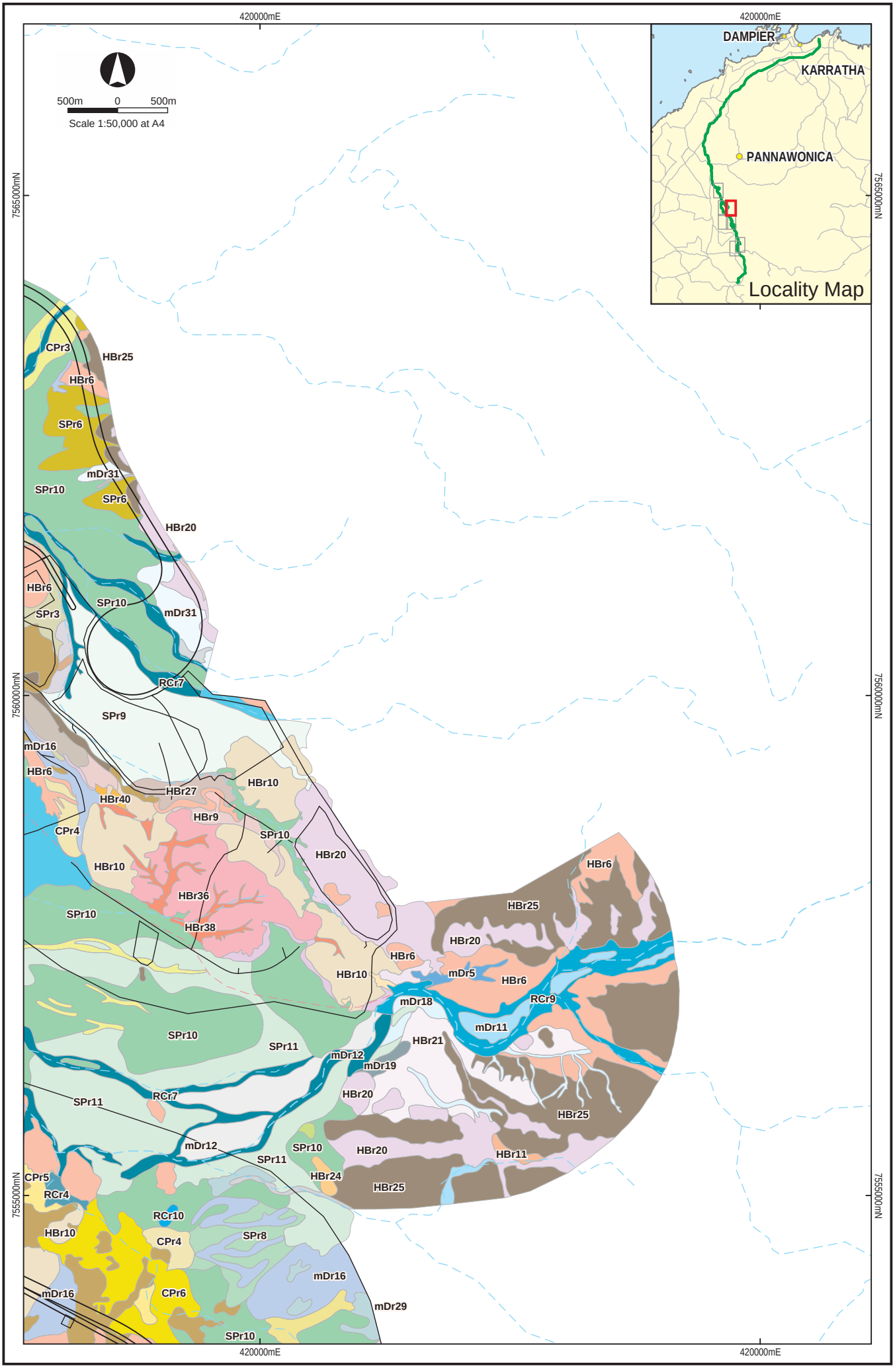

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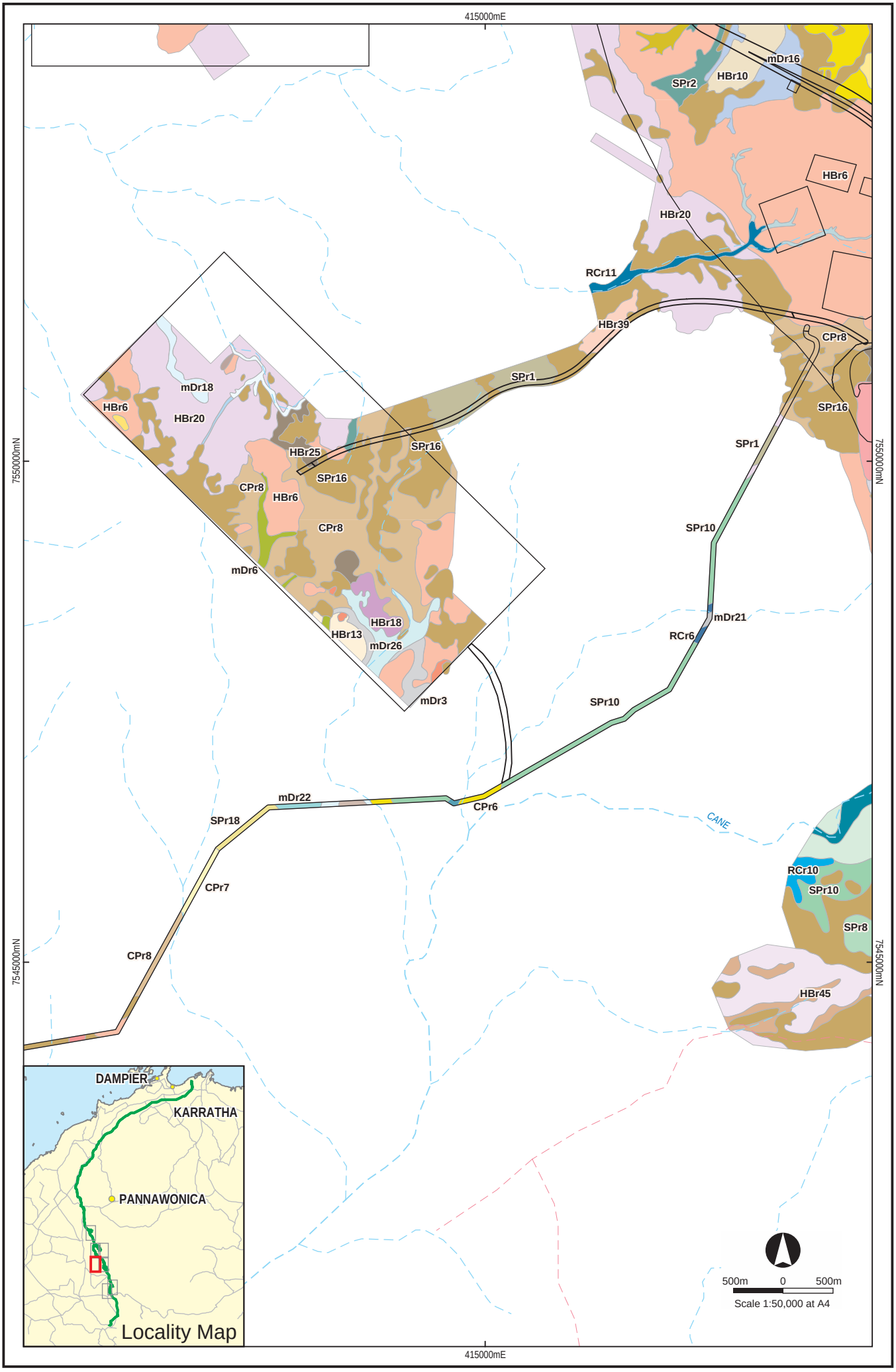

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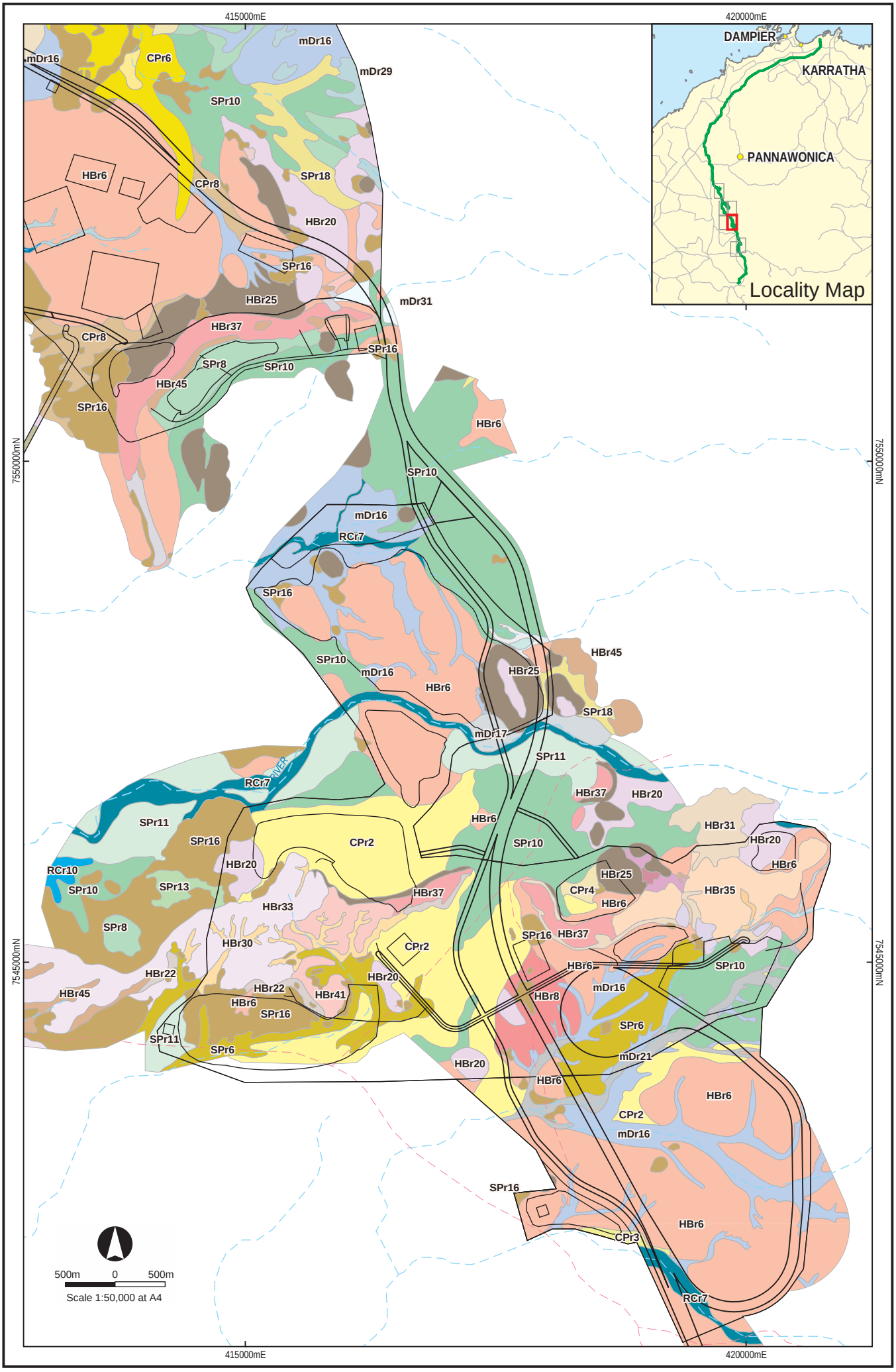

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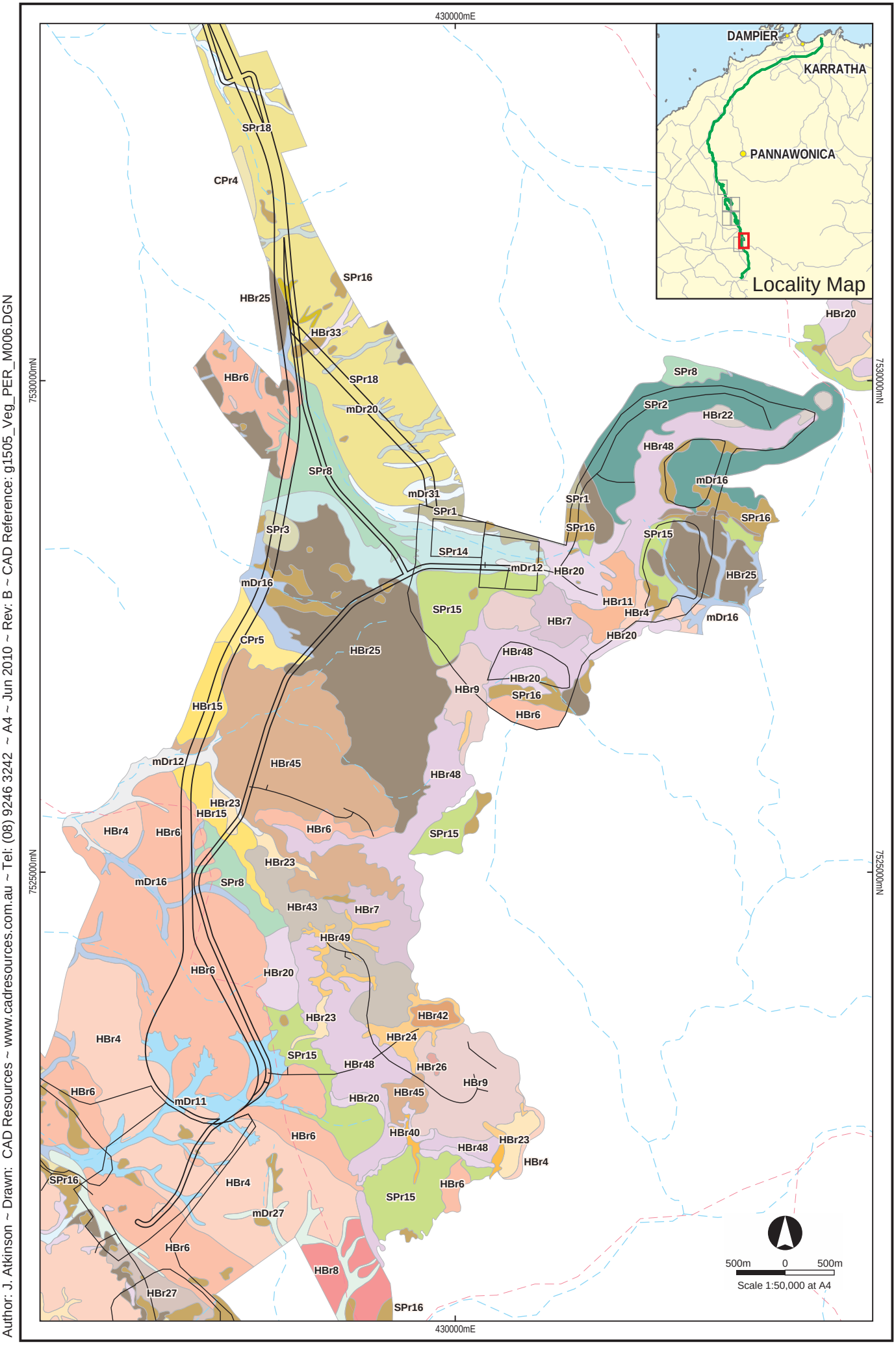

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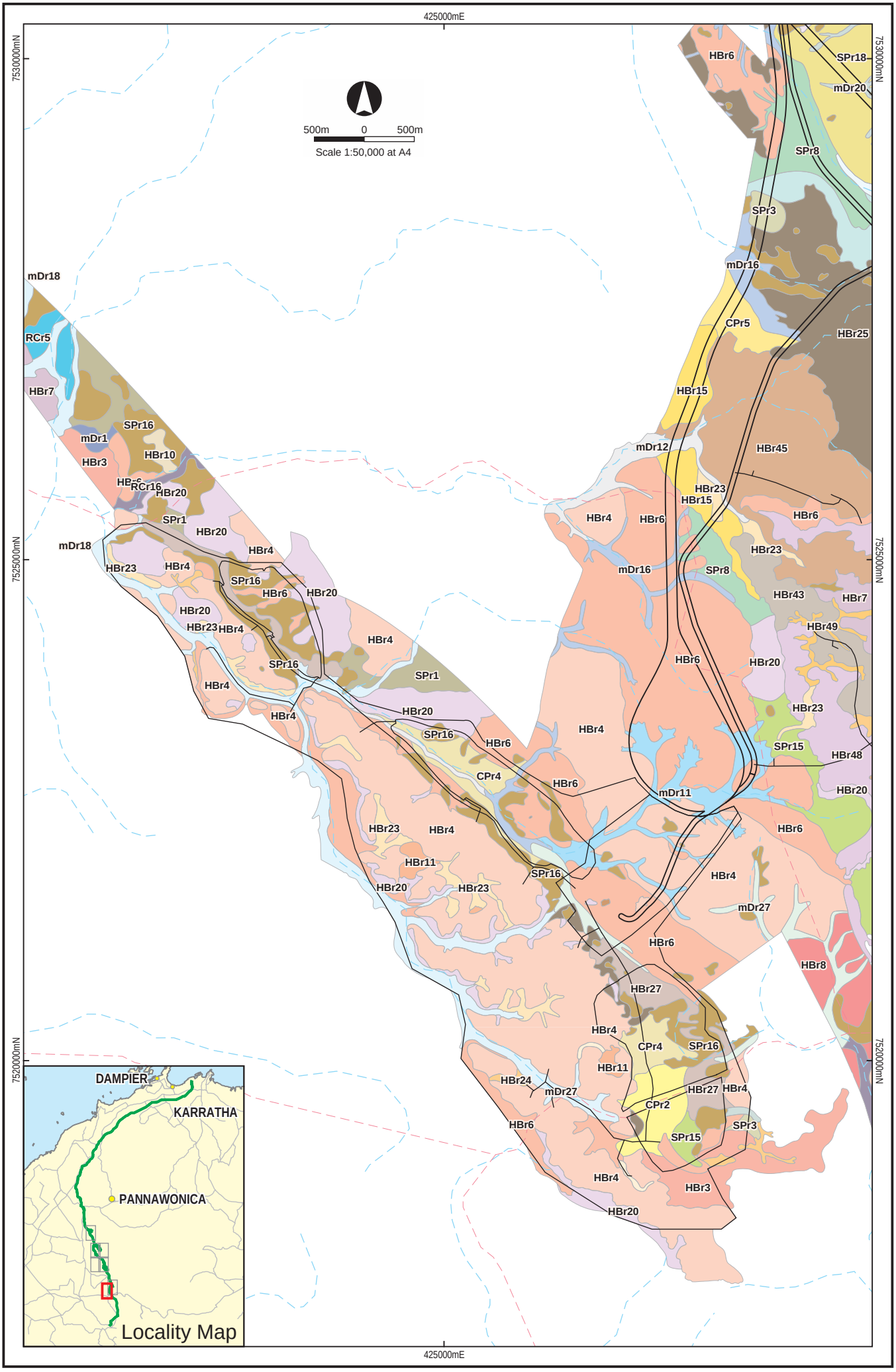

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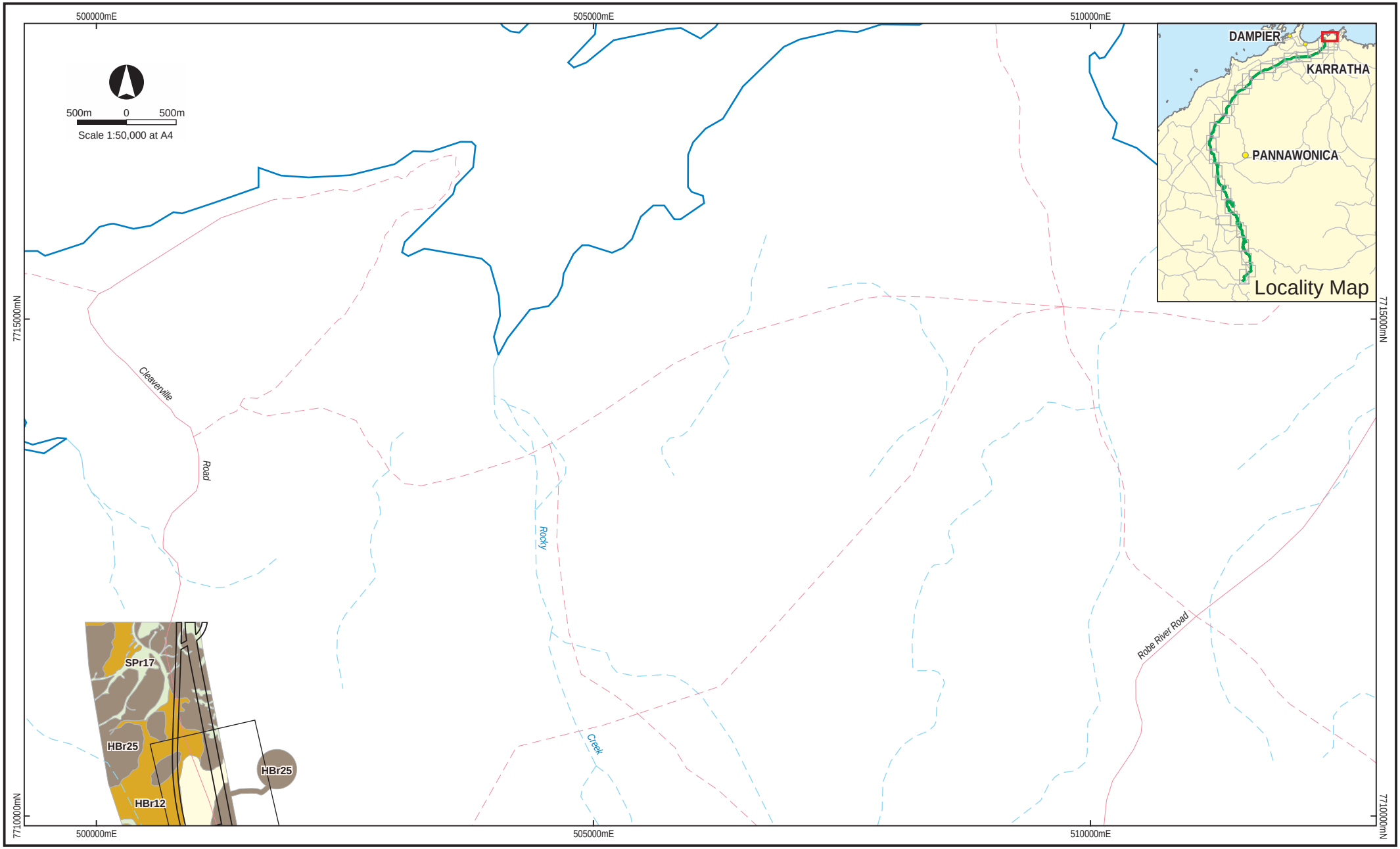

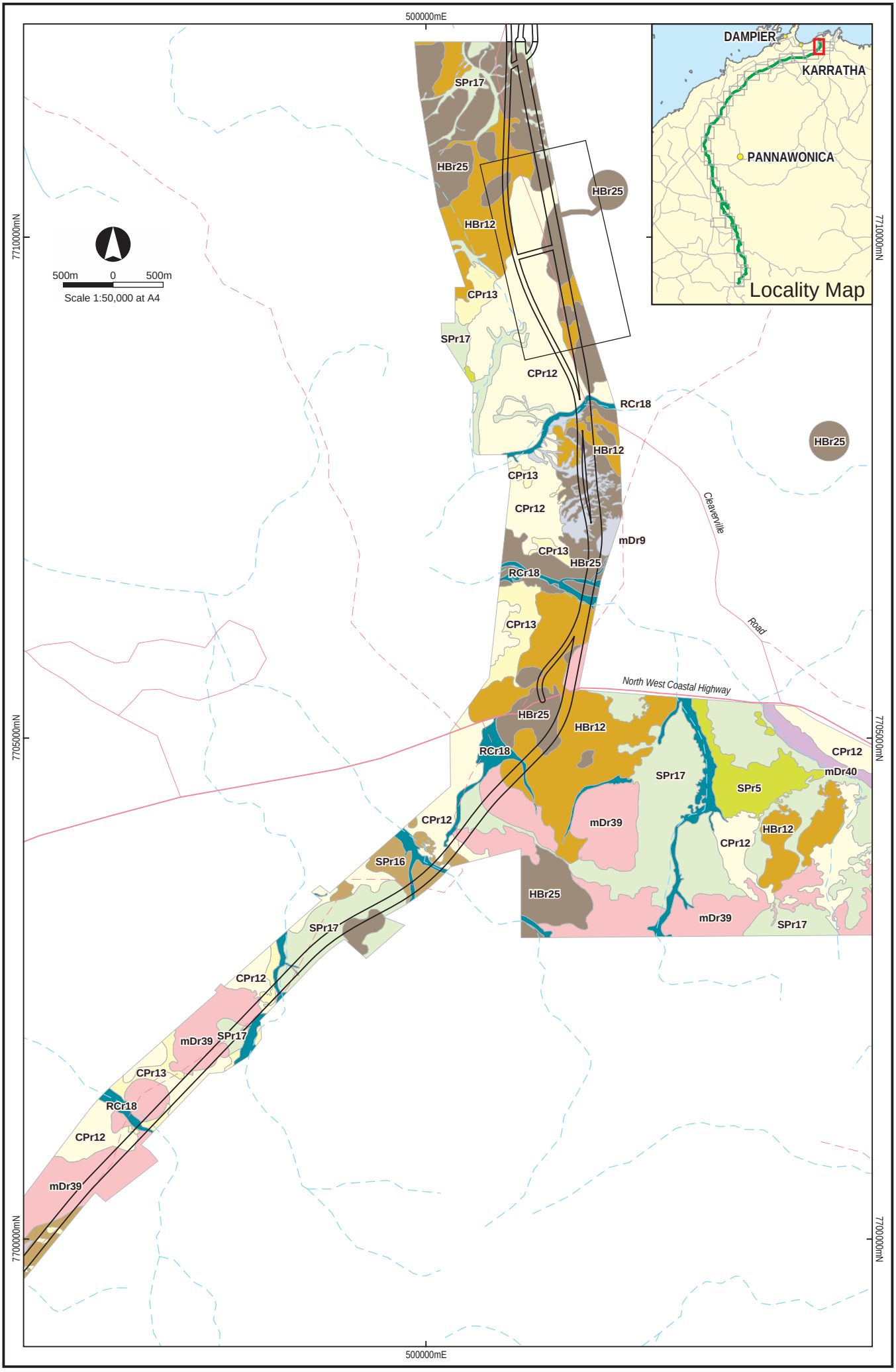

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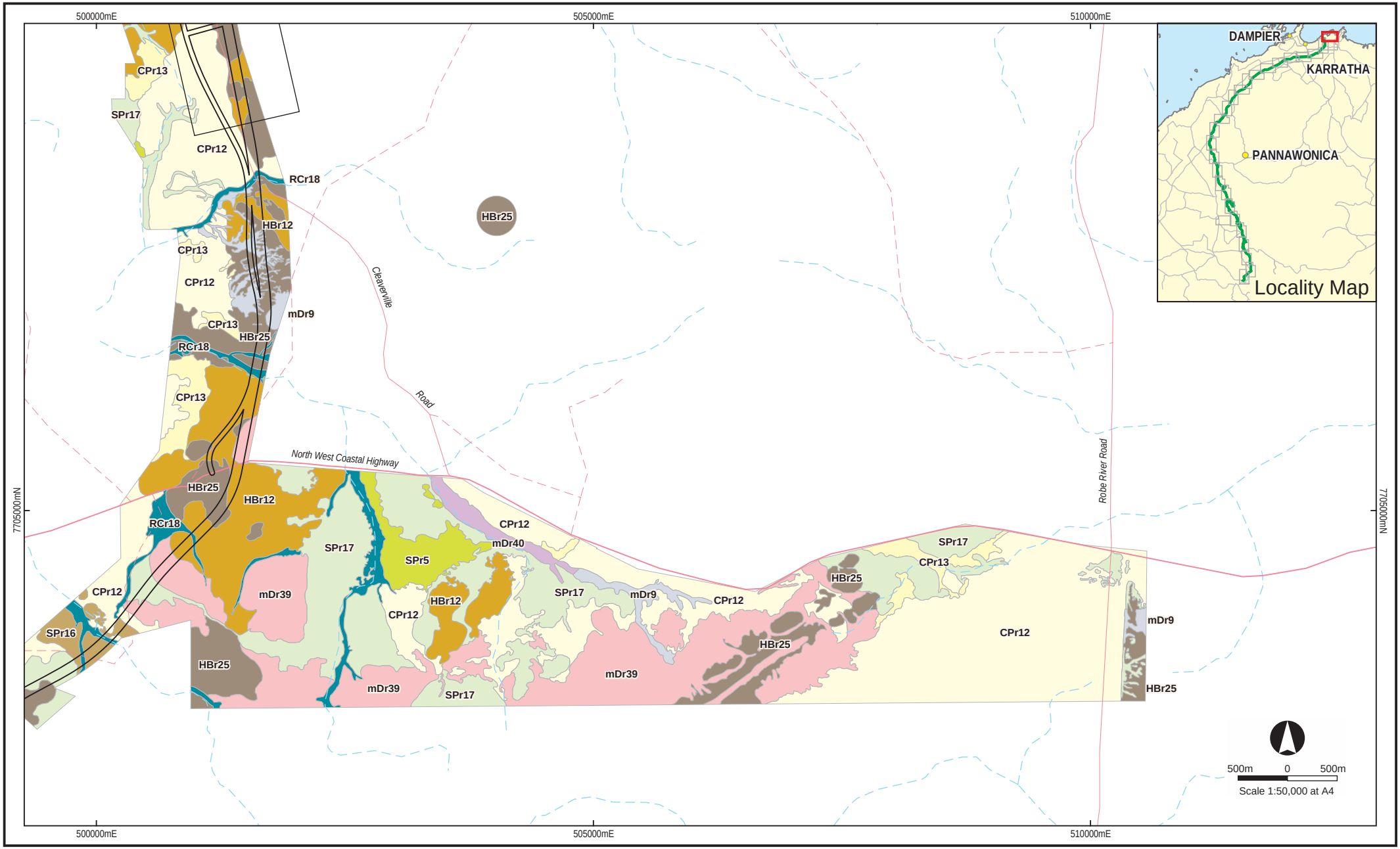

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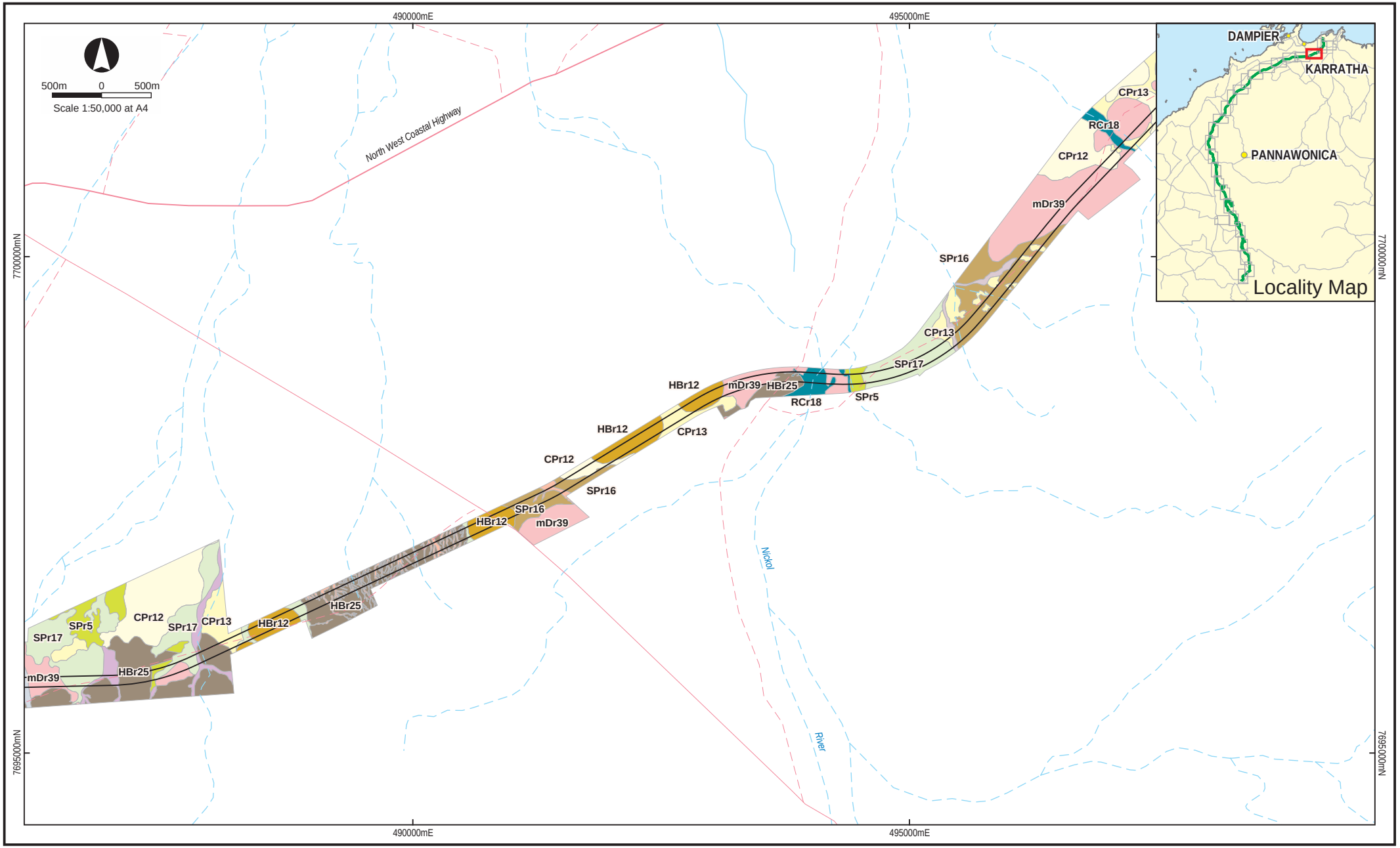

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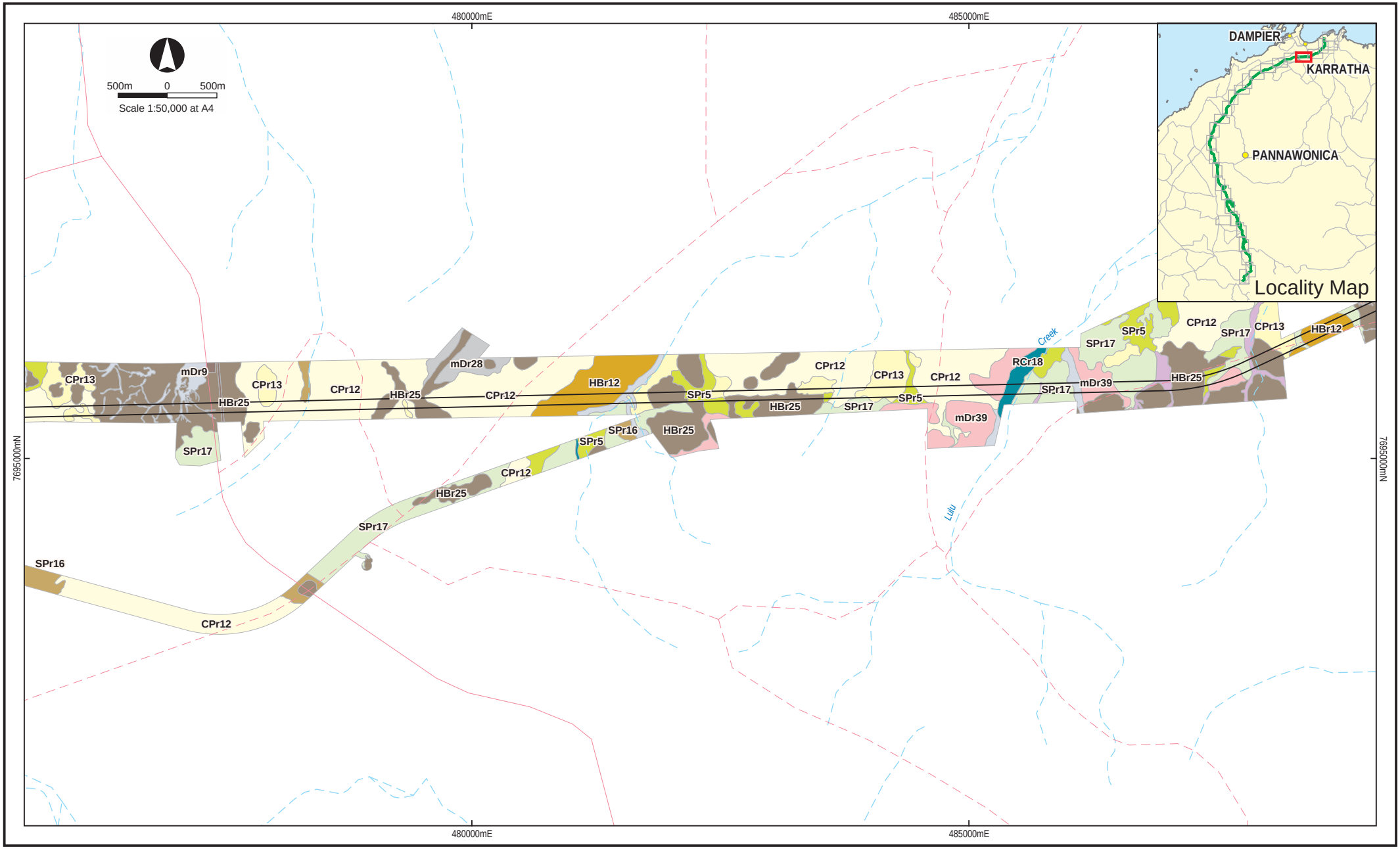

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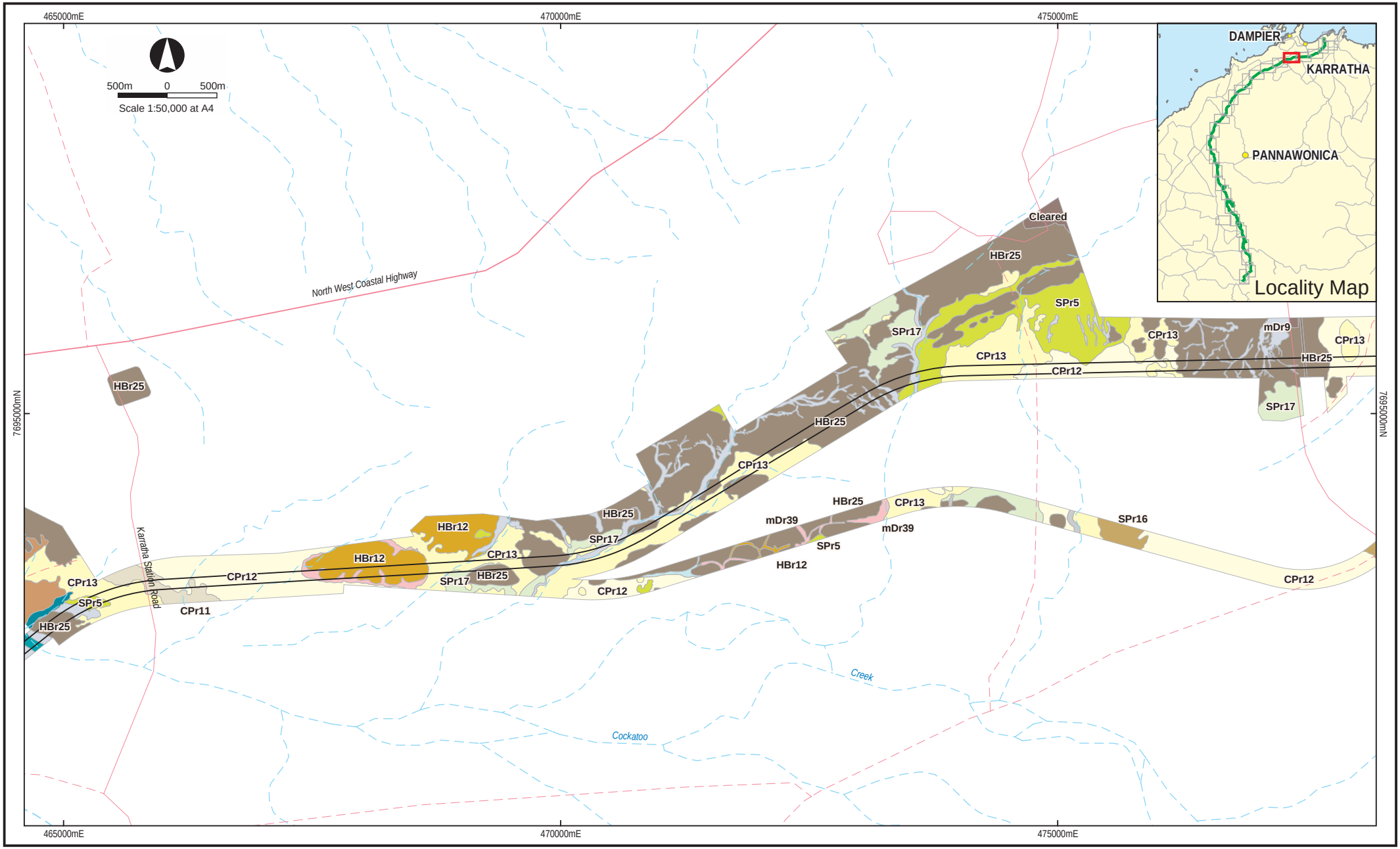

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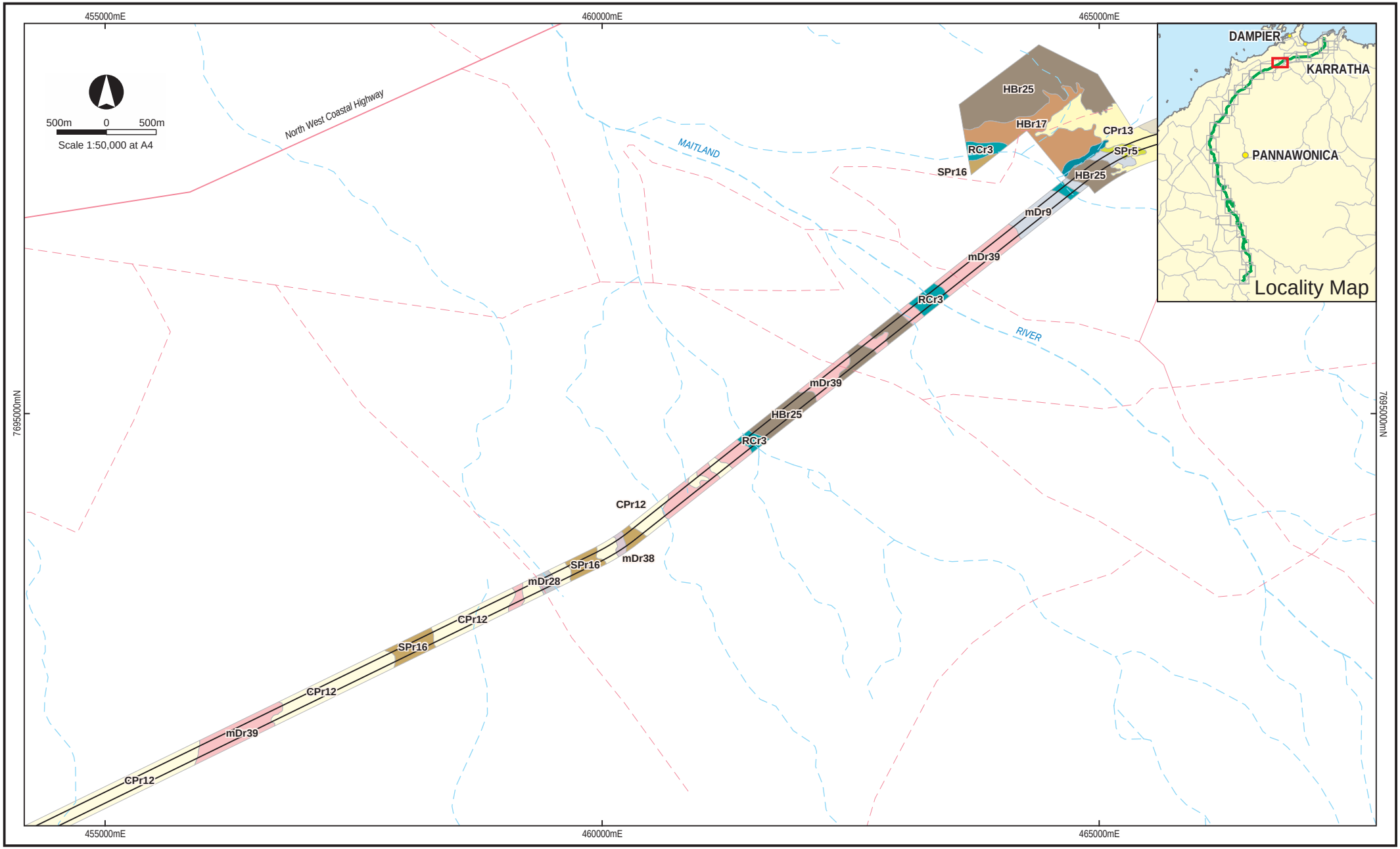

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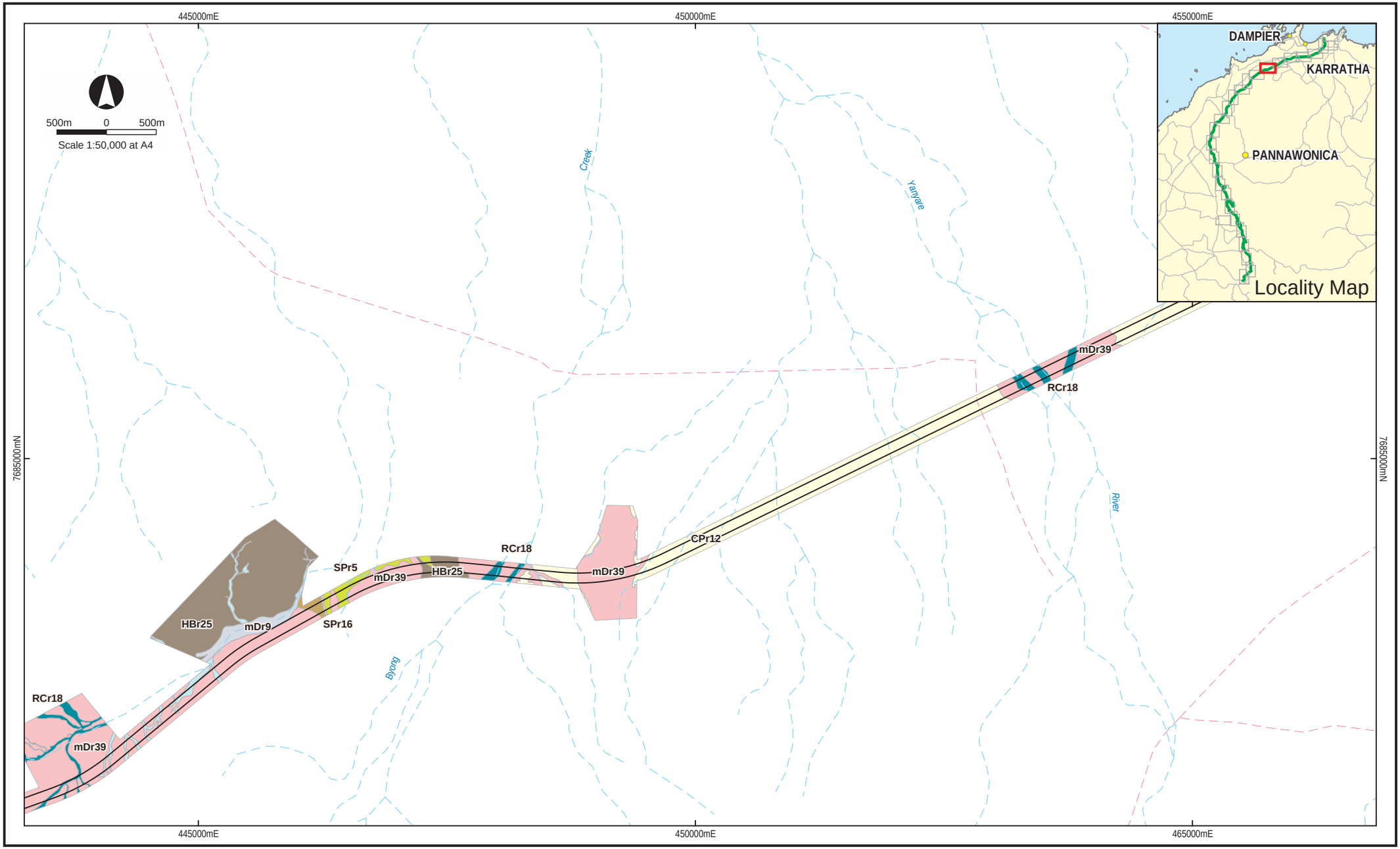

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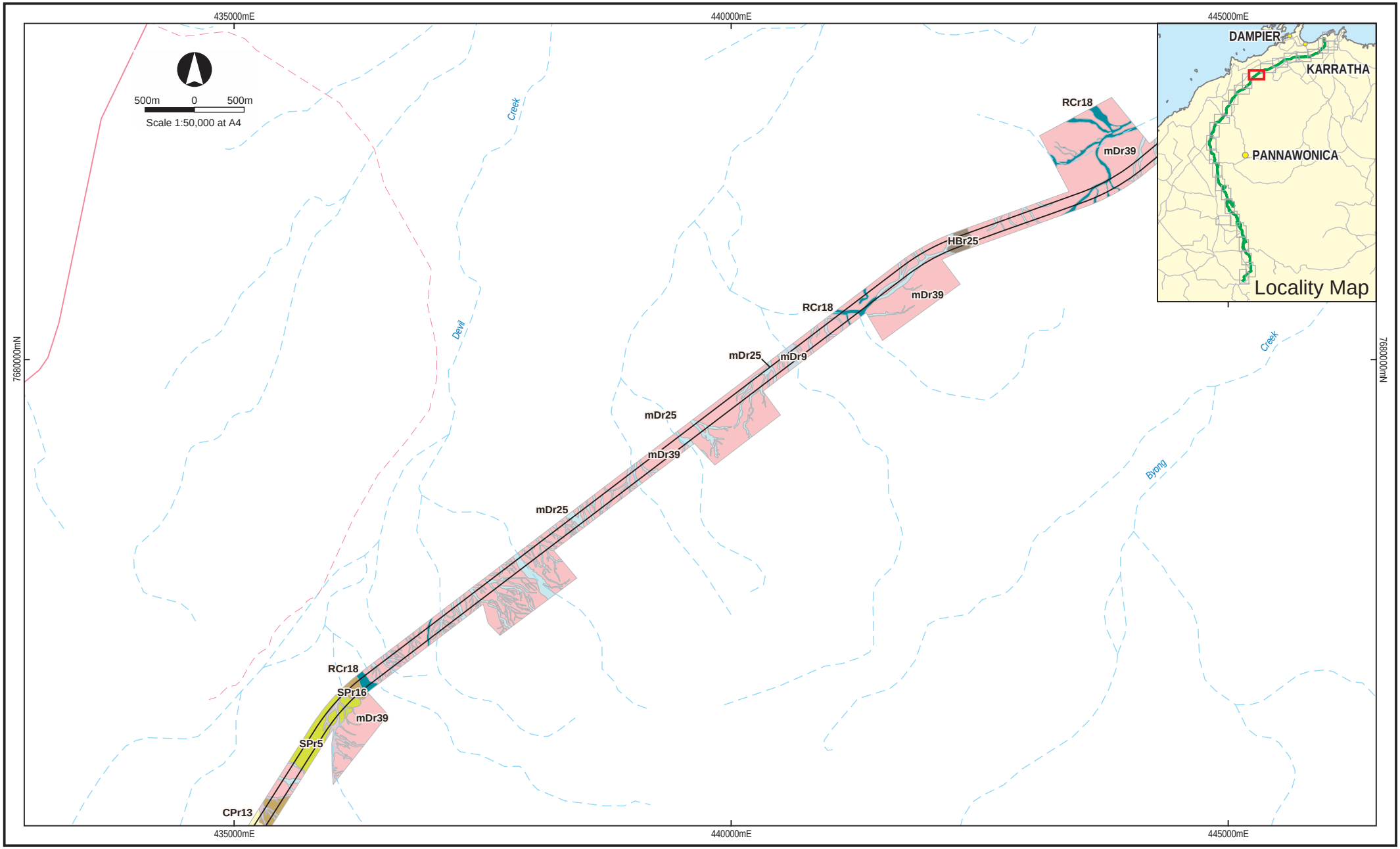

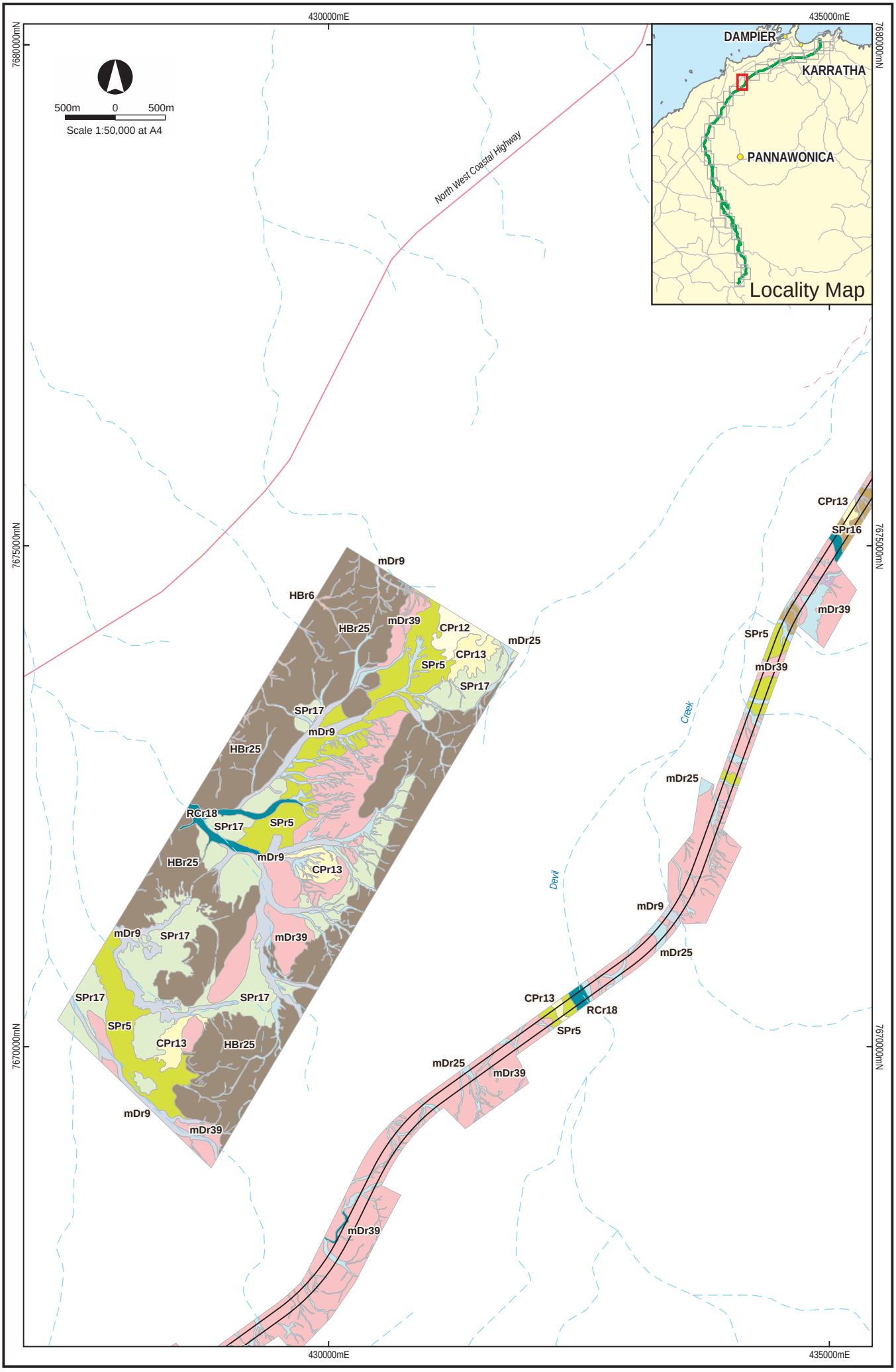

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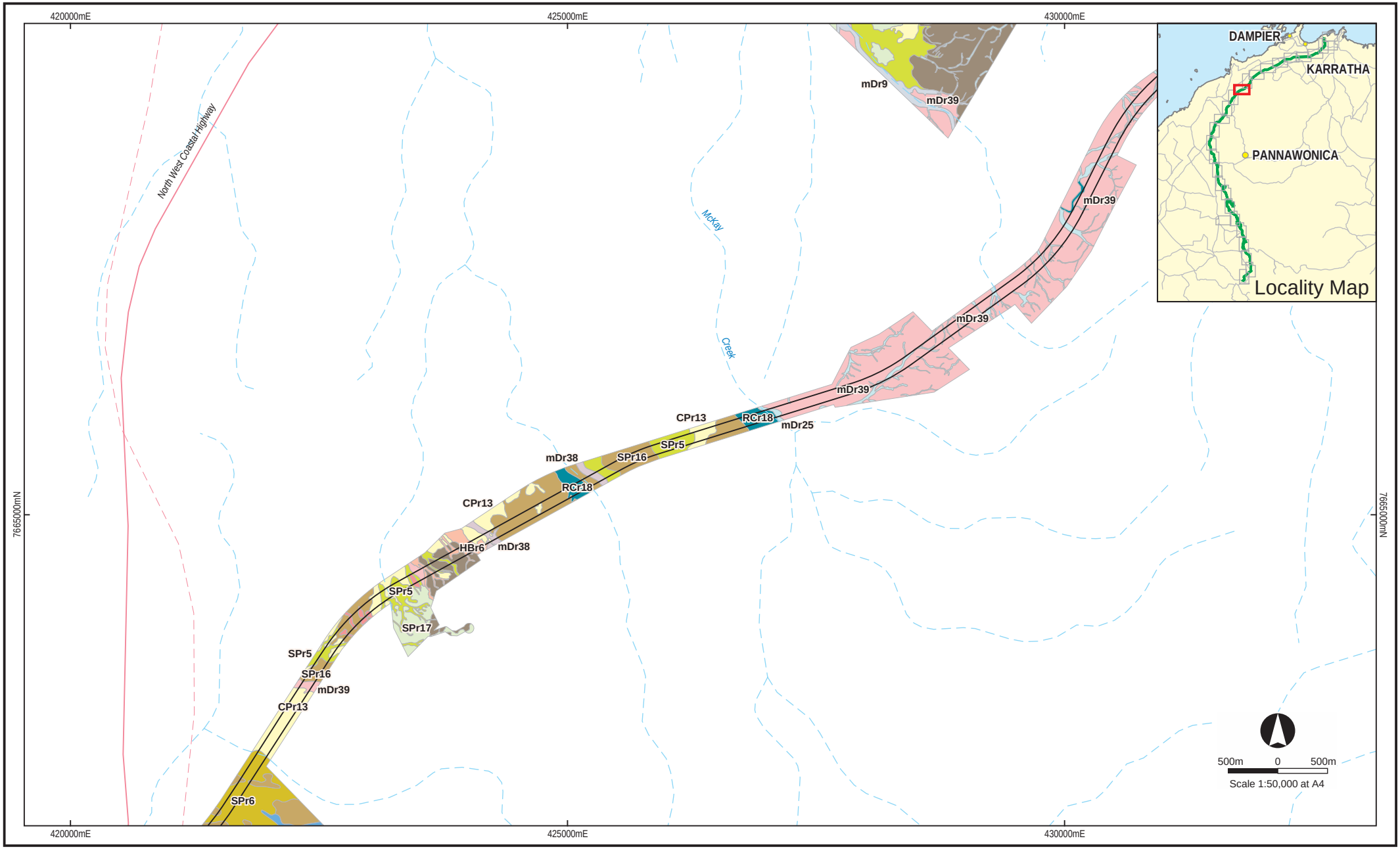

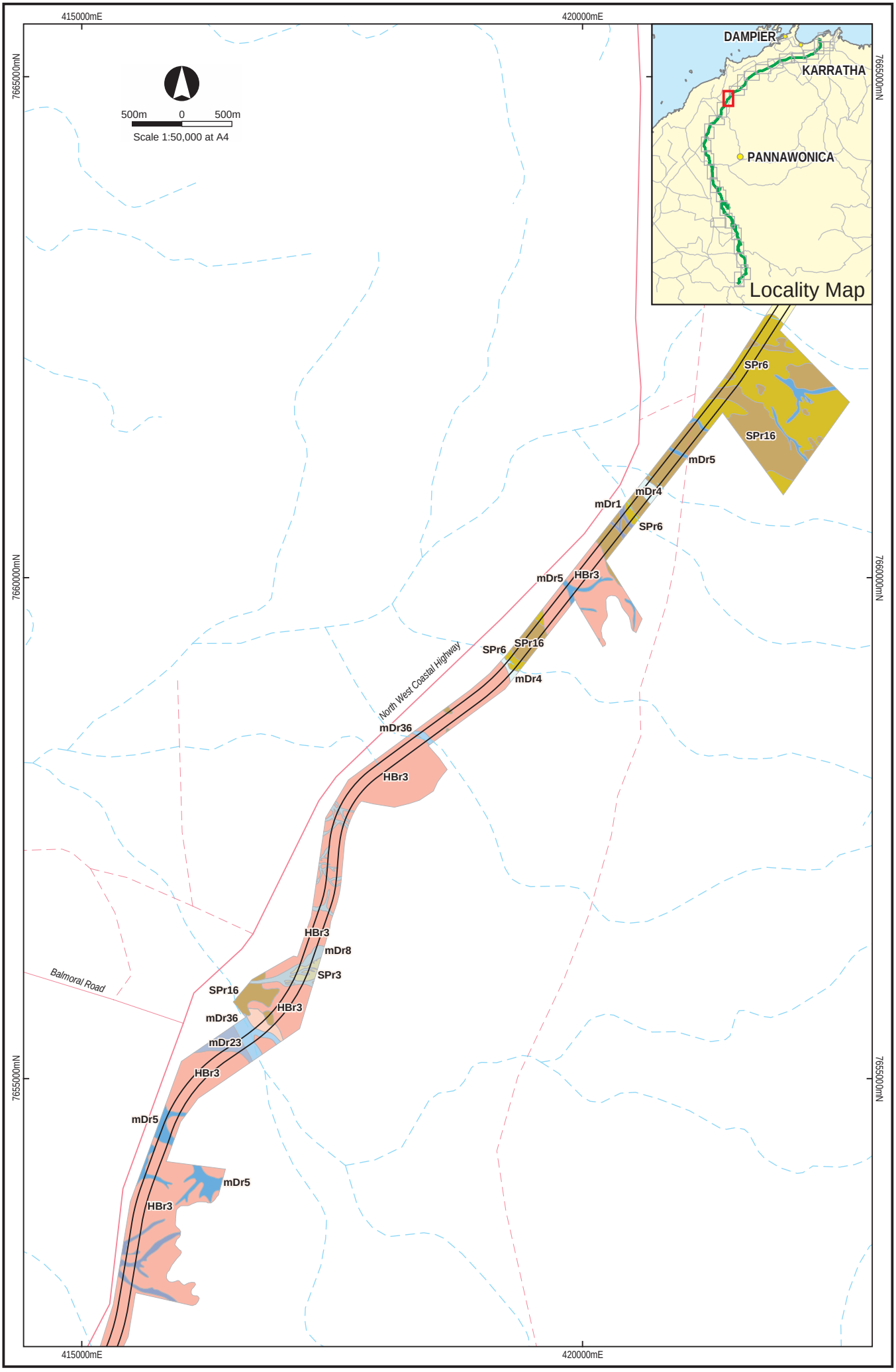

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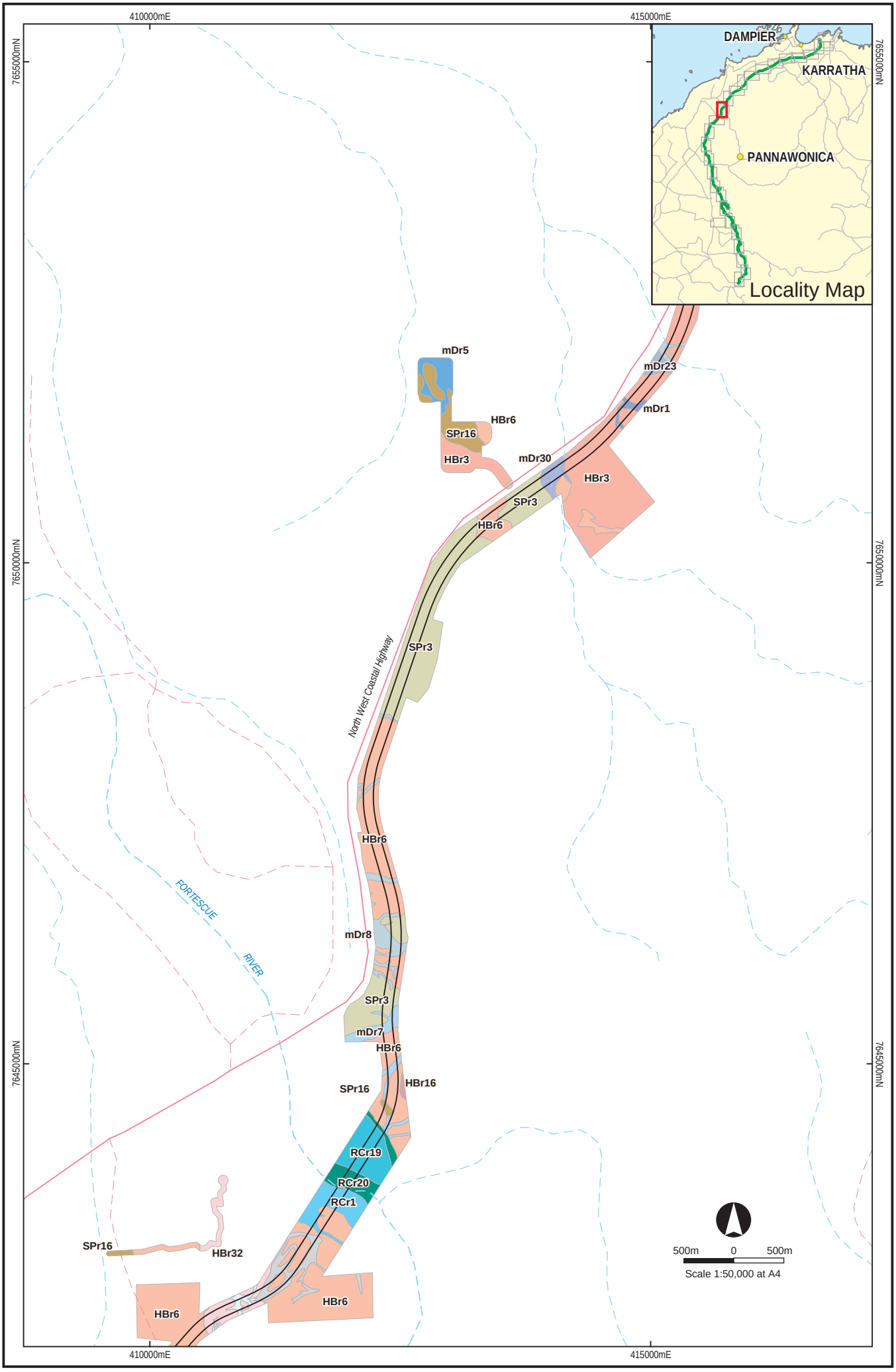

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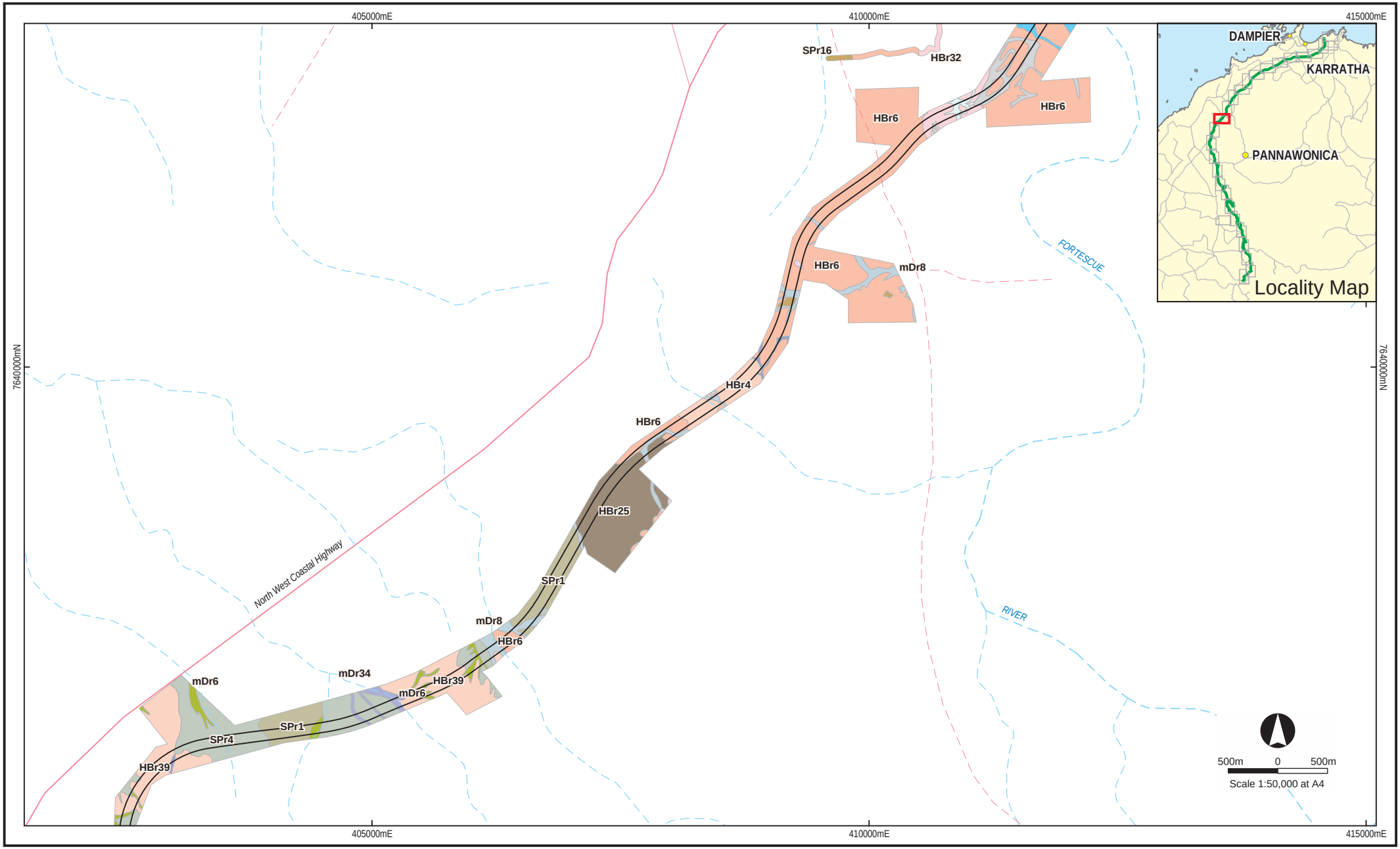

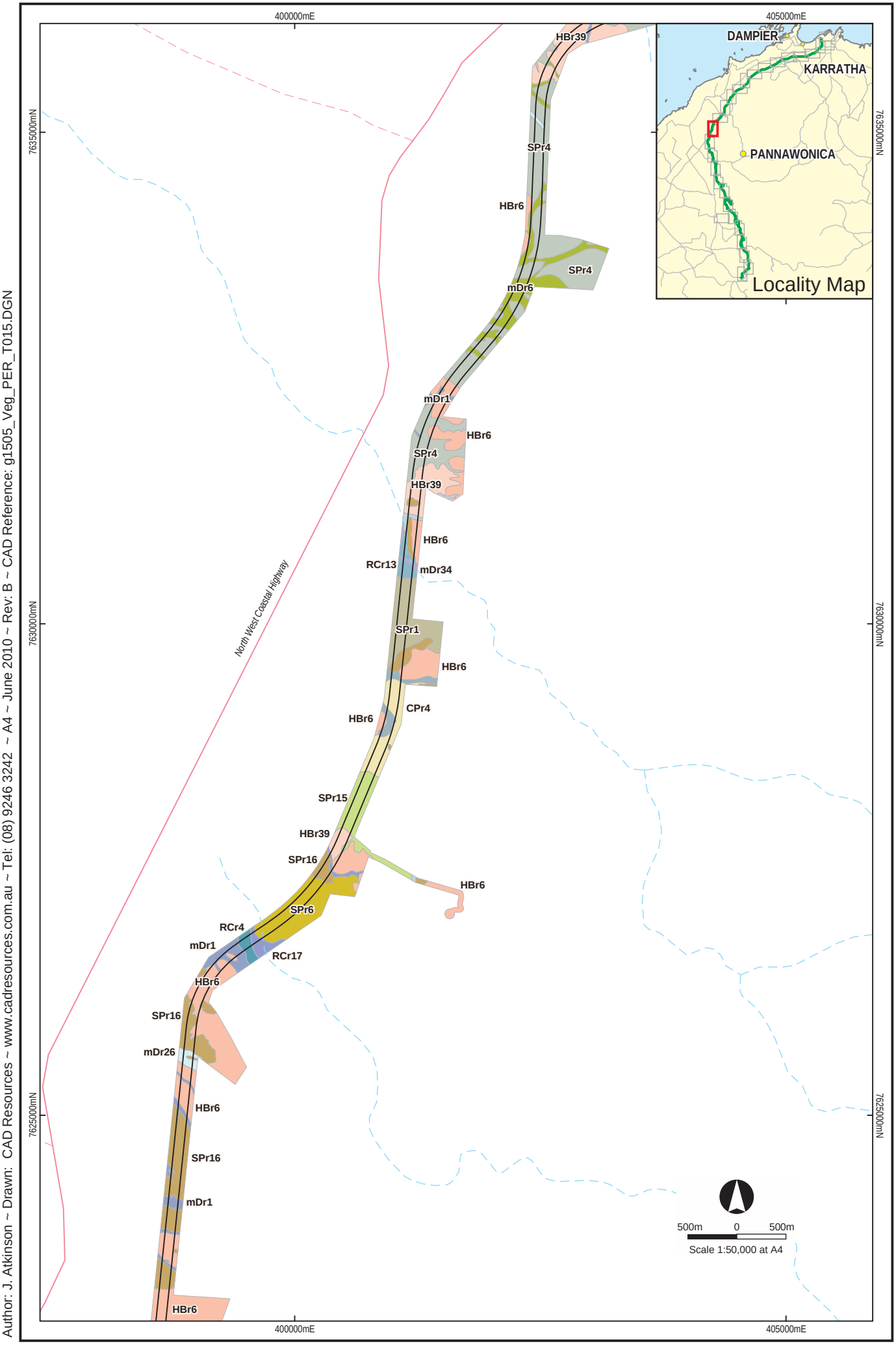

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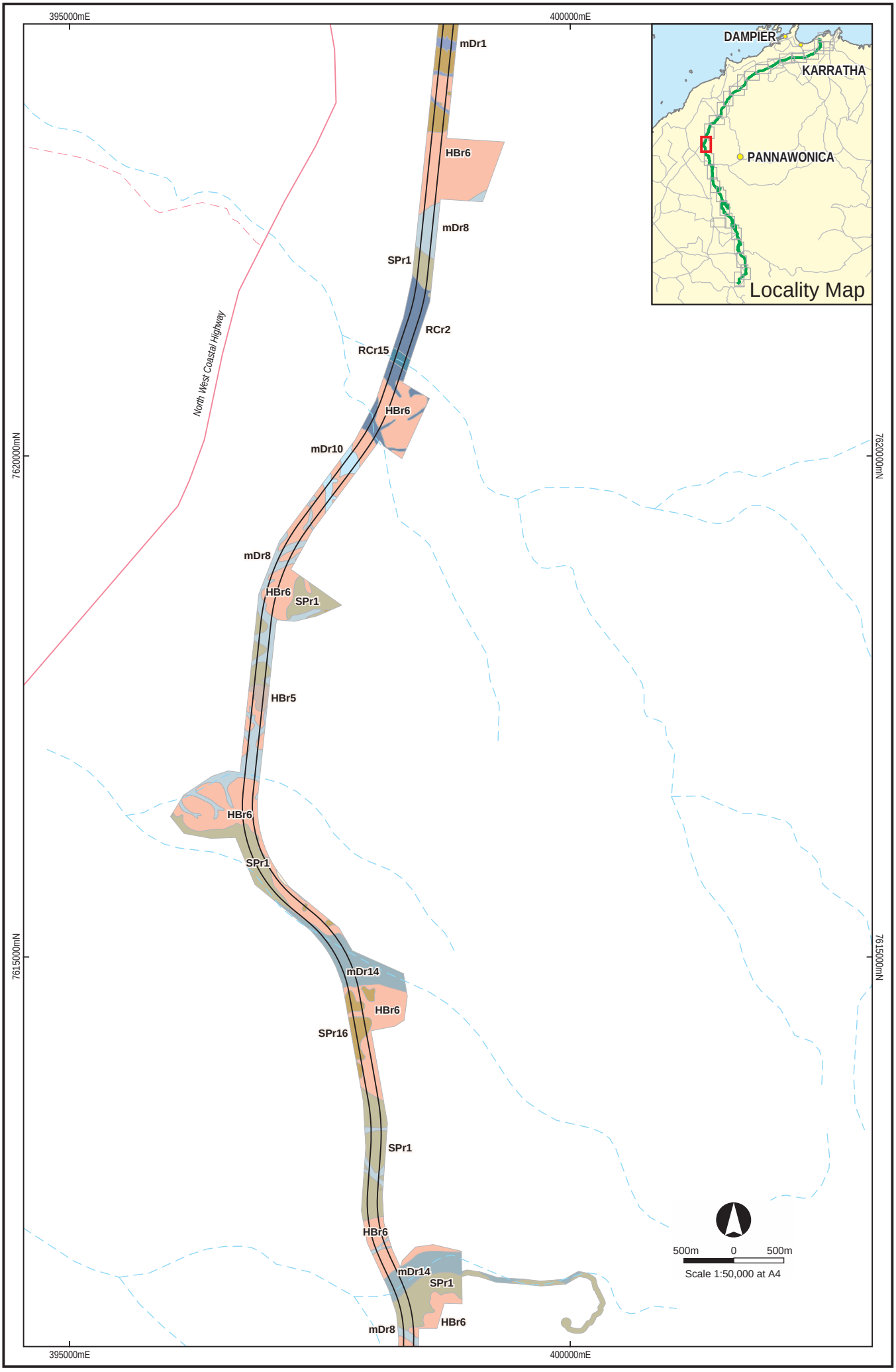

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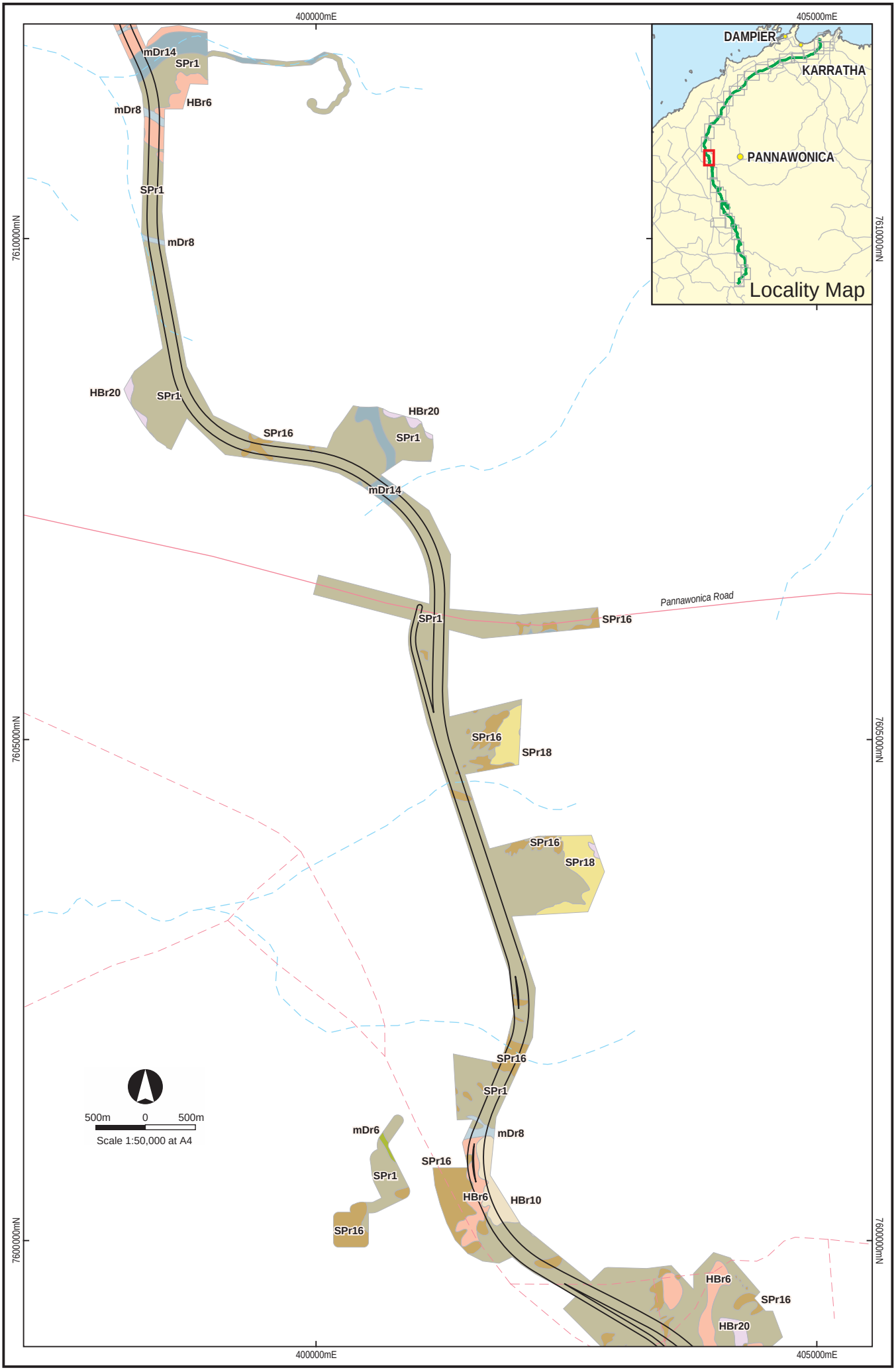

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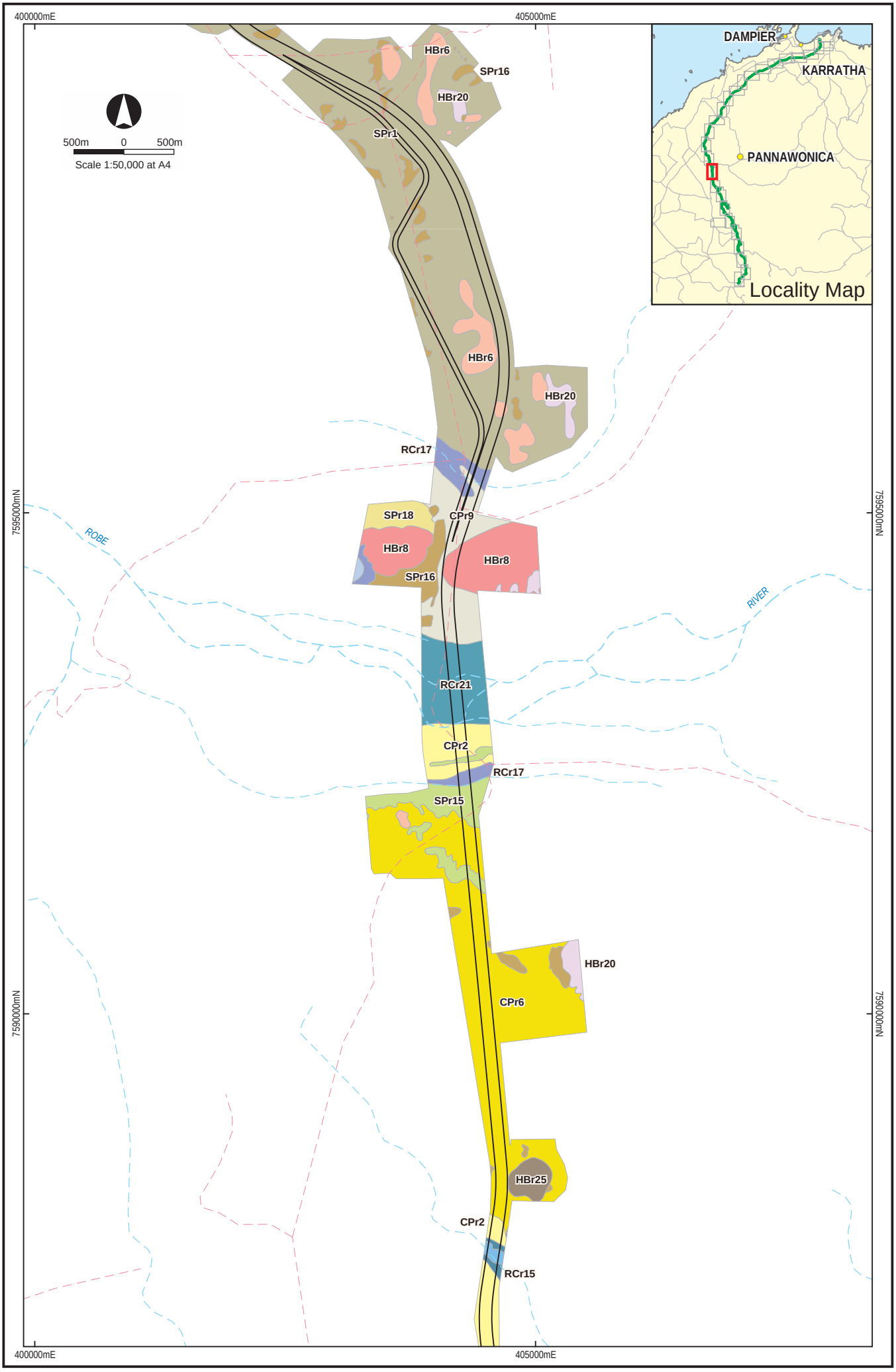

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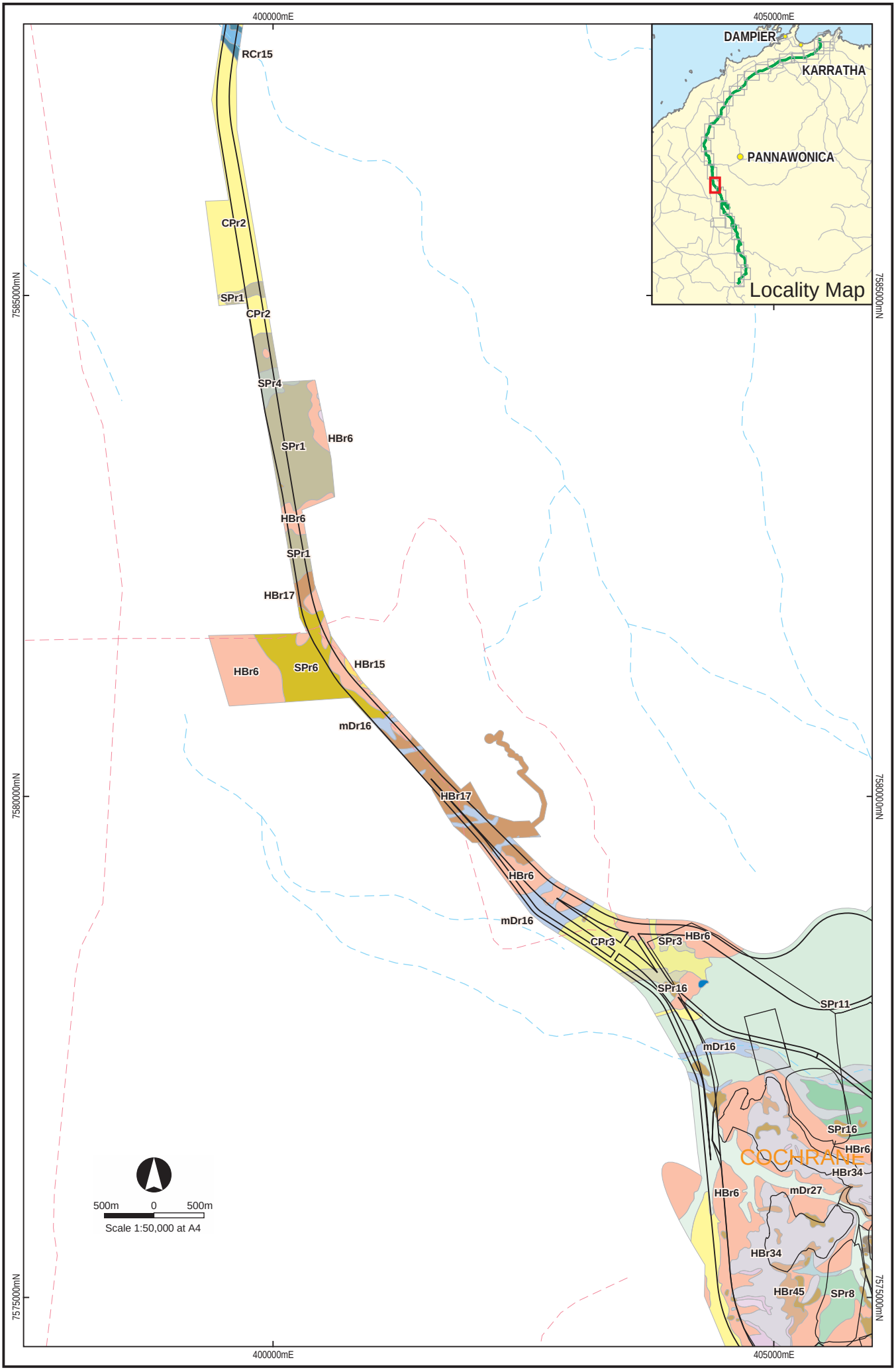

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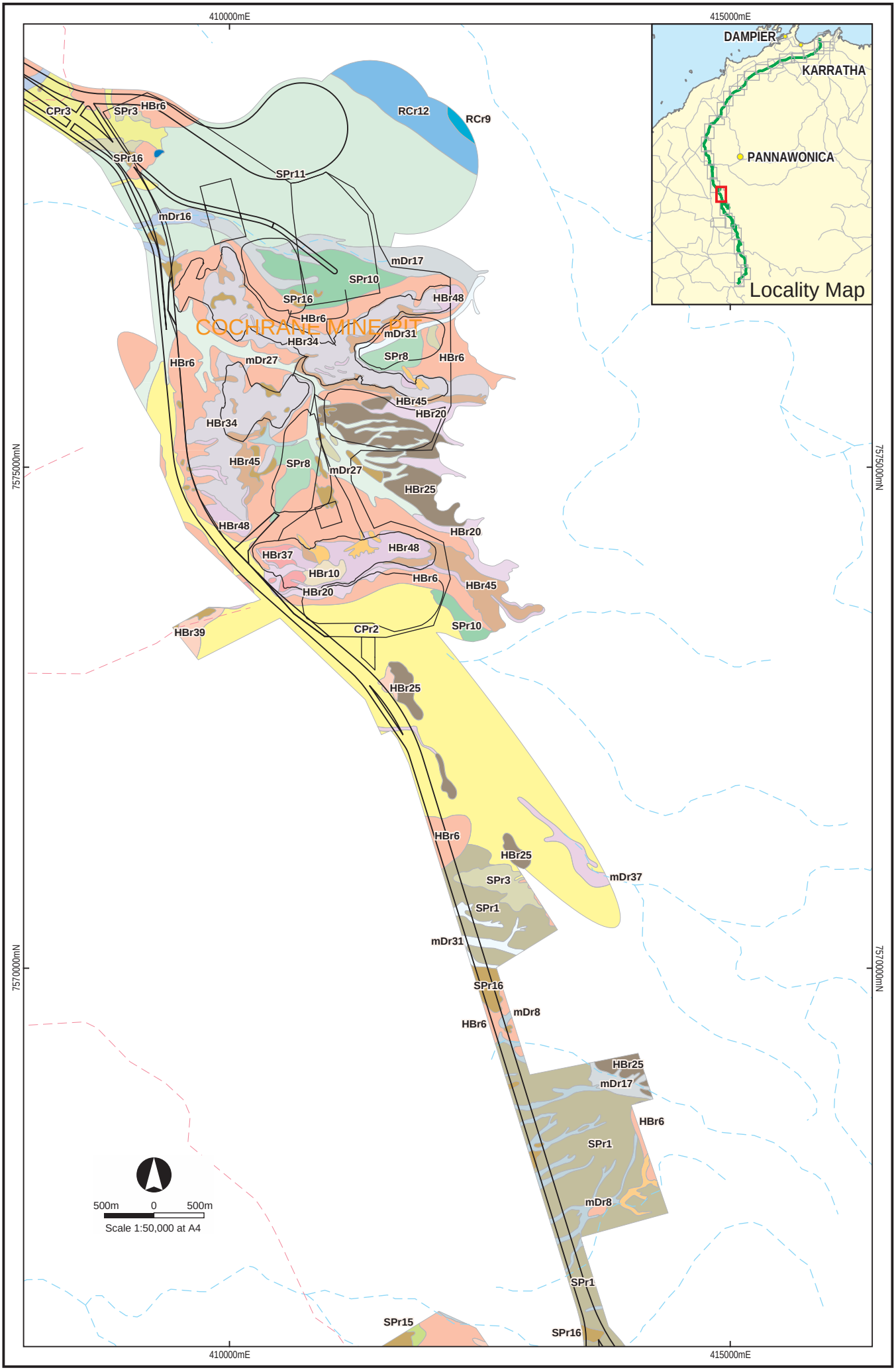

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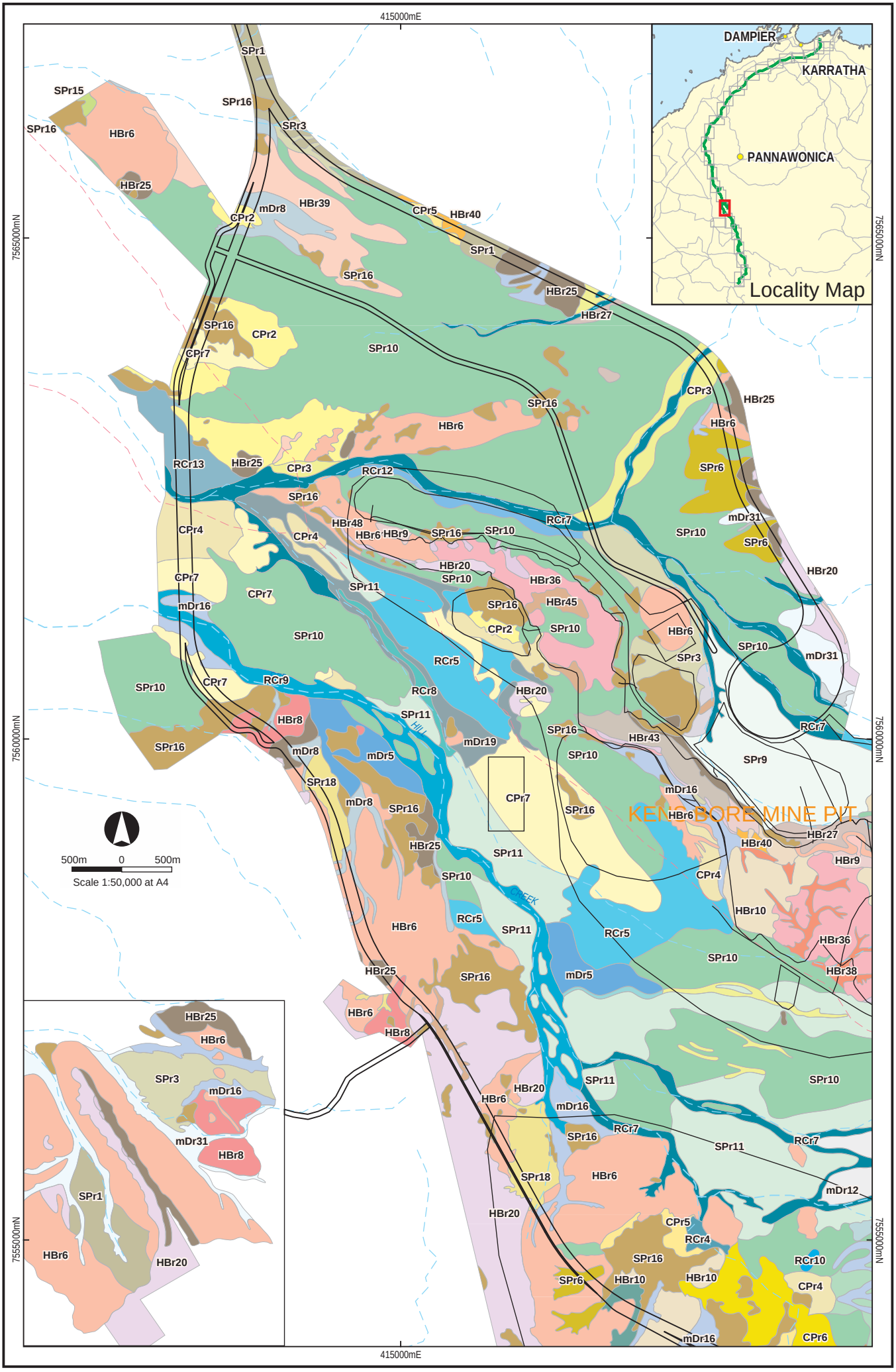

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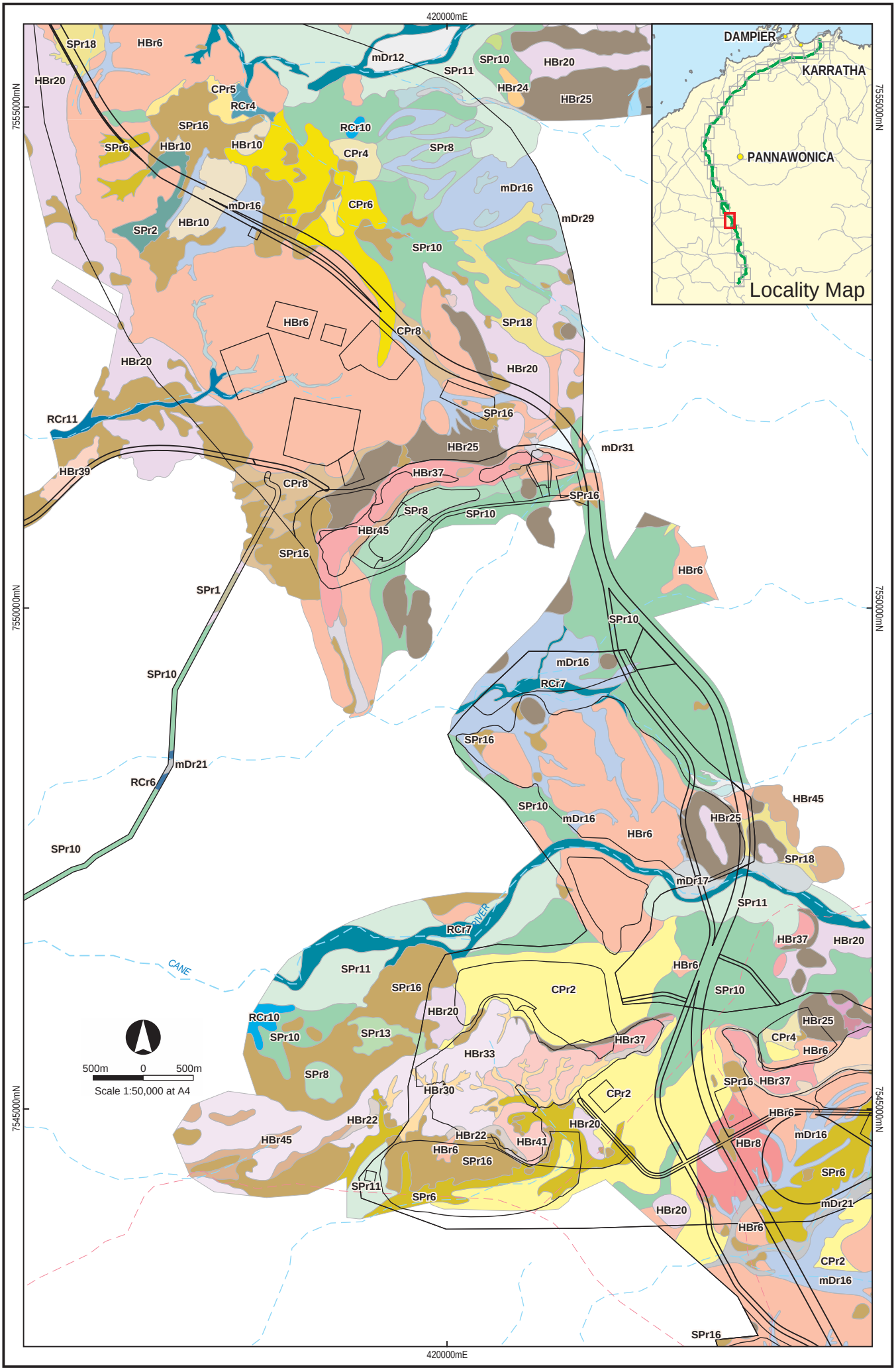

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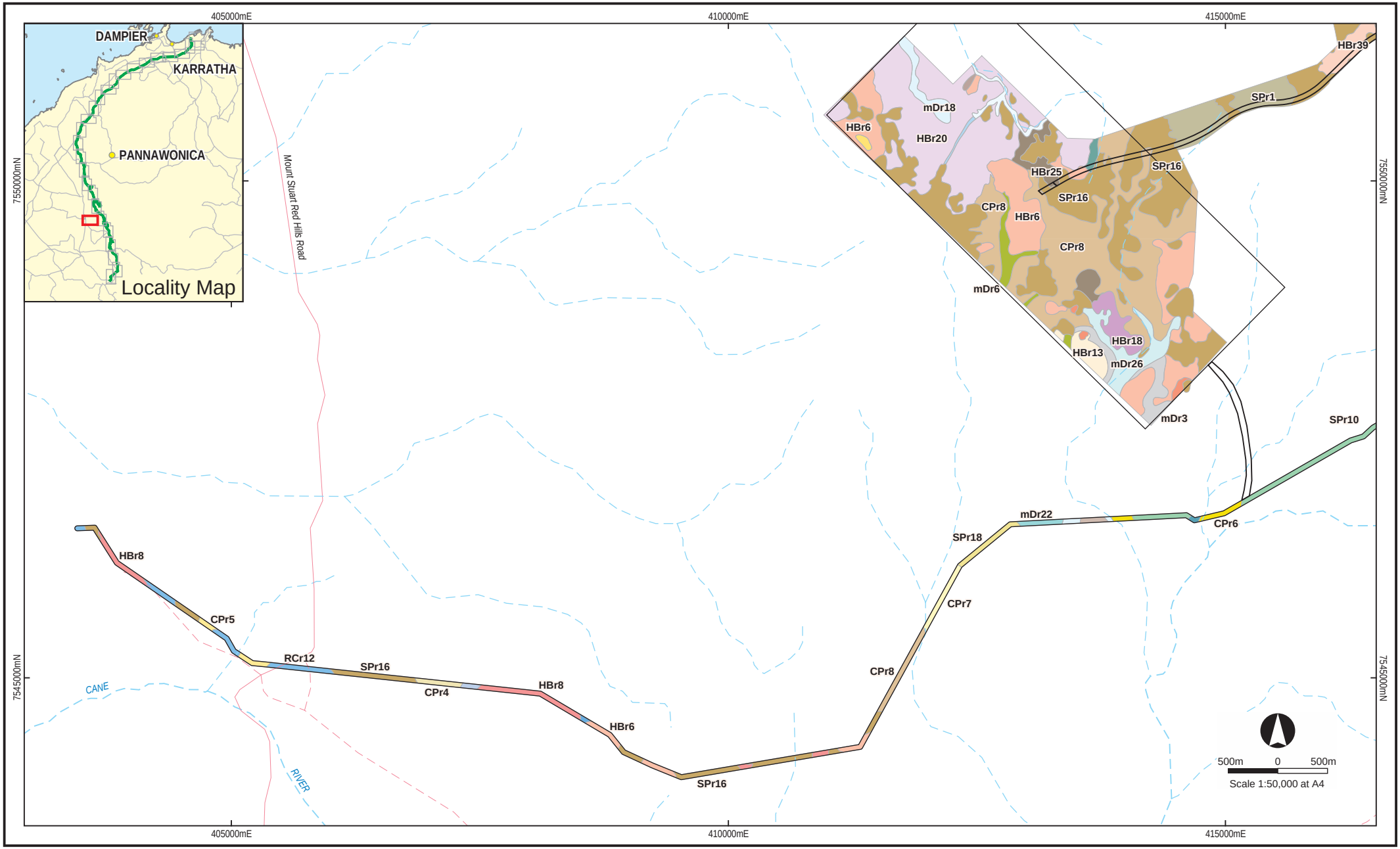

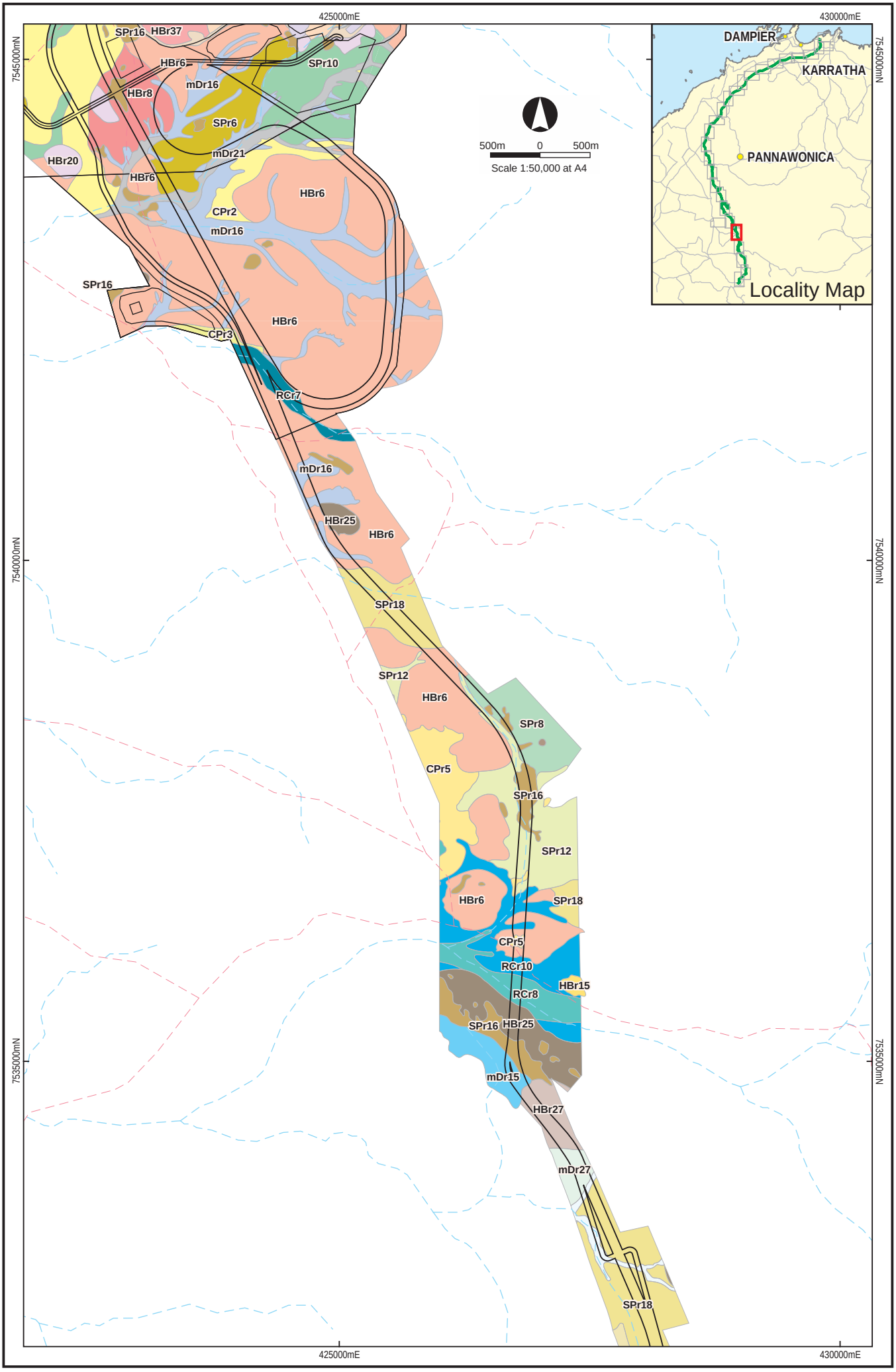

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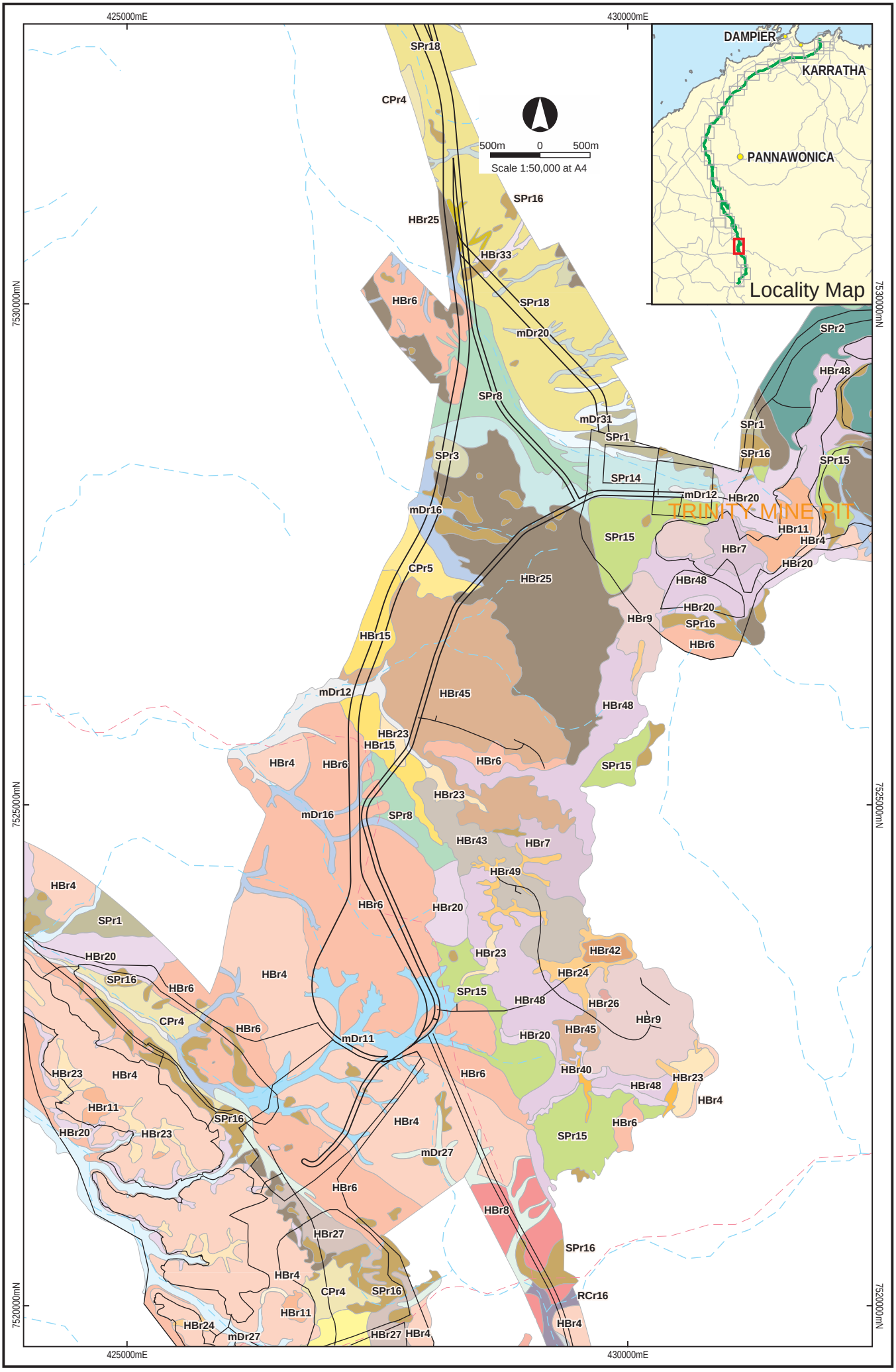

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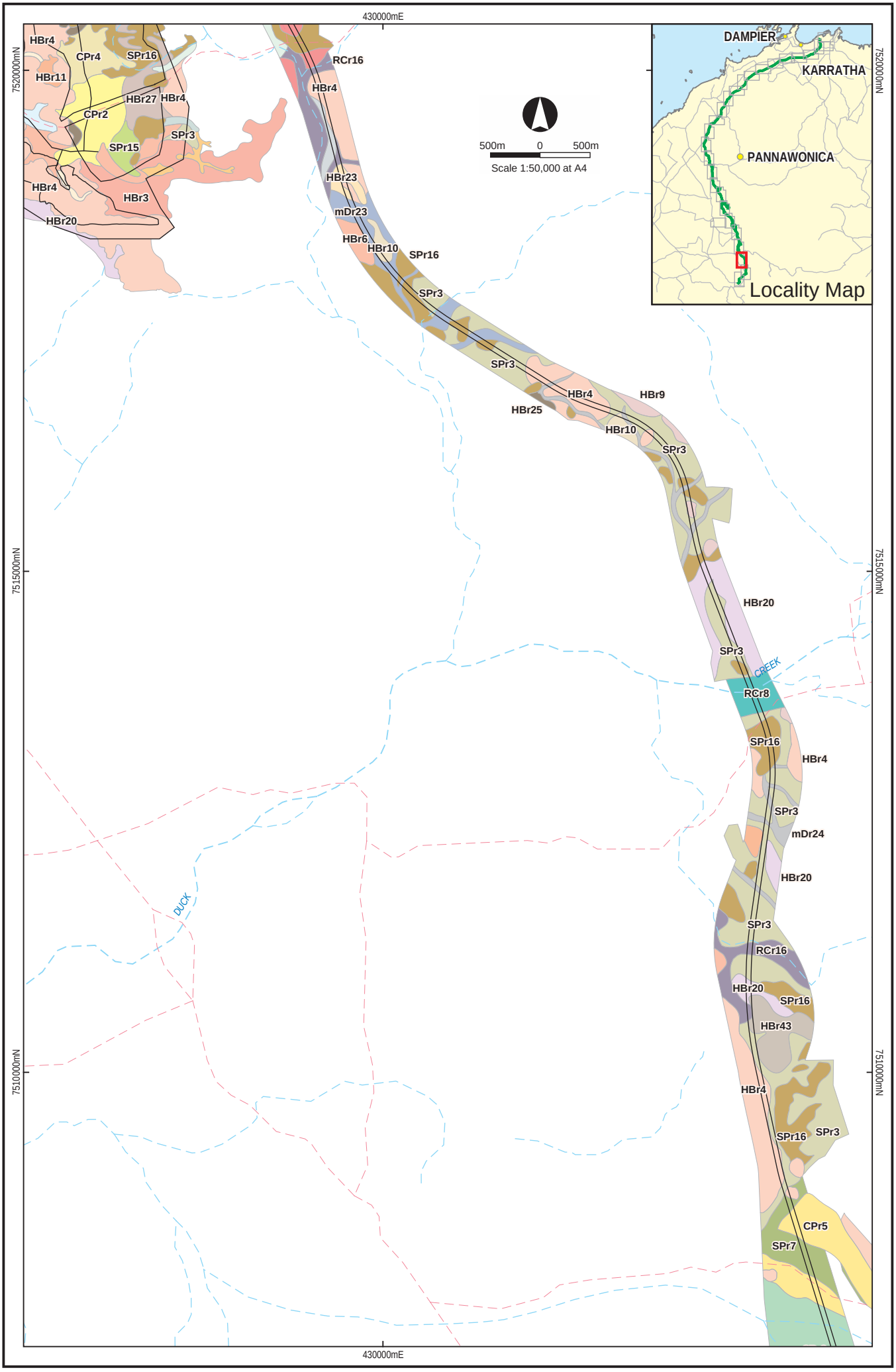

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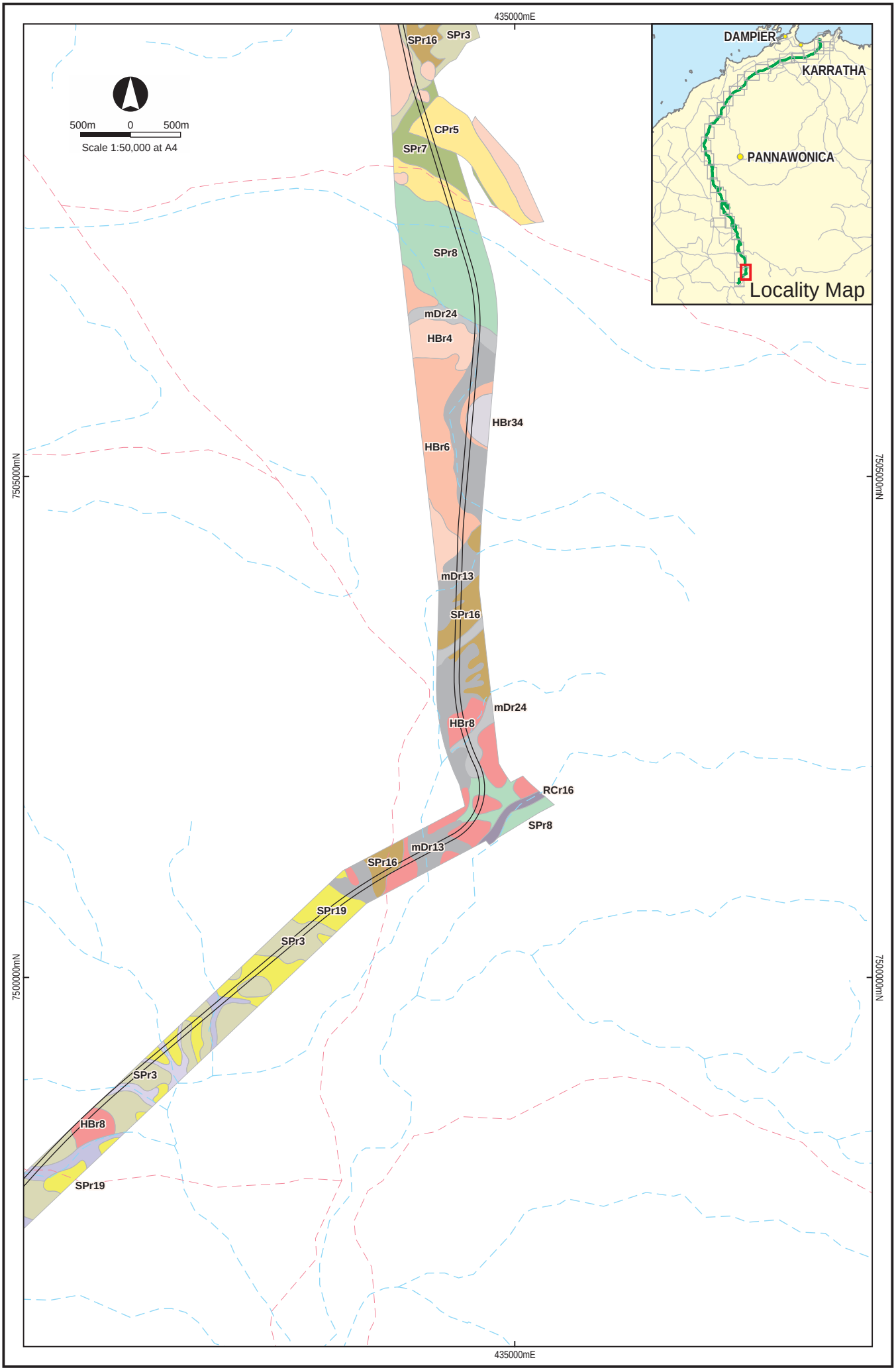

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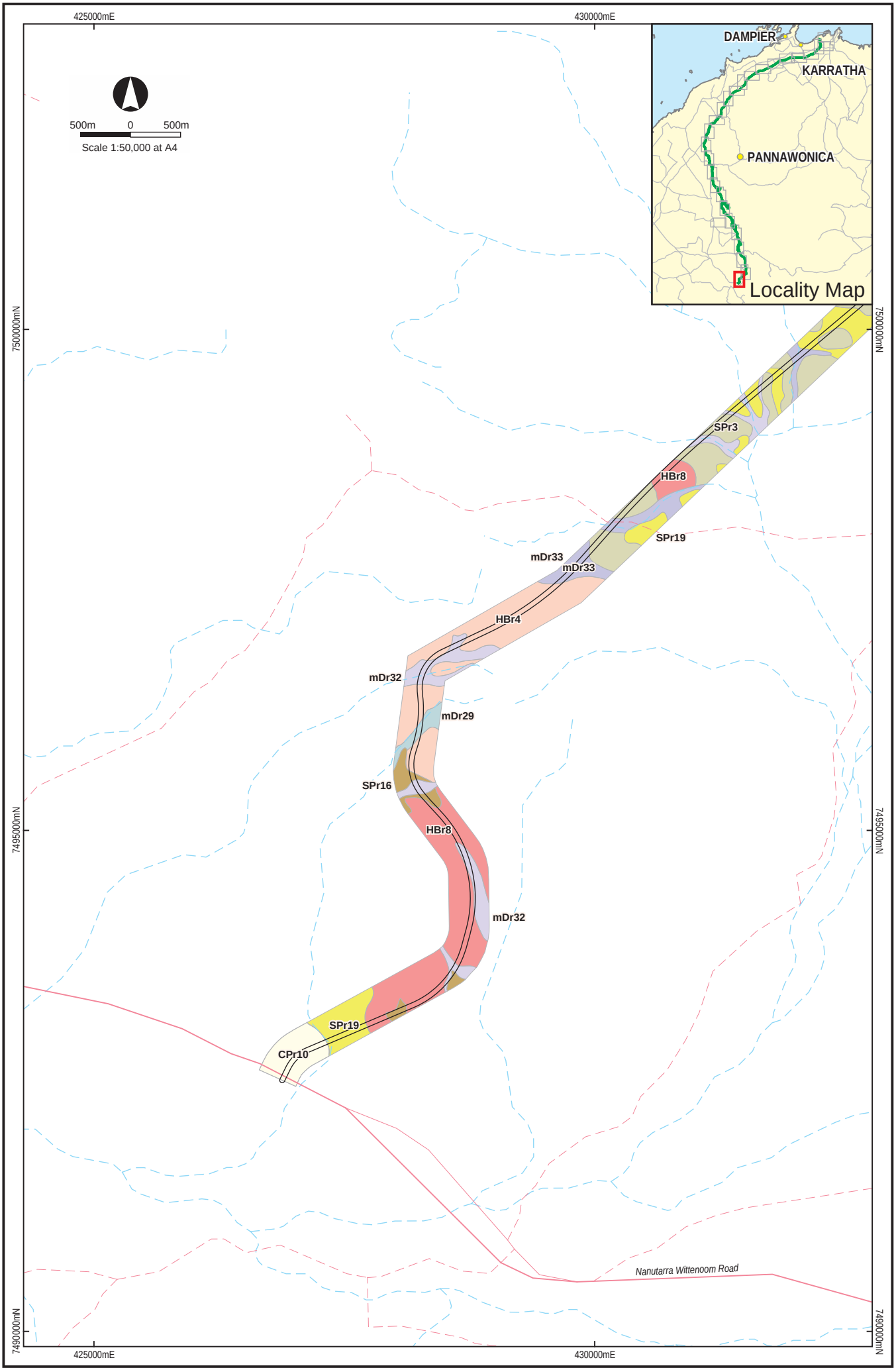

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Appendix B:
Reconciled Vegetation Association Descriptions

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Landform	Sub formation	Reconciled Vegetation Association Code	Reconciled Vegetation Association	Consultants Vegetation Unit Codes	Consultants Vegetation Unit Descriptions
Minor creeks and drainage	Mixed Acacias over hard spinifex	mDr1	*Acacia ancistrocarpa, A. bivenosa* shrubland over *Triodia wiseana* very open hummock grassland	I1a^	*Acacia ancistrocarpa, A. arida* and *A. bivenosa* shrubland over *Triodia wiseana* very open hummock grassland
				I1b^	*Acacia bivenosa* and *A. ancistrocarpa* shrubland over *Triodia wiseana* open hummock grassland
		mDr2	*Acacia aneura* var. *intermedia* low woodland over *Eremophila forrestii* ssp. *forrestii* open shrubland over *Triodia wiseana*	I7a^	*Acacia aneura* var. *intermedia* low woodland over *Eremophila forrestii* ssp. *forrestii* open shrubland over *Triodia wiseana* open hummock grassland
	Mixed shrubs over hard spinifex	mDr3	*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* open scrub over *A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland	I3g^	*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* open scrub over *A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland
		mDr4	*Terminalia canescens* low open woodland over *Acacia arida* open shrubland over *Triodia wiseana* very open hummock grassland	I8a^	*Terminalia canescens* low open woodland over *Acacia arida* open shrubland over *Triodia wiseana* very open hummock grassland
				I3h^	*Terminalia canescens* low open woodland over *Acacia trachycarpa* high shrubland over *A. arida* shrubland over *Triodia wiseana* very open hummock grassland over *Cenchrus ciliaris* very open tussock grassland
	Corymbias/ Eucalypts over hard spinifex	mDr5	*Corymbia hamersleyana* scattered low trees over *A. ancistrocarpa, A. bivenosa* high shrubland to open scrub over *Triodia wiseana* very open hummock grassland	I1d^	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* and *A. bivenosa* open heath over *Triodia wiseana* very open hummock grassland over very open grassland
		mDr6	*Corymbia hamersleyana* scattered low trees over *Acacia atkinsiana* and *A. bivenosa* shrubland over *Triodia wiseana* open hummock grassland	I5e^	*Corymbia hamersleyana* scattered low trees over *Acacia atkinsiana* and *A. bivenosa* shrubland over *Triodia wiseana* open hummock grassland

Landform	Sub formation	Reconciled Vegetation Association Code	Reconciled Vegetation Association	Consultants Vegetation Unit Codes	Consultants Vegetation Unit Descriptions
		mDr7	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia wiseana* hummock grassland	I3d^	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* and *A. arida* open shrubland over *Triodia wiseana* hummock grassland
				I5l^	*Corymbia hamersleyana* low open woodland over *Gossypium robinsonii* high shrubland over *Acacia bivenosa* shrubland over *Triodia wiseana* very open hummock grassland
		mDr8	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis, A. bivenosa, A. ancistrocarpa* open scrub to high open shrubland over *Triodia wiseana* open hummock grassland	I5h^	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis, A. atkinsiana* and *A. ancistrocarpa* shrubland over *Triodia wiseana* open hummock grassland
				I5i^	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis* open scrub to high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* very open hummock grassland
		mDr9	*Corymbia hamersleyana* woodland over *Acacia bivenosa, Acacia tumida* var. *pilbarensis, Acacia ancistrocarpa* tall shrubland over *Triodia wiseana* and *Triodia angusta* hummock grassland	DCAT1*	Woodland of *Corymbia hamersleyana* over a Tall Shrubland of *Acacia bivenosa, Acacia tumida* var. *pilbarensis* and *Acacia ancistrocarpa* with ocassional *Grevillea pyramidalis* subsp. *leucadendron* over a Mid Dense Hummock Grassland of *Triodia wiseana* (fine form) and *Triodia angusta*
		mDr10	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa*, *A. ancistrocarpa* and *A. tumida* var. *pilbarensis* high open shrubland over *Triodia wiseana* hummock grassland	I3e^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa*, *A. ancistrocarpa* and *A. tumida* var. *pilbarensis* high open shrubland over *Triodia wiseana* hummock grassland

Landform	Sub formation	Reconciled Vegetation Association Code	Reconciled Vegetation Association	Consultants Vegetation Unit Codes	Consultants Vegetation Unit Descriptions
	Mixed Acacias over soft spinifex	mDr11	*Acacia citrinoviridis* high open shrubland over *A. bivenosa, Eremophila longifolia, Stylobasium spathulatum* open shrubland over *Triodia epactia* open hummock grassland	I3a^	*Acacia citrinoviridis* high open shrubland over *A. bivenosa, Eremophila longifolia, Stylobasium spathulatum* open shrubland over *Triodia epactia* open hummock grassland
		mDr12	*Acacia pyrifolia* var. *pyrifolia* high shrubland over *Triodia epactia* hummock grassland	I2a^	*Acacia pyrifolia* var. *pyrifolia* high shrubland over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland
				I2c^	*Acacia pyrifolia* var. *pyrifolia, A. citrinoviridis, Gossypium robinsonii* high shrubland over *Triodia epactia* very open hummock grassland
				MC3+	*Acacia citrinoviridis* open scrub over *Acacia pyrifolia* var. *pyrifolia*open shrubland over *Triodia epactia* hummock grassland
		mDr13	*Acacia kempeana* (*A. bivenosa*) open scrub over *Triodia epactia* hummock grassland	mCF4+	*Acacia kempeana* (*A. bivenosa*) open scrub over *Triodia epactia* hummock grassland
	Corymbias/ Eucalypts over soft spinifex	mDr14	*Corymbia candida* ssp. *candida* scattered low trees over *Acacia citrinoviridis* open heath over *Triodia epactia* open hummock grassland	I3b^	*Corymbia candida* ssp. *candida* scattered low trees over *Acacia citrinoviridis* open heath over *Ptilotus astrolasius* var. *astrolasius* low open shrubland over *Triodia epactia* open hummock grassland
		mDr15	*Corymbia candida* ssp. *candida* low open woodland over *A. adsurgens, A. citrinoviridis* high shrubland over *A. ancistrocarpa, A. bivenosa*open heath over *Triodia pungens* hummock grassland	I5a^	*Corymbia candida* ssp. *candida* low open woodland over *Acacia adsurgens, A. citrinoviridis* high shrubland over *Acacia ancistrocarpa, Acacia bivenosa* open heath over *Triodia pungens* hummock grassland

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		mDr16	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa, Acacia inaequilatera*open heath over *Triodia epactia* open hummock grassland	I3c^	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* open heath over *Triodia epactia* open hummock grassland
				I5g^	*Corymbia hamersleyana* low open woodland over *Acacia inaequilatera* high open shrubland over *A. ancistrocarpa* scattered shrubs over *Triodia epactia* open hummock grassland
		mDr17	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Triodia epactia* open hummock grassland to hummock grassland	I2d^	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Acacia trachycarpa* scattered shrubs over *Triodia epactia* open hummock grassland over mixed open herbland
				I2e^	*Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Triodia epactia* hummock grassland
				mCF1+	*Corymbia hamersleyana scattered low trees over Acacia pyrifolia var. pyrifolia and A. ancistrocarpa open shrubland over Triodia epactia hummock grassland*
		mDr18	*Corymbia hamersleyana* low open woodland over *Acacia tumida* var. *pilbarensis, A. citrinoviridis* high open shrubland over *A. ancistrocarpa* open shrubland over *Triodia epactia* very open hummock grassland to open hummock grassland	I5j^	*Corymbia hamersleyana* low open woodland over *Acacia tumida* var. *pilbarensis, A. citrinoviridis* high open shrubland over *A. ancistrocarpa* open shrubland over *Triodia epactia* very open hummock grassland
		mDr19	*Corymbia hamersleyana* low open woodland over *Acacia colei* var. *colei, A. bivenosa, Gossypium robinsonii* high open shrubland over *Triodia epactia* very open hummock grassland	I5f^	*Corymbia hamersleyana* low open woodland over *Acacia colei* var. *colei, A. bivenosa, Gossypium robinsonii* high open shrubland over *Triodia epactia* very open hummock grassland

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		mDr20	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa, A. ancistrocarpa* open shrubland over *Triodia epactia* very open hummock grassland	l1e^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa, A. ancistrocarpa* open shrubland over *Triodia epactia* very open hummock grassland
		mDr21	*Eucalyptus victrix, Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* var. *pyrifolia, Gossypium robinsonii* high open shrubland over *Triodia epactia* open hummock grassland	l2f^	*Eucalyptus victrix, Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* var. *pyrifolia, Gossypium robinsonii* high open shrubland over *Triodia epactia* scattered hummocks over mixed open grassland
		mDr22	*Eucalyptus victrix, Corymbia hamersleyana* low open woodland over *Acacia atkinsiana, A. tumida* var. *pilbarensis, A. wanyu* high shrubland over *Acacia bivenosa, Gossypium australe* open shrubland over *Triodia epactia* open hummock grassland	l6e^	*Eucalyptus victrix, Corymbia hamersleyana* low open woodland over *Acacia atkinsiana, A. tumida* var. *pilbarensis, A. wanyu* high shrubland over *Acacia bivenosa, Gossypium australe* open shrubland over *Triodia epactia* open hummock grassland
	Mixed Acacias over hard and soft spinifex	mDr23	*Acacia bivenosa* and *A. synchronicia* open heath over *Triodia epactia* and *T. wiseana* very open hummock grassland over very open mixed grasses	l4a^	*Acacia bivenosa* and *A. synchronicia* open heath over *Triodia epactia* and *T. wiseana* very open hummock grassland over very open mixed grasses
				mCF6+	Scattered *Corymbia hamersleyana* over shrubland of *Acacia synchronicia, A bivenosa (A. ancistrocarpa)* over open hummock grassland of *Triodia epactia (T. wiseana)*
		mDr24	*Acacia citrinoviridis* and *A. inaequilatera* scattered tall shrubs over *A. bivenosa, A. ancistrocarpa* (*A. synchronicia*) shrubland to open heath over *Triodia epactia, T. wiseana* (**Cenchrus ciliaris*) open hummock grassland	mCF5+	*Acacia citrinoviridis* and *A. inaequilatera* scattered tall shrubs over *A. ancistrocarpa* (*A. bivenosa* and *A. synchronicia*) shrubland to open heath over *Triodia wiseana, T. epactia* open hummock grassland

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		mDr25	*Acacia pyrifolia* ssp. *pyrifolia, A. elachantha* (golden hair variant), *A. Ancistrocarpa* tall open scrub to tall open shrubland over *Triodia wiseana* (*T. epactia)* hummock grassland	CAThg1*	Tall Open Scrub to Tall Open Shrubland of *Acacia ancistrocarpa, Acacia tumida* var. *pilbarensis, Acacia pyrifolia* var. *pyrifolia* and *Acacia elachantha* (golden hairy variant) over a Mid Dense Hummock Grassland of *Triodia wiseana* (fine form) and *Triodia epactia*
	Corymbias/ Eucalypts over hard and soft spinifex	mDr26	*Corymbia candida* ssp. *candida* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia epactia* and *T. wiseana* open hummock grassland	I5b^	*Corymbia candida* ssp. *candida* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia epactia* and *T. wiseana* open hummock grassland
		mDr27	*Corymbia hamersleyana* scattered to low open woodland over *Acacia ancistrocarpa, A. bivenosa* open shrubland to high shrubland over *Triodia epactia, T. wiseana* closed hummock grassland	I1c^	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa, A. bivenosa* high shrubland over *Triodia wiseana, T. epactia* open hummock grassland
				I5d^	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa* and *A. bivenosa* open shrubland over *Triodia epactia, T. wiseana* closed hummock grassland
				mCF7+	Scattered *Corymbia hamersleyana* over shrubland of *Acacia ancistrocarpa* (*A. bivenosa* and *A. inaequilatera*) over open hummock grassland of *Triodia epactia (T. wiseana).*
		mDr28	*Corymbia hamersleyana scattered low trees over Acacia inaequilatera tall shrubland overTriodia wiseana, Triodia epactia hummock grassland (and Chrysopogon fallax)*	Amg*	Tall Shrubland of Acacia inaequilatera with occasional Corymbia hamersleyana over a Grassland dominated by Triodia wiseana, Triodia epactia and Chrysopogon fallax in association with drainage lines.

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		mDr29	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* and *Gossypium robinsonii* open scrub over *Triodia wiseana, T. epactia* very open hummock grassland	I1f^	*Gossypium robinsonii* scattered tall shrubs over *Acacia ancistrocarpa, A. bivenosa* shrubland over *Triodia epactia, T. wiseana* open hummock grassland
				I5k^	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis, Gossypium robinsoinii* open scrub over *Triodia wiseana, T. epactia* very open hummock grassland
		mDr30	*Eucalyptus camaldulensis* var. *obtusa* and *Corymbia hamersleyana* scattered low trees over *Grevillea pyramidalis* ssp. *leucadendron, Acacia pyrifolia* var. *pyrifolia and A. trachycarpa* open shrubland over *Triodia epactia* and *T. wiseana* very open hummock grassland	I6a^	*Eucalyptus camaldulensis* var. *obtusa* and *Corymbia hamersleyana* scattered low trees over *Grevillea pyramidalis* ssp. *leucadendron* high open shrubland over *Acacia pyrifolia var. pyrifolia and A. trachycarpa* open shrubland over *Tephrosia* spp. low open shubland over *Triodia epactia* and *T. wiseana* very open hummock grassland
		mDr31	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* scattered to low open woodland over *Acacia bivenosa, A. tumida* var. *pilbarensis* over *Triodia wiseana, T. epactia* open hummock grassland	I3f^	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis* high shrubland over *Triodia epactia, T. wiseana* very open hummock grassland
				I5o^	*Eucalyptus leucophloia* ssp. *leucophloia* and *Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa* and *A. atkinsiana* open shrubland over *Triodia epactia* and *T. wiseana* open hummock grassland
				I5p^	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* low open woodland over *Acacia bivenosa* open shrubland over *Triodia wiseana, T. epactia* open hummock grassland

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	Mixed Acacias over tussock grasses			I6d^	*Eucalyptus leucophloia ssp. leucophloia, Corymbia hamersleyana* low open woodland over *Acacia tumida* high open shrubland over *Triodia wiseana* very open hummock grassland
		mDr32	*Acacia synchronica* and *A. citrinoviridis* open shrubland to shrubland over **Cenchrus ciliaris* tussock grassland	mCF3+	*Acacia synchronica* and *A. citrinoviridis* open shrubland to shrubland over **Cenchrus ciliaris* tussock grassland
		mDr33	*Acacia synchronicia* (*A. kempeana, A. bivenosa*) open scrubland over **Cenchrus ciliaris* tussock grassland (and scattered *Triodia wiseana* hummocks)	mCF2+	*Acacia synchronicia* (*A. kempeana, A. bivenosa*) open scrubland over **Cenchrus ciliaris* tussock grassland (and scattered *Triodia wiseana* hummocks)
	Mixed Corymbias/ Eucalypts over tussock grasses	mDr34	*Corymbia hamersleyana* and *C. candida* ssp. *candida* low open woodland over *Acacia trachycarpa*, *A. tumida* var. *pilbarensis* and *Petalostylis labicheoides* high open shrubland over **Cenchrus ciliaris* very open tussock grassland	I5c^	*Corymbia hamersleyana* and *C. candida* ssp. *candida* low open woodland over *Acacia trachycarpa*, *A. tumida* var. *pilbarensis* and *Petalostylis labicheoides* high open shrubland over **Cenchrus ciliaris* very open tussock grassland
		mDr35	*Corymbia hamersleyana* scattered low trees over *Stylobasium spathulatum* open shrubland over *Eriachne mucronata* scattered tussock grasses	I5m^	*Corymbia hamersleyana* scattered low trees over *Stylobasium spathulatum* open shrubland over *Eriachne mucronata* scattered tussock grasses
		mDr36	*Eucalyptus camaldulensis* var. *obtusa* woodland over *E. victrix* low woodland over *Melaleuca glomerata*, *M. linophylla* and *Acacia coriacea* ssp. *pendens* high shrubland over **Cenchrus ciliaris* and **C. setiger* tussock grassland (*Cyperus* spp. very open sedgeland)	I6b^	*Eucalyptus camaldulensis* var. *obtusa* woodland over *E. victrix* low woodland over *Melaleuca glomerata*, *M. linophylla* and *Acacia coriacea* ssp. *pendens* high shrubland over *Cenchrus ciliaris* and *C. setiger* tussock grassland over patches of *Cyperus* spp. very open sedges.

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		mDr37	*Eucalyptus camaldulensis* var. *obtusa* low open woodland over *Gossypium robinsonii* high open shrubland over **Cenchrus ciliaris* very open tussock grassland	I6c^	*Eucalyptus camaldulensis* var. *obtusa* low open woodland over *Gossypium robinsonii* high open shrubland over Tephrosia sp. B Kimberley flora (C.A. Gardner 7300) scattered low shrubs over *Cenchrus ciliaris* very open tussock grassland
	Mixed Acacias over hard spinifex and tussock grasses	mDr38	*Acacia bivenosa, Acacia victoriae, Acacia ancistrocarpa* tall over scrub to shrubland over *Triodia wiseana* hummock grassland (*Themeda triandra* open tussock grassland)	DMATE*	Mixed Tall Open Scrub to Shrubland mainly dominated by *Acacia bivenosa, Acacia xiphophylla, Acacia victoriae*and *Acacia ancistrocarpa* over a Hummock Grassland of *Triodia wiseana* (fine form) and *Themeda triandra*
		mDr39	*Acacia pyrifolia* var. *pyrifolia* high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* hummock grassland and **Cenchrus ciliaris* very open tussock grassland	I2b^	*Acacia pyrifolia* var. *pyrifolia* high open shrubland over *A. bivenosa* open shrubland over mixed low open shrubland over *Triodia wiseana* hummock grassland and **Cenchrus ciliaris* very open tussock grassland
				AThg1*	Tall Shrubland to Open Shrubland dominated by *Acacia pyrifolia* var. *pyrifolia, Acacia bivenosa, Acacia ancistrocarpa* and *Acacia synchronicia* over a Mid Dense Hummock Grassland dominated by *Triodia wiseana* (fine form)
	Corymbias/ Eucalypts over hard spinifex and tussock grasses	mDr40	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var.*pyrifolia, Acacia bivenosa* (*Grevillea pyramidalis* subsp. *leucadendron*) tall shrubland *Triodia wiseana* hummock grassland and *Chrysopogon fallax, *Cenchrus ciliaris* tussock grassland.	DCAT2*	Low Open Woodland of *Corymbia hamersleyana* over a Tall Shrubland of *Acacia pyrifolia* var. *pyrifolia, Acacia bivenosa* and *Grevillea pyramidalis* subsp. *leucadendron* over a Mid Dense Hummock Grassland of *Triodia wiseana* (fine form) over a Tussock Grassland dominated by *Chrysopogon fallax* and **Cenchrus ciliaris*

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Major Creeks	Mixed Acacias over hard spinifex	RCr1	**Vachellia farnesiana*, *Acacia synchronicia* and *A. pyrifolia* var. *pyrifolia* high shrubland over *Triodia wiseana* very open hummock grassland	A1b^	**Vachellia farnesiana*, *Acacia synchronicia* and *A. pyrifolia* var. *pyrifolia* high shrubland over *Triodia wiseana* very open hummock grassland
	Mixed Corymbias/ Eucalypts over hard spinifex	RCr2	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* and *C. candida* ssp. *candida* scattered low trees over *Grevillea wickhamii* ssp. *hispidula* high open shrubland over *Triodia wiseana* very open hummock grassland	A3e^	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* and *C. candida* ssp. *candida* scattered low trees over *Grevillea wickhamii* ssp. *hispidula* high open shrubland over *Triodia wiseana* very open hummock grassland
		RCr3	*Eucalyptus victrix* open forest over *Melaleuca glomerata* and *Acacia coriaceae* ssp. *pendens* tall open scrub over *Triodia wiseana* open hummock grassland	DEAT2*	Open Forest of Eucalyptus victrix over a Tall Open Scrub of Melaleuca glomerata and Acacia coriacea subsp. pendens over an Open Hummock Grassland of Triodia wiseana (fine form).
	Mixed Corymbias/ Eucalypts over soft spinifex	RCr4	*Corymbia candida* ssp. *candida* and *C. hamersleyana* low open woodland over *Acacia colei var. colei* and *A. ancistrocarpa* high open shrubland over *Triodia epactia* very open hummock grassland	A3a^	*Corymbia candida* ssp. *candida* and *C. hamersleyana* low open woodland over *Acacia colei var. colei* and *A. ancistrocarpa* high open shrubland over *Triodia epactia* very open hummock grassland
		RCr5	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa, A. bivenosa* and *A. synchronicia* shrubland over *Triodia epactia* hummock grassland	A3b^	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa, A. bivenosa* and *A. synchronicia* shrubland over *Triodia epactia* hummock grassland
		RCr6	*Corymbia zygophylla* (*Eucalyptus victrix*) scattered to low open woodland over *Acacia ancistrocarpa* open heath over *Triodia epactia* hummock grassland	GP1+	Scattered to low open woodland of *Corymbia zygophylla (Eucalyptus victrix)* over open heath of *Acacia ancistrocarpa* over hummock grassland of T*riodia epactia.*
		RCr7	*Eucalyptus victrix* open woodland over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Triodia epactia* open hummock grassland	A5e^	*Eucalyptus victrix* open woodland over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Triodia epactia* open hummock grassland

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		RCr8	*Eucalyptus camaldulensis* and *E. victrix* woodland to open forest over *Melaleuca linophylla, M. glomerata, Acacia ampliceps* high open shrubland over *Triodia epactia* scattered hummocks and *Cyperus vaginata* scattered sedges	A5f^	*Eucalyptus victrix* woodland over *Melaleuca linophylla*, *Melaleuca glomerata* high shrubland over *Triodia epactia* very open hummock grassland over mixed scattered herbs
				MC2+	*Eucalyptus camaldulensis (E. victrix) open forest over Melaleuca argentea, Acacia ampliceps, M. glomerata over Cyperus vaginata scattered sedges.*
		RCr9	*Eucalyptus camaldulensis* var. *obutsa, E. victrix* woodland over *Triodia epactia* scattered hummocks over *Stemodia grossa* very open herbland	A5c^	*Eucalyptus camaldulensis* var. *obutsa, E. victrix* woodland over *Stemodia grossa* very open herbland
	Corymbias/ Eucalypts over hard and soft spinifex	RCr10	*Corymbia hamersleyana* low open woodland over *Acacia bivenosa, A. citrinoviridis, A. pyrifolia* var. *pyrifolia* high shrubland over *Triodia epactia* open hummock grassland	A3d^	*Corymbia hamersleyana* low open woodland over *Acacia bivenosa, A. citrinoviridis, A. pyrifolia* var. *pyrifolia* high shrubland over *Triodia epactia, Triodia wiseana* open hummock grassland
		RCr11	*Eucalyptus victrix* low woodland over *Acacia bivenosa, Gossypium robinsonii, Owenia acidula* high shrubland over *Triodia epactia, T. wiseana* very open hummock grassland	A5d^	*Eucalyptus victrix* low woodland over *Acacia bivenosa, Gossypium robinsonii, Owenia acidula* high shrubland over *Triodia epactia, T. wiseana* very open hummock grassland
	Mixed Acacias over soft spinifex and tussock grasses	RCr12	*Acacia trachycarpa* high shrubland over *A. pyrifolia* var. *pyrifolia* scattered shrubs over *Triodia epactia* very open hummock grassland over **Cenchrus ciliaris* very open tussock grassland	A1a^	*Acacia trachycarpa* high shrubland over *A. pyrifolia* var. *pyrifolia* scattered shrubs over *Triodia epactia* very open hummock grassland over **Cenchrus ciliaris* very open tussock grassland

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	Corymbias/ Eucalypts over soft spinifex and tussock grasses	RCr13	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa* and *A. trachycarpa* scattered shrubs over *Triodia epactia* open hummock grassland over *Aristida holothera* var. *latifolia, Eragrostis* aff. *eriopoda* (WAS site 963) and **Cenchrus ciliaris* very open grassland	A3c^	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa* and *A. trachycarpa* scattered shrubs over *Triodia epactia* open hummock grassland over *Aristida holothera* var. *latifolia, Eragrostis* aff. *eriopoda* (WAS site 963) and **Cenchrus ciliaris* very open grassland
	Mixed Acacias over tussock grasses	RCr14	*Acacia coriacea* ssp. *coriacea, A. inaequilatera*, *A. trachycarpa* and *Grevillea pyramidalis* ssp. *leucadendron* high open shrubland over **Cenchrus ciliaris* and *Eulalia aurea* tussock grassland	A2a^	*Acacia coriacea* ssp. *coriacea, A. inaequilatera*, *A. trachycarpa* and *Grevillea pyramidalis* ssp. *leucadendron* high open shrubland over **Cenchrus ciliaris* and *Eulalia aurea* tussock grassland
	Corymbias/ Eucalypts over tussock grasses	RCr15	*Eucalyptus camaldulensis* var. *obtusa* low open woodland over *Acacia trachycarpa* high open shrubland over **Cenchrus ciliaris* very open tussock grassland	A5a^	*Eucalyptus camaldulensis* var. *obtusa* low open woodland over *Acacia trachycarpa* high open shrubland over *Cenchrus ciliaris* very open tussock grassland
		RCr16	*Eucalyptus victrix* scattered low trees over *Acacia citrinoviridis, A. inaequilatera, A. pyrifola* var. *pyrifolia* open shrubland over **Cenchrus ciliaris* open tussock grassland (*Triodia epactia* very open hummock grassland).	MC1+	*Eucalyptus victrix* scattered low trees over *Acacia citrinoviridis, A. inaequilatera, A. pyrifola* var. *pyrifolia* open shrubland over **Cenchrus ciliaris* open tussock grassland (*Triodia epactia* very open hummock grassland).
	Mixed Corymbias/ Eucalypts over hard and soft spinifex and	RCr17	*Eucalyptus camaldulensis* var. *obtusa* open woodland over *Corymbia candida* ssp. *candida* and *C. hamersleyana* low open woodland over *Acacia* spp. high shrubland over *Triodia wiseana* and *T. epactia* very open hummock grassland over **Cenchrus ciliaris* open tussock grassland over mixed patches of herbs	A5b^	*Eucalyptus camaldulensis* var. *obtusa* open woodland over *Corymbia candida* ssp. *candida* and *C. hamersleyana* low open woodland over *Acacia* spp. high shrubland over *Triodia wiseana* and *T. epactia* very open hummock grassland over *Cenchrus ciliaris* open tussock grassland over mixed patches of herbs

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	tussock grasses	RCr18	*Eucalyptus victrix* and *Corymbia hamersleyana* open woodland over *Acacia bivenosa, Acacia trachycarpa* and *Acacia sclerosperma* subsp. *sclerosperma* shrubland over *Triodia wiseana, T.epactia*, *T. angusta* hummock grassland and **Cenchrus ciliaris* tussock grassland	DEAT1*	Open Woodland of *Eucalyptus victrix* with scattered *Corymbia hamersleyana* over a Shrubland mainly dominated by *Acacia bivenosa, Acacia trachycarpa* and *Acacia sclerosperma* subsp. *sclerosperma* over a Hummock Grassland of *Triodia wiseana* (fine form), *Triodia epactia* and T*riodia angusta* over a Tussock Grassland of **Cenchrus ciliaris*
	Mixed shrubs	RCr19	*Petalostylis labicheoides* scattered shrubs over *Trichodesma zeylanicum* var. *zeylanicum* very open herbland	A6a^	*Petalostylis labicheoides* scattered shrubs over *Trichodesma zeylanicum* var. *zeylanicum* very open herbland
	Corymbias/ Eucalypts over shrubs	RCr20	*Eucalyptus camaldulensis* var. *obtusa* open forest over *Acacia coriacea* ssp. *coriacea* and *Petalostylis labicheoides* high open shrubland	A4a^	*Eucalyptus camaldulensis* var. *obtusa* open forest over *Acacia coriacea* ssp. *coriacea* and *Petalostylis labicheoides* high open shrubland
	Corymbias/ Eucalypts over sedges	RCr21	*Eucalyptus camaldulensis* var. *obtusa* open forest over *Melaleuca glomerata* high open shrubland over scattered tussock grasses over *Cyperus* spp. very open sedgeland over patches of mixed open herbs	A4b^	*Eucalyptus camaldulensis* var. *obtusa* open forest over *Melaleuca glomerata* high open shrubland over *Eragrostis tenellula* scattered tussock grasses over *Cyperus bifax, C. difformu*s and *C. vaginatus* very open sedgeland over patches of mixed open herbs
Sink Hole	Corymbias / Eucalypts over tussock grasses	SHr1	*Eucalyptus camaldulensis* var. *obtusa o*pen forest over *Acacia colei* var. *colei* high open shrubland over *Cenchrus ciliaris* open tussock grassland	H1a^	*Eucalyptus camaldulensis* var. *obtusa o*pen forest over *Acacia colei* var. *colei* high open shrubland over *Cenchrus ciliaris* open tussock grassland
Stony Plains	Mixed Acacias over hard spinifex	SPr1	A*cacia bivenosa, A. atkinsiana* (*A. ancistrocarpa*) shrubland to high shrubland over *Triodia wiseana* open hummock grassland to hummock grassland.	P1a^	*Acacia atkinsiana*, *A. bivenosa* and *A. ancistrocarpa* high shrubland to open shrubland over *Triodia wiseana* open hummock grassland

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				P1b^	*Acacia atkinsiana, A. bivenosa, A. wanyu* shrubland over *Triodia wiseana* open hummock grassland
		SPr2	*Acacia inaequilatera* scattered tall shrubs over *A. ancistrocarpa* open shrubland over *Triodia wiseana* (*T. epactia*) hummock grassland	P4a^	*Acacia inaequilatera* scattered tall shrubs over *Acacia ancistrocarpa* open shrubland over *Triodia wiseana* hummock grassland
				P2b^	*Acacia ancistrocarpa* high shrubland over *Triodia epactia, Triodia wiseana* open hummock grassland
				P4b^	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* scattered shrubs over *Triodia wiseana* hummock grassland
				P2d^	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* shrubland over *Triodia wiseana* and *T. epactia* open hummock grassland
				P2g^	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia, A. ancistrocarpa* open shrubland over *Triodia wiseana, T. epactia* open hummock grassland
		SPr3	*Acacia synchronicia, A. bivenosa* (*A. ancistrocarpa*) open shrubland to shrubland over *Triodia wiseana, T.epactia* open hummock grassland	P3b^	*Acacia synchronicia*, *A. bivenosa* (*A. ancistrocarpa*) open shrubland to shrubland over *Triodia wiseana* very open hummock grassland over *Ptilotus calostachyus* var. *calostachyus* very open herbs
				P2a^	*Acacia ancistrocarpa*, *A. bivenosa*, *A. inaequilatera* and *A. synchronicia* open shrubland over *Triodia epactia* and *T. wiseana* open hummock grassland
				P3c^	*Acacia synchronicia, Acacia bivenosa* open shrubland over *Triodia wiseana, T. epactia* very open hummock grassland

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				SP2+	*Acacia synchronicia* (*A. bivenosa, A. inaequilatera*) high open shrubland over *Triodia wiseana, T. epactia* hummock grassland
				P3a^	*Acacia synchronicia, Eremophila cuneifolia* open shrubland over *Triodia wiseana* open hummock grassland
		SPr4	*Acacia xiphophylla* low open woodland to high open shrubland over *A.bivenosa, A. synchronicia, A. atkinsiana* open shrubland over *Triodia wiseana* open hummock grassland	P5b^	*Acacia xiphophylla* low open woodland to high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland
				P5c^	*Acacia xiphophylla* low open woodland to a high open shrubland over *A. synchronicia* and *A. atkinsiana* open shrubland over *Triodia wiseana* open hummock grassland
		SPr5	*Acacia xiphophylla* tall shrubland to open shrubland of over *Triodia wiseana* and *T. angusta* hummock grassland	AxT*	Tall Shrubland to Open Shrubland of *Acacia xiphophylla* over Hummock Grassland dominated by *Triodia wiseana* (fine form) and *Triodia angusta*
	Corybias/ Eucalypts over hard spinifex	SPr6	*Corymbia hamersleyana* scattered low trees over *A. bivenosa, A. ancistrocarpa, A. inaequilatera* over *Triodia wiseana* open hummock grassland to hummock grassland	P2e^	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* and *A. pyrifolia* var. *pyrifolia* shrubland over *Triodia wiseana* open hummock grassland
				P2f^	*Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland

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	Mixed Acacias over soft spinifex	SPr7	*Acacia ancistrocarpa* open to closed scrub over *Senna artemisiodes* ssp. *oligophylla* x *helmsii* low open shrubland over *Triodia epactia* hummock grassland	SP4+	*Acacia ancistrocarpa* open to closed scrub over *Senna artemisiodes* ssp. *oligophylla* X *helmsii* low open shrubland over *Triodia epactia* hummock grassland
		SPr8	*Acacia bivenosa, A. synchronicia, A. inaequilatera* shrubland over *Senna* spp. scattered shrubs to low open shrubland over *Triodia epactia* hummock grassland	P6a^	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland
				SP5+	*Acacia synchronicia* (*A. inaequilatera*) high shrubland over *Senna oligophylla* low open shrubland over *Triodia epactia* hummock grassland
		SPr9	*Acacia inaequilatera, A. tumida* var. *pilbarensis* scattered shrubs over *Triodia epactia* hummock grassland	P6b^	*Acacia inaequilatera, Acacia tumida* var. *pilbarensis* scattered shrubs over *Triodia epactia* hummock grassland
	Corymbias/ Eucalypts over soft spinifex	SPr10	*Corymbia hamersleyana* scattered low trees to low open woodland over *Acacia inaequilatea, A. bivenosa* and *A. ancistrocarpa* high shrubland over *Triodia epactia* hummock grassland	P6c^	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa and A. inaequilatera* shrubland over *Triodia epactia* hummock grassland
				P6d^	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* and *A. ancistrocarpa* high shrubland over *Triodia epactia* hummock grassland
				P6e^	*Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scatttered shrubs over *Triodia epactia* open hummock grassland
		SPr11	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia, Grevillea pyramidalis* ssp. *leucadendron* high open shrubland over *Triodia epactia* open hummock grassland	P6f^	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia, Grevillea pyramidalis* ssp. *leucadendron* high open shrubland over *Triodia epactia* open hummock grassland

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		SPr12	*Corymbia hamersleyana* scattered low trees over *Acacia wanyu* low open shrubland over *Triodia epactia* open hummock grassland	P6g^	*Corymbia hamersleyana* scattered low trees over *Acacia wanyu* low open shrubland over *Triodia epactia* open hummock grassland
		SPr13	*Corymbia hamersleyana* scattered low trees over *Triodia epactia* very open hummock grassland over herbs; post-fire	P6h^	*Corymbia hamersleyana* scattered low trees over *Triodia epactia* very open hummock grassland over herbs; post-fire
	Soft spinifex grasslands	SPr14	*Triodia epactia* open hummock grassland	P6i^	*Triodia epactia* open hummock grassland
	Mixed Acacias over hard and soft spinifex	SPr15	*Acacia xiphophylla* low open woodland to high open shrubland over *Acacia bivenosa* open shrubland over *T. wiseana* (*T. epactia*) very open hummock grassland	P5a^	*Acacia xiphophylla* low open woodland to high open shrubland over *A. atkinsiana* and *A. ancistrocarpa* open shrubland over *Triodia epactia* and *T. wiseana* very open hummock grassland
				P5e^	*Acacia xiphophylla* low open woodland to high open shrubland over *Triodia wiseana* and occasionally *T. epactia* very open hummock grassland
				MATE*	Tall Shrubland of *Acacia xiphophylla, Acacia bivenosa* & *Acacia synchronicia* over a Mid Dense Hummock Grassland of *Triodia wiseana* (fine form), *Eriachne* spp. and *Aristida* spp.
				S14d^	*Acacia xiphophylla* scattered tall shrubs over *Acacia bivenosa* scattered shrubs over *Triodia wiseana, T. epactia* open hummock grassland
		SPr16	*Acacia xiphophylla* low open woodland to high open shrubland over *A. synchronicia* scattered shrubs *Triodia wiseana* very open hummock grassland	P5d^	*Acacia xiphophylla* low open woodland to high open shrubland over *Triodia wiseana* very open hummock grassland

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				SP1+	*Acacia xiphophylla* (*A. synchronicia*) high shrubland to open scrub over *Triodia wiseana* hummock grassland
		SPr17	*Acacia ancistrocarpa, Acacia bivenosa, Acacia pyrifolia* var. *pyrifolia* shrubland over *Triodia wiseana, Triodia angusta, Triodia epactia* hummock grassland	MAT*	Mixed Shrubland of Acacia spp. mainly dominated by Acacia ancistrocarpa, Acacia bivenosa and Acacia pyrifolia var. pyrifolia over a Mid Dense Hummock Grassland of Triodia wiseana (fine form), Triodia angusta, Triodia aff. epactia, Triodia epactia (Form A)
	Corymbias/ Eucalypts over hard and soft spinifex	SPr18	*Corymbia hamersleyana* scattered low trees over *Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia wiseana, T. epactia* very open to closed hummock grassland	P1c^	*Corymbia hamersleyana* scattered low trees over *Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia wiseana, T. epactia* very open to closed hummock grassland
	Mixed Acacias over hard spinifex and tussock grasses	SPr19	*Acacia xiphophylla* (*A. synchronicia)* high open scrub over **Cenchrus ciliaris* open tussock grassland and *Triodia wiseana* open tussock grassland	SP6+	*Acacia xiphophylla* (*A. synchronicia*) high open scrub over **Cenchrus ciliaris* open tussock grassland and *Triodia wiseana* open tussock grassland
Stony Hills and Breakaways	Mixed Acacias over hard spinifex	HBr1	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over mixed species scattered shrubs to open shrubland over *Triodia wiseana* open hummock grassland to hummock grassland	S8a^	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over *Dodonaea coriacea* open shrubland over *Triodia wiseana* hummock grassland
				S8b^	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over *Eremophila latrobei* ssp. *latrobei* scattered shrubs over *Triodia wiseana* open hummock grassland
		HBr2	*Acacia aneura* var. *intermedia* low woodland over *Triodia wiseana* open hummock grassland	S8d^	*Acacia aneura* var. *intermedia* low woodland over *Triodia wiseana* open hummock grassland

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		HBr3	*Acacia ancistrocarpa* open shrubland over *Triodia wiseana* open hummock grassland	S7b^	*Acacia ancistrocarpa* open shrubland over *Triodia wiseana* open hummock grassland
				S9a^	*Acacia ancistrocarpa* open shrubland over *Dampiera candicans* low shrubland over *Triodia wiseana* open hummock grassland
		HBr4	*Acacia arida* open heath over *Triodia wiseana* open hummock grassland to hummock grassland	S2a^	*Acacia arida, A. bivenosa* and *A. pyrifolia* var. *pyrifolia* open heath over *Triodia wiseana* hummock grassland
				S4b^	*Acacia arida* shrubland over *Triodia wiseana* open hummock grassland
				S4a^	*Acacia arida, A. bivenosa* and *A. trachycarpa* shrubland over *Triodia wiseana* open hummock grassland
				SH2+	*Acacia arida shrubland over Triodia wiseana hummock grassland*
		HBr5	*Acacia atkinsiana* scattered tall shrubs over *A. ancistrocarpa* open shrubland over *Triodia wiseana* open hummock grassland	S7a^	*Acacia atkinsiana* scattered tall shrubs over *A. ancistrocarpa* open shrubland over *Triodia wiseana* open hummock grassland and *Ptilotus calostachyus* var. *calostachyus* scattered herbs
		HBr6	*Acacia inaequilatera* scattered tall shrubs to tall open shrubland over *Triodia wiseana* hummock grassland	S7i^	*Acacia inaequilatera* scattered tall shrubs over *Triodia wiseana* open hummock grassland

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				S7h^	*Acacia inaequilatera* scattered tall shrubs over *Tephrosia* sp. B Kimberley Flora (C.A. Gardner 7300) open shrubland over *Triodia wiseana* very open hummock grassland
				S7e^	*Acacia inaequilatera* tall open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* hummock grassland
				CAThg2*	Tall Open Shrubland of Acacia inaequilatera with scattered Acacia bivenosa over a Mid Dense Hummock Grassland of Triodia wiseana on orange rocky sand.
				S7f^	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa, A. maitlandii* open shrubland over *Triodia wiseana* open hummock grassland
				S14b^	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia wiseana, T. epactia* hummock grassland
		HBr7	*Acacia bivenosa* open shrubland over *Triodia wiseana* hummock grassland	S7c^	*Acacia bivenosa, Senna* spp. open shrubland over *Triodia wiseana* open hummock grassland
				S7d^	*Acacia bivenosa* open shrubland over *Triodia wiseana* open hummock grassland
				SH1+	Acacia bivenosa shrubland over Triodia wiseana hummock grassland
				S14a^	*Acacia bivenosa* scattered shrubs over *Triodia epactia, T. wiseana* open hummock grassland

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		HBr8	*Acacia inaequilatera* and *A. synchronicia* scattered shrubs to open shrubland over *Triodia wiseana* open hummock grassland	S6a^	*Acacia synchronicia* open shrubland over *Triodia wiseana* very open hummock grassland
				S7g^	*Acacia inaequilatera* and *A. synchronicia* scattered shrubs over *Triodia wiseana* open hummock grassland
				AEThg*	*Acacia inaequilatera* and *A. synchronicia* scattered shrubs over *Triodia wiseana* open hummock grassland
				SH3+	*Acacia synchronicia* scattered tall shrubs over *Triodia wiseana* hummock grassland
		HBr9	*Acacia pruinocarpa* high open shrubland over *A. bivenosa, A. ancistrocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland	S3a^	*Acacia inaequilatera, A. pruinocarpa* high open shrubland over *Triodia wiseana* open hummock grassland
				S3c^	*Acacia pruinocarpa* high open shrubland over *A. bivenosa* scattered shrubs over *Triodia wiseana* very open hummock grassland
				S3f^	*Acacia pruinocarpa* high open shrubland over *Triodia wiseana* hummock grassland
				SH12+	*Acacia pruinocarpa* high open shrubland over *A. ancistrocarpa s*cattered shrubs over *Triodia wiseana* open hummock grassland
		HBr10	*Acacia pruinocarpa* and *A. inaequilatera* high open shrubland over *Eremophila fraseri* ssp. *fraseri* low open shrubland over *Triodia wiseana* open hummock	SH11+	*Eremophila fraseri* and *Acacia bivenosa* low open shrubland over *Triodia wiseana* hummock grassland

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			grassland	S14c^	*Acacia inaequilatera* scattered tall shrubs over *Eremophila fraseri* ssp. *fraseri* scattered shrubs over *Triodia wiseana* and *T. epactia* open hummock grassland
				S3d^	*Acacia pruinocarpa* and *A. inaequilatera* high open shrubland over *Eremophila fraseri* ssp. *fraseri* low open shrubland over *Triodia wiseana* open hummock grassland
				S7m^	*Eremophila fraseri* ssp. *fraseri* open shrubland over *Tephrosia* sp. B Kimberley Flora scattered low shrubs over *Triodia wiseana* open hummock grassland
		HBr11	*Acacia pruinocarpa* high open shrubland over *A. arida* open shrubland over *Triodia wiseana* open hummock grassland	S3b^	*Acacia pruinocarpa, A. arida* high shrubland over *Triodia wiseana* open hummock grassland
				S3e^	*Acacia pruinocarpa, Grevillea wickhamii* ssp. *hispidula* high open shrubland over *A. arida* open shrubland over *Triodia wiseana* open hummock grassland
				SH14+	*Acacia pruinocarpa* scattered tall shrubs to tall open shrubland over *Acacia arida* scattered shrubs over *Triodia wiseana* hummock grassland
		HBr12	*Acacia pyrifolia* var. *pyrifolia* open shrubland to low open shrubland over *Corchorus* aff. *parviflorus* scattered low shrubs over *Triodia wiseana* hummock grassland	Athg2*	Open Shrubland to Low Open Shrubland of *Acacia pyrifolia* var. *pyrifolia* with scattered *Corchorus* aff. *parviflorus* over a Mid Dense Hummock Grassland of *Triodia wiseana* (fine form)

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	Mixed shrubs over hard spinifex	HBr13	*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* scattered tall shrubs to tall open shrubland over *Triodia wiseana* very open hummock grassland	S1c^	*Grevillea wickhamii* ssp. *hispidula* scattered tall shrubs over *Acacia bivenosa, A. atkinsiana* shrubland over *Triodia wiseana* open hummock grassland
				S4k^	*Acacia tumida* var. *pilbarensis, Grevillea wickhami*i ssp. *hispidula* tall shrubland over *Triodia wiseana* very open hummock grassland
				S4m^	*Grevillea wickhamii* ssp. *hispidula* tall open shrubland over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* very open hummock grassland
				S4j^	*Acacia tumida* var. *pilbarensis* scattered tall shrubs over *A. bivenosa* and *Senna glutinosa* ssp. *pruinosa* open shrubland over *Triodia wiseana* very open hummock grassland and *Ptilotus calostachyus* var. *calostachyus* very open herbland
		HBr14	*Terminalia canescens, Acacia citrinoviridis* low woodland over *Triodia wiseana* very open hummock grassland	S13a^	*Terminalia canescens, Acacia citrinoviridis* low woodland over *Triodia wiseana* very open hummock grassland
		HBr15	*Terminalia canescens* low open woodland over *Triodia wiseana* scattered hummock grasses	S13b^	*Terminalia canescens* low open woodland over *Triodia wiseana* scattered hummock grasses
		HBr16	*Terminalia supranitifolia* scattered low trees over *Grevillea wickhamii* ssp. *hispidula* scattered tall shrubs over *Triodia wiseana* very open hummock grassland	S13c^	*Terminalia supranitifolia* scattered low trees over *Grevillea wickhamii* ssp. *hispidula* scattered tall shrubs over *Corchorus parviflorus* and *Solanum lasiophyllum* low open shrubland over *Triodia wiseana* very open hummock grassland

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	Corymbias/ Eucalypts over hard spinifex	HBr17	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	S7j^	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland
				CAT*	Low Open Woodland of *Corymbia hamersleyana* over a Shrubland of *Acacia trudgeniana* and *Acacia bivenosa*over a Closed Tussock Grassland of *Triodia wiseana* (fine form)
		HBr18	*Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii* ssp. *hispidula, Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	S7l^	*Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii* ssp. *hispidula, Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland
		HBr19	*Corymbia zygophylla and Eucalyptus leucophloia low open woodland over Acacia maitlandii open shrubland over Acacia ptychophylla low shrubland over Triodia wiseana hummock grassland*	SH10+	*Corymbia zygophylla* and *Eucalyptus leucophloia* low open woodland over *Acacia maitlandii* open shrubland over *Acacia ptychophylla* low shrubland over *Triodia wiseana* hummock grassland
		HBr20	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia bivenosa* scattered shrubs to shrubland over *Triodia wiseana* open hummock grassland to hummock grassland	S11k^	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland
				S11a^	*Eucalyptus leucophloia* spp. *leucophloia* low open woodland over *Acacia ancistrocarpa, A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland

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				S11c^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia arida, A. bivenosa* shrubland over *Triodia wiseana* open hummock grassland
				S11d^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland to low woodland over *Acacia bivenosa* and *A. synchronicia* open shrubland over *Triodia wiseana* open hummock grassland
				S11e^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland
				SH8+	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Senna glutinosa* ssp. *glutinosa* scattered shrubs over *Triodia wiseana* hummock grassland
				S11m^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Triodia wiseana* hummock grassland
		HBr21	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia ptychophylla* low open shrubland over *Triodia wiseana* hummock grassland	S11g^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia ptychophylla* low open shrubland over *Triodia wiseana* hummock grassland
				SH9+	*Eucalyptus leucophloia* ssp. l*eucophloia* scattered low trees over *Acacia ptychophylla* low shrubland over *Triodia wiseana* hummock grassland.
		HBr22	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. pruinocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland	S11b^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. pruinocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland

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		HBr23	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis, A. pruinocarpa* tall shrubland over *Triodia wiseana* open hummock grassland	S11f^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis* tall shrubland over *Triodia wiseana* open hummock grassland
				S4f^	*Acacia citrinoviridis, A. pruinocarpa* high shrubland over *Triodia wiseana* very open hummock grassland
				S4e^	*Acacia citrinoviridis* tall open shrubland over *A. bivenosa, Gossypium robinsonii* open shrubland over *Triodia wiseana* very open hummock grassland
				SH13+	*Eucalyptus leucophloia* ssp. *leucohloia* scattered low trees over *Acacia citrinoviridis* scattered tall shrubs over *Triodia wiseana* open hummock grassland
		HBr24	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia wiseana* open hummock grassland	S11i^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Acacia arida* scattered shrubs over *Triodia wiseana* open hummock grassland
				S11j^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia wiseana* open hummock grassland
	Hard spinifex grasslands	HBr25	*Triodia wiseana* open hummock grassland	S7n^	*Triodia wiseana* open hummock grassland
				Thg*	Mid Dense to Closed Hummock Grasslands of *Triodia* spp.
				SH15+	*Triodia wiseana* hummcok grassland

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	Mixed Acacias over soft spinifex	HBr26	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over *Grevillea wickhamii* ssp. *hispidula, Acacia atkinsiana* tall shrubland over *Triodia epactia* open hummock grassland	S8c^	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over *Grevillea wickhamii* ssp. *hispidula, Acacia atkinsiana* tall shrubland over *Triodia epactia* open hummock grassland
		HBr27	*Acacia bivenosa* and *A. ancistrocarpa* shrubland over *Triodia epactia* open hummock grassland	S4d^	*Acacia bivenosa* and *A. ancistrocarpa* shrubland over *Triodia epactia* open hummock grassland
				S12a^	*Acacia bivenosa* shrubland over *Triodia epactia* hummock grassland
		HBr28	*Acacia citrinoviridis,Stylobasium spathulatum* high shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. epactia* open hummock grassland	S4g^	*Acacia citrinoviridis,Stylobasium spathulatum* high shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. epactia* open hummock grassland
	Mixed Corymbias/ Eucalypts over soft spinifex	HBr29	*Corymbia ferriticola* ssp. *ferriticola* and *Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia citrinoviridis* and *Acacia aneura* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland to open hummock grassland	S5l^	*Corymbia ferriticola* ssp. *ferriticola* low open woodland over *Acacia citrinoviridis* tall shrubland over *Eremophila latrobei* ssp. *latrobei* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland
		HBr30	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S10k^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
		HBr31	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia citrinoviridis* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	S10e^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis, A. inaequilatera* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland

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				S10f^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis*tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland
				S10g^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia citrinoviridis* tall open shrubland over *Triodia wiseana, T*. sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
	Mixed Acacias over hard and soft spinifex	HBr32	*Acacia arida* (*A. bivenosa*) open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland	S5a^	*Acacia arida* open shrubland over *Triodia wiseana* and *T*. sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland
				SH7+	*Acacia arida* (*A. bivenosa*) shrubland over *Triodia wiseana* (*T*. sp. Robe River) hummock grassland
		HBr33	*Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia wiseana, T*. sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S5b^	*Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia wiseana, T*. sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
		HBr34	*Acacia bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) and *T. wiseana* open hummock grassland to hummock grassland	S5c^	*Acacia bivenosa* open shrubland over *Dampiera candicans* low shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* hummock grassland
				S5d^	*Acacia bivenosa* open shrubland over *Triodia wiseana, T*. sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland

Landform	Sub formation	Reconciled Vegetation Association Code	Reconciled Vegetation Association	Consultants Vegetation Unit Codes	Consultants Vegetation Unit Descriptions
		HBr35	*Acacia pruinocarpa, A. inaequilatera* (*A. citrinoviridis*) tall open shrubland over *Triodia wiseana, T.* sp Robe River (M.E. Trudgen MET 12,369) hummock grassland	S4i^	*Acacia inaequilatera, A. pruinocarpa* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland
				S5e^	*Acacia citrinoviridis, A. pruinocarpa, A. inaequilatera* tall open shrubland over *Triodia wiseana, T.* sp Robe River (M.E. Trudgen MET 12,369) hummock grassland
				S5g^	*Acacia inaequilatera, A. citrinoviridis* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
		HBr36	*Acacia inaequilatera* (*Petalostylis labicheoides*) scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S5f^	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana, T.* sp. Robe River open hummock grassland
		HBr37	*Acacia pruinocarpa* scattered tall shrubs to tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland to hummock grassland	S5k^	*Acacia pruinocarpa* scattered tall shrubs over *Eremophila fraseri* ssp. *fraseri* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
				S5j^	*Acacia pruinocarpa* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* hummock grassland
				S5i^	*Acacia pruinocarpa* high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland

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		HBr38	*Acacia tumida* var. *pilbarensis, Petalostylis labicheoides* tall shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	S4l^	*Acacia tumida* var. *pilbarensis, Petalostylis labicheoides* tall shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland
		HBr39	*Acacia bivenosa* and *A. atkinsiana* scattered low shrubs to low open shrubland over *Triodia wiseana, T. epactia* open hummock grassland	S1b^	*Acacia bivenosa* and *A. atkinsiana* scattered low shrubs over *Triodia wiseana* and *T. epactia* open hummock grassland
				S1a^	*Acacia bivenosa* and *A. atkinsiana* open shrubland over *Triodia wiseana* open hummock grassland
		HBr40	*Acacia citrinoviridis* tall open shrubland over *A. bivenosa* open shrubland *Triodia wiseana, T. epactia* open hummock grassland	S2b^	*Acacia citrinoviridis* scattered tall shrubs over *A. bivenosa* open heath over *Triodia epactia, T. wiseana* open hummock grassland
				S4h^	*Acacia citrinoviridis* tall shrubland over *Triodia wiseana, T. epactia* open hummock grassland
	Soft spinifex grasslands	HBr41	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S12b^	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
				S12c^	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland (recently burnt)
	Mixed shrubs over hard and soft spinifex	HBr42	*Grevillea wickhamii* ssp. *hispidula, Petalostylis labicheoides* scattered tall shrubs over *Acacia bivenosa* shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	S4n^	*Grevillea wickhamii* ssp. *hispidula, Petalostylis labicheoides* scattered tall shrubs over *Acacia bivenosa* shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland
		HBr43	*Petalostylis labicheoides* (*Acacia bivenosa*) open shrubland over *Triodia wiseana* (*T.* sp. Robe River (M.E. Trudgen MET 12,369)) open hummock grassland to	S5h^	*Acacia inaequilatera, Petalostylis labicheoides* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* hummock grassland

Landform	Sub formation	Reconciled Vegetation Association Code	Reconciled Vegetation Association	Consultants Vegetation Unit Codes	Consultants Vegetation Unit Descriptions
			hummock grassland	S4c^	*Acacia bivenosa, A. ancistrocarpa, Petalostylis labicheoides* open shrubland over *Triodia wiseana* very open hummock grassland
				SH6+	Scattered tall shrubs of *Petalostylis labicheoides* over scattered shrubs of *Acacia bivenosa* and *Senna glutinosa* ssp. *pruinosa* over hummock grassland of *Triodia wiseana*
	Corymbias/ Eucalypts over hard and soft spinifex	HBr44	*Corymbia hamersleyana scattered low trees over Acacia maitlandii high open shrubland over Triodia wiseana, (T. sp. Robe River (M.E. Trudgen MET 12,369)) very open hummock grassland*	S7k^	*Corymbia hamersleyana* scattered low trees over *Acacia maitlandii* scattered shrubs over *Triodia wiseana* open hummock grassland
				P2c^	*Acacia maitlandii* high open shrubland over *Acacia ancistrocarpa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland
		HBr45	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S10b^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* very open hummock grassland
				S10c^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* very open hummock grassland
				S10d^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland

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				S10n^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland
				I5n^	*Eucalyptus leucophloia* spp. *leucophloia* low open woodland over *Acacia ancistrocarpa* and *A. bivenosa* open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland
		HBr46	*Eucalyptus leucophloia* ssp. *leucophloia, Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. citrinoviridis, Grevillea berryana* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	S10a^	*Eucalyptus leucophloia* ssp. *leucophloia, Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. citrinoviridis, Grevillea berryana* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland
		HBr47	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia maitlandii* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S10h^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia maitlandii* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland
		HBr48	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia pruinocarpa* scattered tall shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	S10i^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia pruinocarpa* scattered tall shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland
				S10j^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia pruinocarpa* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland over *Eriachne mucronata* very open tussock grassland

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				S11h^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia pruinocarpa* open shrubland over *Triodia wiseana* open hummock grassland
				S11l^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland *Grevillea wickhamii* ssp. *hispidula, Acacia pruinocarpa* high shrubland over *Triodia wiseana* very open hummock grassland over *Eriachne tenuiculmis* very open tussock grassland
		HBr49	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Petalostylis labicheoides* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	S10l^	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Petalostylis labicheoides* tall open shrubland over *Acacia ancistrocarpa* scattered shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* very open hummock grassland
				S10m^	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Petalostylis labicheoides* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland
Clay Plains	Mixed Acacias over hard spinifex	CPr1	*Acacia bivenosa* open shrubland over *Scaevola spinescens* scattered low shrubs over *Triodia wiseana* hummock grassland	C2a^	*Acacia bivenosa* open shrubland over *Scaevola spinescens* scattered low shrubs over *Triodia wiseana* hummock grassland
	Mixed Acacias over soft spinifex	CPr2	*Acacia inaequilatera* scattered tall shrubs to tall open shrubland over *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland to hummock grassland	C2b^	*Acacia inaequilatera* scattered tall shrubs over *A. ancistrocarpa* and *Ptilotus astrolasius* var. *astrolasius* low open shrubland over *Triodia epactia* very open hummock grassland
				C2c^	*Acacia inaequilatera* tall open shrubland over *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland

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				C7a^	*Acacia inaequilatera* tall open shrubland over *Triodia epactia* hummock grassland
		CPr3	*Acacia pyrifolia* var. *pyrifolia* scattered tall shrubs over *Grevillea pyramidalis* ssp. *leucadendron* scattered shrubs over *Triodia epactia* hummock grassland	C7b^	*Acacia pyrifolia* var. *pyrifolia* scattered tall shrubs over *Grevillea pyramidalis* ssp. *leucadendron* scattered shrubs over *Triodia epactia* hummock grassland
		CPr4	*Acacia synchronicia* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland	C4a^	*Acacia synchronicia* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland
				C3a^	*Acacia synchronicia* open shrubland over *Triodia epactia* open hummock grassland
		CPr5	*Acacia synchronicia, A. xiphophylla* tall shrubland over *Triodia epactia* open hummock grassland	C6a^	*Acacia synchronicia, A. xiphophylla* tall shrubland over *Triodia epactia* open hummock grassland
				CP2+	*Acacia xiphophylla* (*A. synchronicia*) high shrubland over *Triodia epactia* open hummock grassland
	Corymbias/ Eucalypts over soft spinifex	CPr6	*Corymbia candida* ssp. *candida* scattered low trees over *Acacia ancistrocarpa* and *A. bivenosa* tall open shrubland over *Triodia epactia* hummock grassland	C2e^	*Corymbia candida* ssp. *candida* scattered low trees over *Acacia ancistrocarpa* and *A. bivenosa* tall open shrubland over *Triodia epactia* hummock grassland
		CPr7	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia* and *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland to hummock grassland	C3b^	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia* and *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland
				C6c^	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia, A. ancistrocarpa* and *A. xiphophylla* tall open shrubland to open shrubland over *Triodia epactia* hummock grassland

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	Mixed Acacias over hard and soft spinifex	CPr8	*Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia epactia, T. wiseana* open hummock grassland	C1a^	*Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia epactia, T. wiseana* open hummock grassland
		CPr9	*Acacia inaequilatera* and *A. synchronicia* scattered tall shrubs over *Triodia wiseana* and *T. epactia* open hummock grassland	C2d^	*Acacia inaequilatera* and *A. synchronicia* scattered tall shrubs over *Triodia wiseana* and *T. epactia* open hummock grassland
	Mixed Acacias over tussock grasses	CPr10	*Acacia xiphophylla* open scrub over *Sclerolaena* spp. herbland over *Sporobolus australasicus, Dactyloctenium radulans, *Cenchrus ciliaris* very open tussock grassland	CP1+	*Acacia xiphophylla* open scrub over *Sclerolaena* spp. herbland over *Sporobolus australasicus, Dactyloctenium radulans, *Cenchrus ciliaris* very open tussock grassland
		CPr11	*Acacia sclerosperma* subsp. *sclerosperma* shrubland over *Eragrostis xerophila, Eriachne benthamii* and *Xerochloa barbata* tussock grassland	Ahf*	Shrubland of *Acacia sclerosperma* subsp. *sclerosperma* over a Tussock Grassland of *Eragrostis xerophila, Eriachne benthamii* and *Xerochloa barbata*
	Tussock grassland	CPr12	*Eragrostis xerophila*, *Dichanthium sericeum* ssp. *humilius* and *Xerochloa imberbis* mixed closed grassland over mixed very open herbland	C5a^	*Eragrostis xerophila*, *Dichanthium sericeum* ssp. *humilius* and *Xerochloa imberbis* mixed closed grassland over mixed very open herbland
				Hf*	Horseflats of *Eragrostis* spp., *Eriachne* spp. and *Dichanthium* spp.
	Mixed Acacias over hard spinifex and tussock grasses	CPr13	*Acacia xiphophylla* open shrubland over *Triodia wiseana* open hummock grassland over *Eragrostis xerophila* open tussock grassland	C6b^	*Acacia xiphophylla* open shrubland over *Triodia wiseana* open hummock grassland over *Eragrostis xerophila* open tussock grassland
				AxE*	Shrubland to Low Open Shrubland of *Acacia xiphophylla* over Tussock Grassland dominated by *Eriachne* spp., *Eragrostis* spp. and *Xerochloa* spp. over Hummock Grassland of *Triodia wiseana* (fine form)

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Appendix C:

Reconciliation Rationale

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Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
Minor Creeklines	Acacias over hard spinifex	mDr1	Ia1	*Acacia ancistrocarpa, A. bivenosa* shrubland over *Triodia wiseana* very open hummock grassland	I1a	*Acacia ancistrocarpa, A. arida* and *A. bivenosa* shrubland over *Triodia wiseana* very open hummock grassland	5 x vegetation descriptions. *A. ancistrocarpa* 5 sites 8 - 25 %; *A. arida* 5 sites 1 -15 %; *A. bivenosa* 2 sites 1 -2 %; *T. wiseana* 5 sites + - 38 %	x		y	n	*A. arida, A. pyrifolia ssp. pyrifolia, Senna artemisioides ssp. oligophylla*
					I1b	*Acacia bivenosa* and *A. ancistrocarpa* shrubland over *Triodia wiseana* open hummock grassland	2 x releves, 2 x vegetation descriptions. A. ancistrocarpa 4 sites 1 - 35 %, *A. arida* 0 sites, *A. bivenosa* 4 sites + - 25 %, *T. wiseana* 4 sites + - 25 %.	x		y	n	
	Mixed shrubs over hard spinifex	mDr4	Ia5	*Terminalia canescens* low open woodland over *Acacia arida* open shrubland over *Triodia wiseana* very open hummock grassland	I8a	*Terminalia canescens* low open woodland over *Acacia arida* open shrubland over *Triodia wiseana* very open hummock grassland	1 x releve. *T. canescens* 2 %; *A. arida* 2 %; *A. trachycarpa* 0 % ; *C. ciliaris* 0 %; *T. wiseana* 8 %.	x		n	n	Not sufficient info.
					I3h	*Terminalia canescens* low open woodland over *Acacia trachycarpa* high shrubland over *A. arida* shrubland over *Triodia wiseana* very open hummock grassland over *Cenchrus ciliaris* very open tussock grassland	1. quadrat, 5 x vegetation descriptions. *T. canescens* 1 site, 3 %; *A. arida* 2 sites, 2 - 35 %; *A. trachycarpa* 4 sites 5 - 35 %.	x		y	y	
	Corymbias / Eucalypts over hard spinifex	mDr7	Ia7	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia wiseana* hummock grassland	I3d	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* and *A. arida* open shrubland over *Triodia wiseana* hummock grassland	2 x releves of 3 sites listed. *C. hamersleyana* 1 site 4 %; *A. arida*? %; *A. bivenosa* 2 sites <5 %; G. robinsonii 1 site + %; T. wiseana 2 sites 1 - 45 %.	x		y	?	*G. wickhamii ssp. hispidula, Indigofera monophylla, Jasminum didymum ssp. lineare*
					I5l	*Corymbia hamersleyana* low open woodland over *Gossypium robinsonii* high shrubland over *Acacia bivenosa* shrubland over *Triodia wiseana* very open hummock grassland	1 x releve. *C. hamersleyana* 7 % ; *A. arida* 0 % ; *A. bivenosa* 20 % ; *G. robinsonii* 15 % ; *T. wiseana* 3 %.		x	n	n	
		mDr8	Ia9	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis, A. bivenosa, A. ancistrocarpa* open scrub to high open shrubland over *Triodia wiseana* open hummock grassland	I5h	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis, A. atkinsiana* and *A. ancistrocarpa* shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat, 13 x releves, 5 x vegetation descriptions. *Corymbia hamersleyana* 19 sites + - 3 %; *A. ancistrocarpa* 15 sites + - 19 %; *A. atkinsiana* 14 sites + - 20 %; *A. bivenosa* 14 sites + - 11 %; *A. tumida* var. *pilbarensis* 17 sites + - 32 %; *T. wiseana* 18 sites + - 75 %.	x	x	y	y	*A. inaequilatera, G. australe (Burrup form), I. monophylla, S. glutinosa ssp. glutinosa, Sida sp. Pilbara, Tephrosia uniovulata, G. wickhamii ssp. hispidula, J. didymum ssp. lineare, Ptilotus astrolasius var. astrolasius.*
					I5i	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis* open scrub to high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* very open hummock grassland	1 x quadrat, 3 x releves, 13 x vegetation descriptions. *C. hamersleyana* 11 sites + - 5 %; *A. ancistrocarpa* 11 sites + - 35 %; *A. atkinsiana* 3 sites + - 2 %; *A. bivenosa* 12 sites + - 4 %; *A. tumida* var. *pilbarensis* 7 sites 33 - 80; *T. wiseana* 12 sites + - 25 %.	x		y	y	
	Acacias over soft spinifex	mDr12	Ia13	*Acacia pyrifolia* var. *pyrifolia* high shrubland over *Triodia epactia* hummock grassland	I2a	*Acacia pyrifolia* var. *pyrifolia* high shrubland over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland	3 x releves. *A. pyrifolia* var. *pyrifolia* 2 sites + - 20 %; *A. bivenosa* 4 sites + - 8 %; *A. citrinoviridis* 0 %; *G. robinsonii* 2 sites + - 3 %; *T. epactia* 3 sites 28 - 65 %.		x	y	n	*Stylobasium spathulatum, G. robinsonii, G australe, Salsola tragus spp. tragus, A. bivenosa, A. citrinoviridis, Rhynchosia minima var. australe.*
					I2c	*Acacia pyrifolia* var. *pyrifolia, A. citrinoviridis, Gossypium robinsonii* high shrubland over *Triodia epactia* very open hummock grassland	3 x quadrats , 1 x releve , 1 x vegetation descriptions *A. pyrifolia* var. *pyrifolia* 5 sites + - 25 % ; *A. bivenosa* 4 sites + - 8 % ; *A. citrinoviridis* 5 sites + - 12 % ; *G. robinsonii* 5 sites 1 - 15 % ; *T. epactia* 5 sites + - 35 %.		x	y	y	
					MC3	*Acacia citrinoviridis* open scrub over *Acacia pyrifolia* var. *pyrifolia* open shrubland over *Triodia epactia* hummock grassland	1 x releve. *A. pyrifolia* var. *pyrifolia* 2 -5 %; *A. bivenosa* + %; *A. citrinoviridis* 10 - 20 %; *G. robinsonii* 0 %; *T. epactia* + %.	x		n	n	
	Corymbias / Eucalypts over soft spinifex	mDr16	Ia16	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa, Acacia inaequilatera* open heath over *Triodia epactia* open hummock grassland	I3c	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* open heath over *Triodia epactia* open hummock grassland	1 x quadrat, 9 x releves, 13 x vegetation descriptions. *C. hamersleyana* 14 sites + - 15 %; *A. ancistrocarpa* 21 sites + - 40 %; *A. inaequilatera* 15 sites + - 1 %; *T. epactia* 16 sites + - 75 %.		x	y	y	*A. bivenosa, A. synchronicia, A. inaequilatera, C. parviflorus, H. lorea ssp. lorea, S.spathulatum, G. robinsonii, G. australe, Salsola tragus ssp. tragus, T. wiseana, Eremophila longifolia.*
					I5g	*Corymbia hamersleyana* low open woodland over *Acacia inaequilatera* high open shrubland over *A. ancistrocarpa* scattered shrubs over *Triodia epactia* open hummock grassland	2 x releves. *C. hamersleyana* 1 site 4 %; *A. ancistrocarpa* 1 site 1 %; *A. inaequilatera* 2 sites + - 2 %; *T. epactia* 2 sites 20 - 30 %.	x	x	y	n	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
		mDr17	Ia17	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Triodia epactia* open hummock grassland to hummock grassland	I2d	*Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Acacia trachycarpa* scattered shrubs over *Triodia epactia* open hummock grassland over mixed open herbland	2 x quadrats, 2 x releves. *C. hamersleyana* 4 sites, 18 %; *A. ancistrocarpa* 1 site 2 %; *A. pyrifolia* var. *pyrifolia* 4 sites 3 - 8 %; *A. trachycarpa* 2 sites 1 - 3 %; *T. epactia* 3 sites + - 70 %.		x	y	y	*A. ancistrocarpa, I. monophylla, A. bivenosa, G. australe, Grevillea wickhamii ssp. hispidula.*
					I2e	*Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* var. *pyrifolia* high open shrubland over *Triodia epactia* hummock grassland	2 x releves, 1 x vegetation descriptions *C. hamersleyana* 2 sites; 1 %, A. ancistrocarpa 1 site 1 %; *A. pyrifolia* 3 sites 4 %; *A. trachycarpa* 0 % ; *T. epactia* 3 sites 35 - 80 %.		x	y	n	
					mCF1	*Corymbia hamersleyana scattered low trees over Acacia pyrifolia var. pyrifolia and A. ancistrocarpa open shrubland over Triodia epactia hummock grassland*	1 x releve. *C. hamersleyana* + %; *A. ancistrocarpa* + %; *A. pyrifolia* var. *pyrifolia* + %; *A. trachycarpa*; *T. epactia* + %.	x		n	n	
	Acacias over hard and soft spinifex	mDr23	Ia23	*Acacia bivenosa* and *A. synchronicia* open heath over *Triodia epactia* and *T. wiseana* very open hummock grassland over very open mixed grasses	I4a	*Acacia bivenosa* and *A. synchronicia* open heath over *Triodia epactia* and *T. wiseana* very open hummock grassland over very open mixed grasses	2 x quadrats, 2 x releves. *C. hamersleyana* 0 %; *A. ancistrocarpa* 2 sites + % ; *A. bivenosa* 4 sites + - 60% *; A. synchronicia* 3 sites 2 %; *T., epactia* 3 sites 1.5 - 18 % ; *T. wiseana* 3 sites <5 %	x		y	y	*Corymbia hamersleyana, A. ancistrocarpa, *Cenchrus ciliaris , A. inaequilatera*
					mCF6	Scattered *Corymbia hamersleyana* over shrubland of *Acacia synchronicia, A bivenosa (A. ancistrocarpa)* over open hummock grassland of *Triodia epactia (T. wiseana)*	1 x releve. *C. hamersleyana* + %; A. *ancistrocarpa* + %; *A. bivenosa* 10 % ; *A. synchronicia* 10 %; *T. epactia* 10 - 20 % ; *T. wiseana* 5 %	x		n	n	
	Corymbias / Eucalypts over hard and soft spinifex	mDr27	Ia26	*Corymbia hamersleyana* scattered to low open woodland over *Acacia ancistrocarpa, A. bivenosa* open shrubland to high shrubland over *Triodia epactia, T. wiseana* closed hummock grassland	I1c	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa, A. bivenosa* high shrubland over *Triodia wiseana, T. epactia* open hummock grassland	1 x quadrat, 3 x vegetation descriptions *A. ancistrocarpa* 4 sites < 20 %, *A. bivenosa* 4 sites < 25 %, *C. hamersleyana* 4 sites <? %, *T. epactia* 4 sites < 15 %; *T. wiseana* 0 sites.		x	y	y	*A. inaequilatera, A. synchronicia, *C. ciliaris, Cleome viscosa. Limited data available.*
					I5d	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa* and *A. bivenosa* open shrubland over *Triodia epactia, T. wiseana* closed hummock grassland	4 x quadrats. *C. hamersleyana* 4 sites 2 - 6 %; *A. ancistrocarpa* 3 sites 2 - 4 %; *A. bivenosa* 3 sites 2 - 9 %; *T. epactia* 3 sites 1 - 72 %; *T. wiseana* 2 sites 4 - 10 %.		x	y	y	
					mCF7	Scattered *Corymbia hamersleyana* over shrubland of *Acacia ancistrocarpa* (*A. bivenosa* and *A. inaequilatera*) over open hummock grassland of *Triodia epactia (T. wiseana).*	1 x releve, 1 x vegetation descriptions *C. hamersleyana* + %; *A. ancistrocarpa* 15 - 30 %; *A. bivenosa* >5 % ; *T. epactia* 5 - 20 % ; *T. wiseana* + - 10 %	x		y	n	
		mDr29	Ia28	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* and *Gossypium robinsonii* open scrub over *Triodia wiseana, T. epactia* very open hummock grassland	I1f	*Gossypium robinsonii* scattered tall shrubs over *Acacia ancistrocarpa, A. bivenosa* shrubland over *Triodia epactia, T. wiseana* open hummock grassland	3 x releves. *C. hamersleyana* 2 sites < 1 % ; *A. ancistrocarpa* 2 sites 6 - 16 % ; *A. bivenosa* 1 site 15 % ; *A. tumida* var. *pilbarensis* 0 % ; *G. robinsonii* 2 sites < 1 % ; *T. epactia* 2 sites 1 - 17 % ; *T. wiseana* 2 sites 8 - 18 %.		x	y	n	*Cymbopogon ambiguus, G. australe, Scaevola spinescens, S. artemisioides ssp. oligophylla, P. astrolasius var. astrolasius.*
					I5k	*Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis, Gossypium robinsonii* open scrub over *Triodia wiseana, T. epactia* very open hummock grassland	1 x releve. *C. hamersleyana* 1 site + % ; *A. ancistrocarpa* 1 site + % ; *A. bivenosa* 1 site 15 % ; *A. tumida* var. *pilbarensis* 35 % ; *G. robinsonii* 4 % ; *T. epactia* 1 site 12 % ; *T. wiseana* 0 %.		x	n	n	
		mDr31	Ia31	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* scattered to low open woodland over *Acacia bivenosa, A. tumida* var. *pilbarensis* over *Triodia wiseana, T. epactia* open hummock grassland	I3f	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis* high shrubland over *Triodia epactia, T. wiseana* very open hummock grassland	1 x releve, 3 x vegetation descriptions. *E. leucophloia* 2 sites < 8 %; *C. hamersleyana* 3 sites < 12 %; *A. ancistrocarpa* 3 sites + %; *A. atkinsiana* 1 site ? %; *A. bivenosa* 2 sites ? %; *A. tumida* var. *pilbarensis* 3 sites < 40 %; *T. epactia* 2 sites < 50 %; *T. wiseana* 3 sites ? %.		x	y	n	*Themeda triandra, G. robinsonii, G. wickhamii, A. atkinsiana, S. glutinosa.*
					I5o	*Eucalyptus leucophloia* ssp. *leucophloia* and *Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa* and *A. atkinsiana* open shrubland over *Triodia epactia* and *T. wiseana* open hummock grassland	3 x releves. *E. leucophloia* ssp. *leucophloia* 3 sites + - 3 %; *C. hamersleyana* 1 site 1.5 %; *A. ancistrocarpa* 3 sites 1 - 5 %; *A. atkinsiana* 1 site 8 %; *A. bivenosa* 3 sites + %; *A. tumida* var. *pilbarensis* 1 site + 5; *T. epactia* 3 sites 15 - 20 %; *T. wiseana* 3 sites 1 - 18 %.		x	y	n	
					I5p	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* low open woodland over *Acacia bivenosa* open shrubland over *Triodia wiseana, T. epactia* open hummock grassland	1 x releve of 3 sites listed. *E. leucophloia* ssp. *leucophloia* + % ; *C. hamersleyana* + % ; *A. ancistrocarpa* + % ; *A. atkinsiana* + % ; *A. bivenosa* 11 % ; *A. tumida* var. *pilbarensis* 0 %; *T. epactia* 1 % ; *T. wiseana* 24 %.		x	y	n	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
					I6d	*Eucalyptus leucophloia ssp. leucophloia, Corymbia hamersleyana* low open woodland over *Acacia tumida* high open shrubland over *Triodia wiseana* very open hummock grassland	4 x releve. *E. leucophloia* ssp *leucophloia* 2 sites + - 8 %; *C. hamersleyana* 2 sites + %; *A. ancistrocarpa* 0 %; *A. atkinsiana* 0 %; *A. bivenosa* 3 sites + %; *A. tumida* var. *pilbarensis* 3 sites 1 - 16 %; *T. epactia* 0 %; *T. wiseana* 3 sites + - 15 %.		x	y	n	
	Acacias over hard spinifex and tussock grasses	mDr39	Ia41	*Acacia pyrifolia* var. *pyrifolia* high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* hummock grassland and **Cenchrus ciliaris* very open tussock grassland	I2b	*Acacia pyrifolia* var. *pyrifolia* high open shrubland over *A. bivenosa* open shrubland over mixed low open shrubland over *Triodia wiseana* hummock grassland and **Cenchrus ciliaris* very open tussock grassland	1 x quadrat, 2 x vegetation descriptions. *A. pyrifolia* var. *pyrifolia* 3 sites 1 - 6 %; *A. bivenosa* 3 sites 2.5 - 6 %; *A. ancistrocarpa* 2 sites + - 2.5%; *A. synchronicia* 2 sites + - 6 %; *C. ciliaris* 2 sites 6 - 10 %; *T. wiseana* 3 sites 35 - 60 %.	x		y	y	*A. inaequilatera, A. synchronicia, G. australe, I. linifolia, I. monophylla, Rhynchosia minima, Triumfetta clementii*
					AThg1	Tall Shrubland to Open Shrubland dominated by *Acacia pyrifolia* var. *pyrifolia, Acacia bivenosa, Acacia ancistrocarpa* and *Acacia synchronicia* over a Mid Dense Hummock Grassland dominated by *Triodia wiseana* (fine form)	11 quadrats. *A. pyrifolia* var. *pyrifolia* 6 sites 1 - 10 %; *A. bivenosa* 8 sites 1 - 20 %; *A. ancistrocarpa* 6 sites + - 15 %; *A. synchronicia* 8 sites + - 3 %; *C. ciliaris* 5 sites + - 30 %; *T. wiseana* 10 sites 35 - 70 %.	x		y	y	
Major creeklines	Corymbias / Eucalypts over soft spinifex and sedges	CFr8	Aa9	*Eucalyptus camaldulensis* and *E. victrix* woodland to open forest over *Melaleuca linophylla, M. glomerata, Acacia ampliceps* high open shrubland over *Triodia epactia* scattered hummocks and *Cyperus vaginata* scattered sedges	A5f	*Eucalyptus victrix* woodland over *Melaleuca linophylla*, *Melaleuca glomerata* high shrubland over *Triodia epactia* very open hummock grassland over mixed scattered herbs	1 x quadrat, 2 x releves. *E. camaldulensis* 1 site 40 %; *E. victrix* 2 sites 12 - 15 %; *A. ampliceps* 1 site ? %; *M. glomerata* 2 sites 5 %; *M linophylla* 3 sites 5 - 15 % ; *C. vaginata* 2 sites < 1 %; *T. epactia* 2 sites + - 12 %		x	y	y	*Adriana urticoides, A. citrinoviridis , A. pyrifolia var. pyrifolia, * C. ciliaris, G. robinsonii, Ipomoea muelleri, Rhynchosia bungarensis, *Vachellia farnesiana*
					MC2	*Eucalyptus camaldulensis (E. victrix) open forest over Melaleuca argentea, Acacia ampliceps, M. glomerata over Cyperus vaginata scattered sedges.*	2 x quadrats. *E. camaldulensis* 2 sites 20 % ; *E. victrix* 2 sites 5 -10 % ; *A. ampliceps* 2 sites 5 % ; *M. glomerata* 2 sites + %; *M . linophylla* 2 sites + % ; *C. vaginata* 2 sites + %; T. epactia 0 %	x		y	y	
Stony Plains	Acacias over hard spinifex	SPr1	Pa1	A*cacia bivenosa, A. atkinsiana* (*A. ancistrocarpa*) shrubland to high shrubland over *Triodia wiseana* open hummock grassland to hummock grassland.	P1a	*Acacia atkinsiana*, *A. bivenosa* and *A. ancistrocarpa* high shrubland to open shrubland over *Triodia wiseana* open hummock grassland	3 x quadrats, 20 x releves, 5 x vegetation descriptions. *A. ancistrocarpa* 23 sites + - 8 %; *A. atkinsiana* 26 sites + - 25 %; *A. bivenosa* 24 sites + - 15 %; *A. wanyu* 0 sites; *T. wiseana* 28 sites 4 - 95 %.	x	x	y	y	*Acacia synchronicia, Stylobasium spathulatum, P. var. calostachyus, P. astrolasius var. astrolasius, S. glutinosa ssp. glutinosa, Solanum lasiophyllum, T. uniovulata, T. zeylanicum var. zeylanicum.*
					P1b	*Acacia atkinsiana, A. bivenosa, A. wanyu* shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat, 3 x releves for 10 sites listed. *A. ancistrocarpa* 2 sites + - 5 %; *A. atkinsiana* 2 sites + %; *A. bivenosa* 4 sites + - 3 %; *A. wanyu* 6 sites 3 - 8 %; *T. wiseana* 4 sites 7 - 40 %.		x	y	y	
		SPr2	Pa2	*Acacia inaequilatera* scattered tall shrubs over *A. ancistrocarpa* open shrubland over *Triodia wiseana* (*T. epactia*) hummock grassland	P4a	*Acacia inaequilatera* scattered tall shrubs over *Acacia ancistrocarpa* open shrubland over *Triodia wiseana* hummock grassland	2 x releves. *C. hamersleyana* 1 site + %; *A.* ancistrocarpa 2 sites 1 - 5 %; *T. epactia* 1 site + %; T. wiseana 2 sites 20 - 35 %.		x	y	n	*A. bivenosa, A. synchronicia, Corymbia hamersleyana, H. lorea ssp. lorea, S. artemisioides ssp. oligophylla, S. glutinosa ssp. pruinosa*
					P2b	*Acacia ancistrocarpa* high shrubland over *Triodia epactia, Triodia wiseana* open hummock grassland	1 x quadrat; 1 x vegetation descriptions C. *hamersleyana* 1 site + %; A. ancistrocarpa 2 sites + %; *T. wiseana* 2 sites < 70 %; T. epactia 1 site ? %.		x	y	y	
					P4b	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* scattered shrubs over *Triodia wiseana* hummock grassland	2 x releve, 1 x vegetation descriptions *C. hamersleyana* 2 sites + - 4 %; *A. ancistrocarpa* 3 sites + - 2 %; *T. epactia* 0 %; *T. wiseana* 3 sites < 60 %.	x	x	y	n	
					P2d	*Corymbia hamersleyana* scattered low trees over *Acacia ancistrocarpa* shrubland over *Triodia wiseana* and *T. epactia* open hummock grassland	2 x releves, 1 x vegetation descriptions *C. hamersleyana* 2 sites + - 3 %; *A. ancistrocarpa* 3 sites 3 - 45 %; *T. epactia* 2 sites < 3 %; *T. wiseana* 3 sites 5 - 15 %.		x	y	n	
					P2g	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia, A. ancistrocarpa* open shrubland over *Triodia wiseana, T. epactia* open hummock grassland	3 x vegetation descriptions *C. hamersleyana* 2 sites ? %; *A. ancistrocarpa* 2 sites ? %; *T. epactia* 3 sites ? %; *T. wiseana* 1 site ? %.		x	y	n	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
		SPr3	Pa3	*Acacia synchronicia, A. bivenosa* (*A. ancistrocarpa*) open shrubland to shrubland over *Triodia wiseana, T. epactia* open hummock grassland	P3b	*Acacia synchronicia*, *A. bivenosa* (*A. ancistrocarpa*) open shrubland to shrubland over *Triodia wiseana* very open hummock grassland over *Ptilotus calostachyus* var. *calostachyus* very open herbs	1 x quadrat, 8 x releves, 9 x vegetation descriptions. *A. ancistrocarpa* 10 sites + - 32 %; *A. bivenosa* 11 sites + - 12 %; *A. inaequilatera* 3 sites + %; *A. synchronicia* 7 sites 1 - 12 %; *T. wiseana* 12 sites + - 15 %; *T. epactia* 3 sites 1 - 12 %.	x		y	y	*A. inaequilatera, A. pyrifolia var. pyrifolia, Eremophila cuneifolia, P. astrolasius var. astrolasius, P. exaltatus var. exaltatus, S. glutinosa ssp. glutinosa.*
					P2a	*Acacia ancistrocarpa*, *A. bivenosa*, *A. inaequilatera* and *A. synchronicia* open shrubland over *Triodia epactia* and *T. wiseana* open hummock grassland	1 x releve. *A. ancistrocarpa* 1 %; *A. bivenosa* 1 %; *A. inaequilatera* 1 %; *A. synchronicia* 1 %; *T. epactia* 7.5 %; *T. wiseana* 7.5 %	x		n	n	
					P3c	*Acacia synchronicia, Acacia bivenosa* open shrubland over *Triodia wiseana, T. epactia* very open hummock grassland	1 releve of 4 sites listed. *A. ancistrocarpa* 0 % ; *A. bivenosa* 2 % ; *A. inaequilatera* 0 % ; *A. synchronicia* 3 % ; *T. epactia* 0 % ; *T. wiseana* 8 %.		x	y	?	
					SP2	*Acacia synchronicia* (*A. bivenosa, A. inaequilatera*) high open shrubland over *Triodia wiseana, T. epactia* hummock grassland	2 x quadrats, 2 x releves. *A. ancistrocarpa* 4 sites <1 %; *A. bivenosa* 4 sites + - 30 %; *A. inaequilatera* 4 sites + %; *A. synchronicia* 4 sites + - 12 %; *T. epactia* 2 sites < 40 %; *T. wiseana* 4 sites 10 -70 %	x		y	y	
					P3a	*Acacia synchronicia, Eremophila cuneifolia* open shrubland over *Triodia wiseana* open hummock grassland	1 x releve. *A. ancistrocarpa* 0 % ; *A. bivenosa* 0 % ; *A. inaequilatera* 0 % *; A. synchronicia* 1 % ; *T. epactia* 2 % ; *T. wiseana* 20 %.		x	n	n	
	Acacias over hard spinifex	SPr4	Pa5	*Acacia xiphophylla* low open woodland to high open shrubland over *A. bivenosa, A. synchronicia, A. atkinsiana* open shrubland over *Triodia wiseana* open hummock grassland	P5b	*Acacia xiphophylla* low open woodland to high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat, 4 x releve, 2 x vegetation descriptions *A. atkinsiana* 6 sites + - 3 %; *A. bivenosa* 7 sites + - 4 %; *A. synchronicia* 6 sites + %; *A. xiphophylla* 7 sites + - 12 %; *T. wiseana* 7 sites 2 - 33 %.	x		y	y	*Maireana georgei, Ptilotus exaltatus var. exaltatus, Scaevola spinescens (broad form), A. atkinsiana, S. glutinosa ssp. glutinosa.*
					P5c	*Acacia xiphophylla* low open woodland to a high open shrubland over *A. synchronicia* and *A. atkinsiana* open shrubland over *Triodia wiseana* open hummock grassland	1 x releve. *A. atkinsiana* 1 %; *A. bivenosa* + %; *A. synchronicia* + %; *A. xiphophylla* 2 %; *T. wiseana* 15 %.	x		n	n	
	Corymbias/ Eucalypts over hard spinifex	SPr6	Pa7	*Corymbia hamersleyana* scattered low trees over *A. bivenosa, A. ancistrocarpa, A. inaequilatera* over *Triodia wiseana* open hummock grassland to hummock grassland	P2e	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* and *A. pyrifolia* var. *pyrifolia* shrubland over *Triodia wiseana* open hummock grassland	6 x veg descriptions. *C. hamersleyana* 3 sites <3 %; *A. ancistrocarpa* 5 sites + - 20-30 %; *A. bivenosa* 6 sites < 38 %; *A. inaequilatera* 3 sites + - 4 %; A. *pyrifolia* var. *pyrifolia* 5 sites + - 4 %; *T. wiseana* 5 sites 2 - 38 %.	x		y	n	*A. tumida var. pilbarensis, T. uniovulata, G. australe (Burrup form), C. parviflorus, I. monophylla, P. astrolasius var. astrolasius, H. lorea ssp. lorea, S. glutinosa ssp. glutinosa.*
					P2f	*Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	1 x releve, 2 x vegetation descriptions. *C. hamersleyana* 3 sites + %; *A. ancistrocarpa* 1 site + %; *A. bivenosa* 3 sites < 1 %; *A. inaequilatera* 3 sites < 1 %; *A. pyrifolia* var. *pyrifolia* 0 %; *T. wiseana* 3 sites + - 25 %.	x	x	y	n	
	Acacias over soft spinifex	SPr8	Pa9	*Acacia bivenosa, A. synchronicia, A. inaequilatera* shrubland over *Senna* spp. scattered shrubs to low open shrubland over *Triodia epactia* hummock grassland	P6a	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland	2 x vegetation descriptions of 5 sites listed. *A. bivenosa* 2 sites ? %; *A. inaequilatera* 2 sites? %; *A. synchronicia* 2 sites+ %; *T. epactia* 2 sites ? %.		x	y	n	*A. ancistrocarpa, S. artemisioides ssp. oligophylla,*
					SP5	*Acacia synchronicia* (*A. inaequilatera*) high shrubland over *Senna oligophylla* low open shrubland over *Triodia epactia* hummock grassland	2 x quadrats. *A. bivenosa* 1 site + %; *A. inaequilatera* 2 sites + - 20 %; *A. synchronicia* 2 sites15 %; *T. epactia* 1 sites 30 %.	x		y	y	
	Corymbias/ Eucalypts over soft spinifex	SPr10	Pa11	*Corymbia hamersleyana* scattered low trees to low open woodland over *Acacia inaequilatera, A. bivenosa* and *A. ancistrocarpa* high shrubland over *Triodia epactia* hummock grassland	P6c	*Corymbia hamersleyana* low open woodland over *Acacia ancistrocarpa and A. inaequilatera* shrubland over *Triodia epactia* hummock grassland	2 x releves, 2 x vegetation descriptions. *C. hamersleyana* 3 sites 1 - 6 %; *A. ancistrocarpa* 4 sites + - 5 %; *A. bivenosa* 2 sites + - 3 %; *A. inaequilatera* 4 sites 1 - 2 %; *T. epactia* 4 sites 15 - 50 %.		x	y	n	*G. australe (Burrup form), Grevillea pyramidalis ssp. leucophloia, G. wickhamii ssp. hispidula, Cleome viscosa, H. lorea ssp. lorea, Abutilon trudgenii, T. uniovulata, P. astrolasius var. astrolasius, Solanum diversiflorum, Rhynchosia minima var. australis, S. artemisioides ssp. oligophylla, S. glutinosa ssp. pruinosa, Sida aff. Echinocarpa (MET 15350).*
					P6d	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* and *A. ancistrocarpa* high shrubland over *Triodia epactia* hummock grassland	1 x quadrat, 1 x releve of 4 sites listed. *C. hamersleyana* 1 site ? %; *A. ancistrocarpa* 2 sites + - 12 %; *A. bivenosa* 2 sites 1 - 30 %; *A. inaequilatera* 2 sites + %; *T. epactia* 2 sites 40 - 50 %.		x	y	y	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
					P6e	*Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia epactia* open hummock grassland	6 x quadrats, 6 x releves, 15 x vegetation descriptions. C. hamersleyana 21 sites + - 20 %; *A. ancistrocarpa* 16 sites + - 40 %; *A. bivenosa* 14 sites + - 15 %; *A. inaequilatera* 22 sites + - 2 %; *T. epactia* 19 sites + - 85 %.		x	y	y	
	Mixed Acacias over hard and soft spinifex	SPr15	Pa17	*Acacia xiphophylla* low open woodland to high open shrubland over *Acacia bivenosa* open shrubland over *T. wiseana* (*T. epactia*) very open hummock grassland	P5a	*Acacia xiphophylla* low open woodland to high open shrubland over *A. atkinsiana* and *A. ancistrocarpa* open shrubland over *Triodia epactia* and *T. wiseana* very open hummock grassland	2 x releves. *A. xiphophylla* 2 sites 2 - 6 %; *A. ancistrocarpa* 2 sites 1 %, *A. atkinsiana* 2 sites 1 - 4 %; *A. synchronicia* 1 site + %; *T. epactia* 1 site 8 %; *T. wiseana* 2 sites 1 - 35 %.	x		y	n	A. ancistrocarpa, A. atkinsiana, A. synchronicia, Ptilotus exaltatus var. exaltatus, S. glutinosa ssp. glutinosa.
					P5e	*Acacia xiphophylla* low open woodland to high open shrubland over *Triodia wiseana* and occasionally *T. epactia* very open hummock grassland	1 x quadrat, 11 x releves, 8 x vegetation descriptions. *A. xiphophylla* 18 sites + - 22 %; *A. ancistrocarpa* 8 sites + - 20 %; *A. atkinsiana* 3 sites < 1 %; *A. bivenosa* 14 sites + - 65 %; *A. synchronicia* 13 sites < 1 %; *T. epactia* 5 sites 1 - 35 %; *T. wiseana* 19 sites + - 40 %.	x	x	y	n	
					MATE	Tall Shrubland of *Acacia xiphophylla, Acacia bivenosa* & *Acacia synchronicia* over a Mid Dense Hummock Grassland of *Triodia wiseana* (fine form), *Eriachne* spp. and *Aristida* spp.	3 quadrats. *A, synchronicia* 1 site + - 9 %; *A. xiphophylla* 2 sites 7.5 -10%; *A. ancistrocarpa* 1 site 20 %: *A. atkinsiana* 0 %; *A. bivenosa* 2 sites < 4 %; *T. epactia* 0 %; *T. wiseana* 3 sites 50 - 70 %.	x		y	y	
					S14d	*Acacia xiphophylla* scattered tall shrubs over *Acacia bivenosa* scattered shrubs over *Triodia wiseana, T. epactia* open hummock grassland	5 x releves, 5 x vegetation descriptions. *A. xiphophylla* 4 sites < 1 %; *A. ancistrocarpa* 1 site ? % ; *A. atkinsiana* 2 sites < 8 % ; *A. bivenosa* 10 sites + - 3 % ; *A. synchronicia* 3 sites + % ; *T. epactia* 7 sites + - 25 % ; *T. wiseana* 5 sites < 4%		x	y	n	
	Acacias over hard spinifex	SPr16	Pa18	*Acacia xiphophylla* low open woodland to high open shrubland over *A. synchronicia* scattered shrubs *Triodia wiseana* very open hummock grassland	P5d	*Acacia xiphophylla* low open woodland to high open shrubland over *Triodia wiseana* very open hummock grassland	2 quadrats, 4 releves, 2 vegetation descriptions of 26 sites listed. *A. xiphophylla* 6 sites 2 - 30 %; *A. synchronicia* 4 sites + %; *T. epactia* 3 sites + %; *T. wiseana* 8 sites <2 - 60 %.	x	x	y	y	*A. bivenosa, Eremophila cuneifolia, Marieana georgei, M. tomentosa, Sarcostemma viminale.*
					SP1	*Acacia xiphophylla* (*A. synchronicia*) high shrubland to open scrub over *Triodia wiseana* hummock grassland	2 quadrats. *A. xiphophylla* 2 sites 15 - 30 %; A. *synchronicia* 2 sites 2 - 10 %; *T. wiseana* 2 sites 30 %.	x		y	y	
Stony Hills and Breakaways	Acacias over hard spinifex	HBr1	Sa1	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over mixed species scattered shrubs to open shrubland over *Triodia wiseana* open hummock grassland to hummock grassland	S8a	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over *Dodonaea coriacea* open shrubland over *Triodia wiseana* hummock grassland	1 x releve, 1 x vegetation descriptions *A. aneura* 2 sites < 20 %; *D. coriacea* 1 site 9 %, *E. latrobei* 0 %, *T. wiseana* 1 site 35 %		x	y	n	*Eremophila latrobei, Ptilotus exaltatus var. exaltatus, S. glutinosa ssp. glutinosa.*
					S8b	*Acacia aneura* (narrow, fine veined, Site 1259) low woodland over *Eremophila latrobei* ssp. *latrobei* scattered shrubs over *Triodia wiseana* open hummock grassland	1 x releve, 2 x vegetation descriptions. *A. aneura* 3 sites 20 %; *D. coriacea* 0 %; *E. latrobei* 1 site 1 % ; *T. wiseana* 0 %		x	y	n	
		HBr3	Sa3	*Acacia ancistrocarpa* open shrubland over *Triodia wiseana* open hummock grassland	S7b	*Acacia ancistrocarpa* open shrubland over *Triodia wiseana* open hummock grassland	1 quadrat, 11 vegetation descriptions. *A. ancistrocarpa* 12 sites + - 25 %. *D. candicans* 0 sites, *T. wiseana* 11 sites + - 40 %.	x		y	y	Acacia pyrifolia var. pyrifolia, A. inaequilatera, A. bivenosa, S. glutinosa ssp. glutinosa, Sida pilbarensis (ferruginous form), T. uniovulata.
					S9a	*Acacia ancistrocarpa* open shrubland over *Dampiera candicans* low shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat. *A. ancistrocarpa* 1 %; *D. candicans* 32 %; *T. wiseana* 20 %.		x	n	y	
		HBr4	Sa4	*Acacia arida* open heath over *Triodia wiseana* open hummock grassland to hummock grassland	S2a	*Acacia arida, A. bivenosa* and *A. pyrifolia* var. *pyrifolia* open heath over *Triodia wiseana* hummock grassland	1 x vegetation descriptions *A. arida* 20 %. *A. bivenosa* 20 %; *A. pyrifolia* var. *pyrifolia* 3 %; *A. trachycarpa* 0 %; *T. wiseana* 32 %.	x		n	n	*Acacia pyrifolia var. pyrifolia, A. tumida var. pilbarensis, S. glutinosa ssp. glutinosa, Sida pilbarensis (ferruginous form), T. uniovulata, P. exaltatus var. exaltatus, G. australe (Burrup form), Solanum lasiophyllum, Petalostylis labicheoides, Dampiera candicans, S. artemisioides ssp. oligophylla, Tribulus*
					S4b	*Acacia arida* shrubland over *Triodia wiseana* open hummock grassland	13 x quadrats, 8 x releves, 6 x vegetation descriptions. *A. arida* 24 sites + - 40 %; *A. bivenosa* 14 sites + - 12 %; *A. pyrifolia* var. *pyrifolia*; *T. wiseana* 27 sites + - 60 %.		x	y	y	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
					S4a	*Acacia arida, A. bivenosa* and *A. trachycarpa* shrubland over *Triodia wiseana* open hummock grassland	1 x releve, 2 x vegetation descriptions. *A. arida* 3 sites 1 - 6 %; *A. bivenosa* 2 sites + - 6 %; *A. pyrifolia* var. *pyrifolia* 0 %; *T. wiseana* 3 sites 9 - 35 %.	x		y	n	*suberosus, Triumfetta clementii.*
					SH2	*Acacia arida shrubland over Triodia wiseana hummock grassland*	3 x quadrats. *A. arida* 3 sites 2 - 30 %; *A. bivenosa* 2 sites + %; *A. pyrifolia* var. *pyrifolia* 0 %; *T. wiseana* 3 sites 30 - 80 %.	x		y	y	
		HBr6	Sa7	*Acacia inaequilatera* scattered tall shrubs to tall open shrubland over *Triodia wiseana* hummock grassland	S7i	*Acacia inaequilatera* scattered tall shrubs over *Triodia wiseana* open hummock grassland	3 x quadrat; 15 x releves, 25 x vegetation descriptions assessed of 66 listed sites. *A. inaequilatera* 43 sites + - 5 %; *A. bivenosa* 25 sites + - 4 %; *T. epactia* 1 site 11 % ; *T. wiseana* < 75 %	x	x	y	y	*S. glutinosa ssp. glutinosa, A. ancistrocarpa, A. bivenosa, A. synchronicia, Ptilotus calostachyus var. calostachyus, P. astrolasius var. astrolasius, S. glutinosa ssp. pruinosa, S. artemisioides ssp. oligophylla, T. uniovulata, Solanum lasiophyllum, H. lorea spp. lorea, T. sp. B. Kimberley Flora, Tribulus suberosus, C. parviflorus.*
					S7h	*Acacia inaequilatera* scattered tall shrubs over *Tephrosia* sp. B Kimberley Flora (C.A. Gardner 7300) open shrubland over *Triodia wiseana* very open hummock grassland	1 x releve, 1 x vegetation descriptions *A. inaequilatera* 2 sites 1 %; *A. bivenosa* 0 %; *T. epactia* 0 % ; *T. wiseana* 2 sites		x	y	n	
					S7e	*Acacia inaequilatera* tall open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* hummock grassland	1 x quadrats, 1 x releve, 1 x vegetation descriptions *A. inaequilatera* 3 sites 1 - 4 %; *A. bivenosa* 2 sites 1 - 6 %; *T. epactia* 0 % ; *T. wiseana* 3 sites 21 - 32 %	x		y	y	
					CAThg2	Tall Open Shrubland of Acacia inaequilatera with scattered Acacia bivenosa over a Mid Dense Hummock Grassland of Triodia wiseana on orange rocky sand.	1 x releve. *A. inaequilatera* 5 %; *A. bivenosa* 1 %; *T. epactia* 0 %; *T. wiseana* 70 %.	x		n	n	
	Acacias over hard spinifex				S7f	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa, A. maitlandii* open shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat, 2 x vegetation descriptions. *A. inaequilatera* 2 sites + -1 %; *A. bivenosa* 3 %; *T. epactia* 0 %; *T. wiseana* 3 sites 40 %.		x	y	y	
					S14b	*Acacia inaequilatera* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia wiseana, T. epactia* hummock grassland	4 x quadrats of 6 sites listed. *A. bivenosa* 4 sites + - 23 %; *A. inaequilatera* 4 sites + - 1 %; *T. epactia* 1 site + %; *T. epactia* 1 site 32 %; *T. wiseana* 4 sites 25 - 62 %.		x	y	y	
		HBr7	Sa45	*Acacia bivenosa* open shrubland over *Triodia wiseana* hummock grassland	S7c	*Acacia bivenosa, Senna* spp. open shrubland over *Triodia wiseana* open hummock grassland	4 x quadrats, 1 x releve, 6 x vegetation descriptions. *A. bivenosa* 9 sites + - 15 %; *T. wiseana* 9 sites < 33 %.		x	y	y	*A. ancistrocarpa, A. inaequilatera, A. synchronicia, P. astrolasius var. astrolasius, P. calostachyus var. calostachyus, H. lorea ssp. lorea, S. artemisioides ssp. oligophylla, S. glutinosa ssp. glutinosa, S. glutinosa ssp. pruinosa, G. australe (Burrup form).*
					S7d	*Acacia bivenosa* open shrubland over *Triodia wiseana* open hummock grassland	2 x quadrats, 35 x releves, 2 x vegetation descriptions of 49 sites listed. *A. bivenosa* 33 sites + - 35 %; *T. wiseana* 36 sites + - 50 %	x	x	y	y	
					SH1	Acacia bivenosa shrubland over Triodia wiseana hummock grassland	1 x quadrat. *A. bivenosa* 20 %; *T. wiseana* 50 %; *T. wiseana* 50 %.	x		n	y	
					S14a	*Acacia bivenosa* scattered shrubs over *Triodia epactia, T. wiseana* open hummock grassland	2 x quadrats, *A. inaequilatera* 0 sites; *A. bivenosa* 2 sites 1 - 2 %; *T. wiseana* 2 sites 1 - 10 %		x	y	y	
		HBr8	Sa8	*Acacia inaequilatera* and *A. synchronicia* scattered shrubs to open shrubland over *Triodia wiseana* open hummock grassland	S6a	*Acacia synchronicia* open shrubland over *Triodia wiseana* very open hummock grassland	1 x quadrat, 2 x releves. *A. inaequilatera* 3 sites + %; *A. synchronicia* 3 sites + - 9 %; *T. wiseana* 3 sites 9 - 28 %.	x	x	y	y	*A. bivenosa, H. lorea ssp. lorea, Sida pilbarensis (ferruginous form), Sida arsiniata, S. artemisioides ssp. oligophylla, P. astrolasius var. astrolasius, Corymbia hamersleyana, I. monophylla.*
					S7g	*Acacia inaequilatera* and *A. synchronicia* scattered shrubs over *Triodia wiseana* open hummock grassland	2 x releve, 2 x vegetation descriptions of 4 sites listed. *A. inaequilatera* 2 sites + - 1 %; *A. synchronicia* 2 sites + - 1 %; *T. wiseana* 2 sites 25 %.		x	y	n	
					AEThg	*Acacia inaequilatera* and *A. synchronicia* scattered shrubs over *Triodia wiseana* open hummock grassland	1 x quadrat. *A. inaequilatera* + %; *A. synchronicia* + %; *T. wiseana* 75 %.	x		n	y	
					SH3	*Acacia synchronicia* scattered tall shrubs over *Triodia wiseana* hummock grassland	3 x quadrats. *A. inaequilatera* 1 site + %; *A. synchronicia* 3 sites < 2 %; *T. wiseana* 3 sites 30 - 70 %.	x		y	y	
		HBr9	Sa10	*Acacia pruinocarpa* high open shrubland over *A. bivenosa, A. ancistrocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland	S3a	*Acacia inaequilatera, A. pruinocarpa* high open shrubland over *Triodia wiseana* open hummock grassland	1 x releve, 2 x vegetation descriptions *A. inaequilatera* 3 sites <3 %, A. *bivenosa* 2 sites 1 %, *A. pruinocarpa* 2 sites + %, *T. wiseana* 3 < sites 32 %.		x	y	n	*Ptilotus exaltatus var. exaltatus, Tribulus suberosus, S. glutinosa ssp. glutinosa, J. didymum ssp. lineare, T. zeylanicum var. zeylanicum, Solanum horridum, Triodia sp.*

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
					S3c	*Acacia pruinocarpa* high open shrubland over *A. bivenosa* scattered shrubs over *Triodia wiseana* very open hummock grassland	2 x quadrats, 2 x releves, 4 x vegetation descriptions. *A. bivenosa* 6 sites 1 - 7 %; A. *inaequilatera* 3 sites + - 3 5; *A. pruinocarpa* 6 sites 1 - 15 %; *T. wiseana* 7 sites < 15 %.		x	y	y	*Robe River, Duppereya commixta.*
					S3f	*Acacia pruinocarpa* high open shrubland over *Triodia wiseana* hummock grassland	3 x quadrats, 1 x vegetation descriptions *A. bivenosa* 4 sites + - 2 %; *A. inaequilatera* 3 sites + - 1 %; *A. pruinocarpa* 3 sites <4 %; *T. wiseana* 4 sites 8 = 50 %.		x	y	y	
					SH12	*Acacia pruinocarpa* high open shrubland over *A. ancistrocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland	2 x releves. *A. bivenosa* 2 sites + %; *A. ancistrocarpa* 2 sites < 10 %; *A. inaequilatera* 0 %; *A. pruinocarpa* 2 sites < 10 %; *T. wiseana* 55 %.	x		y	n	
	Acacias over hard spinifex	HBr10	Sa48	*Acacia pruinocarpa* and *A. inaequilatera* high open shrubland over *Eremophila fraseri* ssp. *fraseri* low open shrubland over *Triodia wiseana* open hummock grassland	SH11	*Eremophila fraseri* and *Acacia bivenosa* low open shrubland over *Triodia wiseana* hummock grassland	2 x releves. *A. inaequilatera* 0 %; *A. pruinocarpa* 2 sites + %; *E. fraseri* ssp. *fraseri* 2 sites 1 %; *T. wiseana* 2 sites 50 %.	x		y	n	*A. bivenosa , A. synchronicia , H. lorea ssp.lorea , S. glutinosa ssp. pruinosa , S. artemisioides ssp. oligophylla*
					S14c	*Acacia inaequilatera* scattered tall shrubs over *Eremophila fraseri* ssp. *fraseri* scattered shrubs over *Triodia wiseana* and *T. epactia* open hummock grassland	3 x releves, 2 x vegetation descriptions. *A. bivenosa* 4 sites + - 1 %; *A. inaequilatera* 4 sites + - 2 %; *A. pruinocarpa* 0 sites; *E. fraseri* ssp. *fraseri* 4 sites + - 5 %; *T. wiseana* 15 - 25 %.		x	y	n	
					S3d	*Acacia pruinocarpa* and *A. inaequilatera* high open shrubland over *Eremophila fraseri* ssp. *fraseri* low open shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat. *A. bivenosa* + % ; *A. inaequilatera* 3 %; *A. pruinocarpa* 1 % ; *E. fraseri* ssp. fraseri 5 % ; *T. wiseana* 20 %		x	n	y	
					S7m	*Eremophila fraseri* ssp. *fraseri* open shrubland over *Tephrosia* sp. B Kimberley Flora scattered low shrubs over *Triodia wiseana* open hummock grassland	1 x releve, 1 x vegetation descriptions *A. bivenosa* 1 site + % ; *A. inaequilatera* 1 site + % ; *A. pruinocarpa* 0 % ; *E. fraseri* ssp. *fraseri* 2 site <3 %; *T. wiseana* 2 sites 12 %	x		y	n	
		HBr11	Sa11	*Acacia pruinocarpa* high open shrubland over *A. arida* open shrubland over *Triodia wiseana* open hummock grassland	S3b	*Acacia pruinocarpa, A. arida* high shrubland over *Triodia wiseana* open hummock grassland	2 x quadrats; 2 x vegetation descriptions. *A. arida* 3 sites 3 - 15 %; *A. pruinocarpa* 3 sites 8 - 10 %; *G. wickhamii* ssp. *hispidula* 0 sites; *T. wiseana* 3 sites 15 - 32 %.		x	y	y	*A. bivenosa, A. ancistrocarpa, A. arida, A. inaequilatera, H. lorea ssp. lorea, Solanum sturtianum, Ptilotus exaltatus var. exaltatus.*
					S3e	*Acacia pruinocarpa, Grevillea wickhamii* ssp. *hispidula* high open shrubland over *A. arida* open shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat, 3 x releves. *A. arida* 2 sites < 3 %; *A. pruinocarpa* 2 sites 1 %; *G. wickhamii* ssp. *hispidula* 1 site %; *T. wiseana* 3 sites ? %.		x	y	y	
					SH14	*Acacia pruinocarpa* scattered tall shrubs to tall open shrubland over *Acacia arida* scattered shrubs over *Triodia wiseana* hummock grassland	1 x releve. *A. arida* + %; *A. pruinocarpa* 2 %; *G. wickhamii* ssp. *hispidula* 0 %; *T. wiseana* 70 %.	x		n	n	
	Mixed shrubs over hard spinifex	HBr13	Sa15	*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* scattered tall shrubs to tall open shrubland over *Triodia wiseana* very open hummock grassland	S1c	*Grevillea wickhamii* ssp. *hispidula* scattered tall shrubs over *Acacia bivenosa, A. atkinsiana* shrubland over *Triodia wiseana* open hummock grassland	1 x quadrat, 1 x vegetation descriptions *A. atkinsiana* 2 sites < 20 %; *A. bivenosa* 2 sites < 25 %; *A tumida* var. *pilbarensis* 0 %; *G. wickhamii* ssp. *hispidula* 1 site + %; *T. wiseana* 2 sites <38 %.		x	y	y	*A. ancistrocarpa, A. arida, A. pruinocarpa, Petalostylis labicheoides, T. uniovulata, Streptoglossa bubakii, T. epactia.*
					S4k	*Acacia tumida* var. *pilbarensis, Grevillea wickhamii* ssp. *hispidula* tall shrubland over *Triodia wiseana* very open hummock grassland	1 x quadrat, 1 x releve, 2 x vegetation descriptions. *A. atkinsiana* 0 %; *A. bivenosa* 0 %; *G. wickhamii* ssp. *hispidula* 3 sites < 3 %; *A. tumida* var. *pilbarensis* 4 sites < 40 %; *T. wiseana* 3 sites < 15 %.		x	y	y	
					S4m	*Grevillea wickhamii* ssp. *hispidula* tall open shrubland over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* very open hummock grassland	1 x quadrat, 1 x vegetation descriptions A. *atkinsiana* 0 %; *A. bivenosa* + %; *A. tumida* var. *pilbarensis* 0 sites; *G. wickhamii* ssp. *hispidula* 4 %; *T. wiseana* 27 %.		x	y	y	
					S4j	*Acacia tumida* var. *pilbarensis* scattered tall shrubs over *A. bivenosa* and *Senna glutinosa* ssp. *pruinosa* open shrubland over *Triodia wiseana* very open hummock grassland and *Ptilotus calostachyus* var. *calostachyus* very open herbland	1 x releve. *A. atkinsiana* 0 %; *A. bivenosa* 3 %; *A. tumida* var. *pilbarensis* 1 %; *G. wickhamii* ssp. *hispidula* + %; *T. wiseana* 8 %.	x	x	n	n	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
	Corymbias/ Eucalypts over hard spinifex	HBr17	Sa19	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	S7j	*Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	1 x quadrat, 3 x releves. *A.* bivenosa 4 sites + - 2 %; *C. hamersleyana* 4 sites + - 4 %; *T. wiseana* 4 sites 12 - 35 %.	x		y	y	*A. inaequilatera, A. synchronicia, S. glutinosa ssp. glutinosa, S. artemisioides ssp. oligophylla, P. astrolasius var. astrolasius, G. australe (Burrup form).*
					CAT	Low Open Woodland of *Corymbia hamersleyana* over a Shrubland of *Acacia trudgeniana* and *Acacia bivenosa* over a Closed Tussock Grassland of *Triodia wiseana* (fine form)	1 x quadrat. *A. bivenosa* 8 % ; *C. hamersleyana* 6 %; *T. wiseana* 70 %	x		n	y	
	Corymbias/ Eucalypts over hard spinifex	HBr20	Sa23	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia bivenosa* scattered shrubs to shrubland over *Triodia wiseana* open hummock grassland to hummock grassland	S11k	*Eucalyptus leucophloia* ssp. *leucophloia, Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	5 x releves, 3 x vegetation descriptions. *E. leucophloia* ssp. *leucophloia* 5 sites + % C. *hamersleyana* 4 sites + %; *A. ancistrocarpa* 2 sites + %; *A. bivenosa* 6 sites < 9 %; *A. arida* 0 sites; *A. synchronicia* 1 site + %; *T wiseana* 6 sites 2 - 35 %.		x	y	n	*Acacia inaequilatera, A. ancistrocarpa, A. synchronicia, S. glutinosa ssp. glutinosa, Cymbopogon ambiguus, I. monophylla, P. astrolasius var. astrolasius, Terminalia canescens, Triodia sp. Robe River.*
					S11a	*Eucalyptus leucophloia* spp. *leucophloia* low open woodland over *Acacia ancistrocarpa, A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland	6 x releves, 3 x vegetation descriptions. *E. leucophloia* ssp. *leucophloia* 6 sites + - 15 %; *A. ancistrocarpa* 8 sites + - 18 %; *A. arida* 1 site? %; A. bivenosa 4 sites + - 6 %; *A. synchronicia* 1 sites + %; *T. wiseana* 7 sites 15 - 35 %.		x	y	n	
					S11c	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia arida, A. bivenosa* shrubland over *Triodia wiseana* open hummock grassland	2 x quadrats, 2 x releves, 1 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 5 sites 2 - 12 %; *A. ancistrocarpa* 4 sites + %; *A. arida* 5 sites 4 - 28 %; *A. bivenosa* 4 sites + %; *A. synchronicia* 0 %; *T. wiseana* 5 sites < 32 %.		x	y	y	
					S11d	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland to low woodland over *Acacia bivenosa* and *A. synchronicia* open shrubland over *Triodia wiseana* open hummock grassland	2 x quadrats, 1 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 3 sites 1 - 25 %; *A. ancistrocarpa* 1 site + % site ; *A. arida* 0 sites ; *A. bivenosa* 3 sites 2 - 4 %; *A. synchronicia* 1 site 1 - 5 %; *T. wiseana* 3 sites 35 - 40 %.		x	y	y	
					S11e	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland	2x quadrat, 4 x releve, 4 x vegetation descriptions. *E. leucophloia* ssp. *leucophloia* 9 sites + - 6 %; *A. ancistrocarpa* 3 sites + - 1 %; *A. arida* 0 sites; *A. bivenosa* 6 sites + - 1 %; *A. synchronicia* 4 sites + %; *T. wiseana* 10 sites + - 40 %.		x	y	y	
					SH8	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Senna glutinosa* ssp. *glutinosa* scattered shrubs over *Triodia wiseana* hummock grassland	1 x releve. *E. leucophloia* ssp. *leucophloia* 1 %; *A. ancistrocarpa* + %; *A. bivenosa* 0 %; *A. arida* + %; *A. synchronicia* 0 %; *T. wiseana* 60 %.	x		n	n	
					S11m	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Triodia wiseana* hummock grassland	1 x quadrat. *E. leucophloia* ssp. *leucophloia* 2 %; *A. ancistrocarpa* + %; *A. arida* 0 %; *A. bivenosa* + %; *A. synchronicia* 0 %; *T. wiseana* 60 %.		x	n	y	
		HBr21	Sa58	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia ptychophylla* low open shrubland over *Triodia wiseana* hummock grassland	S11g	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia ptychophylla* low open shrubland over *Triodia wiseana* hummock grassland	1 x releve, 2 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 2 sites + -1 % ; *A. ptychophylla*, *T. wiseana* 3 sites + - 36%		x	y	n	*A. ancistrocarpa, A. maitlandii*
					SH9	*Eucalyptus leucophloia* ssp. l*eucophloia* scattered low trees over *Acacia ptychophylla* low shrubland over *Triodia wiseana* hummock grassland.	1 x releve. *E. leucophloia* ssp. *leucophloia* 1 % ; *A. ptychophylla* 20 % ;*T. wiseana* 50 %	x		n	n	
		HBr23	Sa25	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis, A. pruinocarpa* tall shrubland over *Triodia wiseana* open hummock grassland	S11f	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis* tall shrubland over *Triodia wiseana* open hummock grassland	5 x quadrats, 3 x releves, 2 x vegetation descriptions E. *leucophloia* ssp. *leucophloia* 8 sites 2 - 15 %; *A. citrinoviridis* 4 sites + - 6 % ; *A. pruinocarpa* 2 sites 1 - 3 %; *T. wiseana* 10 sites 2 - 35 %.		x	y	y	*A. bivenosa, G. robinsonii, Solanum lasiophyllum, T. uniovulata, Petalostylis labicheoides, S. artemisioides ssp. oligophylla, S. glutinosa ssp. glutinosa, T. zeylanicum var. zeylanicum.*

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
	Corymbias/ Eucalypts over hard spinifex				S4f	*Acacia citrinoviridis, A. pruinocarpa* high shrubland over *Triodia wiseana* very open hummock grassland	2 x quadrats 2 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 0 %; *A. citrinoviridis* 3 sites 3 - 15 %; *A. pruinocarpa* 3 sites + - 15 %; *G. robinsonii* 0 sites; *T. wiseana* 4 sites 4 - 25 %.		x	y	y	
					S4e	*Acacia citrinoviridis* tall open shrubland over *A. bivenosa, Gossypium robinsonii* open shrubland over *Triodia wiseana* very open hummock grassland	2 x vegetation descriptions. *E. leucophloia* ssp. *leucophloia* 2 sites ? %; *A. citrinoviridis* 2 sites? %; *A. pruinocarpa* 1 site? %; *T. wiseana* 1 site? %.		x	y	n	
					SH13	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis* scattered tall shrubs over *Triodia wiseana* open hummock grassland	1 x releve. *E. leucophloia* ssp. leucophloia + %; *A. citrinoviridis* 1 %; *A. pruinocarpa* 0 %; *T. wiseana* 70 %.	x		n	n	
		HBr24	Sa26	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia wiseana* open hummock grassland	S11i	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Acacia arida* scattered shrubs over *Triodia wiseana* open hummock grassland	2 x quadrats, 2 x releve, 1 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 5 sites + - 25 %; *A. arida* 3 sites + %; *A. tumida* var. *pilbarensis* 4 sites + - 65 %; *T. wiseana* 5 sites 10 - 35 %.		x	y	y	*A. bivenosa, A. arida, S. glutinosa ssp. glutinosa, S. notabilis, I. monophylla, T. zeylanicum var. zeylanicum, Petalostylis labicheoides, G. wickhamii.*
					S11j	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia wiseana* open hummock grassland	2 x quadrat, 1 x releve, 1 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 3 sites 1 - 8 %; *A. arida* 1 site + %; *A. tumida* var. *pilbarensis* 3 sites 3 -20 % ; *T. wiseana* 3 sites 12 %		x	y	y	
	Hard spinifex grasslands	HBr25	Sa30	*Triodia wiseana* open hummock grassland	S7n	*Triodia wiseana* open hummock grassland		x	x	n	y	*A. bivenosa , A. inaequilatera ,A. synchronicia , S. glutinosa* ssp. *pruinosa*
					Thg	Mid Dense to Closed Hummock Grasslands of *Triodia* spp.		x		y	y	
					SH15	*Triodia wiseana* hummock grassland		x		n	n	
	Acacias over soft spinifex	HBr27	Sa32	*Acacia bivenosa* and *A. ancistrocarpa* shrubland over *Triodia epactia* open hummock grassland	S4d	*Acacia bivenosa* and *A. ancistrocarpa* shrubland over *Triodia epactia* open hummock grassland	1 x quadrat, 5 x releves, 1 x vegetation descriptions *A. ancistrocarpa* 7 sites 1 - 25 % ; *A. bivenosa* 6 sites 8 - 38 % sites ; *T. epactia* 7 sites 7 - 35 %		x	y	y	*Acacia synchronicia, Eucalyptus leucophloia ssp. leucophloia, G. wickhamii ssp. hispidula, A. tumida var. pilbarensis, Solanum diversiflorum, T. wiseana.*
					S12a	*Acacia bivenosa* shrubland over *Triodia epactia* hummock grassland	1 x releve, 2 x vegetation descriptions *A. ancistrocarpa* 1 site + %; *A. bivenosa* 3 sites + - 18 %; *T. epactia* 3 sites + -40 %.		x	y	n	
	Corymbias / Eucalypts over soft spinifex	HBr31	Sa36	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia citrinoviridis* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	S10e	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis, A. inaequilatera* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland	1 x quadrat, 1 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 2 sites 1 %; *A. citrinoviridis* 2 sites 3 %; *A. inaequilatera* 2 sites 4 %; *T. wiseana* 2 sites 30 %, *T.* sp. Robe River 2 sites 10 %.		x	y	y	*A. inaequilatera, A. pruinocarpa, Solanum phlomoides, P., Cucumis maderaspatanus, S. glutinosa ssp. glutinosa, Eremophila fraseri ssp. fraseri, Gomphrena cunninghamii.*
					S10f	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	4 x vegetation descriptions. *E. leucophloia* ssp. *leucophloia* 4 sites ? %; *A. citrinoviridis* 4 sites ? %; *A. inaequilatera* 0 %; *T. wiseana* 4 sites; *T.* sp. Robe River 5 sites? %.		x	y	n	
					S10g	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia citrinoviridis* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	2 x quadrats. *E. leucophloia* ssp. *leucophloia* 1 site 15 %; *A. citrinoviridis* 2 sites + - 8 %; *A. inaequilatera* 0 %; *T. wiseana* 2 sites 12 - 18 %; *T.* sp. Robe River 2 sites 2 - 8 %.		x	y	y	
	Acacias over hard and soft spinifex	HBr32	Sa37	*Acacia arida* (*A. bivenosa*) open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland	S5a	*Acacia arida* open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland	2 x releves, 1 x vegetation descriptions *A. arida* 3 sites + - 12 %; *A. bivenosa* 1 site + %; *T. sp*. Robe River 2 sites 15 - 22 %; *T. wiseana* 3 sites 15 - 35 %.	x		y	n	*A. inaequilatera , S. glutinosa* ssp. *glutinosa*
					SH7	*Acacia arida* (*A. bivenosa*) shrubland over *Triodia wiseana* (*T.* sp. Robe River) hummock grassland	1 x quadrat. *A. arida* 20 % ; *A. bivenosa* 2 % ; *T. Sp*. Robe River 10 % ; *T. wiseana* 60 %	x		n	y	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
	Acacias over hard and soft spinifex	HBr34	Sa39	*Acacia bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) and *T. wiseana* open hummock grassland to hummock grassland	S5c	*Acacia bivenosa* open shrubland over *Dampiera candicans* low shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* hummock grassland	1 x quadrat. *A. bivenosa* 2 %; *D. candicans* 20 %; *T. sp*. Robe River 18; *T. wiseana* 17 %.		x	n	y	*A. ancistrocarpa, A. inaequilatera, Dodoanaea coriacea, P. astrolasius var. astrolasius, Sida aff. pilbarensis*
					S5d	*Acacia bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	6 quadrats. *A. bivenosa* 6 sites 1+- 20 %; *D. candicans* 0 %; *T. Sp*. Robe River 6 sites 1 - 25 %; *T. wiseana* 6 sites 6 - 40 %.		x	y	y	
		HBr35	Sa40	*Acacia pruinocarpa, A. inaequilatera* (*A. citrinoviridis*) tall open shrubland over *Triodia wiseana, T.* sp Robe River (M.E. Trudgen MET 12,369) hummock grassland	S4i	*Acacia inaequilatera, A. pruinocarpa* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	1 x quadrat, 1 x releve, 1 x vegetation descriptions *A. citrinoviridis* 2 sites + - 1%, *A. inaequilatera* 3 sites 2 %; *A. pruinocarpa* 2 site 2 - 4%; *T. sp*. Robe River 3 site 3 %; *T. wiseana* 3 sites 5 - 8%		x	y	y	*Eremophila fraseri ssp. fraseri, H. lorea* ssp. *lorea, Solanum phlomoides, S. lasiophyllum, Ptilotus calostachyus, S. glutinosa* spp. *pruinosa, Jasminum didymum* ssp. *lineare.*
					S5e	*Acacia citrinoviridis, A. pruinocarpa, A. inaequilatera* tall open shrubland over *Triodia wiseana, T.* sp Robe River (M.E. Trudgen MET 12,369) hummock grassland	1 x quadrat, 4 x vegetation descriptions *A. citrinoviridis* 4 sites + %; *A. inaequilatera* 2 sites? %; *A. pruinocarpa* 5 sites 3 % ; *T. sp*. Robe River 5 sites 1 % ; *T. wiseana* 5 sites 40 %.		x	y	y	
					S5g	*Acacia inaequilatera, A. citrinoviridis* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	1 x quadrat, 1 x releve, 4 x vegetation descriptions. *A. citrinoviridis* 4 sites < 5 %; *A. inaequilatera* 6 sites < 5 %; *A. pruinocarpa* 5 sites < 3 %; *T. sp*. Robe River 4 sites 8 %; *T. wiseana* 5 sites? %.		x	y	y	
		HBr37	Sa42	*Acacia pruinocarpa* scattered tall shrubs to tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland to hummock grassland	S5k	*Acacia pruinocarpa* scattered tall shrubs over *Eremophila fraseri* ssp. *fraseri* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	3 x quadrats, 1 x releve, 3 x vegetation descriptions. *A. pruinocarpa* 6 sites 1 - 2 %; *Eremophila fraseri* ssp. *fraseri* 5 sites 2 %; *T. sp*. Robe River 5 sites 5 %; *T. wiseana* 6 sites 7 - 15 %.		x	y	y	*A. ancistrocarpa, Corchorus laniflorus, G. australe (Burrup form), Eremophila fraseri ssp. fraseri, Grevillea berryana, G. wickhamii, P., Solanum lasiophyllum, S. glutinosa ssp. glutinosa, T. zeylanicum var. zeylanicum.*
					S5j	*Acacia pruinocarpa* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* hummock grassland	3 x quadrat, 2 x releve. *A. pruinocarpa* 5 sites 1 - 8 %; *E. fraseri* ssp. *fraseri* 2 sites + %; *T. sp.* Robe River 4 sites 8 - 35 %; *T. wiseana* 5 sites + -25 %.		x	y	y	
					S5i	*Acacia pruinocarpa* high open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland	1 x quadrat, 1 x vegetation descriptions A. *pruinocarpa* 2 sites 2 -12 % ; *E. fraseri* ssp. *fraseri* 0 % ; *T. wiseana* 2 sites 4 - 35 %		x	y	y	
		HBr39	Sa46	*Acacia bivenosa* and *A. atkinsiana* scattered low shrubs to low open shrubland over *Triodia wiseana, T. epactia* open hummock grassland	S1b	*Acacia bivenosa* and *A. atkinsiana* scattered low shrubs over *Triodia wiseana* and *T. epactia* open hummock grassland	1 x releve, 1 x vegetation descriptions *A. atkinsiana* 2 sites+ % ; *A. bivenosa* + % ; *T. epactia* 2 sites 4 % ; *T. wiseana* 11 %.		x	y	n	*A. synchronicia, H. lorea* ssp. *lorea, S. glutinosa* ssp. *pruinosa, P. calostachyus.*
					S1a	*Acacia bivenosa* and *A. atkinsiana* open shrubland over *Triodia wiseana* open hummock grassland	2 x quadrats, 4 x releves. *A. atkinsiana* 6 sites + - 4 %; *A. bivenosa* 6 sites + - 5 %; *T. epactia* 1 site 4 %; *T. wiseana* 6 sites 11 - 55 %.	x	x	y	y	
		HBr40	Sa47	*Acacia citrinoviridis* tall open shrubland over *A. bivenosa* open shrubland *Triodia wiseana, T. epactia* open hummock grassland	S2b	*Acacia citrinoviridis* scattered tall shrubs over *A. bivenosa* open heath over *Triodia epactia, T. wiseana* open hummock grassland	1 x quadrat. *A. citrinoviridis* 1 %; *A. bivenosa* 55 %; *T. epactia* 13 %; *T. wiseana* 12 %.		x	n	y	*A. bivenosa, G. australe* (Burrup form), *Cleome viscosa, I.* sp. Bungaroo creek, *Cymbopogon ambiguus, Polycarpaea longiflora, S. notabilis, S. glutinosa* ssp *glutinosa, P. astrolasius* var. *astrolasius.*
					S4h	*Acacia citrinoviridis* tall shrubland over *Triodia wiseana, T. epactia* open hummock grassland	1 x quadrat, 1 x releve, 1 x vegetation descriptions *A. citrinoviridis* 2 sites 1 - 45 %; *A. bivenosa* 2 sites + %; *T. epactia* 2 sites 1 - 15 %; *T. wiseana* 2 sites 3 - 40 %.		x	y	y	
	Soft spinifex grasslands	HBr41	Sa50	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S12b	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	1 x releve. *T. sp*. Robe River.		x	n	n	*A. bivenosa, P. calostachyus* var. *calostachyus*
					S12c	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland (recently burnt)	1 x releve. *T. sp*. Robe River 8 %.		x	n	n	
	Mixed shrubs over hard and soft spinifex	HBr43	Sa52	*Petalostylis labicheoides* (*Acacia bivenosa*) open shrubland over *Triodia wiseana* (*T.* sp. Robe River (M.E. Trudgen MET 12,369)) open hummock grassland to hummock grassland	S5h	*Acacia inaequilatera, Petalostylis labicheoides* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* hummock grassland	1 x quadrat, 2 x vegetation descriptions. *A. ancistrocarpa* 1 site ? %; *A. bivenosa* 3 sites? %; *P. labicheoides* 2 sites 1 - 2 %; *T. sp.* Robe River 2 sites < 31 %; *T. wiseana* 3 sites? %.		x	y	y	*A. pruinocarpa, A. tumida, Eucalyptus leucophloia ssp. leucophloia; P. astrolasius var. astrolasius.*
					S4c	*Acacia bivenosa, A. ancistrocarpa, Petalostylis labicheoides* open shrubland over *Triodia wiseana* very open hummock grassland	1 x vegetation descriptions *A. ancistrocarpa*? %; *A. bivenosa*? %; *P. labicheoides*? %; *T. Sp*. Robe River? %; *T. wiseana*? %.		x	n	n	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
	Mixed shrubs over hard and soft spinifex				SH6	Scattered tall shrubs of *Petalostylis labicheoides* over scattered shrubs of *Acacia bivenosa* and *Senna glutinosa* ssp. *pruinosa* over hummock grassland of *Triodia wiseana*	1 x releve. *A. ancistrocarpa* + %; *A. bivenosa* 2 %; *P. labicheoides* + %; *T. wiseana* 70 %; *T. sp*. Robe River 0 %.		x	n	n	
	Corymbias/ Eucalypts over hard and soft spinifex	HBr44	Sa20	*Corymbia hamersleyana* scattered low trees over *Acacia maitlandii* high open shrubland over *Triodia wiseana*, (*T.* sp. Robe River (M.E. Trudgen MET 12,369)) very open hummock grassland	S7k	*Corymbia hamersleyana* scattered low trees over *Acacia maitlandii* scattered shrubs over *Triodia wiseana* open hummock grassland	1 x releve. *A. ancistrocarpa* + %; *A. maitlandii* 1 %; *C. hamersleyana* 1 %; *T. sp.* Robe River + %; *T. wiseana* 15 %.		x	n	n	*Acacia inaequilatera, A. bivenosa, Solanum lasiophyllum, H. lorea ssp. lorea.*
					P2c	*Acacia maitlandii* high open shrubland over *Acacia ancistrocarpa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	1 x releve. *A. ancistrocarpa* 4 %; *A. maitlandii* 3 %; *C. hamersleyana* + %; *T. Sp*. Robe River 2 %; *T. wiseana* 7 %.		x	n	n	
		HBr45	Sa53	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	S10b	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* very open hummock grassland	2 x quadrat. *E. leucophloia* sp. *leucophloia* 2 sites 2 % ; *A. atkinsiana* 1 site 3 % ; *A. bivenosa* 2 sites 3 % ; *T. sp.* Robe River 2 sites7 % ; *T. wiseana* 2 sites 2 -8 %.		x	y	y	*A. atkinsiana, A. synchronicia, P. astrolasius var. astrolasius, S. glutinosa ssp. glutinosa, S. glutinosa ssp. x luerssenii, Sida pilbarensis.*
					S10c	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* very open hummock grassland	3 x quadrats, 1 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 12 sites? %; *A. atkinsiana* 1 sites <4 %; *A. bivenosa* 3 sites < 9; *T. sp*. Robe River 3 sites 7 - 20 %; *T. wiseana* 4 sites + - 5 %.		x	y	y	
					S10d	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	3 x quadrats. *E. leucophloia* ssp. *leucophloia* 3 sites + - 7 %; *A. atkinsiana* 3 sites = %; *A. bivenosa* 3 sites 5 - 15 %; *T. sp*. Robe River 3 sites 15 - 30 %; *T. wiseana* 3 sites 40 - 50 %.		x	y	y	
					S10n	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	5 x quadrats. *E. leucophloia* ssp. *leucophloia* 5 sites 1 - 50 %; *A. atkinsiana* 1 site + %; *A. bivenosa* 4 sites + - 3 %; *T. sp*. Robe River 5 sites 30 - 80 %; *T. wiseana* 5 sites + - 60 %.		x	y	y	
					I5n	*Eucalyptus leucophloia* spp. *leucophloia* low open woodland over *Acacia ancistrocarpa* and *A. bivenosa* open shrubland over *Triodia wiseana* and *T.* sp. Robe River (M.E. Trudgen MET 12,369) hummock grassland	2 x releves. *E. leucophloia* ssp. *leucophloia* *1 site 3 %; *A. atkinsiana* 1 site + %; *A. bivenosa* 2 sites <2 %; *T. sp*. Robe River 2 sites 8 - 23 %; *T. wiseana* 2 sites 25 %.		x	y	n	
		HBr48	Sa56	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia pruinocarpa* scattered tall shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	S10i	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia pruinocarpa* scattered tall shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	6 x quadrats, 1 x releve, 3 x vegetation descriptions. *E. leucophloia* ssp. *leucophloia* 8 x sites < 2 %; *A. pruinocarpa* 10 sites + - 15 %; *T. sp*. Robe River 11 sites 9 - 70 %; *T. wiseana* 11 sites + % - 45 %.		x	y	y	*A. ancistrocarpa, A. bivenosa, P. astrolasius var. astrolasius, S. glutinosa ssp. glutinosa, Cymbopogon ambiguus.*
					S10j	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia pruinocarpa* tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland over *Eriachne mucronata* very open tussock grassland	2 x quadrats, 2 x vegetation descriptions, 1 x releve. *E. leucophloia* ssp. *leucophloia* 5 sites < 12 %; *A. pruinocarpa* 4 sites 10 %; *T. sp*. Robe River 4 sites < 20 %; *T. wiseana* 4 sites < 10 %.		x	y	y	
					S11h	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia pruinocarpa* open shrubland over *Triodia wiseana* open hummock grassland	4 x quadrats, 1 x releve, 6 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 8 sites 1 % ; *A. pruinocarpa* 11 sites + - 9 % ; *T. sp*. Robe River 3 sites + - 1 % ; *T. wiseana* 12 sites 8 - 25 %.		x	y	y	
					S11l	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland *Grevillea wickhamii* ssp. *hispidula, Acacia pruinocarpa* high shrubland over *Triodia wiseana* very open hummock grassland over *Eriachne tenuiculmis* very open tussock grassland	1 x quadrat. *E. leucophloia* ssp. *leucophloia* 3% ; A. *pruinocarpa* 4 %; *T. Sp*. Robe River 0 % *; T. wiseana* 8 %		x	n	y	

Landform	Sub formation	Reconciled Code	2009 Code	Reconciled Description	Associated old code	Associated old descriptions	Rationale	Transport	Mine	Replicates?	Permanent quadrats?	Common species
	Corymbias/ Eucalypts over hard and soft spinifex	HBr49	Sa57	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Petalostylis labicheoides* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	S10l	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Petalostylis labicheoides* tall open shrubland over *Acacia ancistrocarpa* scattered shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* very open hummock grassland	1 x quadrat, 4 x vegetation descriptions *E. leucophloia* ssp. *leucophloia* 4 sites % ; *A. ancistrocarpa* 3 sites+ % ; *Petalostylis labicheoides* 4 sites 8 % ; *T. sp*. Robe River 3 sites 9 % ; *T. wiseana* 4 sites 11 %.		x	y	y	*A. atkinsiana, A. bivenosa, G. australe.*
					S10m	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Petalostylis labicheoides* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	3 x quadrats. *E. leucophloia* ssp. *leucophloia* 3 sites + - 25 %; *A. ancistrocarpa* 0 %; *Petalostylis labicheoides* 3 sites + - 15 %; *T. sp*. Robe River 3 sites + - 25 %; *T. wiseana* 3 sites 6 - 45 %.		x	y	y	
Clay Plains	Acacias over soft spinifex	CPr2	Ca2	*Acacia inaequilatera* scattered tall shrubs to tall open shrubland over *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland to hummock grassland	C2b	*Acacia inaequilatera* scattered tall shrubs over *A. ancistrocarpa* and *Ptilotus astrolasius* var. *astrolasius* low open shrubland over *Triodia epactia* very open hummock grassland	2 x releves. *A. ancistrocarpa* 2 sites 2 %; *A. inaequilatera* 2 sites + - 1 %; *T. epactia* 2 sites 8 %.	x	x	y	n	*H. lorea ssp. lorea, P. astrolasius var. astrolasius, Eremophila longifolia, Grevillea pyrimidalis, C. parviflorus, G. australe (Burrup form), Tephrosia rosea var. glabrior, J. didymum ssp. lineare.*
					C2c	*Acacia inaequilatera* tall open shrubland over *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland	1 x quadrat, 4 x releves. *A. ancistrocarpa* 4 sites + - 5 %; *A. inaequilatera* 4 sites 1 - 5 %; *T. epactia* 5 sites 3 - 45 %.	x		y	y	
					C7a	*Acacia inaequilatera* tall open shrubland over *Triodia epactia* hummock grassland	3 x quadrats, 8 x releves, 3 x vegetation descriptions. *A. ancistrocarpa* 7 sites + - 7 %; *A. inaequilatera* 12 sites + - 8 %; *T. epactia* 12 sites 9 - 80 %.	x	x	y	y	
		CPr4	Ca4	*Acacia synchronicia* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland	C4a	*Acacia synchronicia* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia epactia* hummock grassland	2 x releves. *A. synchronicia* 2 sites 1 - 2 %; *A. bivenosa* 2 sites 1.5 - 3 %; *T. epactia* 2 sites 18 - 45 %.		x	y	n	*A. inaequilatera, S. artemisioides ssp. oligophylla, Maireana melanocoma, H. lorea ssp. lorea, Sporobolus australasicus.*
					C3a	*Acacia synchronicia* open shrubland over *Triodia epactia* open hummock grassland	3 x quadrats, 1 x vegetation descriptions *A. synchronicia* 3 sites 1 - 25 %; *A. bivenosa* 3 sites + %; *T. epactia* 3 sites 17 - 40 %.		x	y	y	
		CPr5	Ca5	*Acacia synchronicia, A. xiphophylla* tall shrubland over *Triodia epactia* open hummock grassland	C6a	*Acacia synchronicia, A. xiphophylla* tall shrubland over *Triodia epactia* open hummock grassland	5 x releves. 1 x vegetation description. *A. xiphophylla* 5 sites + - 25 %; *A. synchronicia* 5 sites + - 18 %; *T. epactia* 6 sites + - 25 %.		x	y	n	*A. bivenosa, S. artemisioides* ssp. *oligophylla.*
					CP2	*Acacia xiphophylla* (*A. synchronicia*) high shrubland over *Triodia epactia* open hummock grassland	1 x releve. *A. xiphophylla* 20 %; *A. synchronicia* + %; *T. epactia* 1 %.	x		n	n	
		CPr7	Ca7	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia* and *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland to hummock grassland	C3b	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia* and *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland	1 x quadrat, 1 x releve. *C. hamersleyana* 1 site <2 %; *A. ancistrocarpa* 2 sites - 12 %; *A. synchronicia* 2 sites 1 - 12 %; *A. xiphophylla* 0 %; *T. epactia* 2 sites 12 - 28 %.		x	y	y	*A. inaequilatera, A. bivenosa, A. xiphophylla, G. australe (Burrup form), I. monophylla, S. artemisioides ssp. oligophylla, H. lorea ssp. lorea.*
					C6c	*Corymbia hamersleyana* scattered low trees over *Acacia synchronicia, A. ancistrocarpa* and *A. xiphophylla* tall open shrubland to open shrubland over *Triodia epactia* hummock grassland	4 x releves, 2 x vegetation descriptions. *C. hamersleyana* 4 sites + %; *A. ancistrocarpa* 5 sites + - 6 %; *A. synchronicia* 5 sites + - 5 %; *A. xiphophylla* 3 sites = - 8 %; *T. epactia* 5 sites 9 - 55 %.		x	y	n	
	Tussock grassland	CPr12	Ca12	*Eragrostis xerophila*, *Dichanthium sericeum* ssp. *humilius* and *Xerochloa imberbis* mixed closed grassland over mixed very open herbland	C5a	*Eragrostis xerophila*, *Dichanthium sericeum* ssp. *humilius* and *Xerochloa imberbis* mixed closed grassland over mixed very open herbland	1 x quadrat. *E. xerophila* < 3 % ; *D. sericeum* 40 % ; X. *imberbis* 0 %	x		n	y	*Brachyacne convergens, Euphorbia convergens, Heliotropium conocarpum, Iseilema macratherum, Panicum laevinode.*
					Hf	Horseflats of *Eragrostis* spp., *Eriachne* spp. and *Dichanthium* spp.	9 x quadrats. *E. xerophila* 9 sites 15 - 50 %; *D. sericeum* ssp. *humilius* 7 sites + 15 %; *X. imberbis* 2 sites 2 - 5 %.	x		y	y	
	Acacias over hard spinifex and tussock grasses	CPr13	Ca13	*Acacia xiphophylla* open shrubland over *Triodia wiseana* open hummock grassland over *Eragrostis xerophila* open tussock grassland	C6b	*Acacia xiphophylla* open shrubland over *Triodia wiseana* open hummock grassland over *Eragrostis xerophila* open tussock grassland	1 x quadrat. 2 x vegetation descriptions. *A. xiphophylla* < 22 %; *E. xerophila*, 1 site 6 %; *T. wiseana* 1 site 55 %.	x		y	y	*Crotalaria dissitifolia ssp. benthamiana, Dactyloctenium radulans, Enneapogon caerulescens* ssp. *caerulescens, Ptilotus carinatus.*
					AxE	Shrubland to Low Open Shrubland of *Acacia xiphophylla* over Tussock Grassland dominated by *Eriachne* spp., *Eragrostis* spp. and *Xerochloa* spp. over Hummock Grassland of *Triodia wiseana* (fine form)	5 x quadrats. *A. xiphophylla* 5 sites 2 - 20 %; *E. xerophila* 5 sites + - 11 %; *T. wiseana* 4 sites 1 - 6%.	x		y	y	

Appendix D:
Reconciled Species List
(by transport corridor and mine areas)

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Table D.1 API West Pilbara Iron Ore Project Rail and Transport Corridor Species List

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
7	Adiantaceae			*Cheilanthes austrotenuifolia*		x	
				Cheilanthes sieberi subsp. sieberi			x
13	Marsileaceae			*Marsilea exarata*		x	
				Marsilea drummondii		x	
				Marsilea hirsuta	x	x	
				Marsilea sp. 1 (Inadequate material)		x	
				Marsilea sp. 2 (Inadequate material)		x	
20	Typhaceae			*Typha domingensis*		x	
31	Poaceae			*Aristida contorta*	x	x	x
				Aristida burbidgeae	x		
				Aristida holathera var. *holathera*	x	x	
				Aristida holathera var. *latifolia*		x	
				Aristida hygrometrica	x		
				Aristida latifolia	x		
				Aristida sp. 1 (Inadequate material)	x		
				Aristida sp. 2 (Inadequate material)		x	
				Aristida sp. 3 (Inadequate material)		x	
				Aristida sp. 4 (Inadequate material)	x		
				Astrebla pectinata	x		
				Bothriochloa ewartiana	x		
				Brachyachne convergens	x		x
				Brachyachne prostrata	x	x	x
			*	*Cenchrus ciliaris*	x	x	x
			*	*Cenchrus setiger*		x	
				Chloris pectinata	x	x	
				Chrysopogon fallax	x	x	
				Cymbopogon ambiguus	x	x	x
				Cymbopogon obtectus		x	x
				Cymbopogon procerus	x	x	
				Cymbopogon sp. 1 (Inadequate material)		x	
				Cymbopogon sp. 2 (Inadequate material)		x	
			*	*Cynodon dactylon*		x	
				Dactyloctenium radulans	x	x	x

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Dichanthium sericeum			x
				Dichanthium sericeum subsp. *humilius*	x	x	
				Digitaria brownii		x	
				Digitaria ctenantha	x	x	x
			*	*Echinochloa colona*		x	
				Enneapogon caerulescens	x		x
				Enneapogon caerulescens var. *caerulescens*	x	x	
				Enneapogon lindleyanus		x	
				Enneapogon polyphyllus	x	x	x
				Enneapogon sp.		x	x
				Enteropogon ramosus	x		x
				Eragrostis aff. *eriopoda* (WAS site 963)		x	
				Eragrostis aff. *eriopoda*	x		
				Eragrostis cumingii		x	x
				Eragrostis dielsii			x
				Eragrostis exigua		x	
				Eragrostis falcata	x		
				Eragrostis laniflora		x	
				Eragrostis setifolia	x		
				Eragrostis tenellula	x	x	
				Eragrostis xerophila	x	x	x
				Eragrostis sp. (Inadequate material)		x	
				Eriachne aff. *festucacea*		x	
				Eriachne aff. *mucronata*	x		
				Eriachne aristidea	x	x	
				Eriachne benthamii	x	x	
				Eriachne helmsii		x	
				Eriachne mucronata		x	
				Eriachne mucronata (typical form)		x	
				Eriachne obtusa	x	x	
				Eriachne pulchella subsp. *dominii*	x	x	
				Eriachne pulchella subsp. *pulchella*	x	x	x
				Eriachne sp. 1 (inadequate material)		x	
				Eriachne sp. 2 (inadequate material)		x	
				Eriachne tenuiculmis		x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Eriochloa pseudoacrotricha		x	
				Eulalia aurea	x	x	
				Iseilema dolichotrichum	x	x	x
				Iseilema eremaeum	x		x
				Iseilema macratherum	x	x	
				Panicum decompositum	x		
				Panicum laevinode	x	x	
				Paraneurachne muelleri	x	x	
				Paspalidium clementii	x	x	x
				Paspalidium rarum		x	x
				Paspalidium sp. (Inadequate material)			x
				Paspalidium tabulatum	x		
				Paspalidium tabulatum (Whim Creek form)	x	x	
				Perotis rara		x	
				Poaceae sp. (CP19-3, WPI)		x	
				Poaceae sp. 1 (inadequate material)		x	
				Poaceae sp. 2 (inadequate material)		x	
				Schizachyrium fragile	x		
				Setaria dielsii	x	x	x
			*	*Setaria verticillata*		x	x
				Sorghum plumosum		x	
				Sorghum plumosum var. *plumosum*	x		
				Sorghum timorense	x		
				Sporobolus australasicus	x	x	x
				Sporobolus virginicus	x		
				Themeda triandra	x	x	x
				Tragus australianus			x
				Triodia aff. *epactia*	x		
				Triodia aff. *pungens*	x		
				Triodia aff. *wiseana*	x		
				Triodia angusta	x	x	
				Triodia brizoides	x		
				Triodia epactia	x	x	x
				Triodia pungens		x	x
				Triodia schinzii	x		

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Triodia wiseana	x	x	x
				Triodia wiseana (fine form)	x		
				Triodia sp. 1 (inadequate material)		x	
				Triodia sp. 2 (inadequate material)		x	
				Triodia sp. *Robe River* (M.E. Trudgen 12,369)		x	x
				Triraphis mollis		x	
				Urochloa pubigera	x	x	
				Xerochloa barbata	x		
				Xerochloa imberbis	x	x	
				Yakirra australiensis var. *australiensis*	x	x	
32	Cyperaceae			*Bulbostylis barbata*	x	x	x
				Cyperaceae sp. (Inadequate material)		x	
				Cyperus bifax		x	
				Cyperus cunninghamii subsp. *cunninghamii*		x	
				Cyperus difformis	x	x	
				Cyperus hesperius		x	
				Cyperus iria	x	x	
				Cyperus pygmaeus	x		
				Cyperus vaginatus	x	x	x
				Fimbristylis aff. *dichotoma* (M15-4)	x	x	
54G	Asphodelaceae		*	*Asphodelus fistulosus*		x	
54P	Hemerocallidaceae			*Corynotheca pungens*	x		
60	Moraceae			*Ficus aculeata* var. indecora		x	
				Ficus brachypoda		x	x
90	Proteaceae			*Grevillea berryana*		x	x
				Grevillea eriostachya		x	
				Grevillea pyramidalis	x		
				Grevillea pyramidalis subsp. *leucadendron*	x	x	
				Grevillea wickhamii		x	
				Grevillea wickhamii subsp. *hispidula*	x	x	
				Grevillea wickhamii subsp. *macrodonta*		x	
				Hakea lorea subsp. *lorea*	x	x	x
92	Santalaceae			*Santalum lanceolatum*	x		
97	Loranthaceae			*Amyema preissii*		x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Amyema sanguinea var. sanguinea		x	
				Lysiana casuarinae		x	
105	Chenopodiaceae			*Atriplex codonocarpa*	x		x
				Atriplex semilunaris			x
				Dysphania kalpari		x	
				Dysphania melanocarpa forma *leucocarpa*		x	
				Dysphania rhadinostachya subsp. *rhadinostachya*	x	x	
				Enchylaena tomentosa	x		x
				Enchylaena tomentosa var. *tomentosa*	x	x	
				Maireana georgei		x	
				Maireana melanocoma		x	
				Maireana planifolia		x	
				Maireana sp. 1 (inadequate material)		x	
				Maireana sp. 2 (inadequate material)		x	
				Maireana tomentosa subsp. *tomentosa*		x	x
				Maireana trichoptera		x	
				Maireana villosa		x	
				Rhagodia eremaea	x	x	x
				Salsola tragus	x	x	x
				Salsola tragus subsp. *grandiflora*	x		
				Salsola tragus subsp. *tragus*	x	x	
				Sclerolaena bicornis	x		
				Sclerolaena costata	x	x	x
				Sclerolaena cuneata			x
				Sclerolaena densiflora	x	x	x
				Sclerolaena densiflora Form A			x
				Sclerolaena densiflora Form B			x
				Sclerolaena diacantha	x	x	x
				Sclerolaena eriacantha	x	x	
				Sclerolaena glabra	x		
				Sclerolaena lanicuspis			x
				Sclerolaena sp. 1 (inadequate material)		x	
				Sclerolaena sp. 2 (inadequate material)		x	
				Tecticornia sp. (inadequate material)		x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
106	Amaranthaceae		*	*Aerva javanica*	x	x	x
				Alternanthera angustifolia	x		
				Alternanthera nana	x	x	x
				Alternanthera nodiflora	x		x
				Alternanthera sp. (inadequate material)			
				Amaranthus aff. *pallidiflorus* (D89)		x	
				Amaranthus cuspidifolius	x	x	
				Amaranthus mitchellii			x
				Amaranthus sp. (inadequate material)		x	
				Amaranthus undulatus	x	x	
				Gomphrena affinis subsp. *pilbarensis*	x	x	
				Gomphrena canescens			x
				Gomphrena canescens subsp. *canescens*	x		
				Gomphrena cunninghamii	x	x	x
				Gomphrena kanisii			x
				Gomphrena sp. (inadequate material)		x	
				Ptilotus ?exaltatus var. *exaltatus*	x		
				Ptilotus aervoides	x	x	x
				Ptilotus appendiculatus var. *appendiculatus*		x	
				Ptilotus astrolasius var. *astrolasius*	x	x	x
				Ptilotus auriculifolius	x	x	x
				Ptilotus axillaris	x	x	
				Ptilotus calostachyus	x		
				Ptilotus calostachyus var. *calostachyus*	x	x	
				Ptilotus carinatus	x	x	
				Ptilotus clementii	x	x	x
				Ptilotus exaltatus	x		x
				Ptilotus exaltatus var. *exaltatus*	x	x	
				Ptilotus fusiformis	x		
				Ptilotus fusiformis var. *fusiformis*	x	x	
				Ptilotus gaudichaudii var. *gaudichaudii*		x	
				Ptilotus gomphrenoides			x
				Ptilotus gomphrenoides var. *gomphrenoides*	x	x	
				Ptilotus helipteroides	x		x
				Ptilotus helipteroides var. *helipteroides*	x	x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Ptilotus incanus var. *elongatus*		x	
				Ptilotus incanus var. *incanus*	x	x	
				Ptilotus macrocephalus		x	
				Ptilotus murrayi var. *murrayi*	x		
				Ptilotus obovatus			x
				Ptilotus obovatus var. *obovatus*	x	x	
				Ptilotus polystachyus var. *arthrotrichus*	x	x	
				Ptilotus polystachyus var. *polystachyus*	x	x	
				Ptilotus roei		x	
				Ptilotus sp. 1 (inadequate material)		x	
				Ptilotus sp. 2 (inadequate material)		x	
				Ptilotus sp. (WPI, CP50-23)		x	
107	Nyctaginaceae			*Boerhavia burbidgeana*	x	x	
				Boerhavia coccinea	x	x	x
				Boerhavia gardneri	x	x	
				Boerhavia paludosa		x	
				Boerhavia schomburgkiana			x
				Boerhavia sp. (inadequate material)			x
108	Gyrostemonaceae			*Codonocarpus cotinifolius*		x	
110	Aizoaceae			*Trianthema* aff. *triquetra* (M3.35)	x	x	
				Trianthema glossostigma	x	x	
				Trianthema oxycalyptra var. *oxycalyptra*		x	
				Trianthema pilosa		x	
				Trianthema triquetra		x	x
				Trianthema sp. Python Pool	x		
				Trianthema sp. (inadequate material)			x
				Trianthema turgidifolia	x		
				Zaleya galericulata			x
110A	Molluginaceae			*Mollugo molluginea*	x	x	x
111	Portulacaceae			*Calandrinia ptychosperma*		x	
				Portulaca conspicua	x	x	x
				Portulaca intraterranea		x	
			*	*Portulaca oleracea*	x	x	x
				Portulaca pilosa	x		

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Portulaca sp. 1 (inadequate material)		x	
				Portulaca sp. 2 (inadequate material)		x	
113	Caryophyllaceae			*Polycarpaea corymbosa* var. *corymbosa*	x	x	
				Polycarpaea holtzei	x	x	
				Polycarpaea longiflora	x	x	x
				Polycarpaea longiflora (White form, M13-7)		x	
				Polycarpaea longiflora (Whim Creek form WC141-1)	x		
				Polycarpaea longiflora (white form)	x	x	
122	Menispermaceae			*Tinospora smilacina*	x	x	
131	Lauraceae			*Cassytha capillaris*	x	x	
135	Papaveraceae		*	*Argemone ochroleuca* subsp. *ochroleuca*		x	x
137A	Capparaceae			*Capparis spinosa* var. *nummularia*	x	x	x
				Cleome viscosa	x	x	x
138	Brassicaceae			*Lepidium pedicellosum*	x		
				Lepidium pholidogynum	x	x	
				Lepidium platypetalum		x	x
160	Surianaceae			*Stylobasium spathulatum*		x	x
163	Mimosaceae			*Acacia acradenia*	x		
				Acacia ampliceps		x	x
				Acacia ancistrocarpa	x	x	x
				Acacia ancistrocarpa x *stellaticeps*	x		
				Acacia adsurgens	x	x	
				Acacia aneura (narrow, fine veined, site 1259)		x	
				Acacia aneura var. ? *aneura/intermedia*			x
				Acacia aneura var. *intermedia*		x	
				Acacia aneura var. *pilbarana*		x	
				Acacia arida		x	x
				Acacia atkinsiana		x	
				Acacia bivenosa	x	x	x
				Acacia bivenosa (wispy/weeping form)		x	
				Acacia bivenosa x *sclerosperma*		x	
				Acacia citrinoviridis		x	x
				Acacia colei var. *colei*	x	x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Acacia coriacea		x	
				Acacia coriacea subsp. *coriacea*	x	x	
				Acacia coriacea subsp. *pendens*	x	x	x
				Acacia cowleana	x		
				Acacia elachantha		x	x
				Acacia elachantha (golden hairy variant)	x		
				Acacia elachantha (silvery hairy variant)		x	
		*		*Acacia glaucocaesia*	x		
				Acacia gregorii	x		
				Acacia inaequilatera	x	x	x
				Acacia kempeana			x
				Acacia ligulata	x	x	
				Acacia maitlandii	x	x	
				Acacia pruinocarpa		x	x
				Acacia ptychophylla		x	
				Acacia pyrifolia var. *pyrifolia*	x	x	x
				Acacia sabulosa	x		
				Acacia sclerosperma subsp. *sclerosperma*	x	x	
				Acacia sericophylla		x	
				Acacia stellaticeps	x		
				Acacia synchronicia	x	x	x
				Acacia tenuissima	x	x	
				Acacia tetragonophylla			x
				Acacia trachycarpa	x	x	
				Acacia trachycarpa x *tumida* var. *pilbarensis*	x	x	
				Acacia trudgeniana	x		
				Acacia tumida var. *pilbarensis*	x		x
				Acacia victoriae	x		
				Acacia wanyu		x	x
				Acacia xiphophylla	x	x	x
				Acacia sp. 1 (inadequate material)		x	
				Acacia sp. 2 (inadequate material)		x	
				Dichrostachys spicata	x		
				Neptunia dimorphantha	x	x	
			*	*Prosopis pallida*	x		

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
			*	*Vachellia farnesiana*	x	x	x
164	Caesalpiniaceae			*Petalostylis labicheoides*	x	x	x
				Senna artemisioides aff subsp *oligophylla* (thinly sericeous)	x	x	
				Senna artemisioides subsp. aff. *oligophylla* (thinly sericeous)	x		x
				Senna artemisioides subsp. *helmsii*		x	
				Senna artemisioides subsp. *oligophylla*	x	x	x
				Senna artemisioides subsp. *oligophylla* x *glutinosa*		x	
				Senna artemisioides subsp. *oligophylla* x *helmsii*	x	x	x
				Senna artemisioides x *helmsii*			x
				Senna artemisioides x oligophylla			x
				Senna glutinosa			x
				Senna glutinosa subsp. *glutinosa*	x	x	x
				Senna glutinosa subsp. *glutinosa* x *luerssenii*	x	x	
				Senna glutinosa subsp. *glutinosa* x *oligophylla*	x		
				Senna glutinosa subsp. *glutinosa* x *stricta*		x	
				Senna glutinosa subsp. *luerssenii*	x	x	x
				Senna glutinosa subsp. *pruinosa*	x	x	x
				Senna glutinosa subsp. *pruinosa* x *?glutinosa*			x
				Senna glutinosa subsp. *pruinosa* x *glutinosa*	x		
				Senna glutinosa subsp. x *luerssenii*	x	x	x
				Senna hamersleyensis	x		
				Senna notabilis	x	x	x
				Senna oligophylla			x
				Senna sp. Karijini (M.E. Trudgen 10392)	x		
				Senna sp. 1 (inadequate material)		x	
				Senna sp. 2 (inadequate material)		x	
				Senna sp. Port Hedland (SPB 20-09-05B)		x	
				Senna stricta		x	x
				Senna venusta	x	x	
165	Papilionaceae			*Alysicarpus muelleri*	x	x	x
				Cajanus cinereus	x	x	
				Crotalaria cunninghamii		x	
				Crotalaria dissitiflora subsp. *benthamiana*	x		
				Crotalaria medicaginea (Burrup form; B65-11)		x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Crotalaria medicaginea var. *neglecta*	x	x	
				Crotalaria novae-hollandiae subsp. *novae-hollandiae*	x		
				Cullen cinereum	x		
				Cullen graveolens	x		
				Cullen lachnostachys		x	
				Cullen leucanthum	x		x
				Cullen leucochaites	x	x	
				Cullen martinii		x	
				Cullen pogonocarpum		x	
				Desmodium campylocaulon	x		
				Desmodium filiforme	x		
				Desmodium muelleri	x		
				Erythrina vespertilio		x	
				Indigastrum parviflorum	x		
				Indigofera aff. *monophylla*	x		
				Indigofera boviperda subsp. boviperda		x	
				Indigofera colutea	x	x	x
				Indigofera linifolia	x	x	
				Indigofera linnaei	x		
				Indigofera monophylla	x	x	x
				Indigofera monophylla (Burrup form)	x	x	
				Indigofera monophylla (Cape Preston form)	x	x	
				Indigofera monophylla (grey leaflet form)	x	x	x
				Indigofera monophylla (grey/green leaflet form)	x	x	
				Indigofera monophylla (MJOPP-2)	x		
				Indigofera monophylla (OR 89-02)			x
				Indigofera monophylla (small calyx form)		x	
				Indigofera rugosa		x	
				Indigofera sp. 1 (inadequate material)		x	
				Indigofera sp. 2 (inadequate material)		x	
		*		*Indigofera* sp. Bungaroo Creek (S. van Leeuwen 4301) PN		x	x
				Indigofera trita	x		
				Isotropis atropurpurea	x	x	
		*		*Rhynchosia bungarensis*		x	x
				Rhynchosia minima	x		x

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
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				Rhynchosia minima var. *australis*		x	
				Sesbania cannabina	x	x	x
				Sesbania formosa		x	
				Swainsona canescens	x		
				Swainsona formosa	x	x	
				Swainsona pterostylis	x		
				Tephrosia aff. *clementii* (4) (M35-14)	x		
				Tephrosia aff. *clementii* (8) (HD106)		x	
				Tephrosia aff. *supina*			x
				Tephrosia aff. *supina* (06BP45-006)		x	
				Tephrosia aff. *supina* (HD133-20)	x		
				Tephrosia aff. *supina* (HD205-10)	x		
				Tephrosia aff. *supina* (HD88-4)	x		
				Tephrosia aff. *supina* (M19-3)			x
				Tephrosia aff. *supina* (MET 12,351)	x	x	
				Tephrosia aff. *supina* (MET 12,357)		x	x
				Tephrosia clementii	x		
				Tephrosia densa		x	x
				Tephrosia rosea			x
				Tephrosia rosea var. *clementii*	x	x	
				Tephrosia rosea var. *glabrior*		x	x
				Tephrosia sp. B Kimberley Flora (C.A. Gardner 1300)	x	x	
				Tephrosia sp. B Kimberley Flora (C.A. Gardner 7300)		x	
				Tephrosia sp. Bungaroo Creek (M.E. Trudgen 11601)	x	x	x
				Tephrosia sp. Bungaroo Creek (S. van Leeuwen 4301)			x
				Tephrosia sp. 1 (inadequate material)		x	
				Tephrosia sp. 2 (inadequate material)		x	
				Tephrosia supina	x		
				Tephrosia uniovulata		x	x
				Vigna lanceolata var. *lanceolata*	x	x	
				Vigna sp. *Burrup (B18)*	x		
				Vigna sp. *central* (MET 1626)	x		
				Vigna sp. rockpiles	x		
167	Geraniaceae			*Erodium cygnorum*	x		

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
173	Zygophyllaceae			*Tribulopis angustifolia*		x	
				Tribulus hirsutus	x	x	x
				Tribulus macrocarpus		x	
				Tribulus occidentalis		x	
				Tribulus platypterus		x	x
				Tribulus sp. (inadequate material)		x	
				Tribulus suberosus	x	x	x
183	Polygalaceae			*Polygala* aff. *isingii*	x	x	
185	Euphorbiaceae			*Adriana urticoides* var. *urticoides*	x	x	x
				Euphorbia aff. *australis*	x		
				Euphorbia australis	x	x	x
				Euphorbia biconvexa	x	x	x
				Euphorbia boophthona	x	x	
				Euphorbia boophthona (Large seed form)		x	
				Euphorbia coghlanii	x	x	x
			*	*Euphorbia hirta*		x	
				Euphorbia sp. (inadequate material)	x		
				Euphorbia sp. (B170-4)		x	
				Euphorbia sp. (BPBS10-50)	x		x
				Euphorbia sp. 1 (inadequate material)		x	
				Euphorbia sp. 2 (inadequate material)		x	
				Euphorbia sp. (M80-1)		x	
				Euphorbia sp. (site 1089)		x	x
				Euphorbia tannensis subsp. *eremophila*			x
				Euphorbia tannensis subsp. *eremophila* (Burrup form)	x	x	
				Euphorbia tannensis subsp. *eremophila* (Hamersley form)		x	
				Euphorbia wheeleri	x	x	
				Flueggea virosa subsp. *melanthesoides*	x	x	x
				Leptopus decaisnei	x		x
				Leptopus decaisnei var. *orbicularis*	x	x	x
				Phyllanthus erwinii		x	x
				Phyllanthus maderaspatensis	x	x	x
				Phyllanthus reticulatus		x	
207	Sapindaceae			*Diplopeltis eriocarpa*	x		

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CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Dodonaea coriacea		x	
				Dodonaea petiolaris			x
				Dodonaea pachyneura		x	
220	Tiliaceae			*Abutilon* aff. *dioicum* (HD72-14)		x	
				Abutilon aff. *lepidum* (1) (MET 15,352)	x	x	x
				Abutilon aff. *lepidum* (4)	x		x
				Abutilon amplum	x	x	
				Abutilon dioicum		x	
				Abutilon fraseri	x	x	x
				Abutilon lepidum	x		x
				Abutilon otocarpum		x	
				Abutilon oxycarpum		x	
				Abutilon sp. A (inadequate material)		x	
				Abutilon sp. B (inadequate material)			x
				Abutilon trudgenii MS		x	x
				Abutilon oxycarpum subsp. *prostratum*	x		
				Corchorus aff. *parviflorus*	x	x	
				Corchorus aff. *parviflorus* (JW 11-11)	x	x	
				Corchorus aff. *walcotti* (K.J. Atkins 570)	x	x	
				Corchorus crozophorifolius		x	x
				Corchorus incanus subsp. *incanus*		x	
				Corchorus laniflorus	x	x	x
				Corchorus lasiocarpus subsp. *parvus*		x	
				Corchorus parviflorus	x	x	
				Corchorus sidoides subsp. aff. *vermicularis* (GLD NIM17-16)		x	
				Corchorus sidoides subsp. *sidoides*		x	
				Corchorus sp. A (inadequate material)	x		
				Corchorus sp. B (inadequate material)			x
				Corchorus sp. (inadequate material)		x	
				Corchorus tectus	x		
				Corchorus tridens	x	x	
				Triumfetta appendiculata	x	x	x
				Triumfetta appendiculata (Burrup Form)		x	
				Triumfetta appendiculata (Mardie form)		x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Triumfetta appendiculata (Red Hill form)		x	
				Triumfetta appendiculata (Whim Creek form)			x
				Triumfetta chaetocarpa		x	
				Triumfetta clementii	x	x	x
				Triumfetta johnstonii		x	
				Triumfetta sp. 1 (inadequate material)		x	
				Triumfetta sp. 2 (inadequate material)		x	
221	Malvaceae			*Gossypium australe* (Burrup Peninsula form)	x	x	x
				Gossypium australe (Whim Creek form)	x	x	
				Gossypium robinsonii		x	x
				Hibiscus aff. *coatesii*			x
				Hibiscus aff. *coatesii* (site 733)		x	
				Hibiscus aff. *platychlamys* (MET 15,061)	x		
				Hibiscus aff. *sturtii* (site 1209)		x	
				Hibiscus brachychlaenus		x	
				Hibiscus brachysiphonius	x		x
				Hibiscus burtonii		x	
				Hibiscus coatesii	x	x	
				Hibiscus goldsworthii		x	
				Hibiscus leptocladus	x	x	
				Hibiscus sturtii			x
				Hibiscus sturtii (Site 1209)		x	
				Hibiscus sturtii var. aff. *campylochlamys* (MET 15,957)			x
				Hibiscus sturtii var. aff. *grandiflorus*		x	x
				Hibiscus sturtii var. aff. *platychlamys*		x	
				Hibiscus sturtii var. *campylochlamys*	x	x	x
				Hibiscus sturtii var. *platychlamys*	x	x	x
				Hibiscus sturtii var. *platychlamys* (MET 15067)		x	
				Hibiscus sp. (inadequate material)		x	
			*	*Malvastrum americanum*	x	x	x
				Melhania sp. Burrup	x		
				Sida aff. *echinocarpa* (MET 15,350)	x	x	x
				Sida aff. *fibulifera*		x	
				Sida aff. *fibulifera* (B64-13B)		x	x

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Sida aff. *fibulifera* (B235-7)			x
				Sida aff. *fibulifera* (FMG 125-20)		x	
				Sida aff. *fibulifera* (HD200-6)	x	x	
				Sida aff. *fibulifera* (oblong) (MET 15220)	x		
				Sida aff. *fibulifera* (MET Site 1346)		x	
				Sida arenicola			x
				Sida arsiniata	x	x	x
				Sida cardiophylla		x	
				Sida clementii	x	x	
				Sida echinocarpa	x	x	x
				Sida pilbarensis (Ferrugineous form)	x	x	
				Sida pilbarensis (green form)		x	
				Sida rhytidocarpa		x	
				Sida rohlenae			x
				Sida rohlenae subsp. *rohlenae*	x	x	
				Sida sp. 1 (inadequate material)		x	
				Sida sp. 2 (inadequate material)		x	
				Sida sp. Articulation below (A.A. Mitchell PRP 1605)		x	
				Sida sp. spiciform panicles (E. Leyland s.n. 14/08/90)	x	x	x
				Sida sp. verrucose glands (F.H. Mollemans 2423)	x	x	x
				Sida spinosa	x	x	
223	Sterculiaceae			*Brachychiton acuminatus*	x		
				Keraudrenia nephrosperma		x	
				Keraudrenia velutina subsp. *elliptica*		x	
				Melhania sp. (CH15-39)	x	x	
				Melhania sp. Burrup	x		
				Melhania sp. Turee Creek (MJ1-35)		x	
			*	*Melochia pyramidata*		x	
				Waltheria indica	x	x	x
235	Elatinaceae			*Bergia pedicellaris*	x		
243	Violaceae			*Hybanthus aurantiacus*	x	x	x
248	Passifloraceae		*	*Passiflora foetida* var. *hispida*	x	x	
265	Lythraceae			*Ammannia auriculata*	x	x	
				Ammannia baccifera	x		

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
272	Combretaceae			*Terminalia canescens*		x	
		*		*Terminalia supranitifolia*		x	
273	Myrtaceae			*Corymbia candida* subsp. *candida*		x	
				Corymbia aff. *hamersleyana*			x
				Corymbia ferriticola ssp. *ferriticola*		x	
				Corymbia hamersleyana	x	x	x
				Corymbia opaca	x		
				Corymbia zygophylla		x	
				Eucalyptus camaldulensis	x		x
				Eucalyptus camaldulensis var. *obtusa*		x	
				Eucalyptus leucophloia subsp. *leucophloia*		x	x
				Eucalyptus victrix	x	x	x
				Melaleuca argentea		x	x
				Melaleuca bracteata		x	
				Melaleuca glomerata	x	x	x
				Melaleuca linophylla		x	x
276	Haloragaceae			*Haloragis gossei* var. gossei		x	
				Haloragis gossei var. *inflata*		x	
281	Apiaceae			*Trachymene oleracea*	x		
				Trachymene oleracea subsp. *oleracea*	x	x	
301	Oleaceae			*Jasminum didymum* subsp. *lineare*	x	x	x
305	Asclepiadaceae			*Sarcostemma viminale* subsp. *australe*	x	x	
307	Convolvulaceae			*Bonamia media*			x
				Bonamia media var. *villosa*	x	x	x
				Bonamia pannosa	x	x	
				Bonamia rosea	x	x	
				Bonamia sp. (inadequate material)		x	
				Convolvulus angustissimus subsp. *angustissimus*		x	
				Duperreya commixta	x	x	x
				Evolvulus alsinoides var. *decumbens*	x	x	
				Evolvulus alsinoides var. *villosicalyx*	x	x	x
				Ipomoea coptica	x	x	
				Ipomoea costata	x	x	
				Ipomoea muelleri	x	x	x

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Ipomoea plebeia	x	x	
				Ipomoea polymorpha	x	x	
				Operculina aequisepala	x	x	
				Polymeria aff. *ambigua*		x	
				Polymeria aff. *ambigua* (MET 12302)		x	
				Polymeria aff. *ambigua* (PAN 26B-20)		x	
				Polymeria ambigua	x	x	x
				Polymeria calycina		x	
				Polymeria sp. (site 1365)	x	x	
310	Boraginaceae			*Ehretia saligna* var. *saligna*	x	x	
				Heliotropium conocarpum	x		
				Heliotropium crispatum		x	
				Heliotropium cunninghamii	x		
				Heliotropium heteranthum	x	x	x
				Heliotropium inexplicitum	x	x	
				Heliotropium ovalifolium	x	x	
				Heliotropium sp. 1 (inadequate material)		x	
				Heliotropium sp. 2 (inadequate material)		x	
				Trichodesma zeylanicum	x		x
				Trichodesma zeylanicum var. *zeylanicum*	x	x	x
311	Verbenaceae			*Clerodendrum floribundum* var. *angustifolium*		x	
				Clerodendrum tomentosum var. *lanceolatum*	x	x	
315	Solanaceae			*Nicotiana benthamiana*		x	
				Nicotiana occidentalis subsp. *occidentalis*		x	
				Nicotiana rosulata subsp. *rosulata*		x	
				Nicotiana sp. (inadequate material)		x	
				Solanum aff. gabrielae		x	
				Solanum aff. phlomoides		x	
				Solanum diversiflorum	x	x	x
				Solanum ellipticum	x	x	x
				Solanum gabrielae	x	x	x
				Solanum horridum	x	x	x
				Solanum lasiophyllum	x	x	x
				Solanum phlomoides		x	x

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Solanum sp. 1 (inadequate material)		x	
				Solanum sp. 2 (inadequate material)		x	
				Solanum sturtianum		x	
316	Scrophulariaceae			*Peplidium aithocheilum*		x	
				Stemodia grossa	x	x	x
				Stemodia kingii	x		
325	Acanthaceae			*Dicliptera armata*	x	x	
				Rostellularia adscendens var. *clementii*		x	
326	Myoporaceae			*Eremophila cuneifolia*		x	x
				Eremophila forrestii	x		
				Eremophila forrestii subsp. *forrestii*	x	x	x
				Eremophila fraseri subsp. *fraseri*		x	x
				Eremophila longifolia	x	x	x
				Eremophila sp. (inadequate material)			
331	Rubiaceae			*Oldenlandia crouchiana*	x	x	
				Synaptantha tillaeacea var. *tillaeacea*	x	x	
337	Cucurbitaceae		*	*Citrullus colocynthis*	x	x	
				Cucumis maderaspatanus	x	x	x
			*	*Cucumis melo* subsp. *agrestis*	x	x	
				Trichosanthes cucumerina	x	x	
339	Campanulaceae			*Wahlenbergia tumidifructa*		x	
341	Goodeniaceae			*Dampiera candicans*		x	
				Goodenia forrestii	x	x	x
				Goodenia lamprosperma	x	x	
				Goodenia microptera	x	x	
				Goodenia muelleriana			x
		*		*Goodenia nuda*		x	
				Goodenia pascua	x		
				Goodenia sp. 1 (inadequate material)		x	
				Goodenia sp. 2 (inadequate material)		x	
				Goodenia stobbsiana	x	x	
				Scaevola spinescens	x		x
				Scaevola spinescens (broad leaf form)	x	x	

API West Pilbara Iron Ore Project Rail and Transport Corridor Species List					Recorded By		
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**	**AECOM**	**WB**	**ASTRON**
				Scaevola spinescens (narrow form)	x		
345	Asteraceae			*Blumea tenella*		x	
				Calocephalus knappii		x	
				Centipeda minima subsp. *macrocephala*		x	
		*		*Flaveria australasica* subsp. *gilgai*	x	x	
				Flaveria australasica subsp. *australasica*		x	
				Helichrysum luteoalbum		x	
				Pentalepis trichodesmoides	x	x	
				Pluchea dentex		x	
				Pluchea dunlopii		x	
				Pluchea rubelliflora	x	x	
				Pluchea tetranthera		x	
				Pluchea sp. (inadequate material)	x		
				Pterocaulon sp. (inadequate material)		x	
				Pterocaulon sphacelatum	x	x	x
				Pterocaulon sphaeranthoides	x	x	x
				Rhodanthe margarethae		x	
				Rutidosis helichrysoides		x	
			*	*Sonchus oleraceus*		x	
				Streptoglossa bubakii	x	x	
				Streptoglossa decurrens	x	x	
				Streptoglossa liatroides	x	x	x
				Streptoglossa odora		x	
				Streptoglossa sp. (inadequate material)	x		x

Table D.2 API West Pilbara Iron Ore Project Mine Areas Species List

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
7	Adiantaceae			*Cheilanthes austrotenuifolia*
				Cheilanthes brownii
				Cheilanthes lasiophylla
				Cheilanthes sieberi subsp. *sieberi*
				Cheilanthes sp. (inadequate material)
31	Poaceae			*Amphipogon sericeus*
				Amphipogon sericeus (Newman form BR2-21)
				Aristida burbidgeae
				Aristida contorta
				Aristida holathera var. *holathera*
				Aristida holathera var. *latifolia*
				Aristida ingrata
				Aristida sp. (inadequate material)
				Brachyachne prostrata
			*	*Cenchrus ciliaris*
			*	*Cenchrus setiger*
				Chrysopogon fallax
				Cymbopogon ambiguus
				Cymbopogon obtectus
				Cymbopogon sp. (inadequate material)
				Dactyloctenium radulans
				Enneapogon caerulescens var. *caerulescens*
				Enneapogon intermedius
				Enneapogon lindleyanus
				Enneapogon polyphyllus
				Eragrostis aff. *eriopoda* (WAS site 963)
				Eragrostis cumingii
				Eragrostis dielsii
				Eragrostis sp. (inadequate material)
				Eragrostis tenellula
				Eriachne aristidea
				Eriachne helmsii
				Eriachne mucronata
				Eriachne mucronata (typical form)
				Eriachne obtusa
				Eriachne pulchella subsp. *dominii*
				Eriachne pulchella subsp. *pulchella*
				Eriachne sp. (inadequate material)
				Eriachne tenuiculmis
				Eulalia aurea
				Iseilema dolichotrichum
				Iseilema membranaceum
				Paraneurachne muelleri

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Paspalidium clementii
				Paspalidium rarum
				Paspalidium tabulatum (Whim Creek form)
				Poaceae sp. (inadequate material)
				Setaria dielsii
				Setaria sp. (inadequate material)
			*	*Setaria verticillata*
				Sporobolus australasicus
				Themeda triandra
				Triodia epactia
				Triodia pungens
				Triodia sp. (inadequate material)
				Triodia sp. Robe River (M.E. Trudgen 12,369)
				Triodia wiseana
				Tripogon loliiformis
32	Cyperaceae			*Bulbostylis barbata*
				Cyperus cunninghamii subsp. *cunninghamii*
				Cyperus hesperius
				Cyperus iria
				Cyperaceae sp. (inadequate material)
				Cyperus vaginatus
				Fimbristylis dichotoma
87	Moraceae			*Ficus aculeata* var. *indecora*
				Ficus brachypoda
				Ficus platypoda
				Ficus sp. (inadequate material)
90	Proteaceae			*Grevillea berryana*
				Grevillea pyramidalis subsp. *leucadendron*
				Grevillea wickhamii
				Grevillea wickhamii subsp. *aprica*
				Grevillea wickhamii subsp. hispidula
				Grevillea wickhamii subsp. *macrodonta*
				Hakea lorea subsp. *lorea*
97	Loranthaceae			*Amyema preissii*
				Amyema sanguinea var. *sanguinea*
				Diplatia grandibractea
				Lysiana casuarinae
105	Chenopodiaceae			*Dysphania kalpari*
				Dysphania melanocarpa forma *leucocarpa*
				Dysphania rhadinostachya subsp. *rhadinostachya*
				Enchylaena tomentosa var. *tomentosa*
				Maireana aff. *georgei*
				Maireana georgei
				Maireana melanocoma

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Maireana planifolia *Maireana* sp. (inadequate material) *Maireana tomentosa* subsp. *tomentosa* *Rhagodia eremaea* *Salsola tragus* *Salsola tragus* subsp. *tragus* *Sclerolaena costata* *Sclerolaena cuneata* *Sclerolaena densiflora* *Sclerolaena eriacantha* *Sclerolaena* sp. (inadequate material)
106	Amaranthaceae			*Achyranthes aspera* *Alternanthera nana* *Alternanthera* sp. (inadequate material) *Amaranthus cuspidifolius* *Amaranthus interruptus* *Amaranthus undulatus* *Gomphrena affinis* subsp. *pilbarensis* *Gomphrena canescens* *Gomphrena cunninghamii* *Gomphrena kanisii* *Gomphrena* sp. (inadequate material) *Ptilotus aervoides* *Ptilotus appendiculatus* var. *appendiculatus* *Ptilotus astrolasius var. astrolasius* *Ptilotus auriculifolius* *Ptilotus axillaris* *Ptilotus calostachyus* var. *calostachyus* *Ptilotus clementii* *Ptilotus exaltatus* var. *exaltatus* *Ptilotus fusiformis var. fusiformis* *Ptilotus gaudichaudii* var. *gaudichaudii* *Ptilotus gomphrenoides* var. *gomphrenoides* *Ptilotus incanus* var. *elongatus* *Ptilotus incanus* var. *incanus* *Ptilotus macrocephalus* *Ptilotus obovatus* var. *obovatus* *Ptilotus polystachyus* var. *polystachyus* *Ptilotus roei* *Ptilotus* sp. (inadequate material)
107	Nyctaginaceae			*Boerhavia coccinea* *Boerhavia gardneri* *Boerhavia* sp. (inadequate material) *Commicarpus australis*

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
108	Gyrostemonaceae			*Codonocarpus cotinifolius*
110	Aizoaceae			*Trianthema* aff. *triquetra (M3.35)* *Trianthema glossostigma* *Trianthema oxycalyptra* var. *oxycalyptra* *Trianthema pilosa* *Trianthema triquetra* *Trianthema turgidifolia*
110A	Molluginaceae			*Mollugo molluginea*
111	Portulaceae		*	*Calandrinia ptychosperma* *Portulaca oleracea* *Portulaca* sp. (inadequate material)
113	Caryophyllaceae			*Polycarpaea corymbosa* var. *corymbosa* *Polycarpaea holtzei* *Polycarpaea longiflora* *Polycarpaea longiflora* (red form) *Polycarpaea longiflora* (White form, M13-7)
122	Menispermaceae			*Tinospora smilacina*
131	Lauraceae			*Cassytha capillaris*
135	Papaveraceae		*	*Argemone ochreleuca* ssp. *ochreleuca*
137A	Capparaceae			*Capparis spinosa* var. *nummularia* *Capparis umbonata*
138	Brassicaceae			*Lepidium muelleri-ferdinandii* *Lepidium pedicellosum* *Lepidium pholidogynum* *Lepidium platypetalum*
160	Surianaceae			*Stylobasium spathulatum*
163	Mimosaceae			*Acacia adsurgens* *Acacia* aff. *aneura* (narrow fine veined; site 1259) *Acacia ancistrocarpa* *Acacia aneura* (narrow, fine veined, site 1259) *Acacia aneura* var. *aneura* *Acacia aneura* var. *pilbarana* *Acacia arida* *Acacia atkinsiana* *Acacia bivenosa* *Acacia citrinoviridis* *Acacia colei* var. *colei* *Acacia elachantha* *Acacia inaequilatera* *Acacia kempeana* (1) *Acacia maitlandii* *Acacia monticola* *Acacia orthocarpa*

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Acacia pruinocarpa *Acacia ptychophylla* *Acacia ptychophylla* x *ancistrocarpa* *Acacia pyrifolia* var. *morrisonii* *Acacia pyrifolia var. pyrifolia* *Acacia sclerosperma* subsp. *sclerosperma* *Acacia stowardii* *Acacia synchronicia* *Acacia tenuissima* *Acacia trachycarpa* *Acacia tumida var. pilbarensis* *Acacia victoriae* *Acacia wanyu* *Acacia xiphophylla* *Vachellia farnesiana*
			*	
164	Caesalpiniaceae			*Petalostylis labicheoides* *Senna artemisioides* aff. subsp. *oligophylla* (thinly sericeous) *Senna artemisioides* aff. subsp. *oligophylla* x *helmsii* *Senna artemisioides* subsp. *helmsii* *Senna artemisioides* subsp. *oligophylla* *Senna artemisioides* subsp. *oligophylla x glutinosa* *Senna artemisioides* subsp. *oligophylla x helmsii* *Senna glutinosa* *Senna glutinosa* subsp. *glutinosa* *Senna glutinosa* subsp. *glutinosa x luerssenii* *Senna glutinosa* subsp. *luerssenii* *Senna glutinosa subsp. pruinosa* *Senna glutinosa* subsp. x *luerssenii* *Senna notabilis* *Senna* sp. (inadequate material) *Senna* sp. Port Hedland (SPB 20-09-05B) *Senna stricta* *Senna venusta*
165	Papillionaceae			*Alysicarpus muelleri* *Crotalaria medicaginea* (Burrup form; B65-11) *Crotalaria medicaginea* var. *neglecta* *Cullen lachnostachys* *Cullen leucochaites* *Cullen martinii* *Cullen pogonocarpum* *Glycine canescens* *Indigofera boviperda subsp. boviperda* *Indigofera colutea* *Indigofera linifolia*

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Indigofera monophylla
				Indigofera monophylla (Cape Preston form)
				Indigofera monophylla (grey leaflet form)
				Indigofera monophylla (grey/green leaflet form)
				Indigofera monophylla (small calyx form)
				Indigofera rugosa
				Indigofera sp. (inadequate material)
		*		*Indigofera* sp. Bungaroo Creek (S. van Leeuwen 4301) PN
				Isotropis atropurpurea
		*		*Rhynchosia bungarensis*
				Rhynchosia minima var. australis
				Swainsona canescens
				Swainsona formosa
				Tephrosia aff. *densa* (B17)
				Tephrosia aff. *supina* (MET 12,357)
				Tephrosia clementii
				Tephrosia rosea var. *glabrior*
				Tephrosia sp. (inadequate material)
				Tephrosia sp. B Kimberley Flora (C.A. Gardner 7300)
				Tephrosia sp. Bungaroo Creek (M.E. Trudgen 11601)
				Tephrosia spechtii
				Tephrosia uniovulata
				Vigna lanceolata var. *lanceolata*
173	Zygophyllaceae			*Tribulus astrocarpus*
				Tribulus hirsutus
				Tribulus macrocarpus
				Tribulus occidentalis
				Tribulus platypterus
				Tribulus sp. (inadequate material)
				Tribulus suberosus
178	Meliaceae	*		*Owenia acidula*
185	Euphorbiaceae			*Euphorbia australis*
				Euphorbia biconvexa
				Euphorbia boophthona
				Euphorbia boophthona (Large seed form)
				Euphorbia coghlanii
				Euphorbia schultzii
				Euphorbia sp. (B170-4)
				Euphorbia sp. (BPBS10-50)
				Euphorbia sp. (M80-1)
				Euphorbia sp. (site 1089)
				Euphorbia tannensis
				Euphorbia tannensis subsp. *eremophila* (Hamersley form)
				Euphorbia wheeleri

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Flueggea virosa subsp. *melanthesoides*
				Leptopus decaisnei var. *orbicularis*
				Phyllanthus erwinii
				Phyllanthus maderaspatensis
207	Sapindaceae			*Alectryon oleifolius* subsp. *oleifolius*
				Dodonaea coriacea
				Dodonaea pachyneura
				Dodonaea petiolaris
220	Tiliaceae			*Abutilon* aff. *dioicum* (HD72-14)
				Abutilon aff. *lepidum* (1) (MET 15 352)
				Abutilon cunninghamii
				Abutilon dioicum
				Abutilon lepidum
				Abutilon otocarpum
				Abutilon sp. (inadequate material)
				Abutilon trudgenii MS
				Corchorus aff. *parviflorus*
				Corchorus aff. *parviflorus (JW011-11)*
				Corchorus aff. *walcotti* (K.J. Atkins 570)
				Corchorus crozophorifolius
				Corchorus incanus subsp. *incanus*
				Corchorus laniflorus
				Corchorus lasiocarpus subsp. *parvus*
				Corchorus parviflorus
				Corchorus sidoides subsp. aff. *vermicularis* (GLD NIM17-16)
				Corchorus sidoides subsp. *sidoides*
				Corchorus sp. (inadequate material)
				Triumfetta aff. *chaetocarpa* (denser indumentum)
				Triumfetta aff. *chaetocarpa (PAN3/4)*
				Triumfetta aff. *chaetocarpa (Panorama form)*
				Triumfetta appendiculata
				Triumfetta clementii
				Triumfetta maconochieana
				Triumfetta sp. (inadequate material)
221	Malvaceae			*Gossypium australe* (Burrup Peninsula form)
				Gossypium australe (Whim Creek form)
				Gossypium robinsonii
				Hibiscus aff. *coatesii* (MET 15 305)
				Hibiscus aff. *coatesii* (MET 16,542)
				Hibiscus aff. *coatesii* (site 693)
				Hibiscus aff. *coatesii* (site 733)
				Hibiscus aff. *coatesii* (site 751)
				Hibiscus aff. *sturtii* (site 1209)
				Hibiscus austrinus var. *austrinus*

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Hibiscus brachychlaenus
				Hibiscus burtonii
				Hibiscus coatesii
				Hibiscus gardneri
				Hibiscus goldsworthii
				Hibiscus leptocladus
				Hibiscus sp. (inadequate material)
				Hibiscus sturtii
				Hibiscus sturtii var. aff. *campylochlamys* (MET 15,957)
				Hibiscus sturtii var. aff. *grandiflorus*
				Hibiscus sturtii var. *campylochlamys*
				Hibiscus sturtii var. *grandiflorus*
				Hibiscus sturtii var. *platychlamys*
			*	*Malvastrum americanum*
				Sida aff. *clementii*
				Sida aff. *echinocarpa (MET 15,350)*
				Sida aff. *fibulifera*
				Sida aff. *fibulifera* (B181-5B)
				Sida aff. *fibulifera* (B64-13B)
				Sida aff. *fibulifera* (FMG 125-20)
				Sida aff. *fibulifera (HD200-6)*
				Sida aff. *fibulifera* (MET Site 1346)
				Sida aff. *fibulifera* 'var. L'
				Sida aff. *pilbarensis* (EOB46-01B)
				Sida aff. spiciforme panicles (FML46-13)
				Sida arsiniata
				Sida cardiophylla
				Sida clementii
				Sida echinocarpa
				Sida pilbarensis
				Sida pilbarensis (ferruginous form)
				Sida rohlenae subsp. *rohlenae*
				Sida sp. (inadequate material)
				Sida sp. Articulation below (A.A. Mitchell PRP 1605)
				Sida sp. Pilbara (A.A. Mitchell PRP 1543)
				Sida sp. spiciform panicles (E. Leyland s.n. 14/8/90)
				Sida sp. verrucose glands (F.H. Mollemans 2423)
				Sida spinosa
				Sida subarticulata
223	Sterculiaceae			*Keraudrenia nephrosperma*
				Keraudrenia velutina subsp. *elliptica*
				Melhania sp. (Burrup)
				Melhania sp. (CH15-39)
				Melhania sp. Turee Creek (MJ1-35)

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Waltheria indica
235	Elatinaceae			*Bergia pedicellaris*
243	Violaceae			*Hybanthus aurantiacus*
272	Combretaceae			*Terminalia canescens*
273	Myrtaceae			*Corymbia candida* subsp. *candida* *Corymbia ferriticola* subsp. *ferriticola* *Corymbia hamersleyana* *Eucalyptus camaldulensis* var. *obtusa* *Eucalyptus leucophloia* subsp. *leucophloia* *Eucalyptus* sp. (inadequate material) *Eucalyptus victrix*
276	Haloragaceae			*Haloragis gossei* var. *gossei*
281	Apiaceae			*Trachymene oleracea* subsp. *oleracea*
301	Oleaceae			*Jasminum didymum* subsp. *lineare*
305	Asclepiadaceae			*Marsdenia australis* *Sarcostemma viminale* subsp. *australe*
307	Convolvulaceae			*Bonamia media* var. *villosa* *Bonamia pannosa* *Bonamia rosea* *Bonamia* sp. (inadequate material) *Duperreya commixta* *Evolvulus alsinoides* var. *decumbens* *Evolvulus alsinoides* var. *villosicalyx* *Ipomoea muelleri* *Polymeria* aff. *ambigua* *Polymeria* aff. *ambigua* (PAN 26B-20) *Polymeria ambigua* *Polymeria* sp. (site 1365)
310	Boraginaceae			*Ehretia saligna* var. *saligna* *Heliotropium crispatum* *Heliotropium cunninghamii* *Heliotropium heteranthum* *Heliotropium inexplicitum* *Heliotropium ovalifolium* *Trichodesma zeylanicum* var. *zeylanicum*
313	Lamiaceae			*Clerodendrum floribundum* var. *angustifolium* *Clerodendrum tomentosum* var. *lanceolatum*
315	Solanaceae			*Nicotiana benthamiana* *Nicotiana occidentalis* subsp. *occidentalis* *Nicotiana* sp. (inadequate material) *Solanum* aff. *gabrielae* *Solanum* aff. *phlomoides* *Solanum diversiflorum*

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Solanum ellipticum *Solanum horridum* *Solanum lasiophyllum* *Solanum phlomoides* *Solanum* sp. (inadequate material) *Solanum sturtianum*
316	Scrophulariaceae			*Peplidium aithocheilum* *Stemodia grossa* *Stemodia* sp. (inadequate material) *Stemodia viscosa*
325	Acanthaceae			*Dicladanthera forrestii*
326	Myoporaceae			*Eremophila cuneifolia* *Eremophila forrestii* subsp. *forrestii* *Eremophila forrestii* x *latrobei* *Eremophila fraseri* subsp. *fraseri* *Eremophila latrobei* subsp. *glabra* *Eremophila latrobei* subsp. *latrobei* *Eremophila longifolia* *Eremophila* sp. (inadequate material) *Eremophila youngii* x *latrobei*
331	Rubiaceae			*Oldenlandia crouchiana* *Synaptantha tillaeacea* var. *tillaeacea*
337	Curcubitaceae		 *	*Cucumis maderaspatanus* *Cucumis melo* subsp. *agrestis*
339	Campanulaceae			*Wahlenbergia tumidifructa*
340	Lobeliaceae			*Lobelia heterophylla*
341	Goodeniaceae			*Dampiera candicans* *Goodenia cusackiana* *Goodenia forrestii* *Goodenia microptera* *Goodenia* sp. (inadequate material) *Goodenia stobbsiana* *Velleia connata*
345	Asteraceae		 * 	*Asteraceae* sp. (inadequate material) *Bidens bipinnata* *Calocephalus* sp. Pilbara-Desert (M.E. Trudgen 11454) *Flaveria australasica* subsp. *australasica* *Pentalepis trichodesmoides* *Pluchea dentex* *Pluchea ferdinandi-muelleri* *Pluchea squarrosa* *Pterocaulon serrulatum* *Pterocaulon* sp. (inadequate material) *Pterocaulon sphacelatum*

API West Pilbara Iron Ore Project Mine Areas Species List (Western Botanical)				
CODE	**FAMILY**	**PRIORITY**	**WEED**	**SPECIES**
				Pterocaulon sphaeranthoides
				Rhodanthe margarethae
			*	*Sonchus oleraceus*
				Streptoglossa bubakii
				Streptoglossa decurrens
				Streptoglossa sp. (inadequate material)
				Streptoglossa tenuiflora

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Appendix E:
Priority Flora Locations

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Species	Easting	Northing
Acacia glaucocaesia (P3)	501668	7708273
Flaveria australasica ssp. *gilgae*(P3)	423752	7670577
	422895	7664784
Goodenia nuda (P4)	404472	7592374
Indigofera sp. Bungaroo Creek (S. van Leeuwen 4301) PN (P3)	416755	7551828
	424765	7522029
	423933	7522869
	430449	7522109
	429618	7522924
	430482	7522051
	430691	7522544
	424416	7545539
	425532	7545808
	433446	7511221
Owenia acidula (P3)	416420	7551794
Rhynchosia bungarensis (P4)	426016	7535981
	421471	7557075
	415408	7561386
	427245	7535609
	433642	7513735
Terminalia supranitifolia (P3)	412494	7644863
	412407	7647146
Triodia sp. Robe River (M.E. Trudgen et al. MET 12367)(P3)	423339	7523786
	426166	7519103
	425709	7519816
	425928	7521472
	426639	7519931
	425607	7521449
	425251	7521444
	425058	7521681
	425449	7520428
	425396	7521789
	424334	7522371
	423977	7522941
	425256	7520941
	424739	7522379
	425399	7521945
	424736	7522026
	421928	7545726
	420383	7544872
	420151	7545200
	420361	7545739
	421156	7545447
	420067	7545588
	421501	7545508
	421309	7545299
	420623	7544732
	420349	7545677
	421386	7545647
	421873	7545787
	420674	7551509

Species	Easting	Northing
Triodia sp. Robe River *(*M.E. Trudgen et al. MET 12367)(P3)	419060	7550617
	419228	7550804
	419139	7550774
	415681	7556526
	415622	7556750
	415556	7556877
	402532	7635542
	402604	7635695
	402745	7635912
	410724	7642564
	412032	7571281
	410801	7642582
	410012	7576496
	411202	7576330
	412105	7575788
	411548	7576547
	411191	7576317
	410777	7576093
	411306	7575959
	412187	7576649
	410030	7575466
	410030	7575954
	410446	7574104
	410857	7574037
	411681	7574154
	412021	7574135
	416807	7560766
	415677	7561752
	416821	7561278
	418330	7559280
	417016	7560156
	418591	7558861
	418458	7558953
	418858	7558873
	418772	7558843
	418410	7558857
	418420	7558798
	416950	7560126
	417135	7560001
	420226	7557884
	420440	7557618
	417091	7561001
	416336	7561657
	420470	7557686
	416314	7561755
	411386	7576303
	411334	7576265
	411095	7576026
	410533	7573887
	410778	7573690
	411943	7573871

Species	Easting	Northing
Triodia sp. Robe River *(*M.E. Trudgen et al. MET 12367)(P3)	417081	7560508
	410597	7573909
	411946	7573894
	418935	7558019
	410638	7576222
	420245	7557891
	420233	7557975
	420465	7557522
	425532	7545808
	425532	7545808
	419576	7558279
	432368	7529457
	432615	7529523
	432150	7529341
	432570	7529522
	423810	7545886
	424929	7545815
	424959	7545706
	425692	7546040
	424599	7545328
	424361	7545484
	424416	7545539
	423671	7545340
	423305	7545276
	424259	7545493
	425537	7546006
	425394	7545814
	424772	7545708
	424881	7545584
	425725	7546123
	425725	7546123
	425725	7546123
	425411	7545812
	425313	7545813
	425147	7545542
	424677	7545799
	424628	7545375
	424541	7545510
	422805	7545748
	423429	7545281
	423689	7545289
	424092	7545685
	423938	7546006
	423963	7545934
	424050	7545859
	424097	7545896
	410303	7576469
	415955	7556078
Vigna sp. Central (M.E. Tudgen 1626) (P2)	422529	7663263

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Appendix F:
Vegetation Association Conservation Value Risk Assessment

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	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
CPr2	Boolgeeda (W, N), Robe (W, N), Capricorn (W, N), Newman (W, N), Stuart (W, N), Rocklea (W, N), Urandy (W, N), River (W, N)		C		S (clay soils)	H	2		1		1	4	8
CPr3	Boolgeeda (W, N), Rocklea (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N), Urandy (W, N)		C		S (clay soils)	M	2		1		1	2	6
CPr4	Capricorn (W, N), Robe (W, N), Stuart (W, N), Urandy (W, N),Nanutarra (R, N), Peedamulla (R, N), Boolgeeda (W, N),		C		S (clay soils)	H	3		1		1	4	9
CPr5	Houndstooth (R, N), Stuart (W, N), Boolgeeda (W, N), Capricorn (W, N), Rocklea (W, N), Urandy (W, N)		C		S (clay soils)	ML	3		1		1	1	6
CPr6	Boolgeeda (W, N), Capricorn (W, N), Rocklea (W, N), Ruth (R, N), Urandy (W, N)		C		S (clay soils)	M	3		1		1	2	7
CPr7	Capricorn (W, N), Robe (W, N), Stuart (W, N), Urandy (W, N)		C		S (clay soils)	H	2		1		1	4	8
CPr8	Robe (W, N), Capricorn (W, N), Stuart, Rocklea (W, N), Boolgeeda (W, N)		C		S (clay soils)	VH	2		1		1	6	10
CPr9	Newman (W, N), River (W, N), Ruth (R, N)		C		S (clay soils)	M	3		1		1	2	7
CPr10	Paraburdoo (W, N)		T (**Cenchrus ciliaris*)		S (clay soils)	ML	2		-3		1	1	1
CPr11	Horseflats (R, N) A (cracking clays)		C	L (clay species)	S (clay soils)	ML	4 + 2		1	2	1	1	11
CPr12	Boolgeeda(W), Cheerawarra (R, O), Horseflats (R, N), Macroy (W, O), Mallina (W, O), Paraburdoo (W, N), River (W, N), Ruth (W, N) .		C	L (clay species)	S (clay soils)	ML	3		1	2	1	1	8
CPr13	Boolgeeda (W, N), Horseflats (R, N), Paraburdoo (W, N), Rocklea (W, N), Ruth (W, N)		C	L (clay species)		ML	3 + 2 +2		1	2		1	11
HBr1	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N) A (mesa)		C			M	2 + 2		1			2	7
HBr2	Rocklea (W, N)	U (*Acacia aneura* var. *intermedia*)	C			VH	2	2	1			6	11
HBr3	Capricorn (W, N), Paraburdoo (W, N), Robe (W, N), Rocklea (W, N)	P (*Triodia* sp. Robe River)	C			M	2	4	1			2	9
HBr4	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Paraburdoo (W, N), Robe (W, N), Rocklea (W, N)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			H	2	4	1			4	11
HBr5	Capricorn (W, N), Nanutarra (R, N)		C			H	3		1			4	7
HBr6	Boolgeeda (W, N), Capricorn (W, N), Horseflats (R, N), Houndstooth (R, N), Nanutarra (R, N), Newman (W, N), Paraburdoo (W, N), Peedamulla (R, N), River (W, N), Robe (W, N), Rocklea (W, N), Ruth (W, N), Ruth (R, N), Stuart (W, N), Urandy (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River), U (*Aristida holathera* var. *latifolia*)	C			H	3 + 2	4 + 2	1			4	16
HBr7	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek)	C			M	2	4	1			2	9
HBr8	Boolgeeda (W, N), Capricorn (W, N), Houndstooth (R, N), Newman (W, N), Paraburdoo (W, N), Robe (W, N), Rocklea (W, N), Ruth (W, N), Stuart (W, N), Urandy (W, N)		C			M	2		1			2	5
HBr9	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N), Rocklea (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			ML	2 + 2	4	1			1	10

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
HBr10	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N), Rocklea (W, N), Urandy (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr11	Capricorn (W, N), Newman (W, N), Robe (W, N) A (mesa)	P *(Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			H	2 + 2	4	1			4	13
HBr12	Boolgeeda (W, N), Horseflats (R, N), Littoral (R, N), Ruth (W, N)	P (*Acacia glaucocaesia*), U (*Vigna* sp. Rockpiles)	C			ML	3	2	1			1	7
HBr13	Capricorn (W, N), Nanutarra (R, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	3 + 2	4	1			6	16
HBr14	Capricorn (W, N)		C			VH	2		1			6	9
HBr15	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N), Rocklea (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek)	C			ML	2 + 2	4	1			1	10
HBr16	Newman (W, N) A		C			0	2		1			0	3
HBr17	Boolgeeda (W, N), Capricorn (W, N), Horseflats (R, N), Ruth (W, N)	U (*Tephrosia* aff. *clementii* (4) (M35-14))	C			M	2	2	1			2	7
HBr18	Capricorn (W, N)		C			VH	2		1			6	9
HBr20	Boolgeeda (W, N), Capricorn (W, N), Nanutarra (R, N), Newman (W, N), Robe (W, N), Rocklea (W, N), Urandy (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, *Owenia acidula*, *Triodia* sp. Robe River)	C			H	2 + 2	4	1			4	13
HBr21	Newman (W, N), Robe (W, N) A (mesa)		C			0	2		1			0	3
HBr22	Boolgeeda (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			H	2 + 2	4	1			4	13
HBr23	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River); U (*Acacia citrinoviridis* on mesa)	C			M	2 + 2	4 + 2	1			2	13
HBr24	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			ML	2 + 2	4	1			1	10
HBr25	Boolgeeda (W, N), Capricorn (W, N), Cheerawarra (R, O), Horseflats (R, N), Houndstooth (R, N), Macroy (W, O), Mallina (W, O), Newman (W, N), Paraburdoo (W, N), River (W, N), Robe (W, N), Rocklea (W, N), Ruth (W, N), Stuart (W, N), Ruth (R, N), Uaroo (W, O), Urandy (W, N)	*P (Triodia* sp. Robe River, *Acacia glaucocaesia*), U (*Vigna* sp. Rockpiles)	C			ML	3	4 + 2	1			1	11
HBr26	Robe (W, N)		C			L	2		1			1	4
HBr27	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N), Urandy (W, N) A (mesa)		C			VH	2 + 2		1			6	11

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
HBr28	Robe (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr29	Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr30	Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr31	Capricorn (W, N), Newman (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River); U (*Acacia citrinoviridis* on mesa)	C			M	2 + 2	4 + 2	1			2	13
HBr32	Newman (W, N)	P (*Triodia* sp. Robe River)	C			M	2	4	1			2	9
HBr33	Boolgeeda (W, N), Newman (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River) U (*Aristida holathera* var. *latifolia*)	C			M	2 + 2	4 + 2	1			2	13
HBr34	Capricorn (W, N), Newman (W, N), Robe (W, N), Urandy (W, N) A (mesa)	P (*Triodia* sp. Robe River), U *Aristida holathera* var. *latifolia*)	C			VH	2 + 2	4 + 2	1			6	17
HBr35	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, Triodia sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr36	Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr37	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr38	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr39	Boolgeeda (W, N), Houndstooth (R, N), Newman (W, N), Nanutarra (R, N), Peedamulla (R, N), Robe (W, N), Stuart (W, N), Urandy (W, N)	P (*Triodia* sp. Robe River), U (*Acacia aneura* var. *intermedia*)	C			L	3	4 + 2	1			1	11
HBr40	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N), Urandy (W, N) A (mesa)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River) U (*Acacia citrinoviridis* on mesa)	C			M	2 + 2	4 + 2	1			2	13
HBr41	Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr42	Robe (W, N) A (mesa)		C			0	2 + 2		1			0	5
HBr43	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			L	2 + 2	4	1			1	10
HBr44	Capricorn (W, N)	P (*Triodia* sp. Robe River)	C			VH	2	4	1			6	11

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
HBr45	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N), Stuart (W, N)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			L	2	4	1			1	8
HBr46	Robe (W, N) A (mesa)	*P* (*Triodia* sp. Robe River) U (*Acacia citrinoviridis* on mesa)	C			VH	2 + 2	4 + 2	1			6	17
HBr47	Capricorn (W, N), Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			VH	2 + 2	4	1			6	15
HBr48	Capricorn (W, N), Newman (W, N), Robe (W, N), Urandy (W, N) A (mesa)	P (*Triodia* sp. Robe River), U (*Acacia citrinoviridis* on mesa)	C			M	2 + 2	4 + 2	1			2	13
HBr49	Robe (W, N) A (mesa)	P (*Triodia* sp. Robe River)	C			M	2 + 2	4	1			2	11
mDr1	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Nanutarra (R, N), Paraburdoo (W, N), Peedamulla (R, N),Robe (W, N), Rocklea (W, N)		C			M	2		1			1	4
mDr2	Nanutarra (R, N)	P (*Triodia* sp. Robe River), U (*Acacia aneura* var. *intermedia*)	C			H	4	4 + 2	1			4	15
mDr3	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N)		C			H	2		1			4	7
mDr4	Newman (W, N), Paraburdoo (W, N), Rocklea (W, N)		C			H	2		1			4	7
mDr5	Capricorn (W, N), Houndstooth (R, N), Newman (W, N), Robe (W, N), Paraburdoo (W, N), Rocklea (W, N), Urandy (W, N)		C			L	2		1			1	4
mDr6	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Nanutarra (R, N), Stuart (W, N)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			M	2	4	1			2	9
mDr7	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N)		C			M	2		1			2	5
mDr8	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Nanutarra (R, N), Paraburdoo (W, N), Peedamulla (R, N), Robe (W, N), Rocklea (W, N), Stuart (W, N), Urandy (W, N)	U (*Aristida holathera* var. *latifolia*)	C			M	2	2	1			2	7
mDr9	Boolgeeda (W, N), Cheerawarra (R, O), Horseflats (R, N), Littoral (R, N), Mallina (W, O), Paraburdoo (W, N), River (W, N), Rocklea (W, N), Ruth (W, N)		C			ML	3		1			1	5
mDr10	Nanutarra (R, N)		C			H	4		1			4	9
mDr11	Capricorn (W, N), Rocklea (W, N), Robe (W, N), Newman (W, N)		C			H	2		1			4	7
mDr12	Capricorn (W, N), Robe (W, N), Boolgeeda (W, N),Rocklea (W, N), Urandy (W, N)	P (*Indigofera* sp. Bungaroo Creek)	C	D (creek)		ML	2	4	1	1		1	9
mDr13	Capricorn (W, N), Newman (W, N), Rocklea (W, N)		T (*Cenchrus ciliaris)		S (A. aneura)	ML	2		-3		1	1	1

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
mDr14	Boolgeeda (W, N), Nanutarra (R, N), Peedamulla (R, N), Ruth (R, N)	U (*Aristida holathera* var. *latifolia, Acacia aneura* var. *intermedia*)	C			L	3	2	1			1	7
mDr15	Boolgeeda (W, N)		C	D (creek)		ML	2		1	1		1	5
mDr16	Capricorn (W, N), Robe (W, N), Stuart (W, N), Urandy (W, N), Rocklea (W, N), Boolgeeda (W, N), Newman (W, N)		C			VH	2		1			6	9
mDr17	Urandy (W, N), Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N), Rocklea (W, N),		C			M	2		1			2	5
mDr18	Robe (W, N), Capricorn (W, N), Newman (W, N), Urandy (W, N)	P (*Triodia* sp. Robe River)	C			H	2	4	1			4	11
mDr19	Newman (W, N), Robe (W, N), Urandy (W, N)	P (*Rhynchosia bungarensis*)	C	L (creek)		ML	2	4	1	2		1	10
mDr20	Capricorn (W, N), Boolgeeda (W, N), Robe (W, N)		C			ML	2		1			1	4
mDr21	Boolgeeda (W, N), Rocklea (W, N)		C			VH	2		1			6	9
mDr22	Capricorn (W, N), Urandy (W, N)		C			M	2		1			2	5
mDr23	Capricorn (W, N), Paraburdoo (W, N), Rocklea (W, N)		C			L	2		1			1	4
mDr24	Rocklea (W, N), Ruth (W, N), Uaroo (W, O)		C			L	2		1			1	4
mDr25	Boolgeeda (W, N), Horseflats (R, N), Paraburdoo (W, N), Rocklea (W, N), Ruth (W, N)		C			ML	2		1			1	4
mDr26	Boolgeeda (W, N), Capricorn (W, N)		C			VH	2		1			6	9
mDr27	Capricorn (W, N), Robe (W, N), Boolgeeda (W, N), Newman (W, N), Rocklea (W, N), Urandy (W, N)	P (*Triodia* sp. Robe River)	C			H	2	4	1			4	11
mDr28	Boolgeeda (W, N), Horseflats (R, N), Macroy (W, O), Uaroo (W, O),		C			L	3		1			1	5
mDr29	Boolgeeda (W, N), Newman (W, N), Robe (W, N), Rocklea (W, N)		C	D (creek)		VH	2		1	1		6	10
mDr30	Paraburdoo (W, N), Rocklea (W, N)		C			M	2		1			2	5
mDr31	Robe (W, N), Boolgeeda (W, N), Capricorn (W, N), Rocklea (W, N), Stuart (W, N), Urandy (W, N)	P (*Triodia* sp. Robe River)	C			H	2	4	1			4	11
mDr32	Rocklea (W, N)		T (**Cenchrus ciliaris*)			L	2		-3			1	0
mDr33	Rocklea (W, N)		T (**Cenchrus ciliaris*)			L	2		-3			1	0
mDr34	Boolgeeda (W, N), Newman (W, N), Peedamulla (R, N)		T (**Cenchrus ciliaris*)			M	3		-3			2	2
mDr35	Rocklea (W, N), Urandy (W, N)		C	D (creek)		M	2		1	1		2	6
mDr36	Paraburdoo (W, N), Rocklea (W, N) A (river)		T (**Cenchrus ciliaris*)	D (river)		M	2 + 2		-3	1		2	2
mDr37	Boolgeeda (W, N), Newman (W, N)		C			L	2		1			1	4
mDr38	Boolgeeda (W, N), Horseflats (R, N), Paraburdoo (W, N), Rocklea (W, N), Ruth (W, N)		C			M	2		1			2	5
mDr39	Boolgeeda (W, N), Cheerawarra (R, N), Horseflats (R, N), Littoral (R, N), Mallina (W, O), Paraburdoo (W, N), River (W, N), Rocklea (W, N), Ruth (W, N)	P (*Vigna* sp. Central)	T (**Cenchrus ciliaris*)			ML	3	4	-3			1	5

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
mDr40	Boolgeeda (W, N), Horseflats (R, N), Paraburdoo (W, N), Rocklea (W, N), Ruth (W, N)					L	2					1	3
RCr1	Newman (W, N), River (W, N) A (floodplain of river)		C			ML	2 + 2		1			1	6
RCr2	Boolgeeda (W, N), Newman (W, N), River (W, N) A (river)		C	L (river species), D (creek)		M	2 + 2		1	2 + 1		2	10
RCr3	Horseflats (R, N), Mallina (W, O), River (W, N) A (creek)		C	D (creek)		M	3 + 2		1	1		2	9
RCr4	Boolgeeda (W, N), Capricorn (W, N), Nanutarra (R, N), Peedamulla (R, N), Rocklea (W, N), Urandy (W, N) A (creek)		C	D (creek)		VH	3 + 2		1	1		6	13
RCr5	Capricorn (W, N), Robe (W, N), Urandy (W, N) A (creek)		C	D (creek)		H	2 + 2		1	1		4	10
RCr6	Boolgeeda (W, N) A (creek)		C	D (creek)		VH	2 + 2		1	1		6	12
RCr7	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N), Rocklea (W, N), Urandy (W, N) A (creek)		C	D (creek)		M	2 + 2		1	1		2	8
RCr8	Boolgeeda (W, N), Capricorn (W, N), Urandy (W, N) A (creek)	P (*Rhynhosia bungarensis* and *Indigofera* sp. Bungaroo Creek)	C	L (river species), D (creek)		L	2 + 2	4	1	2 + 1		1	13
RCr9	Capricorn (W, N), Newman (W, N), Robe (W, N), Urandy (W, N) A (creek)	P (*Rhynchosia bungarensis*)	C	L (river species), D (creek)		L	2 + 2	4	1	2 + 1		1	13
RCr10	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N), Urandy (W, N) A (creek)	P (*Rhynchosia bungarensis*)	C	L (creek species), D (creek)		L	2 + 2	4	1	2 + 1		1	13
RCr11	Capricorn (W, N), Robe (W, N), Rocklea (W, N) A (creek)	P (*Owenia acidula*)	C	D (creek)		M	2 + 2	4	1	1		2	12
RCr12	Houndstooth (R, N), Robe (W, N), Stuart (W, N), Urandy (W, N) A (floodplain of river)		T (**Cenchrus ciliaris*)	D (floodplain of river)		M	2 + 2		-3	1		2	4
RCr13	Nanutarra (R, N), Peedamulla (R, N), Robe (W, N), Urandy (W, N) A (floodplain of river)		T (**Cenchrus ciliaris*)	D (creek)		M	3 + 2		-3	1		2	5
RCr15	Boolgeeda (W, N), Urandy (W, N) A (creek)		T (**Cenchrus ciliaris*)	D (creek)		H	2		-3	1		4	4
RCr16	Capricorn (W, N), Robe (W, N), Rocklea (W, N) A (creek)	P (*Indigofera* sp. Bungaroo Ck)	T (**Cenchrus ciliaris*)	D (creek)		L	2 + 2	4	-3	1		1	7
RCr17	Newman (W, N),Nanutarra (R, N), Peedamulla (R, N),River (W, N), Ruth (R, N) A (creek)	P (*Goodenia nuda*)	T (**Cenchrus ciliaris*)	D (creek)		ML	3 + 2	4	-3	1		1	8
RCr18	Boolgeeda (W, N), Horseflats (R, N), Paraburdoo (W, N), River (W, N), Rocklea (W, N), Ruth (W, N) A (creek)		T (**Cenchrus ciliaris*)	D (creek)		ML	3 + 2		-3	1		1	4
RCr19	Boolgeeda (W, N), Newman (W, N), River (W, N) A (river and floodplain)		C	L (river species), D (river and floodplain)		ML	2 + 2		1	2 + 1		1	9
RCr20	Boolgeeda (W, N), Nanutarra (R, N) A (creek)		C	D (creek)		ML	3		1			1	5
RCr21	River (W, N) A (river)		C	L (river species), D (creek)		ML	2 + 2		1	2 + 1		1	9

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
SHr1	Urandy (W, N) A (sink hole)		C	L (ground water dependent species) D (sink hole)		VH	2 + 2		1	2 + 1		6	14
SPr1	Boolgeeda (W, N), Capricorn (W, N), Nanutarra (R, N), Newman (W, N), Peedamulla (R, N), Robe (W, N), Ruth (R, N), Stuart (W, N), Urandy (W, N)	P (*Indigofera* sp. Bungaroo Creek), U (*Acacia aneura* var. *intermedia*)	C			M	3	4 + 2	1			2	12
SPr2	Capricorn (W, N), Rocklea (W, N)		C			H	2		1			4	7
SPr3	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Paraburdoo (W, N), Robe (W, N), Rocklea (W, N), Stuart (W, N), Urandy (W, N)	P (*Triodia* sp. Robe River), U *Aristida holathera* var. *latifolia*)	C			ML	2	4 + 2	1			1	10
SPr4	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Nanutarra (R, N), Peedamulla (R, N)	P (*Indigofera* sp. Bungaroo Creek, *Triodia* sp. Robe River)	C			M	3	4	1			2	10
SPr5	Boolgeeda (W, N), Horseflat, Paraburdoo (W, N), River (W, N), Rocklea (W, N), Ruth (W, N) I (Shrublands, snakewood scrub)	U (*Trianthema* sp. Python Pool)	C			L	2 + 2	2	1			1	8
SPr6	Boolgeeda (W, N), Capricorn (W, N), Nanutarra (R, N), Paraburdoo (W, N), Robe (W, N), Rocklea (W, N), Urandy (W, N)		C			M	2		1			2	5
SPr7	Boolgeeda (W, N), Capricorn (W, N)		C			L	2		1			1	4
SPr8	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N), Rocklea (W, N)		C			M	2		1			2	5
SPr9	Robe (W, N), Rocklea (W, N), Urandy (W, N)		C			VH	2		1			6	9
SPr10	Boolgeeda (W, N), Capricorn (W, N), Houndstooth (R, N), Newman (W, N), Robe (W, N), Rocklea (W, N), Stuart (W, N), Urandy (W, N)	U (*Triodia* sp. Robe River, *Aristida holathera* var. *latifolia*)	C			M	2	2	1			2	7
SPr11	Boolgeeda (W, N), Capricorn (W, N), Newman (W, N), Robe (W, N), Rocklea (W, N), Urandy (W, N)	U (*Aristida holathera* var. *latifolia*)	C			M	2	2	1			2	7
SPr12	Boolgeeda (W, N), Capricorn (W, N), Rocklea (W, N)		C			ML	2		1			1	4
SPr13	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N)		C			L	2		1			1	4
SPr14	Boolgeeda (W, N), Capricorn (W, N), Robe (W, N)		C			H	2		1			4	7
SPr15	Boolgeeda (W, N), Capricorn (W, N), Houndstooth (R, N), Nanutarra (R, N), Newman (W, N), River (W, N), Robe (W, N), Rocklea (W, N), Ruth (R, N), Stuart (W, N), Urandy (W, N)	P (*Triodia* sp. Robe River)	C			M	3	4	1			2	10
SPr16	Boolgeeda (W, N), Capricorn (W, N), Cheerawarra (R, O), Horseflats (R, N), Houndstooth (R, N), Mallina (W, O), Nanutarra (R, N), Newman (W, N), Paraburdoo (W, N), Peedamulla (R, N), River (W, N), Robe (W, N), Rocklea (W, N), Ruth (W, N), Ruth (R, N), Stuart (W, N), Urandy (W, N)	P (*Owenia acidula*, *Triodia* sp. Robe River)	C			M	3	4	1			2	10
SPr17	Boolgeeda (W, N), Cheerawarra (R, O), Horseflats (R, N), Littoral (R, N), Paraburdoo (W, N), Rocklea (W, N), Ruth (W, N), Uaroo (W, O)		C			L	3		1			1	5

	Conservation Value Factor						Conservation Value Score						
Vegetation Association	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Vegetation Distribution (W, O, R, N, I, A)**	**Rarity (P, U)**	**Naturalness (C, T)**	**Distinctiveness (L, D)**	**Sensitivity (S)**	**Proportion within Footprint area (VH, H, M, ML, L)**	**Total Score**
SPr18	Boolgeeda (W, N), Capricorn (W, N), Nanutarra (R, N), Newman (W, N), Robe (W, N), Rocklea (W, N), Ruth (R, N), Stuart (W, N), Urandy (W, N)		C			M	2		1			2	5
SPr19	Paraburdoo (W, N), Rocklea (W, N)		T (**Cenchrus ciliaris*)			L	2		-3			1	0

Appendix G:

High Conservation Value Vegetation Associations

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Vegetation Association	Vegetation Description	Score	Total Area Mapped (ha)	% Within Disturbance Footprint	Rationale for Score	Comments
HBr6	Acacia i*naequilatera* scattered tall shrubs to tall open shrubland over *Triodia wiseana* hummock grassland	16	4877.6	57.9	Restricted habitat (mesas). Priority Flora and uncommon flora.	Very large area mapped increases likelihood of P species occurring. Much occurs on rolling hills (not mesas). Considered to be widespread and not at significant risk.
HBr10	*Acacia pruinocarpa* and *A. inaequilatera* high open shrubland over *Eremophila fraseri* ssp. *fraseri* low open shrubland over *Triodia wiseana* open hummock grassland	15	251.3	85.7	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	
HBr11	*Acacia pruinocarpa* high open shrubland over *A. arida* open shrubland over *Triodia wiseana* open hummock grassland	13	51.1	55.3	Restricted habitat (mesas). Priority Flora. H proportion in disturbance footprint area.	
HBr13	*Grevillea wickhamii* ssp. *hispidula* and *Acacia tumida* var. *pilbarensis* scattered tall shrubs to tall open shrubland over *Triodia wiseana* very open hummock grassland	16	13.7	95.8	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	
HBr20	*Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia bivenosa* scattered shrubs to shrubland over *Triodia wiseana* open hummock grassland to hummock grassland	13	1473.4	50.7	Restricted habitat (mesas). Priority Flora. High proportion in disturbance footprint area.	Very large area mapped increases likelihood of P species occurring. Considered to be widespread and not at significant risk.
HBr22	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. pruinocarpa* scattered shrubs over *Triodia wiseana* open hummock grassland	13	36.3	52.3	Restricted habitat (mesas). Priority Flora. High proportion in disturbance footprint area.	
HBr23	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia citrinoviridis, A. pruinocarpa* tall shrubland over *Triodia wiseana* open hummock grassland	13	102.5	48.6	Restricted habitat (mesas). Priority Flora, uncommon flora.	*Acacia citrinoviridis* on mesas is unusual.
HBr28	*Acacia citrinoviridis, Stylobasium spathulatum* high shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. epactia* open hummock grassland	15	0.83	99.9	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Acacia citrinoviridis* on mesas is unusual. *Triodia* sp. Robe River community. Very small area mapped. Possibly an ecotone - requires verification. Described from only one quadrat.
HBr29	*Corymbia ferriticola* ssp. *ferriticola* and *Eucalyptus leucophloia* ssp. *leucophloia* low open woodland over *Acacia citrinoviridis* and *Acacia aneura* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland to open hummock grassland	15	2.1	100	Restricted habitat (mesas). Priority Flora . VH proportion in disturbance footprint area.	*Acacia citrinoviridis* on mesas is unusual. *Triodia* sp. Robe River community. Relatively small area mapped. Possibly an ecotone but likely to be an unusual vegetation association.
HBr30	*Eucalyptus leucophloia* ssp. l*eucophloia* scattered low trees over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	32.1	92.7	Restricted habitat (mesas). Priority Flora and uncommon flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.
HBr31	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia citrinoviridis* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	13	61.7	46.7	Restricted habitat (mesas). Priority Flora and uncommon flora.	*Acacia citrinoviridis* on mesas is unusual. Triodia sp. Robe River community.
HBr33	*Acacia atkinsiana, A. bivenosa* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	13	188.4	41.7	Restricted habitat (mesas). Priority Flora and uncommon flora.	*Triodia* sp. Robe River community.
HBr34	*Acacia bivenosa* open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369) and *T. wiseana* open hummock grassland to hummock grassland	17	204	88	Restricted habitat (mesas). Priority Flora and uncommon flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.
HBr35	*Acacia pruinocarpa, A. inaequilatera* (*A. citrinoviridis*) tall open shrubland over *Triodia wiseana, T.* sp Robe River (M.E. Trudgen MET 12,369) hummock grassland	15	80.8	99.9	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Acacia citrinoviridis* on mesas is unusual. *Triodia* sp. Robe River community.
HBr36	*Acacia inaequilatera* (*Petalostylis labicheoides*) scattered tall shrubs over *A. bivenosa* scattered shrubs over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	183.1	100	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.

Vegetation Association	Vegetation Description	Score	Total Area Mapped (ha)	% Within Disturbance Footprint	Rationale for Score	Comments
HBr37	*Acacia pruinocarpa* scattered tall shrubs to tall open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland to hummock grassland	15	120.1	84.1	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.
HBr38	*Acacia tumida* var. *pilbarensis, Petalostylis labicheoides* tall shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) very open hummock grassland	15	33	99.3	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.
HBr40	*Acacia citrinoviridis* tall open shrubland over *A. bivenosa* open shrubland *Triodia wiseana, T. epactia* open hummock grassland	13	14.3	41.1	Restricted habitat (mesas). Priority Flora and uncommon flora.	*Acacia citrinoviridis* on mesas in unusual.
HBr41	*Triodia* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	50.6	100	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.
HBr46	*Eucalyptus leucophloia* ssp. *leucophloia, Acacia aneura* (narrow, fine veined, Site 1259) low open woodland over *A. citrinoviridis, Grevillea berryana* tall open shrubland over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), T. wiseana open hummock grassland	17	6.5	100	Restricted habitat (mesas). Priority Flora, uncommon species. VH proportion in disturbance footprint area.	*Acacia citrinoviridis* on mesas in unusual. Triodia sp. Robe River community.
HBr47	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees over *Acacia maitlandii* open shrubland over *Triodia wiseana, T.* sp. Robe River (M.E. Trudgen MET 12,369) open hummock grassland	15	6.15	100	Restricted habitat (mesas). Priority Flora. VH proportion in disturbance footprint area.	*Triodia* sp. Robe River community.
HBr48	*Eucalyptus leucophloia* ssp. *leucophloia* scattered low trees to low open woodland over *Acacia pruinocarpa* scattered tall shrubs over *Triodia* sp. Robe River (M.E. Trudgen MET 12,369), *T. wiseana* open hummock grassland	13	436.4	44.9	Restricted habitat (mesas). Priority Flora and uncommon flora.	*Triodia* sp. Robe River community.
mDr2	*Acacia aneura* var. *intermedia* low woodland over *Eremophila forrestii* ssp. *forrestii* open shrubland over Triodia wiseana	15	0.7	64.3	Priority Flora, uncommon flora. VH proportion in disturbance footprint area.	Very small area mapped. Possibly an ecotone - requires verification.
RCr4	*Corymbia candida* ssp. *candida* and *C. hamersleyana* low open woodland over *Acacia colei* var. *colei* and *A. ancistrocarpa* high open shrubland over *Triodia epactia* very open hummock grassland	13	11.5	79.9	Restricted habitat (creek). Significant drainage.	
RCr8	*Eucalyptus camaldulensis* and *E. victrix* woodland to open forest over *Melaleuca linophylla, M. glomerata, Acacia ampliceps* high open shrubland over *Triodia epactia* scattered hummocks and *Cyperus vaginata* scattered sedges	13	66.8	7.1	Restricted habitat (creek). Priority flora. Significant drainage.	
RCr9	*Eucalyptus camaldulensis* var. *obtusa, E. victrix* woodland over *Triodia epactia* scattered hummocks over *Stemodia grossa* very open herbland	13	194.3	2.1	Restricted habiat (creek). Priority flora. Significant drainage.	
RCr10	*Corymbia hamersleyana* low open woodland over *Acacia bivenosa, A. citrinoviridis, A. pyrifolia* var. *pyrifolia* high shrubland over *Triodia epactia* open hummock grassland	13	82	9.3	Restricted habitat (creek). Priority flora. Significant drainage.	
SHr1	*Eucalyptus camaldulensis* var. *obtusa* open forest over Acacia colei var. *colei* high open shrubland over *Cenchrus ciliaris* open tussock grassland	14	0.56	99.7	Restricted habitat (sink hole). Species restricted to habitat (ground water dependent). Significant drainage. VH proportion in disturbance footprint area.	Very small area mapped. Unusual habitat.