- the project objectives to rectify the deficiency including value management for major projects,
- the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
- management of risks associated with alternative options,
- and evaluate the options against evaluation criteria adopted by Council, and
- select the best option to be included in capital upgrade/new programs,

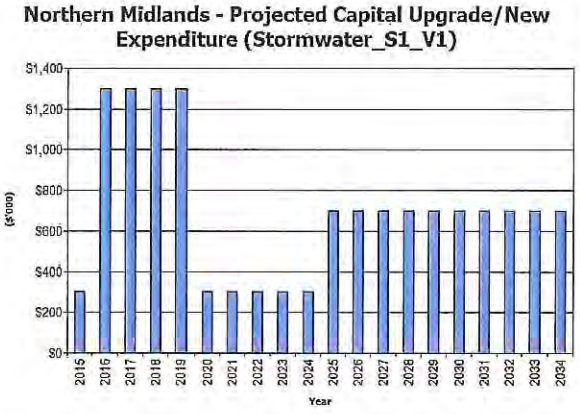
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Fig 6. The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in real values.

Fig 6: Projected Capital Upgrade/New Asset Expenditure



Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's long term financial plan.

Where cashflow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings

Pipes & pits	Redundancy due to duplication	As needed	Nil revenue	Nil savings
Pipes & pits	Redundancy due to incorrect location or depth	As needed	Nil revenue	Nil savings
Pipes & pits	Redundancy due to upgrades (eg. new kerb and channel in a street)	As needed	Nil revenue	Nil savings
Pipes & pits	Redundancy due to capacity shortfall	As needed	Nil revenue	Nil savings

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (ie what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council/Board and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Project not yet identified
- Project not yet identified.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Not yet identified
- Not yet identified

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These include:

- Not yet identified
- Not yet identified

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

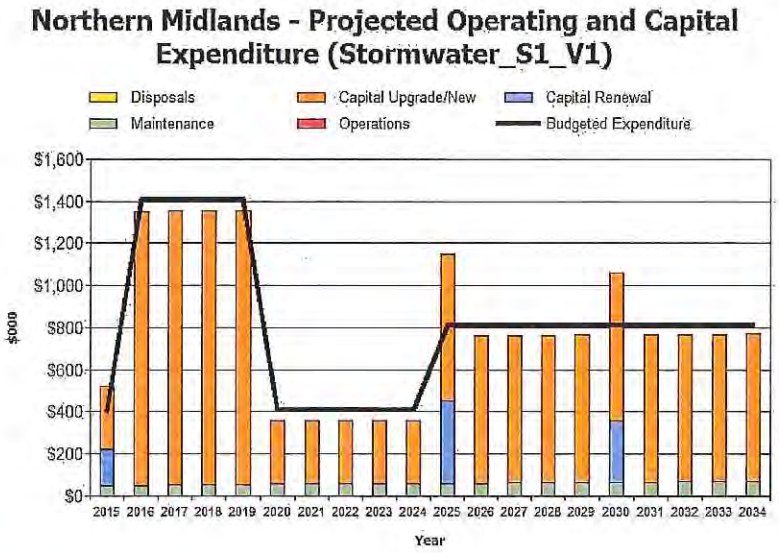
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

Fig 7: Projected Operating and Capital Expenditure



6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[12] 291%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have all of the funds required for the optimal renewal and replacement of its assets.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation

[12] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

expense). The life cycle cost for the services covered in this asset management plan is $467,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $110,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is negative (surplus) $357,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 24% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $73,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $110,000 on average per year giving a 10 year funding surplus of $37,000 per year. This indicates that Council expects to have 150% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

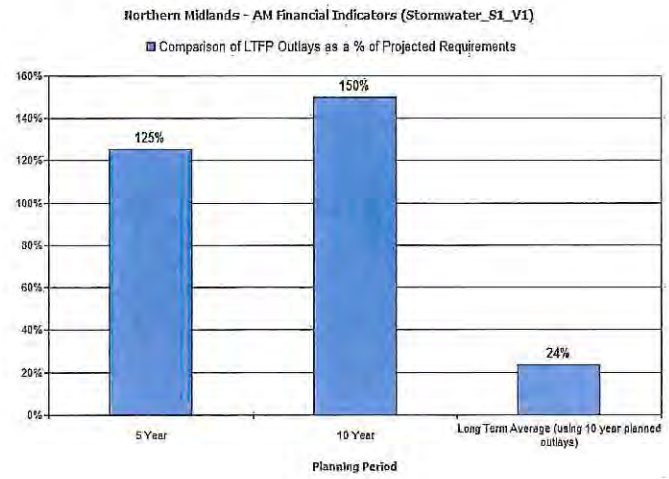
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $88,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $110,000 on average per year giving a 5 year funding surplus of $22,000. This indicates that Council expects to have 125% of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

Figure 7A shows the asset management financial indicators over the 10 year planning period and for the long term life cycle.

Figure 7A: Asset Management Financial Indicators



Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

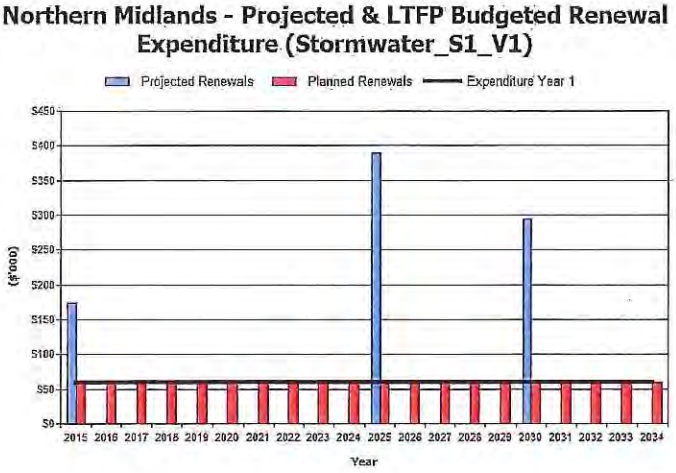


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2015	$175	$60	-$115	-$115
2016	$0	$60	$60	-$55
2017	$0	$60	$60	$5
2018	$0	$60	$60	$65
2019	$0	$60	$60	$125
2020	$0	$60	$60	$185
2021	$0	$60	$60	$245
2022	$0	$60	$60	$305
2023	$0	$60	$60	$365
2024	$0	$60	$60	$425
2025	$390	$60	-$330	$96
2026	$0	$60	$60	$156
2027	$0	$60	$60	$216
2028	$0	$60	$60	$276
2029	$0	$60	$60	$336
2030	$294	$60	-$234	$102
2031	$0	$60	$60	$162
2032	$0	$60	$60	$222
2033	$0	$60	$60	$282
2034	$0	$60	$60	$342

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the long term financial plan.

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap.**

We will manage any 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2015 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$0	$50	$175	$300	$0
2016	$0	$50	$0	$1,300	$0
2017	$0	$52	$0	$1,300	$0
2018	$0	$54	$0	$1,300	$0
2019	$0	$56	$0	$1,300	$0
2020	$0	$58	$0	$300	$0
2021	$0	$59	$0	$300	$0

2022	$0	$59	$0	$300	$0
2023	$0	$60	$0	$300	$0
2024	$0	$60	$0	$300	$0
2025	$0	$61	$390	$700	$0
2026	$0	$62	$0	$700	$0
2027	$0	$63	$0	$700	$0
2028	$0	$64	$0	$700	$0
2029	$0	$65	$0	$700	$0
2030	$0	$66	$294	$700	$0
2031	$0	$67	$0	$700	$0
2032	$0	$68	$0	$700	$0
2033	$0	$69	$0	$700	$0
2034	$0	$70	$0	$700	$0

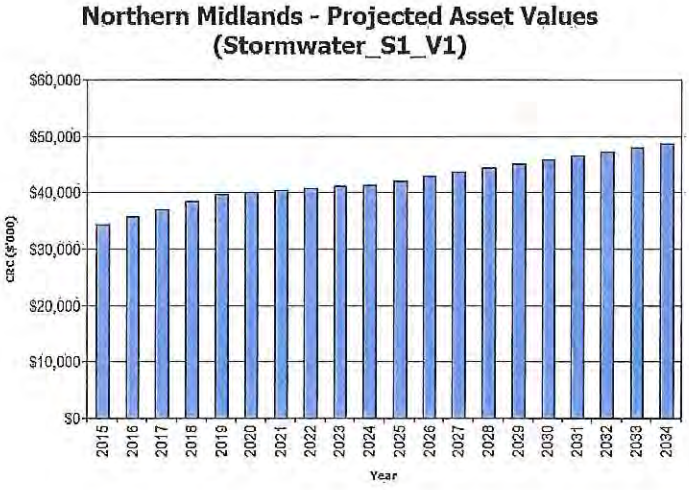
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year long term financial plan.

6.3 Valuation Forecasts

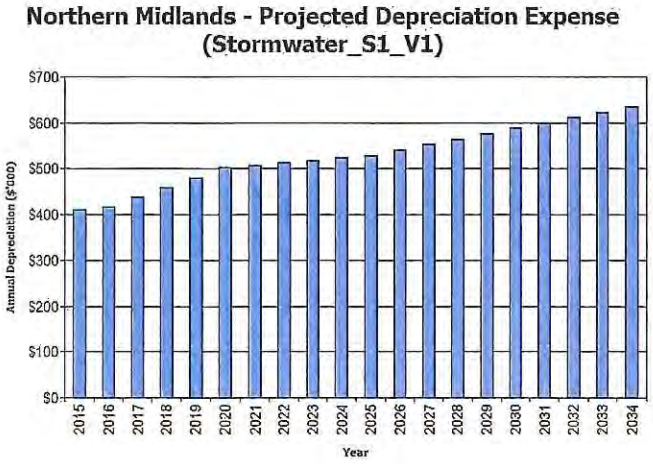
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in real values.

Figure 9: Projected Asset Values



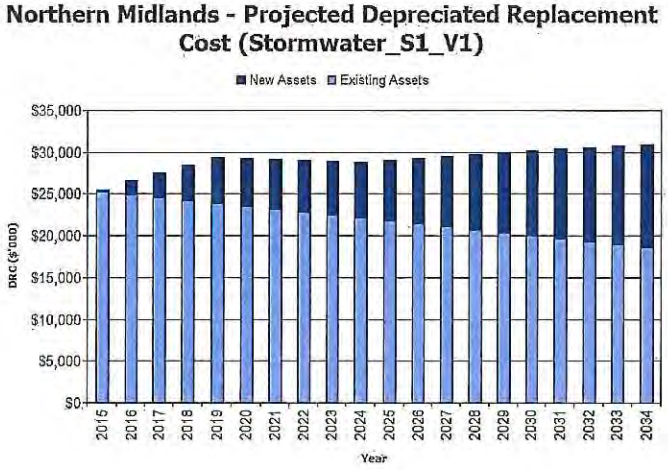
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions

▪ Average population growth over the planning period to be consistent with current level	Minimal effect on AM Plan
▪ Population density to remain reasonably stable	Minimal effect on AM Plan
▪ Asset construction costs to remain stable in real terms (current dollars)	Minimal effect on AM Plan

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale[13] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Reliable	
Growth projections	Reliable	
Operations expenditures	Highly reliable	
Maintenance expenditures	Highly reliable	
Projected Renewal exps. - Asset values	Reliable	
- Asset residual values	Reliable	
- Asset useful lives	Uncertain	
- Condition modelling	Uncertain	
- Network renewals	Uncertain	
- Defect repairs	Uncertain	
Upgrade/New expenditures	Reliable	
Disposal expenditures	Uncertain	

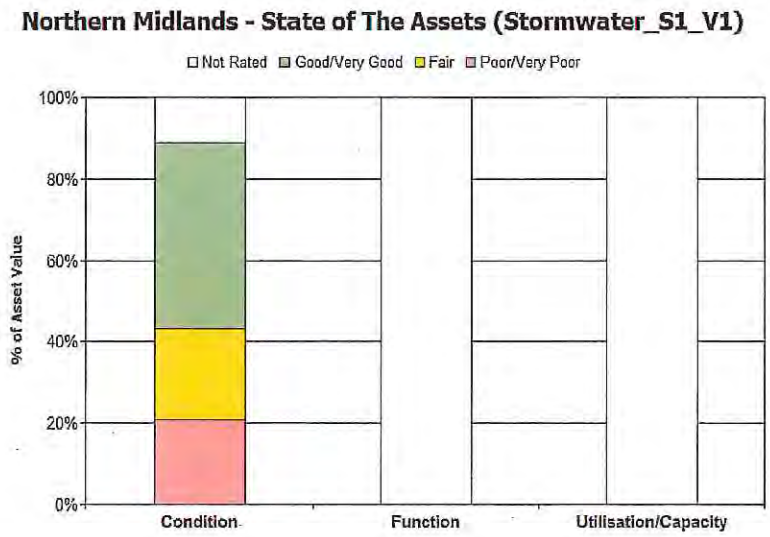
Over all data sources the data confidence is assessed as medium confidence level for data used in the preparation of this AM Plan.

Accuracy of future financial forecasts may be improved in future revisions of this stormwater asset management plan by the following actions - Capital Works programs to be reviewed with preliminary designs.

[13] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Figure 13 shows a picture of the State of the Northern Midlands Council stormwater assets as at the start of the planning period. Figure 13 shows the percentage of asset value rated as being in very good/good, fair and poor/very poor for their condition, function and utilisation/capacity.

Figure 13: State of the Assets



7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

The Corporate Services Department is responsible for the set up and operation of Council's financial systems. Council operates OpenOffice Solution (Finesse) software to manage its accounting functions. This system includes a fully integrated creditor, debtor, payroll, general ledger, receipting modules. The system has a fully integrated asset system however it is only used for fleet operating management.

Council is required to prepare its annual financial report in accordance with Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board and the Local Government Act 1993 (as amended).

AASB 116 Property, plant and equipment, AASB 136 Impairment of Assets, AASB 140 Investment Property and AASB 5 Non-current Assets held for Sale and Discontinued Operations are applied when preparing council's annual financial statements.

The cost method of accounting is used for the initial recording of all assets acquired. Cost is determined as the fair value of the assets given as consideration plus cost incidental to the acquisition including architects fees, engineering design fees, consulting fees, administration charges and all other costs incurred in getting the assets ready for use. In addition the cost of non-current assets constructed by Council, 'cost' includes all material used in construction, direct labour used on the project and an appropriate proportion of overheads.

Non-monetary assets received in the form of grants and donations are recognised as assets and revenues at their fair value at the date of receipt. Fair value means the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

Generally maintenance, repair costs and minor renewals are charged as expenditure when incurred unless the total value exceeds 10% of the assets written down value or increase the economic life by more than 10%. Road reseals, reconstructions, and resheeting are capitalised. Road shouldering, roadside drainage and hotmix patching are expensed.

Expenditure is capitalised when it provides a future economic benefits which extends beyond one year and can be measured reliably. A $5,000 limit applies to the recognition of the acquisition of new stormwater assets.

7.1.2 Accounting standards and regulations

The asset management policies and references used by Northern Midlands Council include:

- Northern Midlands Asset Management Policy – March 2016
- Northern Midlands Asset Management Strategy – March 2016
- International Infrastructure Management Manual, Association of Local Government Engineering new Zealand & Institute of Public Works Engineering Australia 2006
- Australian Infrastructure Financial Management Guidelines, Institute of Public Works Engineering Australia 2009

7.1.3 Capital/maintenance threshold

Capital/maintenance asset thresholds are detailed in the Northern Midlands Council Accounting Policy.

7.1.4 Asset management system

Northern Midlands Council currently has four software systems utilised for managing asset data. These are: TechnologyOne 'ECM' Customer Request System; OpenOffice 'Community - Finesse' Financial System; Intramaps; Geographic Information System for electronic mapping; and 'Moloney Asset Management' System for data storage and asset registers. These four systems contribute to the overall management of the long term planning of its infrastructure assets in order to:

Know what and where its assets are;

Know their condition;

Establish suitable operational, maintenance and renewal regimes to suit the assets and level of services required of them by present and future customers;

Establish asset function and asset maintenance to meet the needs of the present and future customers;

Review maintenance practices and optimising operational procedures;

Implement management strategies for resources and work programs;

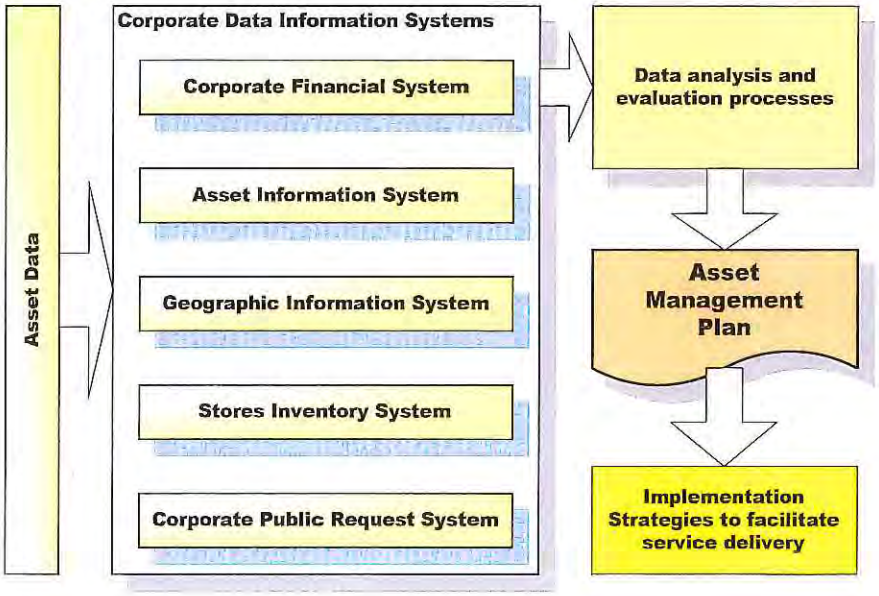
Improve risk management techniques; and

Identify the true cost of operations and maintenance and predict future capital investments and maintenance expenditure required to optimise the asset function and lifecycle.

The Moloney Asset Management System is not linked to the accounting system, however it is constantly reconciled to the Finesse system.

The ongoing responsibility of the Asset Management system is primarily that of the Asset Management Officer, including the annual valuation adjustments, upkeep of the existing and new/acquired assets, and depreciation calculations of the assets.

The following chart illustrates the relationship of the information systems:



7.1.5 Information Flow Requirements and Processes

The key information flows into this asset management plan are:

The asset register data on size, age, value, remaining life of the network;

The unit rates for categories of work/material;

The adopted service levels;

Projections of various factors affecting future demand for services;

Correlations between maintenance and renewal, including decay models;

Data on new assets acquired by council.

The key information flows from this asset management plan are:

The assumed Works Program and trends;

The resulting budget, valuation and depreciation projections;

The useful life analysis.

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

One of the essential aspects of asset management is to maintain data records to ensure that they are up to date and accurate. Asset Managers are responsible for updating and maintaining the asset data to meet the organisations operational and financial requirements in delivering efficient and effective asset management.

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Review condition assessments to increase condition data for better understanding of asset useful lives			
2	Improved system capital works upgrade/new expenditure with project ranking consistent with agreed criteria			
3	Investigation to determine reporting requirements in regard to the breakdown of maintenance expenditure			
4	Improving and automating the data collection/ inspection processes			
5	Formalise and document the data entry process specific to each asset			
6	Review need for Pollutant traps at strategic river outfalls			
7	Catchment modelling to identify deficiencies			
8	Assess benefits of piping any open drain systems			
9	Completion of Stormwater Management Plans and assessment of recommendations/issues raised			
10				

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

The Plan has a life of 4 years and is due for revision and updating within 2 years of each Council election.

7.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

8. REFERENCES

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMG.

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

Sample Council, 'Strategic Plan 20XX – 20XX',

Sample Council, 'Annual Plan and Budget'.

9. APPENDICES

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Appendix C Projected 10 year Capital Upgrade/New Works Program

Appendix D LTFP Budgeted Expenditures Accommodated in AM Plan

Appendix E Abbreviations

Appendix F Glossary

Appendix G Translink Stormwater Upgrade

Appendix A Maintenance Response Levels of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Provide stormwater drainage system that meets community expectations by adequate collection and disposal	Number of customer service requests / complaints	<1 per month	No. of reported incidents ??
Function	Drainage point for all properties in town areas	No of properties where there is no stormwater discharge point	1 in 500 properties have to pump stormwater from property	Nil properties not meeting standard
Safety	Minimise flooding of roads and properties and ponding of stormwater for long periods	Inspections during rainfall events – number of reports of inconvenience claims, health or ponding.	<5 per annum	No. of requests ?? pa
Responsiveness	Council's response to various community raised issues ranging from calls about problems, handling correspondence and service applications	(a) Provision of a 24 hour, 7 day per week call-out service to attend to issues (b) Percentage of issues responded to in set timeframes	100% of time 95% of time	
TECHNICAL LEVELS OF SERVICE				
Condition	Undertake inspections, routine maintenance tasks and repairs in a timely manner	Frequency of inspections, maintenance or repairs	Inspect every 24 months and repair within 3 months. Monthly cleaning of pits during autumn.	Not programmed
Accessibility	Ensure adequate stormwater drainage services are available within declared drainage districts	Number of reported property / road inundation events within serviced area following rain greater then 1in10 year event and discharge options exist	Flooding no more than one time in average 10 year period unless an upgrade or improvement program exists and a connection point or discharge option can be devised	Not currently measured
Cost Effectiveness	Provide services in a cost effective manner	Benchmarking against other councils or contractors	Validate cost of council compared to contractor undertaiking works or cost to maintain system is < or = to that of other municipalities	On a case by case basis. No current benchmarking against other Councils.
Safety	Ensure stormwater infrastructure poses low risk to community and provides physical barriers or signage to identify and protect from hazards. Grates and covers are installed on stormwater entry pits.	Number of injury / damage claims, defect and condition survey results and site specific risk assessments	Less than 1 claim for compensation per 10 km of network and any high risks identified are addresses within 3 months	No currently measured

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Northern Midlands - Report 6 - Appendix B 10 year Renewal & Replacement Program (Stormwater_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
2374	Pipe			Bridge Street	0	2015	$1,296	80
479	Pipe			CNR High/Grant Street	0	2015	$4,549	80
478	Pipe			CNR High/Grant Street	0	2015	$3,499	80
180	Pipe			High Street	0	2015	$6,317	80
1089	Pipe			High Street	0	2015	$2,615	80
1088	Pipe			High Street	0	2015	$252	80
1087	Pipe			High Street	0	2015	$1,082	80
1086	Pipe			High Street	0	2015	$1,195	80
485	Pipe			High Street	0	2015	$11,325	80
2703	Pipe			Mulgrave Street	0	2015	$3,059	80
844	Pipe			Old Bridge Road	0	2015	$5,217	80
843	Pipe			Old Bridge Road	0	2015	$11,355	80
74.1	Pipe			Smith Street	0	2015	$12,522	80
74.2	Pipe		28	Smith Street	0	2015	$2,210	80
2356	Pipe		61	Forster Street	0	2015	$16,536	80
1412	Pipe	112		Summit Drive	0	2015	$2,394	80
1254	Pipe	22		Wilson Street	0	2015	$442	80
1255	Pipe	23		Wilson Street	0	2015	$1,657	80
1256	Pipe	24		Wilson Street	0	2015	$9,207	80
1257	Pipe	25		Wilson Street	0	2015	$368	80
1258	Pipe	26		Wilson Street	0	2015	$2,026	80
2386	Pipe	47	48	King Street	0	2015	$1,399	80
2383	Pipe	49	50	King Street	0	2015	$3,333	80
2380	Pipe	51	52	King Street	0	2015	$6,629	80
2378	Pipe	53		Bridge Street	0	2015	$1,158	80
179	Pipe	87		High Street	0	2015	$17,435	80
2013	Pit			Arthur Street	0	2015	$2,148	100
478	Pit			CNR High/Grant Street	0	2015	$2,148	100
180	Pit			High Street	0	2015	$2,864	100
1089	Pit			High Street	0	2015	$1,841	100
1088	Pit			High Street	0	2015	$1,841	100
1087	Pit			High Street	0	2015	$1,841	100
1086	Pit			High Street	0	2015	$1,841	100
485	Pit			High Street	0	2015	$2,148	100
2547	Pit			Main Street	0	2015	$2,148	100
2703	Pit			Mulgrave Street	0	2015	$2,148	100
844	Pit			Old Bridge Road	0	2015	$2,148	100
843	Pit			Old Bridge Road	0	2015	$2,148	100
74.1	Pit			Smith Street	0	2015	$2,148	100
74.2	Pit		28	Smith Street	0	2015	$2,148	100
1412	Pit	112		Summit Drive	0	2015	$1,841	100
1254	Pit	22		Wilson Street	0	2015	$1,841	100
1255	Pit	23		Wilson Street	0	2015	$1,841	100
1256	Pit	24		Wilson Street	0	2015	$1,841	100
1257	Pit	25		Wilson Street	0	2015	$1,841	100
1258	Pit	26		Wilson Street	0	2015	$1,841	100
2449	Pit	39		Wellington Street	0	2015	$2,148	100

179	Pit	87	High Street	0	2015	$2,864	100
					Subtotal	$174,702	
					Program Total	$174,702	

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program

Projected Expenditure	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capital Expenditure on Renewal/Replacement of existing assets	$175	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Expenditure on Upgrade/New assets	$300	$1,300	$1,300	$1,300	$1,300	$300	$300	$300	$300	$300
Operational cost of existing assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance cost of existing assets	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50
Operational cost of New assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance cost of New assets	$0	$0	$2	$4	$6	$8	$9	$9	$10	$10
Disposal of Surplus assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Appendix D Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management **Northern Midlands**

Stormwater_S1_V1 **Asset Management Plan**

IPWEA INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA JRA

First year of expenditure projections **2015** (financial yr ending)

Stormwater

Asset values at start of planning period

		Calc CRC from Asset Register
Current replacement cost	$34,045 (000)	$34,045 (000)
Depreciable amount	$25,593 (000)	This is a check for you.
Depreciated replacement cost	$25,593 (000)	
Annual depreciation expense	$411 (000)	

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.00%
Additional maintenance	0.15%
Additional depreciation	1.61%
Planned renewal budget (information only)	

You may use these values calculated from your data or overwrite the links.

Existing %ages calculated from data in worksheet

0.00%	of CRC (10 yr average)
0.15%	of CRC (10 yr average)
1.61%	of Dep Amt
0.18%	of CRC (Year 1 comparison)

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2015** values

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)											**Average of first 10 year Expenditure Outlays from LTFP**									
Operations																				
Operations **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Management **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AM systems **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance																				
Reactive maintenance **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Planned maintenance **budget**	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50
Capital																				
Planned renewal **budget**	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60
Planned upgrade/new **budget**	$300	$1,300	$1,300	$1,300	$1,300	$300	$300	$300	$300	$300	$700	$700	$700	$700	$700	$700	$700	$700	$700	$700
Non-growth contributed asset value	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Asset Disposals																				
Est Cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Additional Expenditure Outlays required and not included above											**Average of first 10 years Expenditure Outlays required from IRMP**									
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)																			
Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2																				

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Forecast Capital Renewal from Forms 2A & 2B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forecast Capital Upgrade from Form 2C	$300	$1,300	$1,300	$1,300	$1,300	$300	$300	$300	$300	$300	$700	$700	$700	$700	$700	$700	$700	$700	$700	$700

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Appendix E Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRC	Written down current replacement cost

Appendix F Glossary

Annual service cost (ASC)

1) Reporting actual cost
   The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2) For investment analysis and budgeting
   An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new
Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal
Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade
Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding
Funding to pay for capital expenditure.

Capital grants
Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure
See capital expenditure definition

Capitalisation threshold
The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount
The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets
See asset class definition

Component
Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management
Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision- making).

Cost of an asset
The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets
Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)
The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance
The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)
The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation
The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life
See useful life definition.

Expenditure
The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Expenses
Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Fair value
The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Financing gap
A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels.

Heritage asset
An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss
The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets
Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business.

Key performance indicator
A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service
The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *
1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure
The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings
See borrowings.

Maintenance
All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *
Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality
The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset
Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations
Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure
Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense
The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses
Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio
Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Operations, maintenance and renewal gap
Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score
A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *
The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *
The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *
A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount
The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure
Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

Remaining useful life
The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal
See capital renewal expenditure definition above.

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management
The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment
A self-contained part or piece of an infrastructure asset.

Service potential
The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining
A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Specific Maintenance
Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan
A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component
Smaller individual parts that make up a component part.

Useful life
Either:
(a) the period over which an asset is expected to be available for use by an entity, or
(b) the number of production or similar units expected to be obtained from the asset by the entity.
It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use
The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *

PLAN 1

PLANNING APPLICATION P15-331

2 HUDSON FYSH DRIVE, WESTERN JUNCTION

ATTACHMENTS

A Draft amendment and permit

B Representations and applicant's response

ATTACHMENT A.

NORTHERN MIDLANDS INTERIM PLANNING SCHEME 2013

AMENDMENT 07/2015

To allow the land at 2 Hudson Fysh Drive, Western Junction to be used and developed for a car park with a variation to the landscaping setbacks from Evandale Main Road and Hudson Fysh Drive boundaries) and the parking provisions, by amending the Ordinance as follows:

Clause F1.4.8 Open Space and Landscaping by adding ', except that on 2 Hudson Fysh Drive (CT 146537/2) the setback from Evandale Road may be varied to no less than 8m provided that there is still effective screening of buildings and works from Evandale Main Road' after 'P1 No performance criteria'.

and

Clause E6.7.4 Parking for Persons with a Disability by adding ', except that on 2 Hudson Fysh Drive (CT 146537/2), where used and developed for vehicle parking, one of every 50 parking spaces or part thereof must be constructed and designated for use by persons with disabilities in accordance with Australian Standards AS/NZ 2890.6 2009' after 'P2 No performance criteria'.

The **COMMON SEAL** of the Northern Midlands Council is affixed hereto, Pursuant to the Council's resolution of **15 February 2016** in the presence of:)

NORTHERN MIDLANDS COUNCIL 1993

.....
Mayor

.....
General Manager

Northern Midlands Interim Planning Scheme 2013

DRAFT

NORTHERN MIDLANDS COUNCIL

Planning Permit P15-331

In accordance with Division 2 of the *Land Use and Planning Approvals Act 1993*, the Northern Midlands Council (Planning Authority) hereby grants a permit for –

ADDRESS OF LAND:

2 HUDSON FYSH DRIVE, WESTERN JUNCTION

P/N: 202250.1; A134
CT 146537/2

THIS PERMIT ALLOWS FOR:

The land at 2 Hudson Fysh Drive, Western Junction (CT 146537/2), to be developed and used for a carpark, in accordance with application P15-331, and subject to the following conditions:

1 LAYOUT NOT ALTERED

The use and development must be in accordance with the endorsed plans numbered **P1** (Drawing No. 1/8; Revision No. 3, Dated 26.10.15); **P2** (Drawing No. 2/8; Revision No. 3, Dated 26.10.15); **P3** (Drawing No. 3/8; Revision No. 3, Dated 26.10.15); **P4** (Drawing No. 4/8; Revision No. 3, Dated 26.10.15); **P5** (Drawing No. 5/8; Revision No. 3, Dated 26.10.15); **P6** (Drawing No. 6/8; Revision No. 3, Dated 26.10.15); **P7** (Drawing No. 7/8; Revision No. 3, Dated 26.10.15); **P8** (Drawing No. 8/8; Revision No. 3, Dated 26.10.15); **S1** (Drawing No. S01; Revision AP2); **S2** (Drawing No. S02; Revision AP2); **S3** (Drawing No. S03; Revision AP2); **S4** (Drawing No. S04; Revision AP2); **S5** (Drawing No. S05; Revision AP2).

2 AMENDED PLANS REQUIRED

Before application is made for a building permit, amended plans must be submitted. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and show:

a) 7 Disabled parking spaces located closest to the main entrance to the building;

b) Replacement of the pole sign with a blade sign 2.4m high x 1.2m wide.

3 STORMWATER

Prior to the application for a building permit, stormwater drainage plans and calculations from a suitably qualified engineer must be provided to demonstrate that the development can be adequately drained, to the satisfaction of Council's Works and Infrastructure Manager. The design plans shall include internal detention for rainfall events up to the 1 in 20 ARI storm.

4 FOOTPATH

4.1 Prior to the application for a building permit, the developer must have applied to, and received approval from the Northern Midlands Council and the Department of State Growth for the footpath between 2 Hudson Fysh Drive and Airport as shown in the endorsed plan S1. The application must include design drawings prepared by a suitably qualified engineer for the footpath detailing:

i) Footpaths to a minimum of 2m wide and of concrete construction.

ii) Access ramps provided at all interfaces between footpath and kerb/roadway.

iii) Walkways across Hudson Fysh Drive and Evandale Road located through the existing roundabout splitter islands via modification to provide flush walkways with a minimum width of 2m.

iv) The new footpath connecting fully to the existing footpath within the Airport property boundary

v) Tactile Ground Surface Indicators provided at all pedestrian holding points in accordance with relevant Australian Standards and Disability Discrimination Act requirements

vi) Provision of pedestrian warning signage on each Evandale Road approach to the existing roundabout

vii) Confirmation that existing street lighting levels at the roundabout are sufficient to light the new pedestrian crossing points to Australian Standard Category V5. If this cannot be attained, the design plans must detail additional street lightning to meet the minimum V5 Category.

viii) Any stormwater drainage, including underground stormwater reticulation that is directed to the State Road reserve.

4.2 Engineering drawings detailing the above requirements must be provided to the Department of State Growth at the preliminary design stage for review and acceptance prior to submitting final detail design drawings along with an application for a Works Permit.

4.3 Prior to the application for a certificate of occupancy, the footpath between 2 Hudson Fysh Drive and the airport must be completed to the approval of the Northern Midlands Council and the Department of State Growth.

5 CAR PARKING

5.1 Car park plans

Prior to the application for a building permit, construction plans shall be submitted to the approval of the council for the carpark which shall include levels so that the car park can be used in accordance with the plans.

5.2 Car Park

Prior to commencement of the use, areas set aside for parked vehicles and access lanes as shown on the endorsed plans must be constructed in accordance with the endorsed plans, including:

- Where parking spaces are adjacent to pedestrian paths, separation by wheel stops, kerbs, bollards or other protective devices;
- All-weather seal coat surface.
- Concrete kerbs and channels.
- Painting of linemarking and symbols.

5.3 Lighting of car park

The lighting of the car park area must be located and designed so that no direct light is emitted outside the site.

6 COUNCIL'S WORKS & INFRASTRUCTURE DEPARTMENT CONDITIONS

6.1 Access

An access shall constructed in accordance with the approved design plans.

Access works must not commence until an application for vehicular crossing has been approved by Council.

6.2 As constructed information

As Constructed Plans and Asset Management Information must be provided in accordance with Council's standard requirements.

6.3 Municipal standards & certification of works

Unless otherwise specified within a condition, all works must comply with the Municipal Standards including specifications and standard drawings. Any design must be completed in accordance with Council's subdivision design guidelines to the satisfaction of the Works & Infrastructure Department. Any construction, including maintenance periods, must also be completed to the approval of the Works & Infrastructure Department.

6.4 Works in Council road reserve

Works must not be undertaken within the public road reserve, including crossovers, driveways or kerb and guttering, without prior approval for the works by the Works & Infrastructure Manager.

Twenty-four (24) hours' notice must be given to the Works & Infrastructure Department to inspect works within road reserve, and before placement of concrete or seal. Failure to do so may result in rejection of the vehicular access or other works and its reconstruction.

6.5 Pollutants

The developer/property owner must ensure that pollutants such as mud, silt or chemicals are not released from the site.

Prior to the commencement of the development works the developer/property owner must install all necessary silt fences and cut-off drains to prevent soil, gravel and other debris from escaping the site. Material or debris must not be transported onto the road reserve (including the naturestrip, footpath and road pavement). Any material that is deposited on the road reserve must be removed by the developer/property owner. Should Council be required to clean or carry out works on any of their infrastructure as a result of pollutants being released from the site the cost of these works may be charged to the developer/property owner.

6.6 Naturestrips

Any new naturestrips, or areas of naturestrip that are disturbed during construction, must be topped with 100mm of good quality topsoil and sown with grass. Grass must be established and free of weeds prior to Council accepting the development.

7 TASWATER CONDITIONS

Sewer and water services must be provided in accordance with TasWater's Planning Authority Notice (reference number TWDA 2015/01865-NMC).

8 LANDSCAPING

Landscaping works as shown on the landscape plan shall be completed within three months from date of the Certificate of Completion and then maintained for the duration of the use, with vegetation to be of a type as to not attract birds.

9 PROXIMITY TO AIRPORT

9.1 Direct external lighting must not be visible above 3 degrees from the horizontal plane, applicable in all directions.

9.2 Crane operations are limited within the vicinity of the airport and approval to operate a crane that may intrude into the protected airspace is required.

10 ACOUSTIC TREATMENT

Prior to commencement of use, the applicant must demonstrate by a report from an acoustic engineer, that noise from aircraft, when measured from inside the office is no more than 70dB(A).

DUNCAN PAYTON
PLANNING & DEVELOPMENT MANAGER
Date of Decision: 15-Feb-2016
Date of Permit: 25-Feb-2016

THIS IS NOT A BUILDING PERMIT

Notes:

A This permit has no force or effect until such time as the associated Planning Scheme Amendment is approved by the Tasmanian Planning Commission.

B The use allowed by this permit is defined as *Vehicle parking* under the Northern Midlands Interim Planning Scheme 2013. This is a discretionary use within the *General Industrial zone, Translink Specific Area Plan and the Airports Impact Management Code*

C Attention is directed to Section 39 of the Land Use Planning and Approvals Act 1993: "... representations in relation to that draft amendment may be submitted to the authority by any person before the expiration of the exhibition period referred to in section 38(1)(a) ... 28 days (or a longer period agreed to by the planning authority and the Commission) from the date, specified in the notice, on which the public exhibition of those documents is to begin." (The authority is the Northern Midlands Council.)

D This permit does not imply that any other approval required under any other by-law or legislation has been granted.

E The issue of this planning permit does not certify compliance with the *Building Code of Australia*, the *Disability Discrimination Act 1992* or any other applicable legislation.

F This permit does not constitute authority to erect or construct buildings or works over or upon any drain or sewer vested in the Council or upon any drainage or other easement whether registered or statutory.

G Substantial commencement is considered as the commencement of physical works on site for a project. This does not include clearing the site or minor excavations.

H The issue of this planning permit does not certify compliance with the *Building Code of Australia*, the *Disability Discrimination Act 1992* or any other applicable legislation.

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1-435

Proposed Carpark at 2 Hudson Fysh Dve, Western Junction, TAS

for Heath Lang

NORTHERN MIDLANDS COUNCIL
This document forms part of
Planning Permit P15-331
issued on 25-Feb-2016
(P1 - P8)

Project Details	
Council	Northern Midlands Council
Zone	25.0 General Industrial
Overlay	101.SAP.TLX
PID	2697489
Title Folio	2
Title Volume	146537
Climate Zone	7
Wind Speed	N2
Soil Class	-
Site Hazards	-
BAL Rating	BAL -
Corrosive Environment	N/A

Drawing List	
Sheet Number	Sheet Name
1	Cover Page
2	Site Plan
3	Drainage Plan
4	Floor Plan
5	Elevations (sheet 1)
6	Elevations (sheet 2)
7	Signage
8	3D Views

Area Schedule (Gross Building)		
Name	Area	Area (Squares)
Carwash Area	72.57 m²	7.80
Office Area	26.91 m²	2.89
Remainder Roof Area	447.56 m²	48.12
	547.05 m²	58.82

Planning App (A2)

No.	Date	Description
3	26.10.15	Planning Approval
2	21.09.15	Concept # 2
1	21.08.15	Concept # 1

Starting Date : 21.08.15

Plot Date : 27/10/2015 10:43:43 AM

Project No.	Drawing No.
020815	1 /8

P1

NORTHERN MIDLANDS COUNCIL
This document forms part of
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(P1 - P8)

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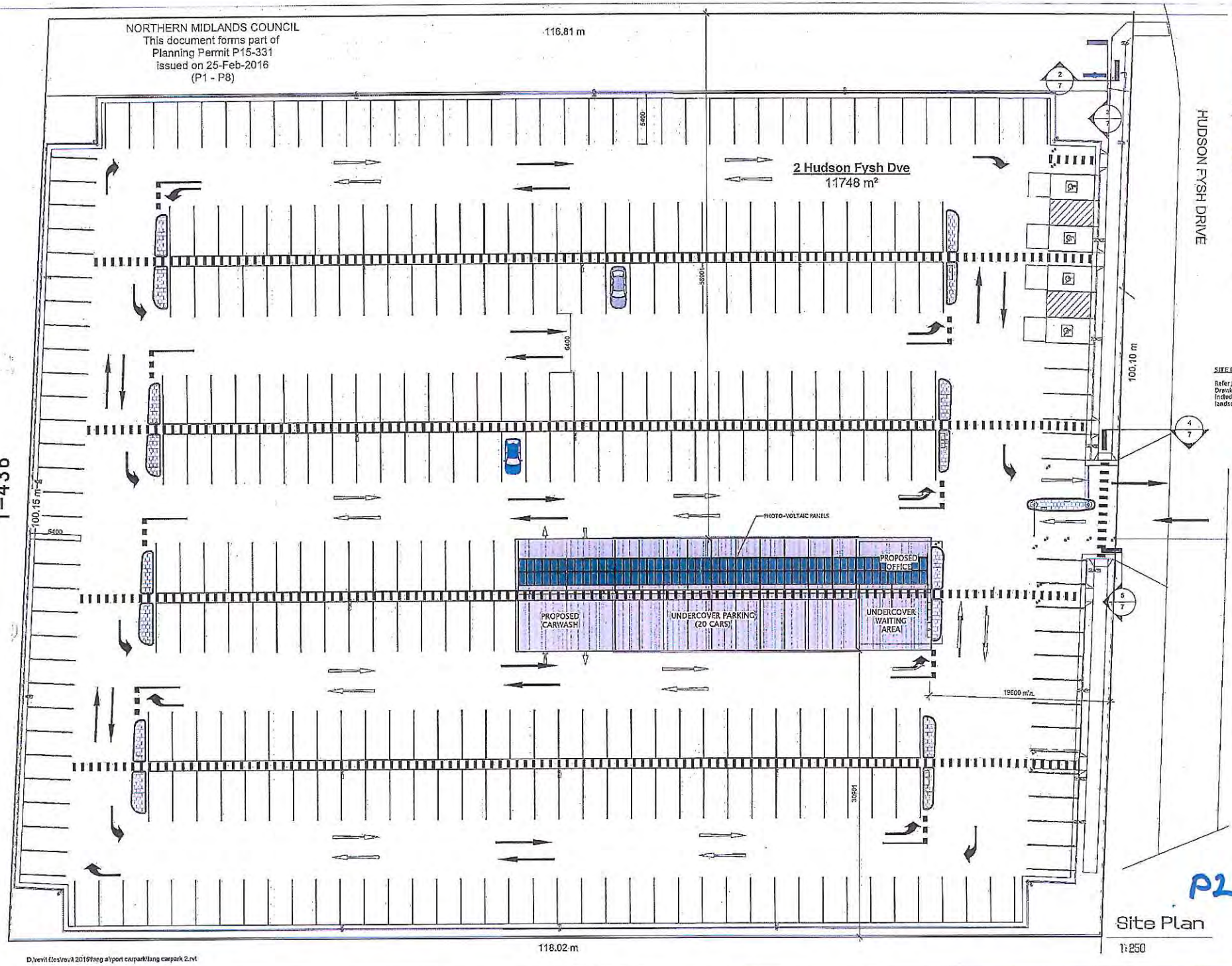

SITE PLAN NOTES

Refer JMG Engineers & Planners Civil Drawings for all Site plan details including carparking, contours, landscaping & plumbing.

Planning App (A2)

No.	Date	Description
3	26.10.15	Planning Approval
2	21.08.15	Concept # 2
1	21.08.15	Concept # 1

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Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
Site Plan

Scale: 1:250
Starting Date: 21.08.15
Plot Date: 27/10/2015 10:43:46 AM

Project No. 020815
Drawing No. 2 /8

P2

Site Plan
1:250

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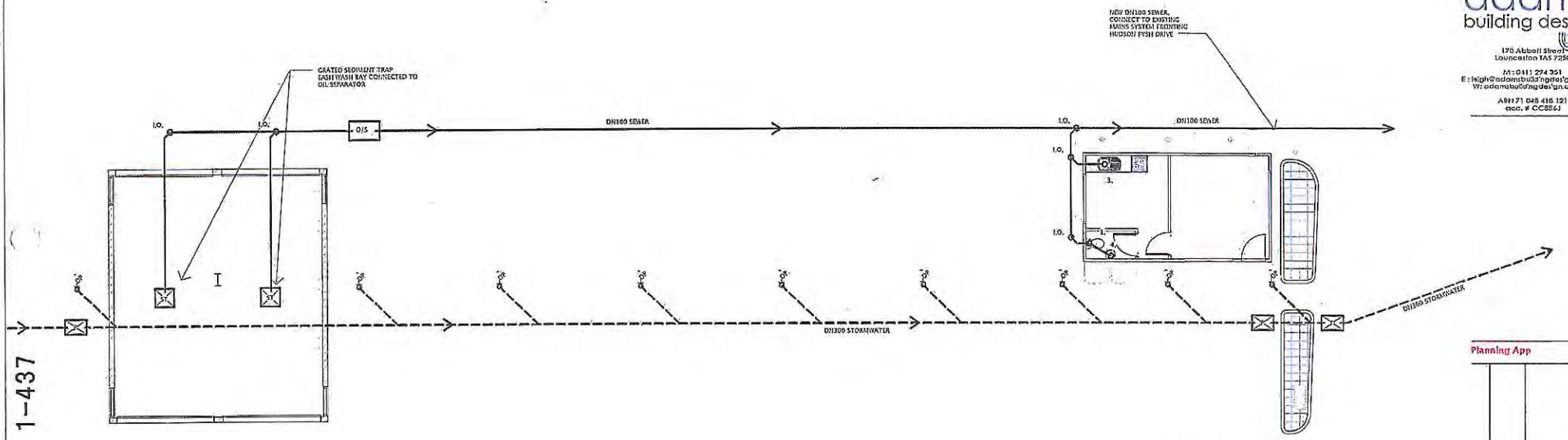
(P1 - P8)



1-437

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Planning App (A2)

No.	Date	Description
3	26.10.15	Planning Approval
2	31.08.15	Concept # 2
1	21.08.15	Concept # 1

PLUMBING NOTES

REACTIVE SITES – where they penetrate through external footings, stormwater, sewer, Drain waste, & vent pipes are to be lagged & flexible connections are to be provided adjacent to the footings prior to connection to the drainage to comply with AS2870-1996 Section 5.5. Additional requirements for class H & E sites.

PLUMBING NOTES

1. All plumbing work to comply with AS 3500 parts 1,2,3 & 4, and the Local Council plumbing regulations.
2. Hot water from the HWC is to be tempered to 50°C.
3. Hot & cold reticulation lines to be DN20 with DN15 branches to individual fixtures.
4. Drain all surface water away from footings in accordance with ECA part 3.1.2.3.
5. The building Contractor must locate the connection points to the mains to verify that their positions & depths are as shown on the endorsed plans. Such verification must be completed as the first task of the building works.
6. Installation of ORG is to comply with AS3500 part 2 clauses 4.6.6.6 (minimum height below lowest fixture = 150mm) & 4.6.6.7 (Minimum height above surrounding ground finished surface level = 75mm)
7. New Sewer = DN100 pvc @ 1:60 falls min.
8. New Stormwater = DN100 pvc @ 1:100 falls min.
9. (UNLESS NOTED OTHERWISE)
10. Grated drains to be installed via a gas sealed pit.
11. STANDARD DRAIN SIZES:
    TROUGH: DN50
    SINK: DN50
    WC: DN100
    STORMWATER: DN100
12. WATER PIPE SIZES:
    COLD WATER: DN 20 WITH DN16 BRANCHES
    HOT WATER: DN 20 WITH DN 16 BRANCHES
13. HOT WATER INSTALLATION SHALL DELIVER HOT WATER TO ALL SANITARY FIXTURES AT THE FOLLOWING TEMPERATURES:
    BATH BASIN & SHOWER: 50deg C
    KITCHEN SINK & LAUNDRY: 60deg C

PLUMBING LEGEND

1. WC
2. URINAL
3. KITCHEN SINK
4. BASIN / VANITY
5. BATH
6. SHOWER
7. WASH TROUGH
8. WASHING MACHINE
9. DISHWASHER

I.O. – INSPECTION OUTLET
ORG – OVERFLOW RELEIF GULLY
DP – DOWNPIPE
EV – DN50 VENT TO AIR
M – WATER METER

PLUMBING LEGEND

- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING WATER
- NEW STORMWATER
- NEW DOWNPIPES/VV
- NEW SEWER
- NEW WATER
- NEW AG DRAIN

SITE PLAN NOTES

Refer JMG Engineers & Planners Civil Drawings for all Site plan details including carparking, contours, landscaping & plumbing.

Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
Drainage Plan

Scale:	1 : 100
Starting Date:	21.08.15
Plot Date:	27/10/2015 10:43:47 AM
Project No.	Drawing No.
020815	3 /8

P3

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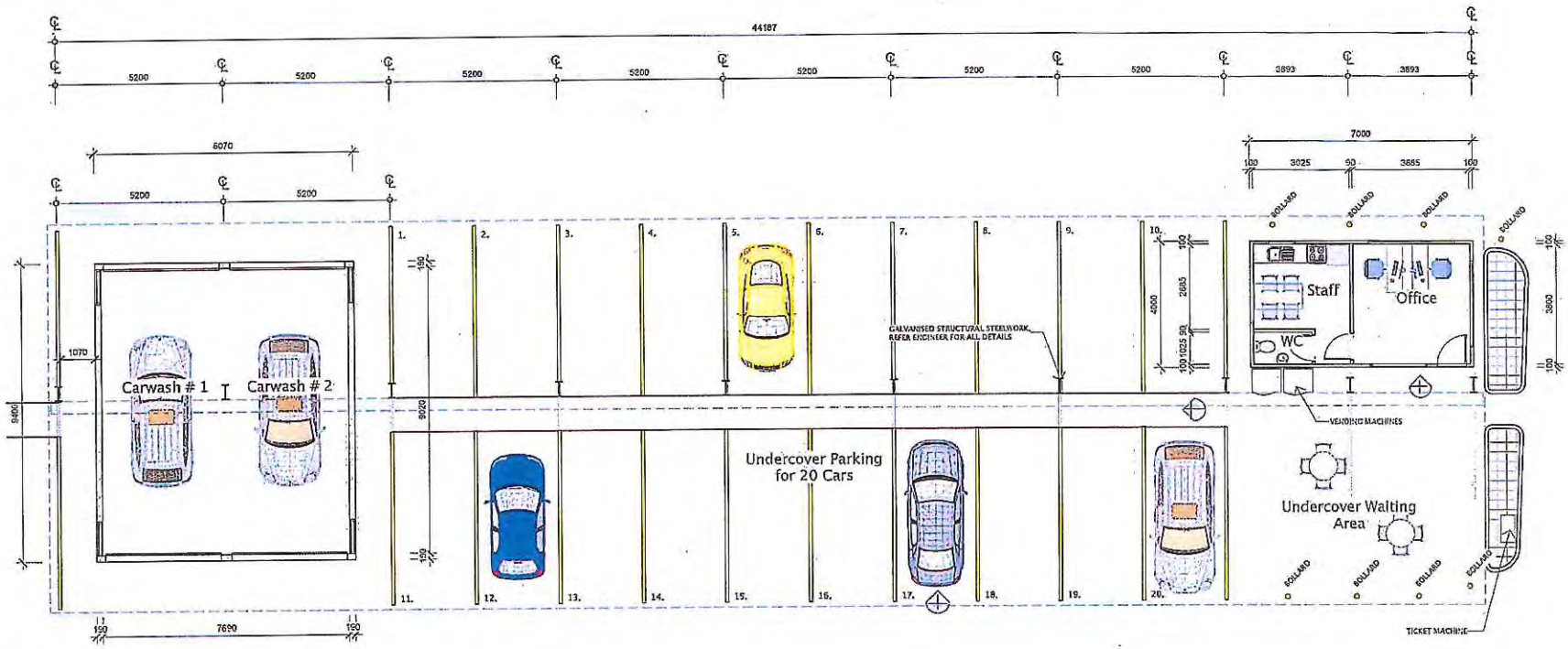

Floor Plan

1:100

Area Schedule (Gross Building)		
Name	Area	Area (Squares)
Carwash Area	72.57 m²	7.60
Office Area	26.91 m²	2.89
Remainder Roof Area	447.56 m²	48.12
	547.05 m²	58.82

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Planning App A2

No.	Date	Description
3	26.10.15	Planning Approval
2	31.08.15	Concept # 2
1	21.08.15	Concept # 1

Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
Floor Plan

Scale: 1:100

Starting Date: 21.08.15

Plot Date: 27/10/2015 10:43:48 AM

Project No.	Drawing No.
020815	4 /8

P4

1-438

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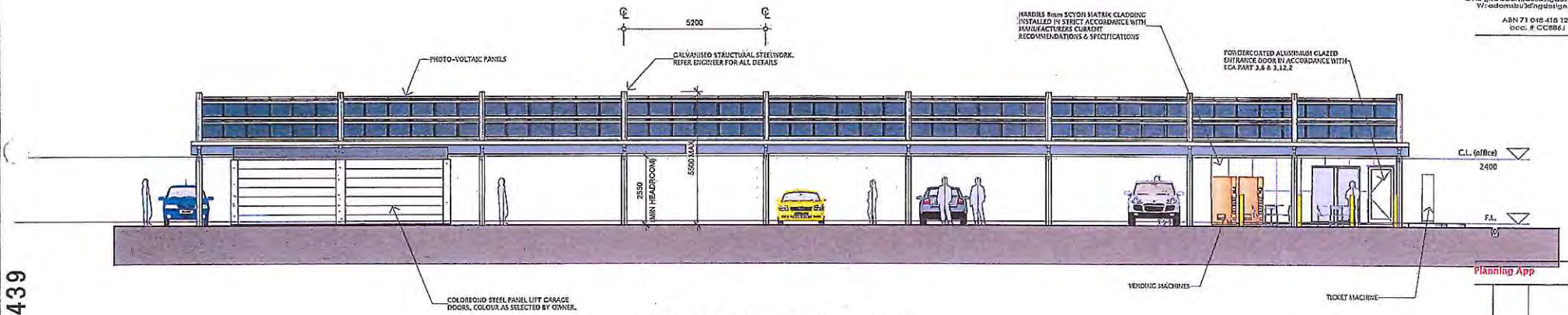
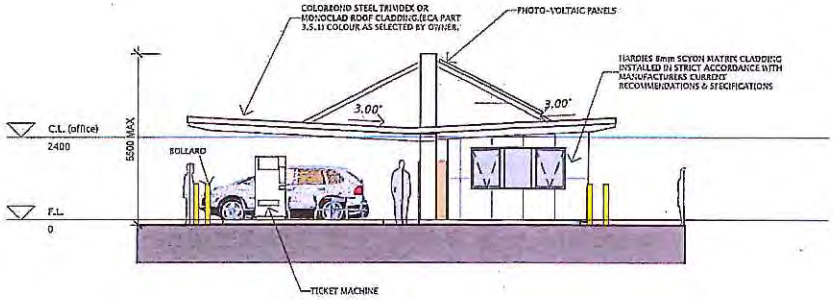


South West Elevation

1:100



South East Elevation

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Planning App

A2

No.	Date	Description
3	28.10.15	Planning Approval
2	31.08.15	Concept # 2
1	21.08.15	Concept # 1

Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
Elevations (sheet 1)

Scale: 1 : 100

Starting Date: 21.08.15

Plot Date: 27/10/2015 10:43:50 AM

PS

Project No.	Drawing No.
020815	5 /8

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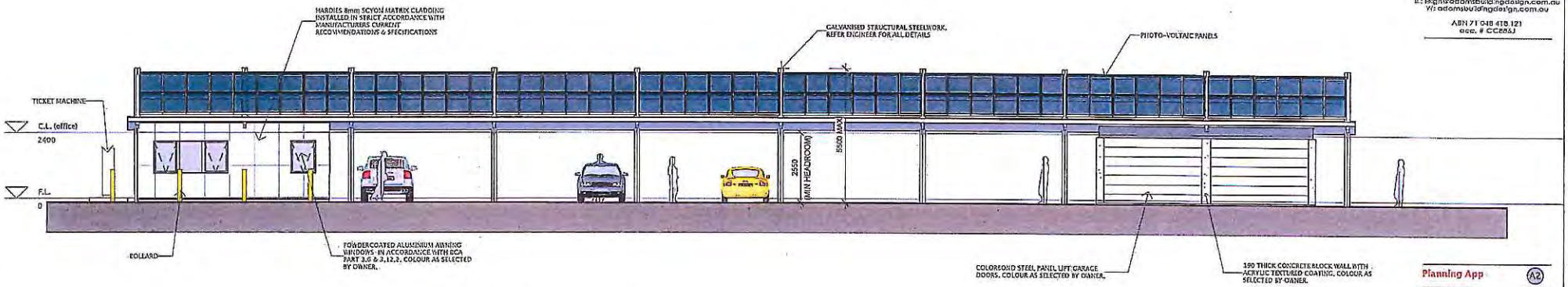
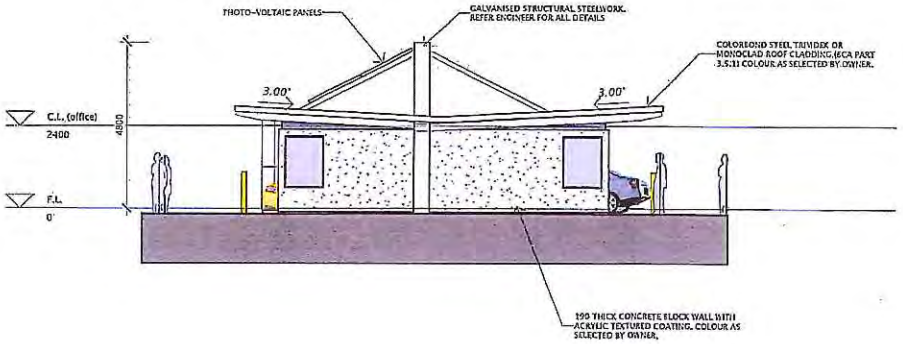


North East Elevation

1:100



North West Elevation

1:100

1-440

Planning App (A2)

No.	Date	Description
3	26.10.15	Planning Approval
2	31.08.15	Concept # 2
1	21.08.15	Concept # 1

Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
Elevations (sheet 2)

Scale:	1 : 100
Starting Date:	21.08.15
Plot Date:	27/10/2015 10:43:52 AM
Project No.	Drawing No.
020815	6 /8

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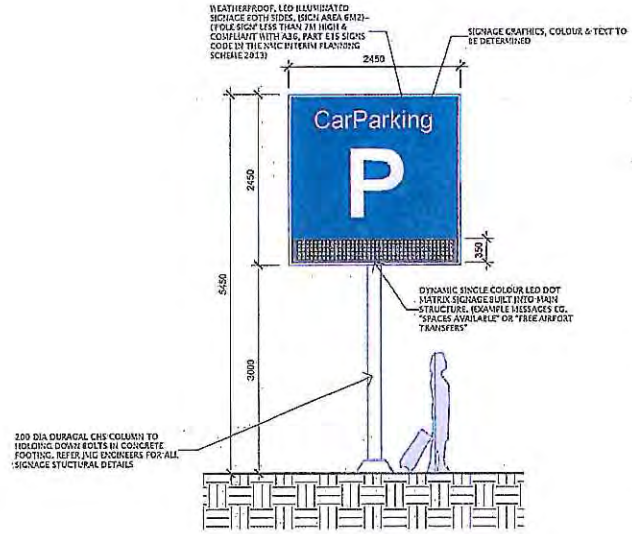

1 Signage Front

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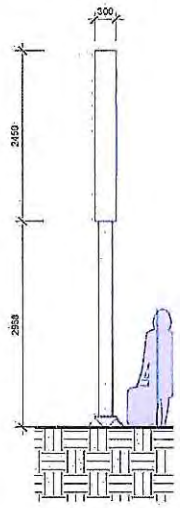

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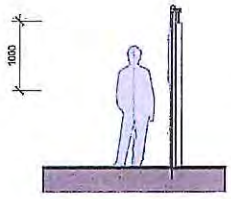
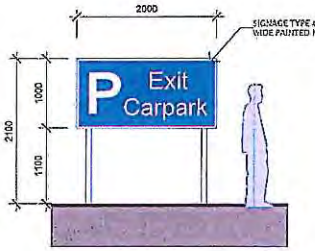
1:50

1 Perspective



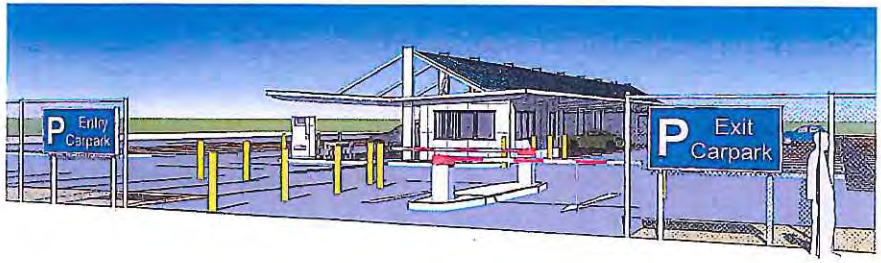


2 Signage Side

1:50

2 Signage Front

1:50



2 Perspective

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NORTHERN MIDLANDS COUNCIL
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Planning Permit P15-331
issued on 25-Feb-2016
(P1 - P8)

Planning App A2

No.	Date	Description
3	26.10.15	Planning Approval
2	31.08.15	Concept # 2
1	21.08.15	Concept # 1

Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
Signage

Scale:	1 : 50
Starting Date:	21.08.15
Plot Date:	27/10/2015 10:43:59 AM
Project No.	Drawing No.
020815	7 /8

P7

1-441

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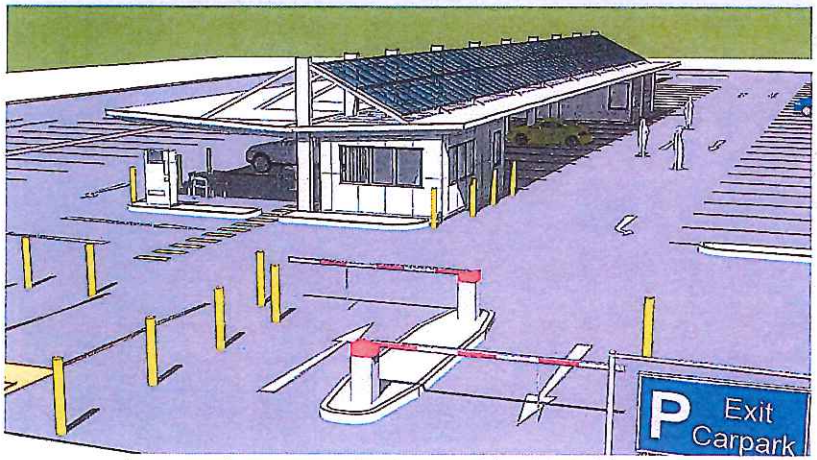
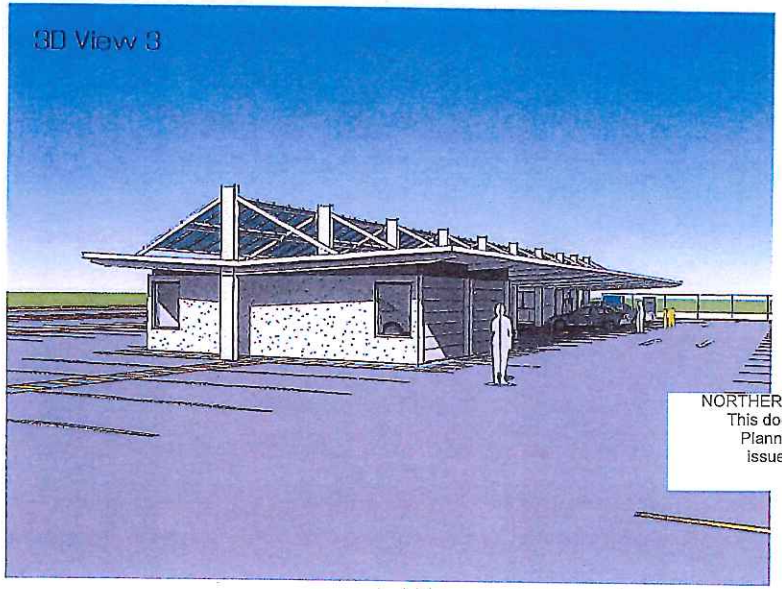
1-442

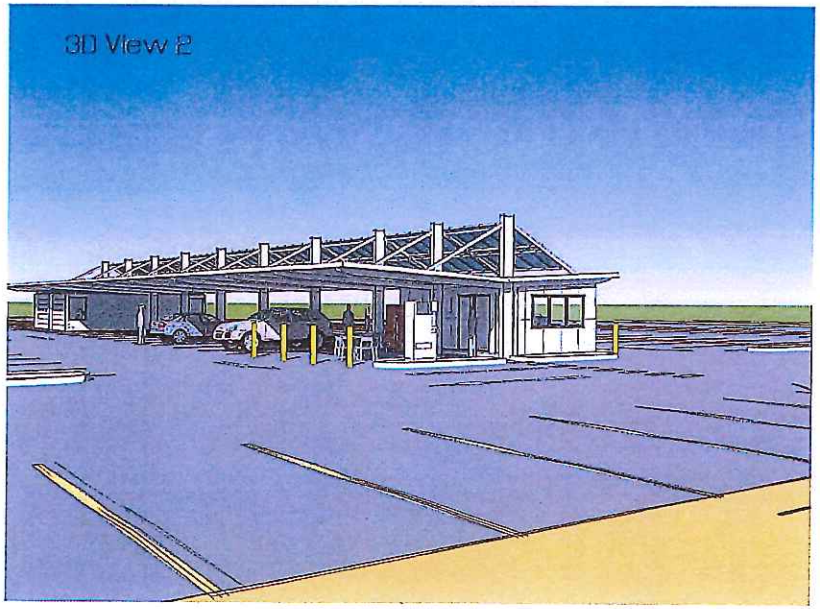
3D View 1



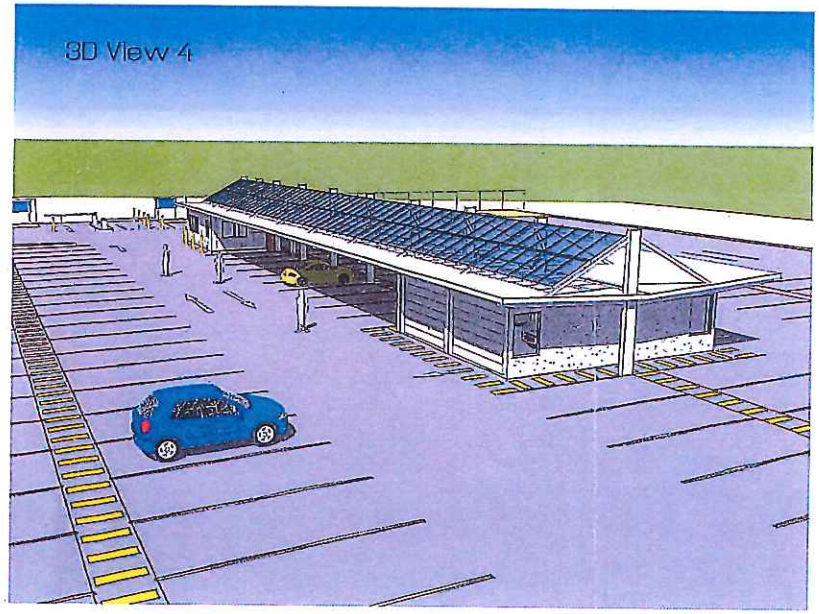
3D View 3



3D View 2



3D View 4



NOTE:
GROUND LEVELS INDICATED IN 3D IMAGES ARE INDICATIVE ONLY & SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. REFER SITE, CONTOUR PLAN & ELEVATIONS FOR TRUE GROUND LEVELS.

D:\revit files\revit 2015\lang airport carpark\lang carpark 2.rvt

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Planning App (A2)

No.	Date	Description
3	26.10.15	Planning Approval
2	23.08.15	Concept # 2
1	21.08.15	Concept # 1

Project:
Proposed Carpark
at 2 Hudson Fysh Dve,
Western Junction, TAS

Client:
Heath Lang

Drawing Title:
3D Views

Scale:

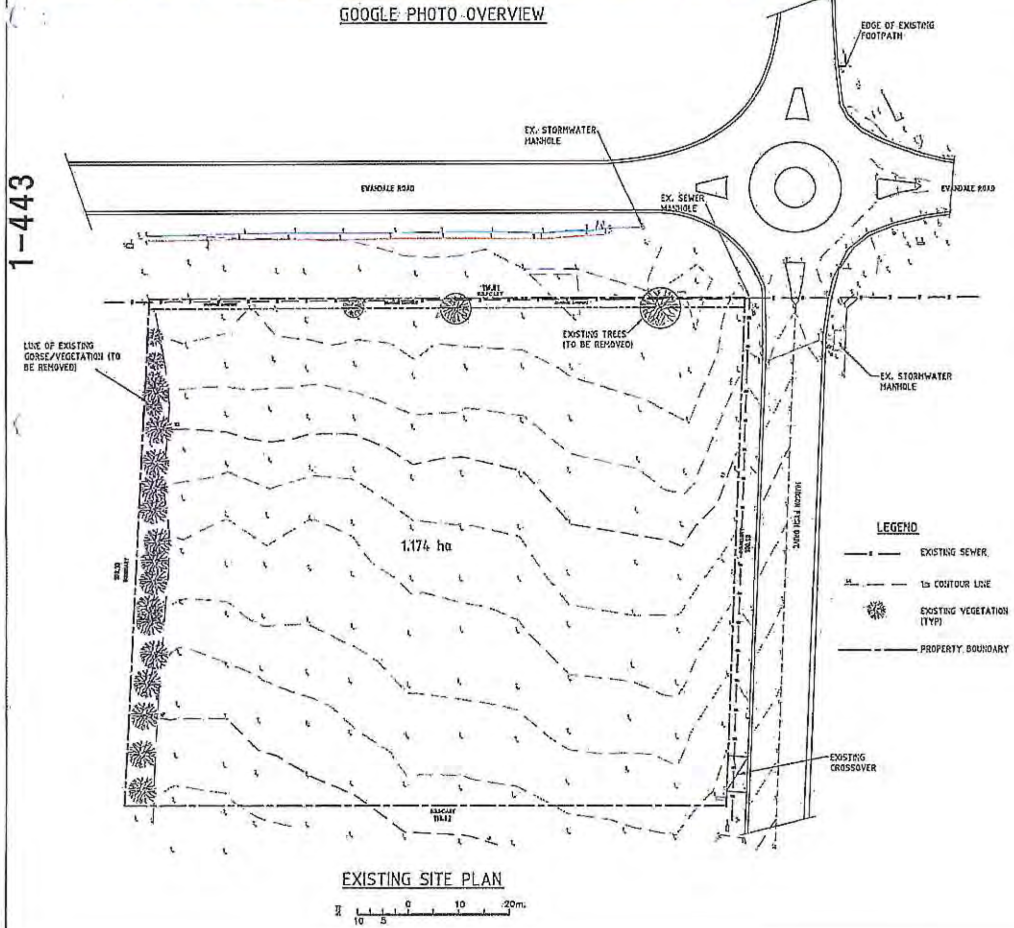
Starting Date: 21.08.15

Plot Date: 27/10/2015 10:44:13 AM

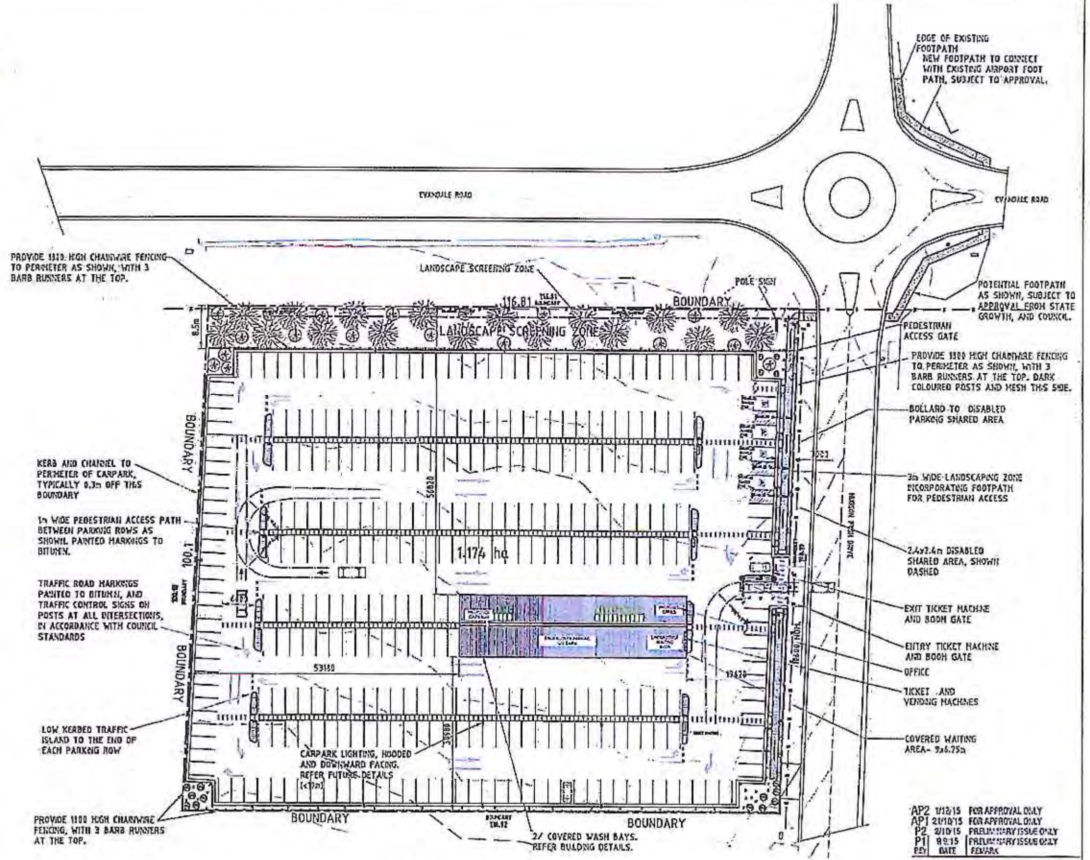
Project No.	Drawing No.
020815	8 /8

P8

GOOGLE PHOTO OVERVIEW


EDGE OF EXISTING FOOTPATH
EX. STORMWATER MANHOLE
EVANDALE ROAD
EX. SEWER MANHOLE
EXISTING TREES (TO BE REMOVED)
LINE OF EXISTING GORSE/VEGETATION (TO BE REMOVED)
EX. STORMWATER MANHOLE
1.174 ha
HUDSON FYSH DRIVE
EXISTING CROSSOVER
LEGEND
EXISTING SEWER
1m CONTOUR LINE
EXISTING VEGETATION (TYP)
PROPERTY BOUNDARY

EXISTING SITE PLAN


EDGE OF EXISTING FOOTPATH
NEW FOOTPATH TO CONNECT WITH EXISTING AIRPORT FOOT PATH, SUBJECT TO APPROVAL.
EVANDALE ROAD
PROVIDE 1800 HIGH CHAINWIRE FENCING TO PERIMETER AS SHOWN, WITH 3 BARB RUNNERS AT THE TOP.
LANDSCAPE SCREENING ZONE
POLE SIGN
116.81
BOUNDARY
POTENTIAL FOOTPATH AS SHOWN, SUBJECT TO APPROVAL FROM STATE GROWTH, AND COUNCIL.
PEDESTRIAN ACCESS GATE
PROVIDE 1800 HIGH CHAINWIRE FENCING TO PERIMETER AS SHOWN, WITH 3 BARB RUNNERS AT THE TOP. DARK COLOURED POSTS AND MESH THIS SIDE.
BOLLARD TO DISABLED PARKING SHARED AREA
KERB AND CHANNEL TO PERIMETER OF CARPARK, TYPICALLY 0.3m OFF THE BOUNDARY
1m WIDE PEDESTRIAN ACCESS PATH BETWEEN PARKING ROWS AS SHOWN. PAINTED MARKINGS TO BITUMEN.
3m WIDE LANDSCAPING ZONE INCORPORATING FOOTPATH FOR PEDESTRIAN ACCESS
100.1
1.174 ha
2.4x2.4m DISABLED SHARED AREA, SHOWN DASHED
TRAFFIC ROAD MARKINGS PAINTED TO BITUMEN, AND TRAFFIC CONTROL SIGNS ON POSTS AT ALL INTERSECTIONS, IN ACCORDANCE WITH COUNCIL STANDARDS
EXIT TICKET MACHINE AND BOOM GATE
ENTRY TICKET MACHINE AND BOOM GATE
OFFICE
TICKET AND VENDING MACHINES
LOW KERBED TRAFFIC ISLAND TO THE END OF EACH PARKING ROW
CARPARK LIGHTING, HOODED AND DOWNWARD FACING. REFER FUTURE DETAILS
COVERED WAITING AREA- 9x6.75m
PROVIDE 1800 HIGH CHAINWIRE FENCING, WITH 3 BARB RUNNERS AT THE TOP.
2/ COVERED WASH BAYS. REFER BUILDING DETAILS.
HUDSON FYSH DRIVE

PROPOSED SITE PLAN

NORTHERN MIDLANDS COUNCIL
This document forms part of
Planning Permit P15-331
issued on 25-Feb-2016
(S1 - S5)

DRAWING SCHEDULE
FOR THIS PROJECT
DRAWING NO: S01- S05

S1

FOR APPROVAL
7.12.15

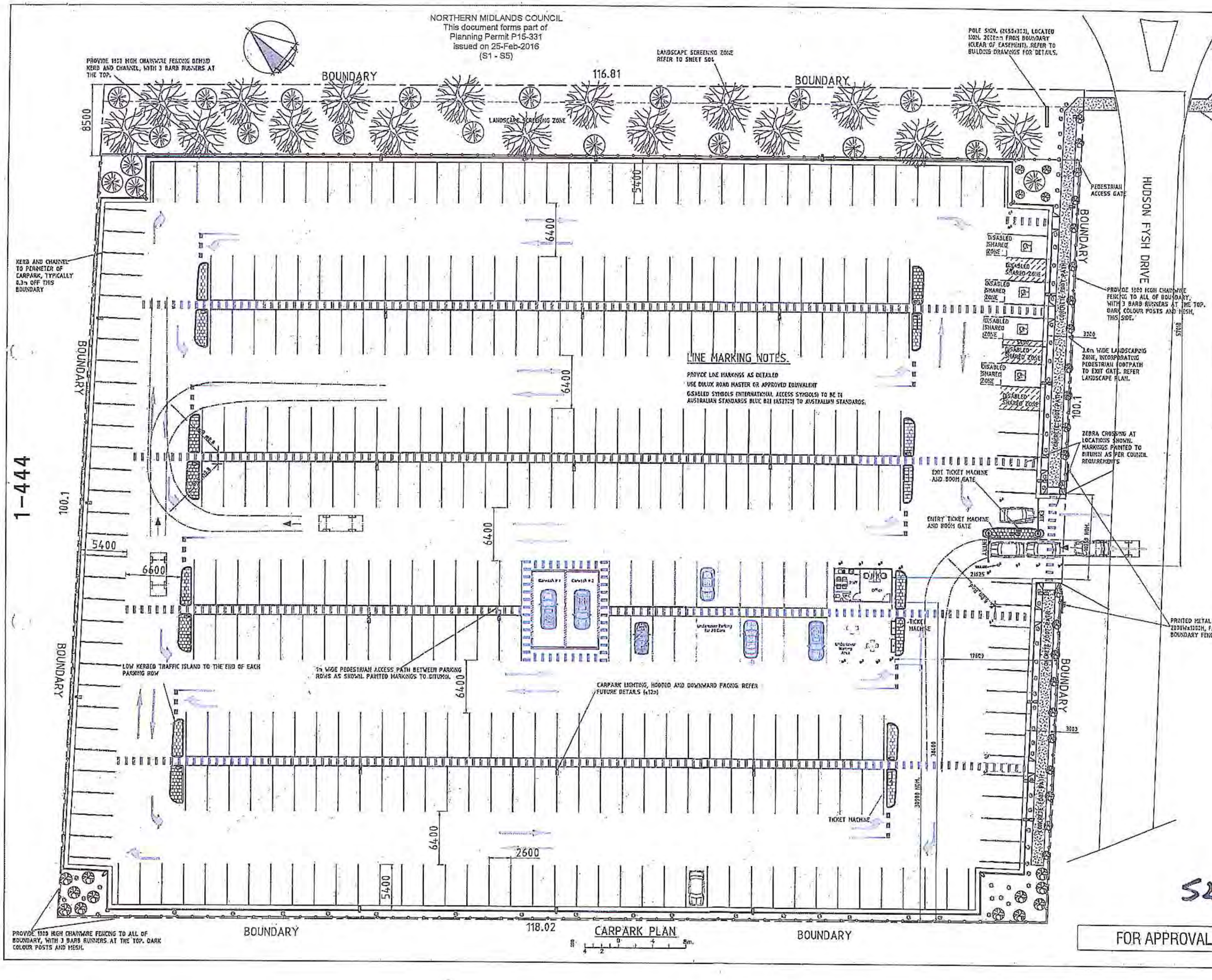
AP2	7/12/15	FOR APPROVAL ONLY
AP1	2/10/15	FOR APPROVAL ONLY
P2	2/10/15	PRELIMINARY ISSUE ONLY
P1	9/9/15	PRELIMINARY ISSUE ONLY
ED	DATE	REMARK

JMG Engineers & Planners
Johnstone McGee & Gandy Pty. Ltd.
Incorporating Dale P Luck & Associates

PROJECT
2 HUDSON FYSH DRIVE
WESTERN JUNCTION
PROPOSED NEW CARPARK

TITLE
EXISTING AND PROPOSED SITE PLANS

PROJECT NO. J152208CL
DWG NO. S01
REVISION AP2


NORTHERN MIDLANDS COUNCIL
This document forms part of
Planning Permit P15-331
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(S1 - S5)
PROVIDE 1800 HIGH CHAINWIRE FENCING BEHIND KERB AND CHANNEL, WITH 3 BARB RUNNERS AT THE TOP.
LANDSCAPE SCREENING ZONE REFER TO SHEET S04
POLE SIGN, LOCATED NOM. 2000mm FROM BOUNDARY (CLEAR OF EASEMENT). REFER TO BUILDING DRAWINGS FOR DETAILS.
POTENTIAL FOOTPATH AS SHOWN, SUBJECT TO APPROVAL FROM STATE GROWTH, AND COUNCIL.
BOUNDARY
116.81
8500
LANDSCAPE SCREENING ZONE
HUDSON FYSH DRIVE
PEDESTRIAN ACCESS GATE
KERB AND CHANNEL TO PERIMETER OF CARPARK, TYPICALLY 0.3m OFF THIS BOUNDARY
DISABLED SHARED ZONE
PROVIDE 1800 HIGH CHAINWIRE FENCING TO ALL OF BOUNDARY, WITH 3 BARB RUNNERS AT THE TOP. DARK COLOUR POSTS AND MESH, THIS SIDE.
LINE MARKING NOTES.
PROVIDE LINE MARKINGS AS DETAILED
USE DULUX ROAD MASTER OR APPROVED EQUIVALENT
DISABLED SYMBOLS (INTERNATIONAL ACCESS SYMBOLS) TO BE IN AUSTRALIAN STANDARDS BLUE B21 (AS2700) TO AUSTRALIAN STANDARDS.
3.0m WIDE LANDSCAPING ZONE, INCORPORATING PEDESTRIAN FOOTPATH TO EXIT GATE. REFER LANDSCAPE PLAN.
ZEBRA CROSSING AT LOCATIONS SHOWN. MARKINGS PAINTED TO BITUMEN AS PER COUNCIL REQUIREMENTS
EXIT TICKET MACHINE AND BOOM GATE
ENTRY TICKET MACHINE AND BOOM GATE
1-444
100.1
5400
6600
6400
2600
LOW KERBED TRAFFIC ISLAND TO THE END OF EACH PARKING ROW
1m WIDE PEDESTRIAN ACCESS PATH BETWEEN PARKING ROWS AS SHOWN. PAINTED MARKINGS TO BITUMEN.
CARPARK LIGHTING, HOODED AND DOWNWARD FACING. REFER FUTURE DETAILS
TICKET MACHINE
PRINTED METAL SIGN, FIXED TO BOUNDARY FENCE.
30980 NOM.
38400
PROVIDE 1800 HIGH CHAINWIRE FENCING TO ALL OF BOUNDARY, WITH 3 BARB RUNNERS AT THE TOP. DARK COLOUR POSTS AND MESH.
118.02
CARPARK PLAN
8m
52

KERB NOTES.

- EXPANSION JOINTS (E.J.) IN KERB ARE REQUIRED AT 18m CENTRES MAX AND AT EACH SIDE OF DRIVEWAYS IN ACCORDANCE WITH IPWEA DRG SD-1065.
- CONTRACTION JOINTS (C.J.) IN KERBS TO BE PROVIDED IN ADDITION TO E.J's AT 2400 CENTRES MAXIMUM, OR TO MATCH TOOLED JOINTS IN FOOTPATH. CONTRACTION JOINTS TO BE WEAKENED PLANE, 75mm DEEP WITH 5mm RADIUS.
- SETOUT IS TO BE APPROVED PRIOR TO KERB INSTALLATION

CAR PARK SUMMARY

343 – STANDARD 2.6x5.4m PARK SPACES
20 – UNDERCOVER PARK SPACES
4 – DISABLED PARK SPACES WITH SHARED ZONES

367 SPACES TOTAL

ASPHALT
- 30mm HOTMIX
- 110 BASE COURSE 'CLASS A'
- 200 SUBBASE 'SUBBASE 1'

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JMG Engineers & Planners
Johnstone McGee & Gandy Pty. Ltd.
Incorporating Dale P Luck & Associates

PROJECT
2 HUDSON FYSH DRIVE
WESTERN JUNCTION
PROPOSED NEW CARPARK

TITLE
PROPOSED CARPARK PLAN

PROJECT NO. J152208CL

DWG NO. S02 | REVISION AP2

FOR APPROVAL

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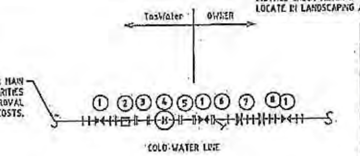
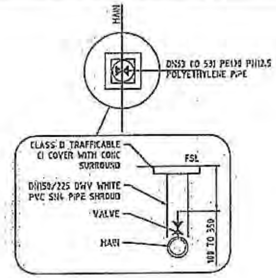


INSTALLATION NOTES
INSTALL IN CLASS D PRECAST CONCRETE VALVE BOX WITH CLASS D LID TO TasWater APPROVAL
PLACE 6mm OF CLOSED CELL POLYETHYLENE FOAM BETWEEN PIPE & CONCRETE.
SEAL WITH FLEXIBLE SEALER.
INSTALLATION TO WATER MAIN BY TasWater PAY ALL COSTS.

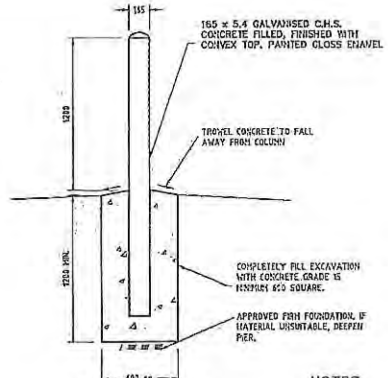
WATER CONNECTION SCHEMATIC
NTS

WATER CONNECTION SCHEDULE	
MARK	DESCRIPTION
1	LOCKABLE RESILIENT SEATED ISOLATING GATE VALVE. CLOCKWISE CLOSE
2	SENSUS WP-F DYNAMIC DIRT BOX
3	UPSTREAM SPACER TO SUIT WATER METER MIN LENGTH 3 x DIA
4	WATER METER BY TasWater
5	DOWNSTREAM SPACER TO SUIT WATER METER MIN LENGTH 3 X DIA
6	IN-LINE STRAINER FOR BACKFLOW DEVICE
7	DOUBLE CHECK VALVE
8	UNION COUPLINGS (TYP)
5	NON TESTABLE DUAL CHECK VALVE

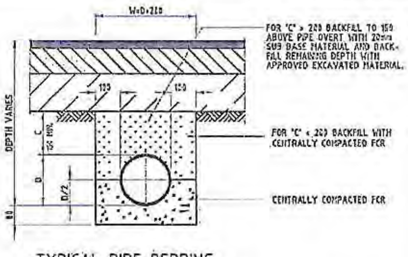
NOTES:
- CONNECTION & INSTALLATION TO TASWATER APPROVAL.
- METER & ASSEMBLY BY TASWATER.
- INSTALL ALL TO MANUFACTURERS INSTRUCTIONS.
- BOLTS & WASHERS TO 316 SS.
- MIN CLASS ALL FITTINGS PN16 UNO.
- REFER TasWater DRAWING No. TW-SD-W-20



VALVE BOX CLASS D
NTS
INSTALL TO TasWater & MANUFACTURERS REQUIREMENTS AND DRG TW-SD-W-20 SHEET SH1
FALL ADJACENT SURFACES AWAY TO PREVENT INGRESS OF WATER.
HINGE COVERS TO CLOSE IN THE DIRECTION OF FALL OF LAND.



1m HIGH BOLLARD DETAIL
SCALE 1:20

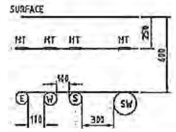


TYPICAL PIPE BEDDING DETAIL UNDER PAVEMENT& SLAB
1:20

NOTES:
SERVICE POSITIONS SHOWN ARE DIAGRAMATIC ONLY
GENERALLY OBSERVE A SEPARATION BETWEEN SERVICES OF 100 MM UNO.
SERVICES CROSSING OTHER SERVICES SHALL:-
- CROSS AT AN ANGLE GREATER THAN 45 DEGREES.
- HAVE A VERTICAL SEPARATION OF 100 MM
- BE MARKED ALONG ITS LENGTH FOR 1m EITHER SIDE OF THE CENTERLINE OF THE SERVICE WITH MARKER TAPE COMPLYING WITH AS/NZS 2648.1 LAID 150 ABOVE THE INSTALLED SERVICE.

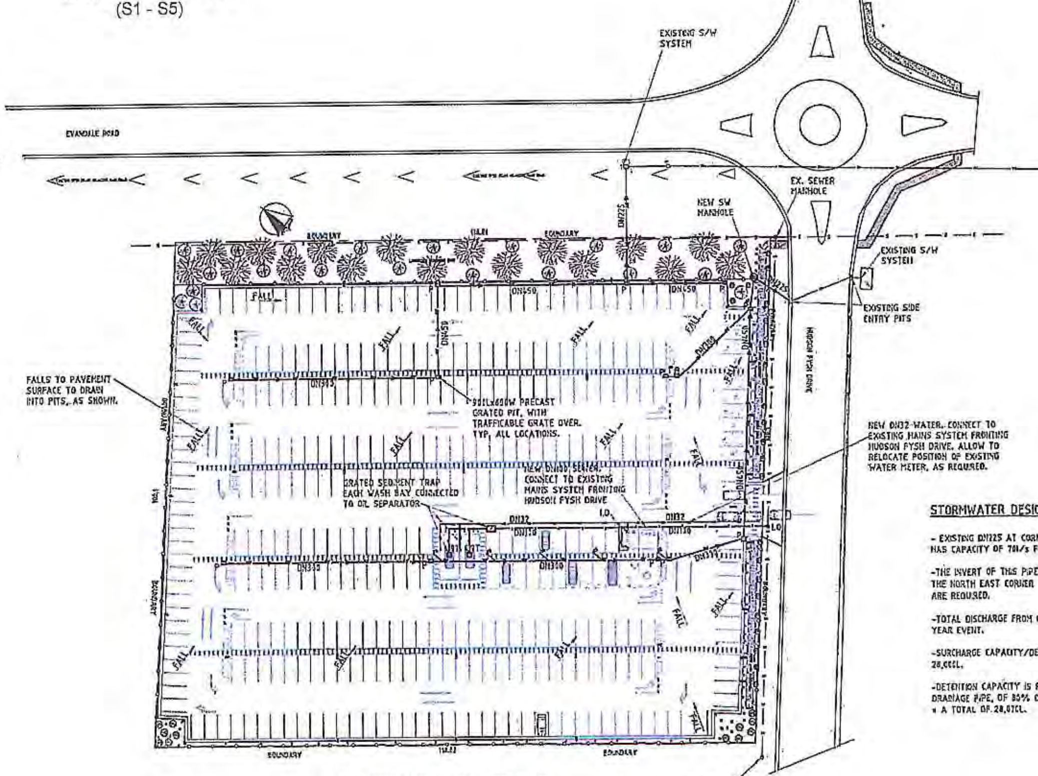
STORMWATER SERVICES: ELECTRICAL SUPPLY CABLES, GAS PIPE, WATER PIPE OR COMMUNICATIONS CABLE CANNOT BE LAID ABOVE STORMWATER PIPE.
WATER SERVICES: CANNOT BE LAID ABOVE STORMWATER PIPE. IN GENERAL WATER SERVICES MUST BE INSTALLED WITH A MINIMUM CLEARANCE OF:-
- <DN65 100 MM
- >DN65 300 MM

TO OTHER SERVICES OR OBSTRUCTIONS EXCEPT FOR CONSUMER GAS, ELECTRICAL OR COMMUNICATIONS SERVICES..



TYPICAL SERVICE SEPERATION
NTS.

LEGEND:
- (E) ELECTRICAL CABLE BY OTHERS
- (SW) STORMWATER PIPE GREATER THAN DN100
- (S) SEWER PIPE DN100 OR SMALLER
- (W) WATER PIPE
- MT ORANGE MARKER TAPE TO AS/NZS 2648.1



SITE STORMWATER MANAGEMENT PLAN
SCALE 1:200
(SHOWING SEWER AND WATER CONNECTIONS)

STORMWATER DESIGN NOTES

- EXISTING DN225 AT CORNER OF HUDSON FYSH DRIVE AND EVANDALE ROAD HAS CAPACITY OF 70l/s FOR ARI 10 YEAR EVENT.

- THE INVERT OF THIS PIPE IS NOT DEEP ENOUGH TO SERVICE S/W PITS ON THE NORTH EAST CORNER OF THE LOT, THEREFORE, TWO DISCHARGE POINTS ARE REQUIRED.

- TOTAL DISCHARGE FROM CARPARK IS CALCULATED @ 231l/s FOR AN ARI 10 YEAR EVENT.

- SURCHARGE CAPACITY/DETENTION REQUIRED HAS BEEN CALCULATED @ 28,000L.

- DETENTION CAPACITY IS PROVIDED IN EXCESS SIZE/VOLUME OF INTERNAL DRAINAGE PIPE, OF 80% OF 142m OF DN450 AND 65% OF 216m OF DN300 PIPE = A TOTAL OF 28,070L.

HYDRAULIC NOTES:

1. INSTALL PLUMBING SERVICES IN ACCORDANCE WITH PLUMBING CODE OF AUSTRALIA, TASMANIAN PLUMBING REGULATIONS 2004, TASMANIAN PLUMBING CODE, AS3500, TasWater, WSA 02-2002-2.3 MRWA ED. V1 (SEWER CODE), WSA 03-2011-3.1 MRWA ED. V2 (WATER CODE) AND TO LOCAL STATUTORY AUTHORITY APPROVAL.
2. PIPEWORK LAYOUTS ARE DIAGRAMMATIC ONLY. CO-ORDINATE WITH ARCHITECTURAL, STRUCTURAL AND OTHER SERVICES DRAWINGS PRIOR TO INSTALLATION.
3. PROVIDE SERVICE IDENTIFICATION AND DIRECTION OF FLOW MARKERS TO PIPEWORK IN ACCORDANCE WITH AS1345.
4. REMOVE ALL EXCESS SOIL AND SURPLUS MATERIALS FROM SITE.
5. THE LOCATION OF EXISTING SERVICES WHERE SHOWN ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE. WHERE POSSIBLE DETERMINE LOCATION OF EXISTING AURORA, TELECOM, WATER AND DRAINAGE SERVICES PRIOR TO COMMENCING NEW WORK.
6. THE PLUMBER SHALL ARRANGE FOR ALL INSPECTIONS AND TESTING OF SERVICES REQUIRED BY TasWater AND THE LOCAL AUTHORITY PRIOR TO CONCEALMENT. PRESSURE TEST HOT AND COLD WATER SERVICES TO 1.5 TIMES NORMAL WORKING PRESSURE AND FIRE SERVICES TO 1700 KPA MINIMUM PRESSURE PRIOR TO CONNECTION TO EXISTING SERVICES. PUMP EQUIPMENT SHALL BE REMOVED WHILST TESTING IS CARRIED OUT.
7. FOLLOWING COMPLETION OF THE WORKS FLUSH ALL PIPING SYSTEMS AND LEAVE FREE OF FOREIGN MATTER. CLEAN OUT AERATORS, STRAINERS, FILTERS, ETC. FLOW TEST ALL HYDRANTS AND HOSE REELS.
8. APPROVAL FROM THE CLIENT SHALL BE REQUIRED PRIOR TO ANY SERVICE SHUT DOWN. PREPARE PROGRAM FOR ALL SHUT DOWNS INCLUDING WORK TO BE CARRIED OUT AND TIME REQUIRED FOR EACH SERVICE.
9. ALLOWANCE SHALL BE MADE FOR ALL OUT OF HOURS WORK ASSOCIATED WITH THE CONTRACT.
10. REFER TO ARCHITECTS DRAWINGS AND FIXTURE & EQUIPMENT TECHNICAL SPECIFICATIONS FOR PIPEWORK CONNECTIONS.
11. OBTAIN AND SUPPLY TO THE CONTRACTOR, THE WARRANTIES OFFERED BY THE MANUFACTURERS OF APPLIANCES, FIXTURES, FITTINGS AND ACCESSORIES USED IN THE WORKS AND THE LOCAL AUTHORITIES COMPLETION CERTIFICATES, UPON COMPLETION OF THE WORKS.
12. REFER TO THE ARCHITECTS DRAWINGS FOR SANITARY FIXTURE AND TAP SELECTIONS. SUPPLY AND FIX ACCESSORIES NECESSARY FOR THE CORRECT INSTALLATION OF THE FIXTURES AND EQUIPMENT.
13. ALL SCREWED STOP VALVES SHALL HAVE UNION COUPLINGS AND BE ACCESSIBLE. GROUP VALVES WHEREVER POSSIBLE.
14. GENERALLY HOT WATER TO FOLLOW COLD.
15. INSULATE ALL HOT WATER PIPEWORK WITH 'BRADFLEX' 13MM NOM. THICK INSULATION OR APPROVED EQUAL. TAPE SEAL ALL JOINTS.
15. ALL HOSE BIBCOCKS TO HAVE VACUUM BREAKERS.
17. MAKE GOOD ALL DISTURBED SURFACES TO MATCH EXISTING.
18. IT IS THE RESPONSIBILITY OF THE REGISTERED PLUMBER TO ENSURE THAT THE PLUMBING AND DRAINAGE WORK IS INSPECTED BEFORE THE WORK IS COVERED UP.
19. THE REGISTERED PLUMBER OR CONTRACTOR SHALL BE THE RESPONSIBLE PARTY TO INSURE THAT ALL APPROPRIATE APPLICATIONS HAVE BEEN OBTAINED AND A START WORK NOTICE HAS BEEN LODGED WITH TasWater AND THE PERMIT AUTHORITY. IT SHALL BE THE REGISTERED PLUMBER OR CONTRACTORS RESPONSIBILITY TO VERIFY THAT ALL MANDATORY NOTIFICATIONS AND INSPECTIONS REQUIRED ARE PERFORMED.

S3

FOR APPROVAL

AP2 1/12/15 FOR APPROVAL ONLY
AP1 21/10/15 FOR APPROVAL ONLY
P2 2/10/15 PRELIMINARY ISSUE ONLY
P1 9/9/15 PRELIMINARY ISSUE ONLY
REV DATE REMARKS

Engineers & Planners
Johnstone McGee & Gandy Pty. Ltd.
Incorporating Dale P Luck & Associates

PROJECT
2 HUDSON FYSH DRIVE
WESTERN JUNCTION
PROPOSED NEW CARPARK

TITLE
SITE STORMWATER
MANAGEMENT PLAN

PROJECT No. J152208CL
DRAWING S03 REVISION AP2

1-446

NORTHERN MIDLANDS COUNCIL
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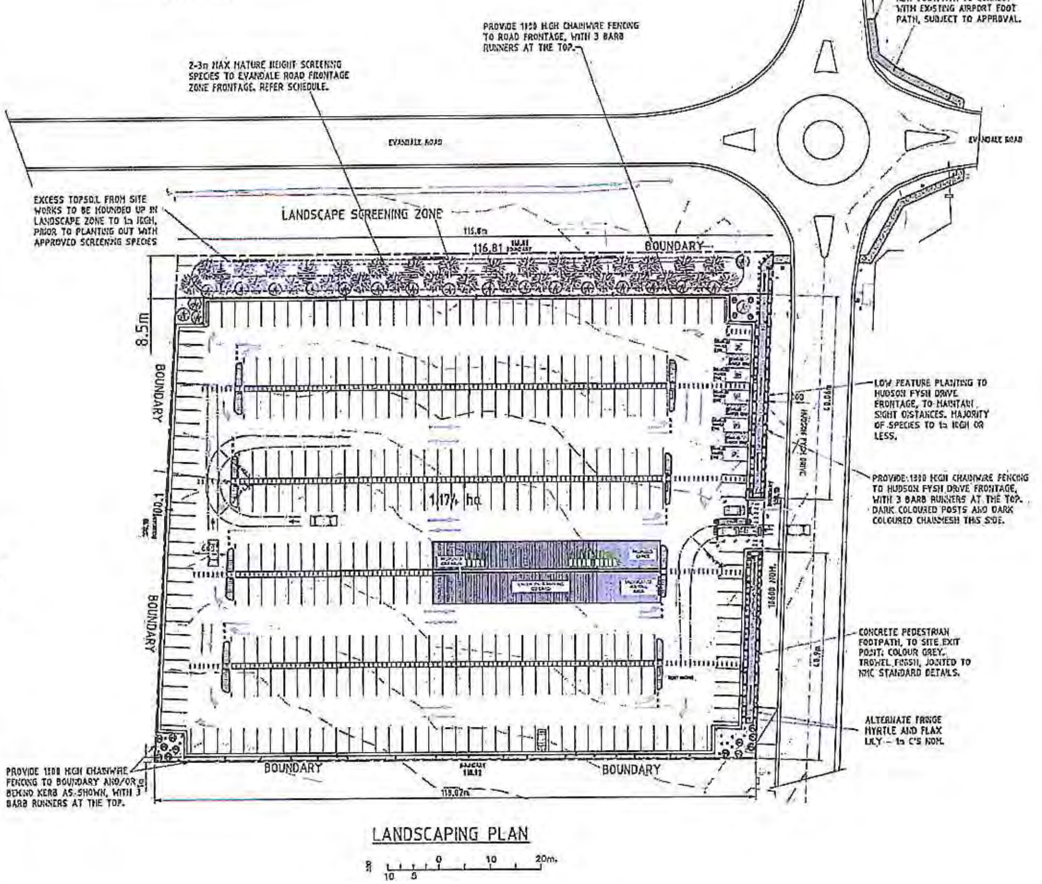
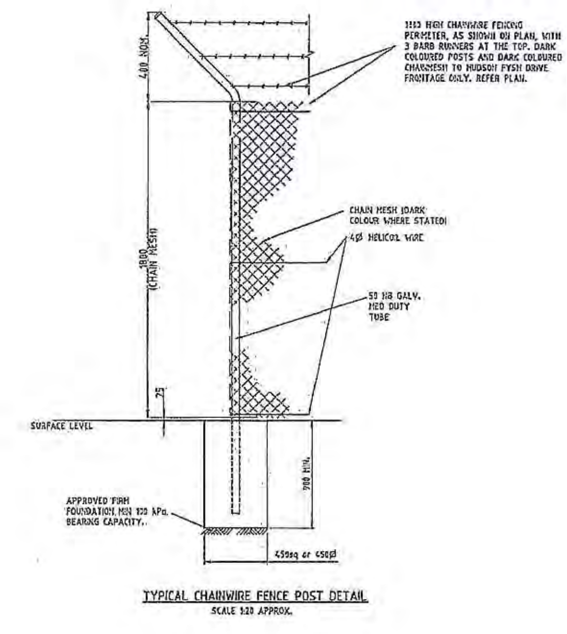


LANDSCAPING PLAN



TYPICAL CHAINWIRE FENCE POST DETAIL
SCALE 1:20 APPROX.

LANDSCAPING NOTES:

- THE LANDSCAPE DESIGN FOR THIS SITE IS TO USE TASMANIAN AND AUSTRALIAN NATIVE SPECIES. PLANTS WILL BE SPECIFICALLY SELECTED FOR THEIR HARDY LOW MAINTENANCE NATURE; WHILST PROVIDING A SCREENING OR BUFFER ZONE FROM THE MAIN ROAD AND NEIGHBOURING PROPERTIES.

-SCREENING SPECIES SELECTED FOR THE 8.5m WIDE BUFFER ZONE ADJACENT TO EVANDALE MAIN ROAD WILL BE SELECTED SO THAT THE MATURE HEIGHT DOES NOT INTERFERE WITH EXISTING POWER LINES OR THE LIKE, AND WOULD BE LIMITED TO SPECIES WITH A MATURE HEIGHT OF 2-3m TALL. REFER TO PLANTING SCHEDULE FOR SPECIES INFORMATION

- LANDSCAPING TO THE 3m WIDE ZONE ADJACENT TO THE HUDSON FYSH DRIVE BOUNDARY IS INTENDED TO BE LIMITED TO SPECIES THAT FALL INTO THE GRASSES AND SMALL SHRUBS CATEGORIES, WITH A MATURE HEIGHT OF UP TO 1m TALL. THIS IS TO MAINTAIN ADEQUATE SITE DISTANCES TO THE ROAD FRONTAGE AND KEEP THE CARPARK HIGHLY VISIBLE FROM A SECURITY POINT OF VIEW. REFER TO PLANTING SCHEDULE FOR SPECIES INFORMATION.

-IT IS INTENDED THAT EXCESS TOPSOIL FROM CARPARK SITE WORKS CAN BE MOUNDED UP IN THE SCREENING ZONE FRONTING EVANDALE MAIN ROAD, TO NOM. 1m HIGH, AND THEN PLANTED OUT.

-APPROPRIATE GARDEN MULCH, AT LEAST 75mm THICK TO BE APPLIED TO ALL LANDSCAPE AREAS TO RETAIN MOISTURE, AND REDUCE THE IMPACT OF WEEDS.

-AUTOMATIC RETICULATION SYSTEM TO BE INSTALLED TO ALL LANDSCAPE AREAS.

LANDSCAPING SUMMARY

TOTAL LOT AREA = 11747.8 sq. METERS

LANDSCAPE AREAS

EVANDALE ROAD BOUNDARY -116.8x8.5M=992.8m sq.

HUDSON FYSH BOUNDARY -(40.06x3)+(40.9x3)=242.88m sq.

SOUTHERN BOUNDARY - 118x1=118m sq.

LOT CORNERS - 4(5.25x5)=105m sq.

TOTAL LOT AREA COVERED IN LANDSCAPING = 1458.7 sq. METERS

TOTAL % OF LOT COVERED IN LANDSCAPING - 12.41%

PLANTING LEGEND

MARK	PLANT TYPE	SPECIES OPTIONS AND DESCRIPTION
	MEDIUM SHRUB TO 3m MAX. HEIGHT WHEN MATURE	HAKEA EPIGLOTTIS (BEAKED HAKEA) OR MELALEUCA POSTULATA (YELLOW PAPERBARK). PLANT SPACING - 4m C'S.
	MEDIUM SHRUBS TO 2m HIGH MAX. WHEN MATURE	GREVILLEA AUSTRALIS (SOUTHERN GREVILLEA) OR MELALEUCA GIBBOSA (SMALL LEAVED MELALEUCA). PLANT SPACING - LOCATIONS SHOWN (TYP)
	SMALL SHRUBS TO 1m HIGH MAX. WHEN MATURE.	CALYTRIX TETRAGONA (FRINGE MYRTLE). PLANT SPACING - 1m C'S
	GROUND COVERS AND GRASSES	DIANELLA BREVICAULIS (SHORT STEM FLAX LILY). PLANT SPACING - 1m C'S

54

FOR APPROVAL

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SAFETY IN DESIGN REPORT

Engineers & Planners
Johnstone McGee & Gandy Pty. Ltd.
Incorporating Dale P Luck & Associates

PROJECT
2 HUDSON FYSH DRIVE
WESTERN JUNCTION
PROPOSED NEW CARPARK

TITLE
LANDSCAPING PLAN

PROJECT NO. J152208CL
DWG NO. S04
REVISION AP2

1-447

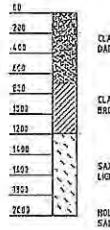
SOIL CLASSIFICATION TO AS2870 — CLASS "H2"

WIND CLASSIFICATION TO AS4055 — N2 – 40m/s ult

CONSTRUCTION OF THE FOOTINGS SHOWN ON THIS DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS & SOIL CLASSIFICATION REPORT No. T615555/9 – 02 (TASMAN GEO) DATED 7/9/15

0-20mm	'S'
20-40mm	'M'
40-60mm	'M'
60-75mm	'H2'
75mm	'E'

REFER TO SITE CLASSIFICATION REPORT AND SUPERVISING ENGINEER FOR FOUNDING DEPTH



SUB SURFACE PROFILE

REFER TO ENGINEER IF MATERIALS ENCOUNTERED ARE SIGNIFICANTLY DIFFERENT

PLEASE NOTE THAT THE SITE REPORT REFERRED TO IS NOT PART OF THE CERTIFICATION ATTACHED TO THIS DRAWING. IT SHOULD BE SEPARATELY CERTIFIED BY ITS AUTHOR

INTERPRETATION

I1 IN THESE NOTES, APPROVED, DIRECTED, REQUIRED, REJECTED & SIMILAR EXPRESSIONS, SHALL MEAN APPROVED, DIRECTED, REQUIRED, REJECTED AND TO THE LIKE BY THE SUPERINTENDENT THROUGH THE CONTRACTOR.

GENERAL

G1 READ THE DRAWING IN CONJUNCTION WITH ARCHITECTS AND OTHER CONSULTANTS SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTION THAT MAY BE ISSUED.

G2 BUILDING SET-OUT AND DIMENSIONS ARE DETERMINED BY THE ARCHITECT. DIMENSIONS EXPRESSED IN MILLIMETRES, FULL DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THESE DRAWINGS. SETTING OUT DIMENSIONS SHALL BE VERIFIED BEFORE COMMENCING WORK. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND THE ARCHITECTS OR OTHER DRAWINGS IS TO BE ADVISED BEFORE PROCEEDING WITH THE WORK.

G3 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION & NO PART SHALL BE OVERSTRESSED.

G4 24 HOURS NOTICE REQUIRED FOR WORK REQUIRING INSPECTION.

G5 THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED ASSUMING TO BE SITED EVEN FOR A REGIONAL WIND SPEED OF 45m/s IN TERRAIN CATEGORY 2.5 SHELTERED & FOR THE FOLLOWING LIVE LOADS:

AREA	LIVE LOAD
ROOF	0.25 kPa
WALKWAY	2.5 kPa
ROOF SPACE	1.5 kPa

FOUNDATION

F2 FOUNDATIONS ARE DESIGNED LEVELS TO UNDERSIDE OF FOOTINGS SHOWN ON DRAWINGS ARE FOR TENDERING PURPOSES. CONTRACT DRAWINGS AS REQUIRED TO MAKE FINDINGS ACCURATE. ALL EXCAVATIONS SHALL BE APPROVED BEFORE PLACEMENT OF STRUCTURAL FILL, CONCRETE, BEARING PADS OR REINFORCEMENT.

F3 FOUNDATION MATERIAL SHALL HAVE A MINIMUM BEARING CAPACITY OF 100 kPa MINIMUM.

F4 BASES OF FOOTINGS SHALL BE HORIZONTAL, UNO.

F5 EXCESS DEPTHS AND WIDTHS IN FOUNDATIONS TO THOSE SPECIFIED SHALL BE FILLED WITH MINIMUM A.S. GRADE 15 CONCRETE. THE CONCRETE FILL SHALL NOT BE BONDED TO THE CONCRETE UNLESS APPROVED. THE COST OF FILLING SHALL BE BORNE BY THE CONTRACTOR.

F6 WORK EXCAVATED ON THESE DRAWINGS & WHETHER GROUND WATER IS ENCOUNTERED FOOTINGS TO CONCRETE BEARING IMMEDIATELY AFTER APPROVAL OF FOUNDATION.

SLABS ON GROUND

SG1 SUB-BASE PREPARATION

THE SUB-BASE FOR SLABS ON GRADE SHALL BE PREPARED AS FOLLOWS:-

- STRIP OFF ALL VEGETATED TOPSOIL AND CUT TO REQUIRED LEVELS, BUT NO BELOW RL 0.0 KEEP TO FINAL S'K CARD
- PROOF ROLL SUB-BASE TO STANDARD SPECIFIED;
- WHERE CLAYEY SOILS ARE ENCOUNTERED, FILL WITH STRUCTURAL FILL PLACED & THOROUGHLY COMPACTED IN 150 MAXIMUM LAYERS.

SG2 BASE PREPARATION

THE BASE FOR SLABS ON GRADE SHALL BE PREPARED AS DETAILED AND AS FOLLOWS:-

- FILL WITH STRUCTURAL FILL WHERE & COMPACTED AND VARIABLE TO THE MIN. SPECIFIED THICKNESS. ADDITIONAL FILL REQUIRED BELOW END LEVELS SHALL BE TYPE A OR B STRUCTURAL FILL DEPOSITED AND WATERED, PLACED IN LAYERS NOT EXCEEDING 250 FINISHED THICKNESS. TYPE C FILL, IF REQUIRED, IS TO BE LAID IN 0.3 LAYERS. IN LAYERS NOT EXCEEDING 150 FINISHED THICKNESS, ROLL INTO SUBGRADE WITH 10 STATIC SWIPS.
- COMPACTION TO MINIMUM 95% STANDARD COMPACTION TO AS 1289 U.N.O.
- PLACE 30 MM SAND BLINDING MATERIAL & COMPACTED, UNDER ENTIRE SLAB AND SLAB THICKNESSES.
- LAY 0.2MM 'STRONG' MINIMUM TAPE FOR JOINTS AND SEAL ALL PENETRATIONS. PLACE UNDER ENTIRE SLAB MINIMUM SLAB THICKNESS & INTERNAL FOOTINGS. TURN UP AT OUTSIDE EDGES.

SG3 STRUCTURAL FILL

STRUCTURAL FILL SHALL BE AS FOLLOWS:-

TYPE A = 20 FINE CRUSHED ROCK
TYPE B = 40 FINE CRUSHED ROCK
TYPE C = 150/300 NOMINAL SIZE ROCKFILL SPALLS IN 2 LAYERS.

RECYCLED MATERIAL NOT TO BE USED WITHOUT APPROVAL.

SUSPENDED SLABS ON FILL

SS1 GENERAL

WORK SHOWN ON THE PROJECT DRAWINGS ON FILL AS FORMWORK ONLY FOR SUSPENDED SLABS. FILL TO BE PLACED SO AS TO ADEQUATELY SUPPORT CONCRETE UNTIL HARDENED AND SHALL BE FREE OF CONSTRUCTION DEBRIS — USE FREE ADM.

SS2 SUB-BASE PREPARATION

STRIP OFF VEGETATION AND CUT TO REQUIRED LEVEL. PROOF ROLL SUB-BASE AS NOTED IN SPECIFICATION BEFORE PLACING FILL, SAND LAYER, AND FOOTINGS.

SS3 BASE PREPARATION

THE BASE FOR SUSPENDED SLABS ON FILL SHALL BE AS FOLLOWS:-

- FILL AS NOTED IN SECTION SS1
- PLACE SAND LAYER & POLYTHENE AS NOTED IN SECTION SG2

CONCRETE

C1 WORKMANSHIP, MATERIALS & DESIGN SHALL BE IN ACCORDANCE WITH AS 3600 & ASSOCIATED CODES LISTED THEREIN AND THE SPECIFICATION.

C2 NO HOLES OR CHASES OTHER THAN THOSE SHOWN SHALL BE MADE WITHOUT APPROVAL.

C3 DO NOT PLACE CONCRETE, PIPES AND DUCTS WITHIN CONCRETE COVER.

C4 SLABS AND BEAMS ARE TO BE POURED TOGETHER UNLESS NOTED OTHERWISE.

C7 WHERE REINFORCEMENT IS ENCLOSED BETWEEN A FORM WORK, SCAFFOLDING, FORMS ARE UNDER MATERIAL AND EXPOSED THE CONCRETE FACE BEFORE POURING AGAINST IT.

C8 THE USE OF WRECKED CONCRETE, FLY ASH AND OR CHEMICAL ADMIXTURES SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL.

C9 UNFORMED EXPOSED CONCRETE SURFACES SHALL HAVE AN APPROVED FINISH. TROWELLED FINISH UNLESS SHOWN OTHERWISE.

C10 REINFORCEMENT IS REFERENCED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

C11 SLEEVES IN REINFORCEMENT TO BE MADE ONLY AT LOCATIONS AND OF SIZES SHOWN ON STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE.

C12 CONCRETE COVER TO REINFORCEMENT DETAILED AND SHALL BE AS FOLLOWS, UNLESS OTHERWISE SHOWN AS FIRE RESISTANCE PERIOD APPROVED.

EXPOSURE ENVIRONMENT	AS 3600 CAT.	ELEMENT	#	CHOICE GRADE	COVER D / T
BELOW GROUND	A2	FOOTINGS	1	25	65
		FOOTINGS	3	25	50
	A1	SLAB BOT.	3	25	50
BUILDING INTERIOR	A1	SLAB GROUND	3	32	30
		SLAB SUSP.	2	32	30
		CELLOFF	2	40	30
		PANELS	2	32	40
BUILDING EXTERNAL	B1	PANELS	2	40	40
		SLAB	2	32	40
		STAIRS	2	32	40

#1 = CAST AGAINST GROUND
#2 = CAST AGAINST FORMWORK
#3 = CAST AGAINST FORMWORK PERMANENT

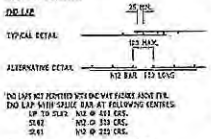
C13 REINFORCEMENT SHALL NOT BE CUT, WELDED, BENT OR HEATED ON SITE, WHERE BARS OR MESH STEEL IS DISPLACED MORE THAN 1/2 THICKNESS THE APPROVAL SPACING WITHOUT PRIOR APPROVAL.

C14 PLACE BOTTOM BAR CHAIRS AT THE RATE OF 2 PER LEAD OF BOTTOM & TOP SLAB REINFORCEMENT AREA PER CHAIR APPROVED AS REQUIRED FOR ADEQUATE SUPPORT OF STEEL MESHES. ALL CHAIRS SUPPORTED ON APPROVED TYPE PLATES.

C15 REINFORCEMENT SHALL BE SECURELY TIED IN PLACE WITHOUT WELDING, UNLESS APPROVED OTHERWISE.

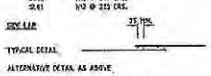
C16 NO CONCRETE SHALL BE PLACED UNTIL AFTER THE REINFORCEMENT FOR THE ENTIRE POUR HAS BEEN INSPECTED AND APPROVED.

C19 FABRIC SHALL BE LAPPED LAPPED WITH NO MORE THAN TWO SHEETS MEETING AT ANY POINT. WHERE SHEETS ARE BUTTED AT ANGLES TO EACH OTHER, A SPACER BAR SHALL BE PLACED WITHIN EDGES OF CONCRETE FACE. ALTERNATIVE SHEETS WHERE FABRIC MESHES



TWO LAPS NOT PERMITTED WITH ONE MY FALLING ABOVE THE OTHER. END LAP WITH SPLICE BAR AT FOLLOWING CENTRES:

UP TO SIZE	N12 @ 400 CRS.
SL82	N12 @ 350 CRS.
SL81	N12 @ 225 CRS.



C20 HOLD REINFORCEMENT FOR WALLS - RESTRAINING BAR TO BE PLACED TO BE WITHIN FACE UNLESS ENTRANCE NOTED, WHERE FACE PLACEMENT IS NOT PRACTICAL REPLACE WITH MARKED EW.

C19 REINFORCEMENT SYMBOLS AND GRADES.

R – DENOTES STRUCTURAL GRADE PLAIN ROUND BARS TO AS 1302
N – DENOTES HOT ROLLED DEFORMED BAR GRADE 500N TO A.S. 4671
SL – DENOTES WELDED REINFORCING FABRIC (GRADE 500N) TO A.S. 4671
M – DENOTES ROAD-REINFORCEMENT MESH (GRADE 500N) TO A.S. 3551

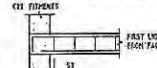
CONCRETE

C21 STAINING STEEL NOT DESIGNATED SHALL BE:

ELEMENT & LOCATION	MARKING REINFORCEMENT	EXTENT BEYOND CROSS OVER POINT
SLABS-INTERNAL EDGES -PENETRATIONS -OPENINGS >250 DEEP	N12 ON TOP AT CORNER	500

C31 MASONRY OR CONCRETE WALLS ON SPREAD FOOTINGS MUST NOT BE CAST ON CONCRETE SLABS OR HARD UNTIL EXPOSURE AND BONDS SUPPORTING THE SAME HAVE BEEN REMOVED.

C32 FITMENTS



PRECAST PANELS

P1 CONCRETE SPECIFICATION TO AS 3610 AND OR DAYS ROLL FIGURE NOTE C2 ALSO.

P2 PANELS TO BE LIFTED USING HEAD OVERHEAD SYSTEM ON PANELS EDGES.

P3 APPLY APPROVED FORM RELEASE AGENT BETWEEN CAST FACE PANELS AND TO CASTING BED.

P4 ALL PANEL BOLSONS BRACING, TO BE IN ACCORDANCE WITH ACCEPT

P5 FOR PANEL ANY DETAILS REFER ARCHITECTS OR OTHER DRAWINGS.

P6 THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL REINFORCEMENT REQUIRED FOR LIFTING. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL PROPPING AND BRACINGS. THE CONTRACTOR SHALL SUBMIT FULL SHOP DRAWINGS FOR APPROVAL PRIOR TO COMMENCEMENT OF MANUFACTURING. LIFTING INSERTS, FITMENTS AND REINFORCEMENT ARE TO BE SHOWN ON SHOP DRAWINGS

P7 WHITE CEMENT IN PANELS TO ACHIEVE ARCHITECTURAL FINISH. THIS IS NOT TO COMPROMISE STRUCTURAL PROPERTIES OF CONCRETE PANELS

P8 THE PRECAST PANELS SHALL BE DESIGNED FOR LIFTING AND TRANSPORT BY QUALIFIED ENGINEER. THIS INFORMATION IS NOT CONTAINED WITHIN THESE DRAWINGS. THE PANELS HAVE BEEN DESIGNED FOR IN PLACE CONDITION ONLY

P9 PROVIDE 15mm CHAMFER TO ALL EXPOSED EDGES OF PANELS WHEN NOT SPECIFIED ELSEWHERE

MASONRY

M1 MASONRY SHALL BE IN ACCORDANCE WITH AS 3700.

M2 ALWAYS SHALL BE USED IN PREFERENCE TO AS STEEL LINTELS SHALL HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF 25 MPa.

M3 MORTAR SHALL BE – THE CONSTRUCTION GENERALLY, EXCEPT CONSTRUCTION AND EXPOSED MASONRY BETWEEN WALLS.

M4 PROVIDE TWO LAYERS OF HESSIAN FLOORING OR FELT GALVANISED SHEET ON TOP OF WALLS SUPPORTING SLABS OVER.

M5 REFER TO ARCHITECTS DRAWINGS FOR LOCATION OF NON-LOAD LEADING MASONRY NOT SHOWN ON THESE DRAWINGS. THESE WALLS SHALL BE CONSTRUCTED TO AS NOT TO TAKE LOADS FROM SLABS OVER. RESTRAIN WALLS LATERALLY.

M6 WHERE MASONRY WALLS ARE TO BE CONSTRUCTED ON SUSPENDED SLABS; THEY SHALL NOT BE CONSTRUCTED UNTIL AFTER THE SLAB UNDER HAS BEEN STRIPPED AND ALL MASONRY TO BE USED IN THE WALLS STACKED ADJACENT TO THE WALL LOCATIONS.

M7 REFER TO SPECIFICATION AND/OR ARCHITECTS DRAWINGS FOR JOINTS AND LINTELS NOT SHOWN ON THESE DRAWINGS. AT LEAST PROVIDE TIED MOVEMENT JOINTS @ 6000 TO 7000 CRS. MAX. USE M4 A.D OR S.D TO ACHIEVE JOINT AND/OR TIE TO ARCHITECTS. PROVIDE CONTROL JOINTS AT STEP DOWNS.

REINFORCED MASONRY

R1 WORKMANSHIP, MATERIALS & DESIGN SHALL BE IN ACCORDANCE WITH AS 3700 & ASSOCIATED CODES LISTED THEREIN AND THE SPECIFICATION.

R2 GROUT FOR FILLING CORES IN REINFORCED MASONRY SHALL HAVE THE FOLLOWING PROPERTIES:

- MAXIMUM AGGREGATE SIZE = 10
- SLUMP = 230
- MINIMUM CEMENT CONTENT = 355 kg/m3
- CHARACTERISTIC STRENGTH f'c = 15-20 MPa
- ADMIXTURES, ADDITIVES AND CHEMICAL ADMIXTURES NOT PERMITTED WITHOUT APPROVAL.

R3 CLEAN OUT HOLES SHALL BE PROVIDED AT THE BASE OF ALL CORES TO BE GROUTED, BEFORE THE GROUT ARE FILLED, ANY MORTAR DROPPINGS SHALL BE CLEANED OUT, THE REINFORCEMENT TIED AND THE HOLES BLOCKED OFF.

R4 PROVIDE GROUT BETWEEN REINFORCEMENT AND FACE OF BLOCK SHALL BE 15.

R5 PROVIDE CONTROL JOINTS AT 15.0m CRS. MAX. JOINTS TO BE PROVIDED AT STEP DOWNS OR ADJACENT APARTMENTS.

STRUCTURAL TIMBER

T1 ALL STRUCTURAL TIMBER WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 1720.

T2 TIMBER SHOWN ON STRUCTURAL DRAWINGS SHALL BE SEASONED EQUIVALENT OF STRESS GRADE F17 UNLESS OTHERWISE SPECIFIED.

T3 REFER TO ARCHITECTS OR OTHER DRAWINGS FOR NON-STRUCTURAL TIMBER DETAILS.

T4 LIGHT TIMBER FRAMING TO COMPLY WITH AS 1684.

T5 THE CONTRACTOR SHALL PROVIDE FULL FABRICATION TRUSS DETAIL FOR APPROVAL PRIOR TO FABRICATION. THE CONTRACTOR SHALL PROVIDE ALL COMPUTATIONS AND CERTIFICATION TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT OF FABRICATION WORKS.

SYSTEMS

S1 WORKMANSHIP, MATERIALS AND DESIGN SHALL BE IN ACCORDANCE WITH AS 4100, ASSOCIATED CODES LISTED THEREIN AND THE SPECIFICATION.

S2 UNLESS NOTED OTHERWISE, STEEL ELEMENTS SHALL BE OF THE FOLLOWING GRADES:

GENERAL SECTIONS – BP 300-350/450/AS/AS 1B
– GRADE 250 TO AS 3678/3511 EITHER SECTIONS)
RHS & SHS – GRADE 350 TO AS 1163
CHS = 81.3 – GRADE 350 TO AS 1163
CHS = 89.1 – GRADE 350 TO AS 1163
PLATES & BARS – GRADE 0450-2250 TO AS 1591
CURSAIL – GRADE CA250 TO AS 1163

S3 REFER TO ARCHITECTS OR OTHER DRAWINGS FOR DETAIL, SLOTS AND HOLES NOT SPECIFICALLY SHOWN ON THESE DRAWINGS.

S4 BOLTING PROCESSES ARE IDENTIFIED AS FOLLOWS:

BOLTING PROCEDURE	GRADE MPa	SNUG TO A.S.	METHOD OF INSTALLATION	NOTES
8.4/S	4.8	AS 1111	SNUG TIGHTENED	
8.8/S	8.8	AS 1252	SNUG TIGHTENED	
8.8/TF	8.8	AS 1252	FULLY TENSIONED LOAD INDICATOR WASHERS.	FRICTION TYPE JOINT
8.8/TB	8.8	AS 1252	FULLY TENSIONED LOAD INDICATOR WASHERS.	BEARING TYPE JOINT

ALL BOLTS TO BE OF SAME IDENTITY GRADE AT LEAST ONE BOLT SHOULD BE EXPOSED BEYOND THE NUT AFTER THE NUT HAS BEEN TIGHTENED.

S5 UNLESS NOTED OTHERWISE, CONNECTIONS SHALL BE AS FOLLOWS:

CONNECTION LOCATION	BOLT NO. & DIA.	PROCEDURE	CLEAT THICKNESS	NOTES
GENERAL MEMBERS	≤ 203 MAX DIM 2M12	8.8/S	8	VISIBLE BACK TOTAL PASS
	> 203 2M16	8.8/S	10	
PURLINS & GIRTS	2M12	4.4/S	8	GALVANISED BOLTS
ROOF BRACING	1 M20 AT SPECIFIED FACE END	4.4/S	AS DETAILED	HALF HOOK WASHER CLEAR END
HD BOLTS	AS DETAILED	4.4/S	AS DETAILED	9T-SOLID WASHER UNDER NUT

NOTE ALL BOLTS TO BE HOT DIP GALV. U.N.O.

S6 PURLINS SHALL BE SUPPLIED AS SPECIFIED WITH BRACING AND TIES TO MANUFACTURER'S SPECIFICATION OR THEIR MAXIMUM UNSUPPORTED LENGTH ALONE. SUBSTITUTION SHALL NOT BE MADE UNLESS APPROVED.

S7 WELDING CATEGORIES SHALL BE AS FOLLOWS:

UNLESS NOTED OTHERWISE SP TO A.S. 1554
PURLIN AND GIRT CLEATS SP TO A.S. 1554

S8 UNLESS NOTED OTHERWISE ALL FILLET WELDS SHALL BE 6mm CONTINUOUS FILLET WELDS, SP CATEGORY.

S9 ALL BUT WELDS SHALL BE RECOMMENDED COMPLETE PENETRATION SP CATEGORY AND SHALL USE 'BACKING BOARD' PLATES.

S10 ELECTRODES SHALL BE:

250mm OR 350mm	TO A.S. 1553 FCA 350W
W503	TO A.S. 3100 FCA 490W
W503	TO A.S. 2205 FCAW 490W
W503	TO A.S. 1554 FCA SAW

S11 GROUT UNDER BASE PLATES SHALL BE 25 NON-SHRINK PREMIX NON-METALLIC GROUT AND PACKED WHEN PLACED IN PLACE. ALTERNATIVELY USE PLATES PLACED ON TOP OF TWO LAYERS OF CEMENT GROUT (BLOWSTILE GRADE) 25 THICK EACH

S12 SUSPENDED CEILINGS, FOR CONCEALING DUCTS, BATHROOM AND SUSPENDED PIPEWORK MUST BE SUITABLY SUPPORTED FROM THE SIDE OF PURLINS. SUPPORT FROM THE FLANGE OF PURLINS SHALL NOT BE PERMITTED. LOADS FROM HEAVIER DUCTS OR PLANT MUST BE SUITABLY DISTRIBUTED BETWEEN FACE OF PURLINS.

S13 PREPARE AND FINISH PAINT STEEL AS FOLLOWS:

INTERIOR FINISHES – CHEMICAL PRE-TREATMENT OF ALL WELDS AND BLACK STEEL COMPONENTS TO BE POWER TOOL CLEANED AND PAINTED WITH AN APPROPRIATE ZINC RICH COLD CURE, MATCHING THE OVERALL FINISH AND LEVEL OF PROTECTION

EXTERNAL EXPOSURE – REFER TO CLASS C2 / AS 4312

	FIRST COAT	SECOND COAT	THIRD COAT
MATERIAL	EPOXY ZINC PHOSPHATE	ALIPHATIC POLYURETHANE	ALIPHATIC POLYURETHANE
DRY FILM THICKNESS	MINIMUM 75 MICRONS	MINIMUM 125 MICRONS	MINIMUM 75 MICRONS

DESIGN TO BE ADVISED AS PER PAINT SPECIFICATIONS

NOTE SPECIFICATION FOR BARRIER AND/OR FINISH COATS.

S14 STEELWORK TO BE HOT DIP GALVANISED IS AS DESCRIBED OR NOTED AS DEALS ON THE PROJECT DRAWINGS. REFERENCE TO CLASS A / AS WELL MAIL CODE ENABLE TO ENGINEERING. WITH "SELECT GALVANIZE" UNLESS NOTED OTHERWISE. REFER TO SPECIFICATION FOR BARRIER AND/OR FINISH COATS.

S15 SHOP DRAWINGS SHALL BE SUBMITTED IN DUPLICATE TO THE ARCHITECT AND ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF STEELWORK FABRICATION. REVIEW DOES NOT INCLUDE DIMENSIONAL CHECKING.

RETAINING WALL NOTES – REINFORCED MASONRY OR CONCRETE

RW1 ALL WORK TO BE IN ACCORDANCE WITH THE RELEVANT SAA CODE.

RW2 CONCRETE STRENGTH FOR FOOTINGS 25MPa.

RW3 COVER TO REINFORCEMENT – 50mm FOOTINGS BOTTOM
– 30mm FOOTINGS TOP
– 50mm WALLS FACE/BACKFILL FACE

RW4 CLAY RETAINING SHALL NOT BE USED AS BACKFILL BEHIND WALLS.

RW5 THE REAR OF RW WALL SHALL BE DRAINED WITH A.R. DRAINS, MINIMUM 300mm WIDE LAYER OF 20mm GRADED ROCK BEHIND WALL.

RW6 CLAY BACKFILL BEHIND WALL NOTE, GROUT OR CONCRETE HAS CURED FOR AT LEAST 14 DAYS.

RW7 MASONRY BLOCK LAYERS IN BOTTOM COURSE OF MASONRY WALL TO ALLOW CLEAR OUT OF MORTAR DROPPINGS AND TYING OF REINFORCEMENT. FORM UP TO GROUT.

ROOFING – STRUCTURAL TIMBERS

R1 STRUCTURAL TIMBERWORK TO ROOFING IS H2S OUTDOOR OR H3 MIN.

R2 RIDGE LOAD IN DIRECTION SHOWN THUS:- ⟵

R3 STRUCTURAL TIMBERWORK TO BE SUPPORTED ON MANUFACTURERS BEAMS AND TEMPORARILY ON PROPS/TIMBER BEARERS.

R4 STRUCTURAL TIMBERWORK TO BE SUPPORTED FULL WIDTH OF ALL WALLS AND TEMPORARILY ON PROPS OR TIMBER BEARERS.

R5 NORMAL 3 ROWS OF PROPS AT THIRD POINTS EACH SPAN EXCEEDING 2100mm OTHERWISE 2 ROW OF PROPS AT MIDSPAN MAXIMUM UNSUPPORTED FREE LENGTH – 2700mm. LEAVE PROPS IN PLACE 14 DAYS AFTER SET.

R6 NO MASONRY BRACES WITHIN SLAB SPANS. PROVIDE ALLOW FLOORING AT SLAB LEVEL OVER MASONRY WALLS LACED BOARDS.

R7 PROVIDE BRACING RODS TO BE 12mm. PRIOR TO COMPLETING ALL ENTRANCES SPACE, GL, GIRT AND SKLETTERING MATTER SHALL BE REMOVED FROM THE LOWER SPACE OF THE STRUCTURAL FRAMING, ALSO, ANY STRONG MATERIAL LYING IN THE BUILDING SPACE, BE SWEPT OR BLOWN AWAY.

R8 MINIMUM VENTILATED AIR GAP UNDER = 300mm.

R9 WELD BRACING TO STEEL BEAMS WITH 6MM DOUBLE WELDS ADJACENT TO EVERY SECOND RIB OR 600 CRS. MAX.

ABBREVIATIONS (REFER A.S. 1101 PART 1)

BOTTOM	BOT
BRACE/BLOCK CONTROL JOINT	BCJ
CONSTRUCTION JOINT	CJ
CONTROL JOINT	CONT J
DIAMETER	DIA (OR ø)
EACH FACE	EF
EACH WAY	EW
EXISTING SURFACE LEVEL	ESL
EXPANSION JOINT	EJ
FAN FACE	FF
FINISHED FLOOR LEVEL	FFL
FINISHED SURFACE LEVEL	FSL
FLAT	FL
GROUND SURFACE LEVEL AS DUG	GSL
HORIZONTAL	HOR
LANDING	L
LONG LEGGED	LL
MECHANICAL	MCH
NEAR FACE	NF
PLATE	PL
PROPOSED LEVEL	RL
TOP AND BOTTOM	TAB
TOP OF CONCRETE	TOC
UNLESS NOTED OTHERWISE	UNO

NORTHERN MIDLANDS COUNCIL
This document forms part of
Planning Permit P15-331
issued on 25-Feb-2016
(S1 - S5)

55

FOR APPROVAL

AP2	1/12/15	FOR APPROVAL ONLY
AP1	21/10/15	FOR APPROVAL ONLY
P2	2/10/15	PRELIMINARY ISSUE ONLY
P1	8/9/15	PRELIMINARY ISSUE ONLY
REV	DATE	REMARKS

EXPERT ASSESSMENT

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PROJECT
2 HUDSON FYSH DRIVE
WESTERN JUNCTION
PROPOSED NEW CARPARK

TITLE
NOTES & SOIL INFORMATION

ACCEPTED CONSTRUCTION	DATE
ACCEPTED AS PER (Australian)	DATE
ACCEPTED FOR (Local Authority)	DATE

SCALES @ A1	DESIGNED BY	DRAWN BY
	RJS/TAS	ASSI
AS SHOWN	PLOT DATE	8/09/2015

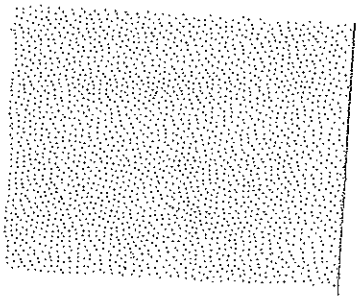
DO NOT SCALE

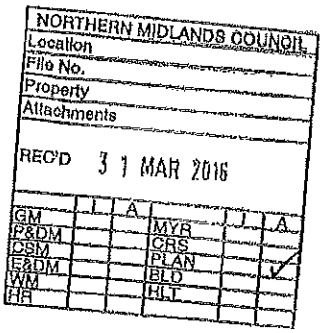
PLOT DETAILS JOB/SCALE/APPROVED

PROJECT NO. J152208CL

DWG NO. S05 REVISION AP2

ATTACHMENT B.





The General Manager

Northern Midlands Council

Longford 7301

Dear Sir,

Representation re: 07/15 &P15-331 Draft Amendment.

I note that in the NMIPS 2013 that para 2.2.2.that the NMC....inter alia ..."will manage (the scheme) according to the following local principals and strategies".

2.2.2.4.b. The Principle to... "protect major tourist routes." The airport is a major tourist route for all tourists arriving by air in the North of the state. To amend the Scheme to effect an ad hoc amendment places that principle and the F.1.4.8 objective in destructive jeopardy, as well as creates the precedent to change the whole screening and streetscape concept for that prime tourist route and visual interface on arrival in Northern Tasmania.

2.2.2.6 a. The proposed amendment does not take into account the existing infrastructure and screening as designed by the old Evandale Scheme that has been subsequently accepted and included in the NMCIPS. This principal must be retained for continuity, and fairness to previous developers.

2.2.2.8 The heritage and landscape of the current airport's original plantings and the adjacent "Clairville" built heritage and treescape need to be reinforced under this principle, and will be supported with the application of the current objectives and landscaping provisions for the area. To change and weaken them will detract from the area and abrogate the principles of the Scheme.

The Tourism Strategy as under 3.5 requires "Protection of major tourist routes from inappropriate development"....there is no concern to the development provided there are the **existing** standards of setback and screening, to change

the scheme by 10metres will impact on the historic cultural and environmental values. The Scheme should look to support and strengthen its principles for tourism, not degrade them, as tourism is one of the few growth sectors in the state including the NM's.

The current controls and setback and for screening not unreasonably meet the objectives of F.1.4.8. The proposed amendment does not, and will set a precedent to abrogate the practical and full impact of the objectives and principles as applied to that tourist route on the whole lead in/out of the airport on the Evandale Road.

The NMC's role under 3.7.1" is to act as an efficient, consistent development authority". This is not a consistent amendment, but an ad hoc motion to meet one particular developers perceived needs. It mitigates against previous applicants and creates uncertainty and undue precedent for future developers.

The ad hoc nature of the amendment will destroy the original concept of accepted set back approaches to the Airport (and subsequently to Evandale). That lead in on the tourist route will become an extensive car park as the "welcome and fare well to Northern Tasmania".

F.1.4.8 has a quite clear objective that "open space and landscaping form and integral part of development in this area...see F1.4.8 /screening/enhanced appearance of ..Works/separate activities/opportunities for recreation. This proposed amendment dilutes all these and destroys the coherence of the current setbacks, and negates any future bike trail proposals.

In conclusion I request the amendment NOT be approved in order to maintain and reinforce the current Principles and Objectives of the Scheme.

F

29 March2016

ireneinc
smithstreetstudio
PLANNING & URBAN DESIGN

29 March 2016

The General Manager
Northern Midlands Council
13 Smith Street
LONGFORD TAS 7301

Dear Sir

DRAFT AMENDMENT 07/15 & DEVELOPMENT APPLICATION P15-331
2 HUDSON FYSH DRIVE, WESTERN JUNCTION

I write in relation to the above application draft amendment to the Northern Midlands Interim Planning Scheme 2013 and associated planning application on behalf of Australia Pacific Airports Corporation, the operators of Launceston Airport.

PROPOSED AMENDMENTS

The amendments proposed are discreet amendment to individual development standards of the Translink Specific Area Plan (SAP) and the Car Parking and Sustainable Transport Code which are both proposed to be site specific amendments.

The location of the subject site is however prominent being on Evandale Road which is a major tourist route and a regional gateway and also directly opposite the main entry to Launceston Airport. Reduction in site landscaping provided for by the proposed landscaping amendment within the SAP has the potential to reduce the visual amenity for road users.

Additionally the landscape amendment proposed will provide for increased site development which will be inconsistent with other land within the SAP, will provide for a greater area of site development which in turn results in the increase generation of stormwater and the reduction in capacity for onsite management, contrary to the strategies developed for the original SAP development.

The landscaping amendment could additionally be considered to be inconsistent with the parts of the Objectives of the Act and the resulting development and impacts inconsistent with the Objectives of the State Policy on Water Quality.

PROPOSED DEVELOPMENT

Further to the above, the assessment of the proposed development against the provisions of the Planning Scheme has identified the following issues related to the proposed development:

PUBLIC PEDESTRIAN FOOTPATH

The existing footpath within the Airport's land does not currently extend to the property boundary, Council's Draft Permit includes conditions relating to joining the proposed pedestrian footpath to the one existing within the Airport site, therefore compliance to the above conditions would be reliant on agreement with the Airport owners. The Airport owners have not received any request or contact in relation to consultation on this issue.

The TIA by Midson Traffic includes some assessment of the proposed pedestrian footpath from the development site, across Hudson Fysh Drive and Evandale road to connect to the footpath at the entry to the Launceston Airport.

This assessment describes a minimal increase in pedestrian activity and in relation to the extent of pedestrian movements, the TIA describes the existing 2 hour parking restriction in Hudson Fysh Drive and that this parking appears to be associated with the airport.

Given this on street parking is short/medium duration it is unclear why the TIA concludes people who are currently using this free on-street parking would rather utilise a long-term paid car park.

While the TIA states that the proposed business will not follow the normal peak times given that generation will accord with flight arrival and take-off times, however there will presumably be times where flight arrivals and departures will not only match peak Airport traffic times but will also overlap with the usual morning and afternoon traffic peaks.

F1 SPECIFIC AREA PLAN

F1.4.4 Materials and Presentation - The building materials do not appear to meet the Acceptable Solution and there are no Performance Criteria.

F1.4.6 Stormwater - The development includes the paving of the vast majority of the subject site and did not propose to include onsite retention. Assessment against the Performance Criteria is therefore required.

- The development includes building and paving across just under 90% of the site area and therefore substantially increases the intensity of runoff from the site.
- No onsite storage or water sensitive urban design techniques are proposed and the plans describe the stormwater system as being designed for only a 1 in 10 year event. Council's Draft condition requires onsite detention for 1:20 year events. Open onsite storage would be a potential bird attractor which would not be supported because of the potential impact on airport operations, underground or enclosed storage on site could have been accommodated within the design. Neither of the above assess the potential impacts required related to 1% Annual Exceedance Probability (a 1:100 event) including the potential impact on neighbouring land include the airport site through increased overland flow.
- while a calculation of 1:100 year events has been provided it is not apparent how the site or development have been designed to accommodate these volumes. Any additional stormwater from the site has the potential to create downstream flooding at the outfall within the airport land which may impact further upon both the apron and taxiways which are located nearby. Therefore there is significant potential for impact from extreme events to impact on airport operations.

On the basis of the above the Performance Criteria has not been demonstrated to be met.

F1.4.8 Open Space and Landscaping - The existing A1 requires 20m landscaping along the Evandale Road frontage and 3m landscaping along Hudson Fysh Drive. If approved the amendment would allow the Evandale Road landscaping to be reduced to 8m.

While the Evandale Road landscaping area would comply if the amendment is approved, the reduction in width of landscaping by 57.5% as proposed by the amendment would result in an outcome inconsistent with the landscaping provided on neighbouring land and diminish its effectiveness.

Additionally, the Hudson Fysh Drive landscaping area, of which half (1.5m of its 3m width) is occupied by a footpath, does provide landscaping area considered to meet the standard.

F1.4.12 External Lighting - External lighting locations are described on a site plan and the planning submission which forms part of the application describes the lighting as:

External lighting will be less than or equal to 10m, hooded and directed so as not to cause nuisance, threat or hazard to the operation of Launceston Airport.

The proposal does not contain detail on the lighting poles, lights or shielding design, it therefore does not demonstrate it meets A1 and despite the proposed condition, the application should not be approved without detail of lighting design so that the Airport owners have an opportunity to assess whether any inappropriate impact will be created.

CAR PARKING AND SUSTAINABLE TRANSPORT CODE

E6.6.1 Car Parking Numbers and E6.6.2 Bicycle Parking Numbers - No provision has been made for staff parking related to the proposed Service Industry (detailing / car wash)

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E15.5.3 Design and siting of signage - 3 pole signs are proposed, 2 smaller ones located either side of the main entry and one larger near the intersection of Hudson Fysh Drive and Evandale Road.

- The application documentation does not detail why other permitted signage types will not meet the needs and it is therefore unclear how P35 b) is met. Council's Draft Permit condition requires the larger pole sign be altered to a blade sign and this would meet the standards relevant to that type of sign.
- The signage appears broadly consistent with the Performance Criteria with the exception of the 2 signs proposed to be located either side of the main entrance which appears to result in duplication inconsistent with P36 d) & e).
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For further information attached is a report which more fully discusses the above matters, please contact me if you require any further information or wish to discuss any aspect of the above.

Yours faithfully

Jacqui Blowfield
Senior Planner
IRENEINC PLANNING

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29 March 2016

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PLANNING & URBAN DESIGN

2 HUDSON FYSH, DRIVE, WESTERN JUNCTION

Planning Review
Certified Planning Scheme Amendment & Draft Development Application

Last Updated - 24 March 2016
Author - Jacqui Blowfield

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CONTENTS

1. INTRODUCTION

Ireneinc Planning have been engaged by Australia Pacific Airports Corporation, the operators of Launceston Airport, to review the application documents and the Northern Midlands Interim Planning Scheme 2015 in relation to a proposal at 2 Hudson Fysh Drive, Western Junction.

This report firstly considers the amendments as certified by Council and secondly provides a review of the relevant planning scheme provisions relating to a proposed development application.

Assessment is based on application documentation publically exhibited by the Northern Midlands Council.

1.1 THE SITE

The subject site is comprised of CT 146537/2, is a little over 1ha in area and is located on the north-west corner of the junction of Hudson Fysh Drive and Evandale Road. The following figure describes the location of the site.

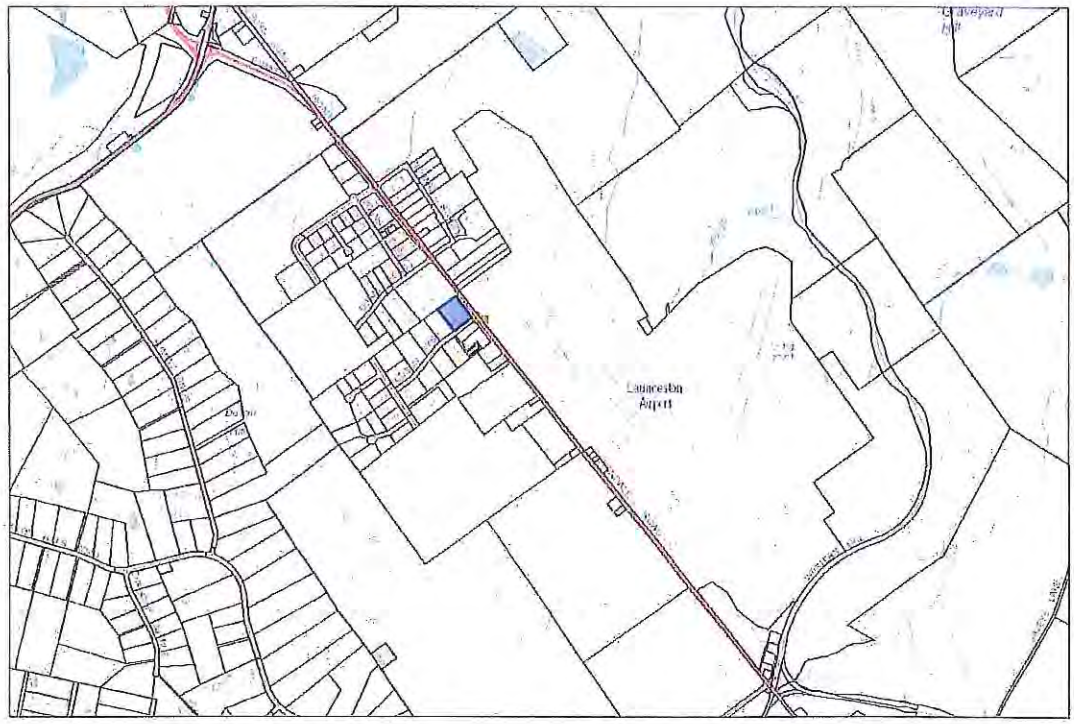


Figure 1: Locality Map (Source: The LIST)

2. PROPOSAL

The proposal is to provide for the development of a car parking and washing facility presumably aimed at attracting customers from those flying in and out of Launceston Airport.

The proposed development does not meet the mandatory provisions of the Scheme and proposes a Planning Scheme Amendment to resolve the non-compliance.

2.1 USE & DEVELOPMENT

The use and development consists of a long-term car park, including 343 standard car bays, 20 covered car bays, and 4 disabled bays. The car park will cover the majority of the site however, a building located centrally would contain staff and customer service areas in addition to the 20 covered spaces.

It is also proposed to offer customers car washing/detailing type services and one end of the proposed building will contain a 2 bay carwash area.

A pedestrian footpath is proposed to extend beyond the boundaries of the subject site and is presumably contained within the Evandale Road reservation.

2.2 PLANNING SCHEME AMENDMENT

The Amendment proposed by the applicant relates to a development standard dealing with the streetscape, setback and landscape setting of Evandale Road.

Council has, in addition to the above, certified a further amendment to the Car Parking and Sustainable Transport Code in relation to the number of parking spaces required for people with a disability.

3. AMENDMENTS

3.1 CERTIFIED AMENDMENTS

The certified amendments proposed to the planning scheme are as follows:

F1.4.8 Open Space and Landscaping	
Acceptable Solution	*Performance Criteria*
A1 *Within Area 1, the following setback distance must be used for landscaping, excluding those areas sealed for driveway access:* *a) 20m from Evandale Main Road* *b) 7m from the Distributor Road* *c) 3m from an access road*	*P1* *~~No performance criteria~~ For Lot 2 Hudson Fysh Drive, Western Junction setback may be varied to provide a setback from Evandale Main Road of at least 8m provided that there is still effective screening of buildings and works from Evandale Main Road.*
E6.7.4 Parking for Persons with a Disability	
Objective *To ensure adequate parking for persons with a disability*	
Acceptable Solution	*Performance Criteria*
A2 *One of every 20 parking spaces or part thereof must be constructed and designated for use by persons with disabilities in accordance with Australian Standards AS/NZ 2890.6 2009.*	*P2* *No performance criteria, except that on 2 Hudson Fysh Drive (CT 146537/2), where used and developed for vehicle parking, one of every 100 parking spaces or part thereof must be constructed and designated for use by persons with disabilities in accordance with Australian Standards AS/NZ 2890.6 2009.*

3.1.1 COMMENT IN RELATION TO F1.4.8 OPEN SPACE AND LANDSCAPING

The amendment proposes only the subject site be provided with the ability to reduce the width of landscaping which while limiting the impact of the proposed amendment given the location at the main entrance to the Launceston Airport does so at one of the most high profile locations within the area of the SAP.

If the amendment were to be approved consideration should be given to the wording to ensure that it is clear that there is no Performance Criteria applicable to any other site or to the Hudson Fysh Drive frontage of the subject site.

The proposed wording should also be reconsidered for clarification of what the purpose and intent of the landscaping areas are and what is intended by "effective screening" to ensure that that landscape setting of the tourist route and regional gateway is maintained.

It is additionally noted that the amendment does not propose discretion be provided to the Hudson Fysh Drive frontage notwithstanding the current development application proposes the 3m wide landscaping area contain a footpath which takes up half the width of the area and planting which will not screen the development being less than 1m in height and will only provide minimal landscaping at a location where angled views from Evandale Road and the Airport entrance will be available.

The reduced landscape width may also result in less availability of land if future widening of the highway if required.

3.1.2 Comment in relation to E6.7.4 Parking for Persons with a Disability

The number of spaces provided for in the proposed amendment is consistent with the number of spaces required for a Class 7 structure (car park) by the National Construction Code and is therefore considered an appropriate level of discretion to provide.

3.2 AMENDMENT ASSESSMENT

Amendments to planning schemes are considered against the following;

- Whether the amendment has the potential to affect land use conflict between use permitted by a planning scheme;
- Whether the amendment is restricted to only affecting local provisions of a planning scheme;
- Whether the amendment will impact upon permissible use or development which would affect the region in environmental, economic or social terms;
- Whether the amendment furthers the objectives of Schedule 1 of the Land Use Planning Approvals Act; and
- Whether the amendment is in accordance with State Policies.

The above provisions are considered in the following sections.

3.2.1 Land use conflicts with adjacent uses

The proposed amendments do not affect land use and will therefore not alter the potential for land use conflict.

3.2.2 Local Provisions

One of the amendments relates to a provision of a Specific Area Plan which is a local provision and does not affect any state-wide provisions.

The amendment proposed to the Car Parking and Sustainable Transport Code is restricted to a site specific amendment and therefore does not impact state provisions.

3.2.3 Regional Impact

The proposed amendments will not impact upon development in the wider region.

3.2.4 Schedule 1 Objectives of LUPAA

The objectives are considered in the following table:

PART 1 - OBJECTIVES OF THE RESOURCE MANAGEMENT AND PLANNING SYSTEM OF TASMANIA	
(a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and	The amendment to the landscaping provision provides for the additional development of paved surfaces across the subject land which increases runoff from the land and reduces the capacity of the site of retain and manage water onsite. The amendment to the parking standard does not conflict with this Objective.
(b) to provide for the fair, orderly and sustainable use and development of air, land and water: and	The proposed site specific amendment creates a different development potential on the subject land to neighbouring similar land creating inequity between landowners, within the same development area such as the developed neighbouring site which has been developed in accordance required landscape setbacks. The amendment to the parking standard does not conflict with this Objective.
(c) to encourage public involvement in resources management and planning; and	The process provides for public involvement.
(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c): and	The proposed amendments may facilitate economic development on the subject land but will create inequity for neighbouring land.
(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.	The assessment process promotes the involvement of the pubic as well as local and state government.
PART 2 - OBJECTIVES OF THE PLANNING PROCESS ESTABLISHED BY THIS ACT	
(a) to require sound strategic planning and co-ordinated action by State and local government; and	The proposed amendments will not impact upon wider regional strategic planning.
(b) to establish a system of planning instruments to be the principle way of setting objectives, policies and controls for the use, development and protection of land;	There is no conflict with this objectives.
(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land;	The landscaping amendment proposed has the potential to increase environmental impact through the increased site development and reduction in retained vegetated area on the land and the consequential increased runoff and reduction of onsite infiltration and management capacity. The amendment to the parking standard does not conflict with this Objective.

(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels;	Not directly applicable to the amendments.
(e) to provide for the consolidation of approvals for land use and development and related matters, and to co-ordinate planning approvals with related approvals;	The process provides the opportunity for the development proposed to be considered as part of the amendment process.
(f) to promote the health and wellbeing of all Tasmanians and visitors to Tasmania by ensuring a pleasant, efficient and safe environment for working, living and recreation;	This objective is not directly relevant to the proposal.
(g) to conserve those buildings and areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;	The landscaping amendment substantially removes a landscape buffer from the site which was required in the original construction of the SAP provisions to ensure the maintenance of the landscape setting of the area given the location on a major tourist route and as a gateway to the region and local heritage areas. The amendment to the parking standard does not conflict with this Objective.
(h) to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;	The increase in developed areas and paved surfaces, which are a consequence of the landscaping amendments removal of the landscaped buffer, will increase the impact on services and reduce the capacity for onsite management. The amendment to the parking standard does not conflict with this Objective given parking for people with disabilities will still be required consistent with the requirements of the National Construction Code.
(i) to provide a planning framework which fully considers land capability.	The amendments dos not directly affect land capability.

3.2.5 STATE POLICIES

The State Policies are considered in the following table:

POLICY	RESPONSE
THE STATE COASTAL POLICY 1996	The subject land is not within the coastal zone; consideration of this policy is therefore not relevant to the amendment.
THE STATE POLICY ON WATER QUALITY MANAGEMENT 1997	The Policy includes the following Objective: *(b) ensure that diffuse source and point*

	source pollution does not prejudice the achievement of water quality objectives and that pollutants discharged to waterways are reduced as far as is reasonable and practical by the use of best practice environmental management; Provisions in the SAP which require onsite retention and management of stormwater are consistent with the objectives of this policy. The proposed landscaping amendment results in the ability for further onsite development of paved areas and the consequential increase in runoff and reduction in the ability for onsite management, arguably inconsistent with best practice methods in achieving the objectives of this Policy.
THE STATE POLICY ON THE PROTECTION OF AGRICULTURAL LAND 2009	The land is not agricultural land; consideration of this policy is therefore not relevant to the amendment.
NATIONAL ENVIRONMENT PROTECTION MEASURES	The proposed amendment will not impact on any protection measures.

4. PLANNING SCHEME PROVISIONS

4.1 ZONING AND OVERLAYS

The following figures identify the zones and mapped Overlays relevant to the site and surrounds:

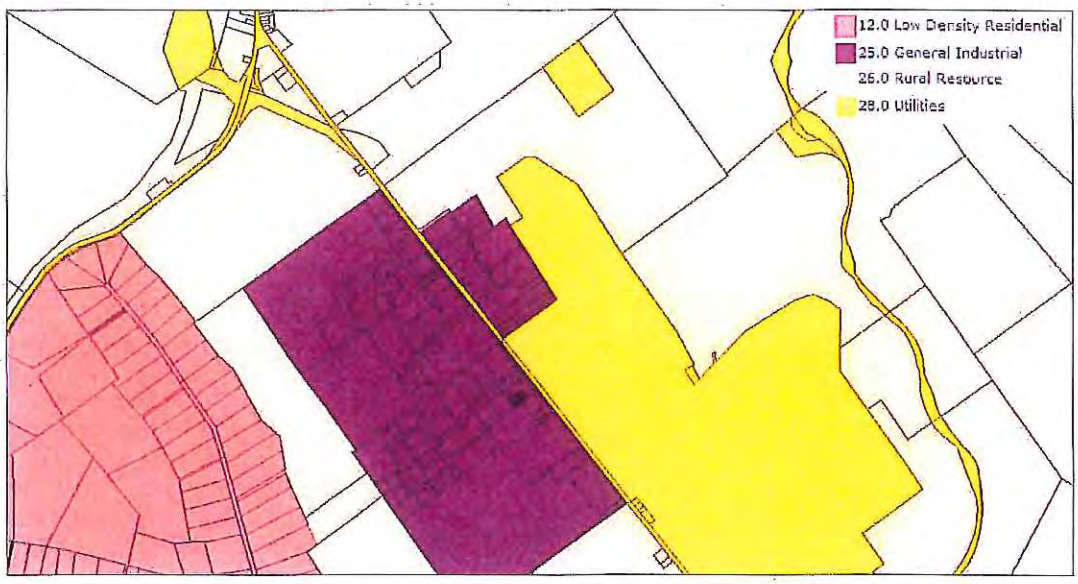


Figure 2: Zoning (Source: The LIST)

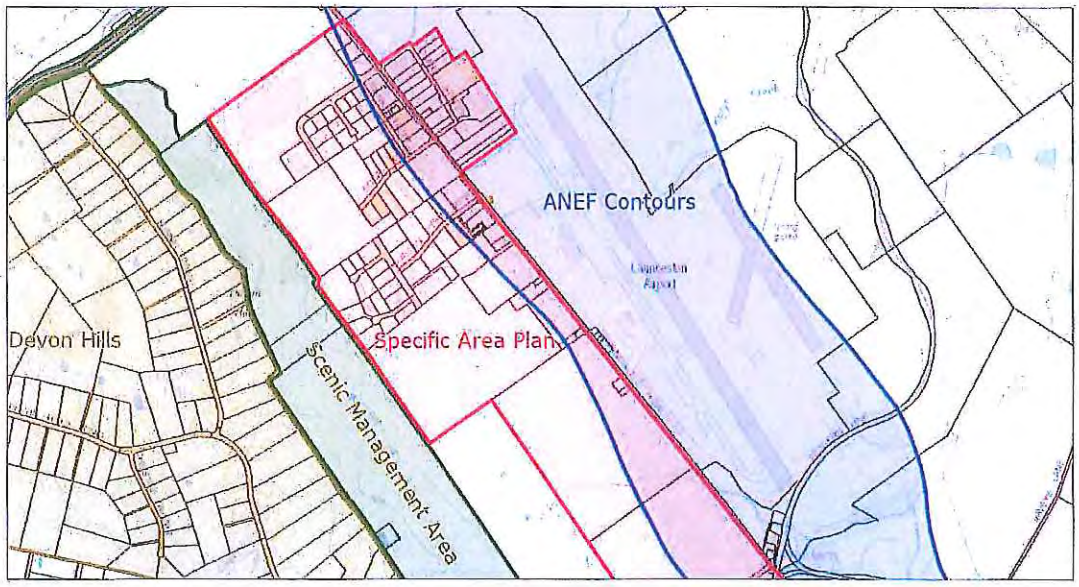


Figure 3: Overlays (Source Base Plan: The LIST)

The subject land is zoned General Industrial, with the Evandale Road Reservation and the airport opposite being Utilities Zone.

The Overlay plan in Figure 3 above, indicates the area including the subject site is within the Translink Specific Area Plan and also within the ANEF contours overlay relevant to the Airports Impact Management Code.

4.2 USE DEFINITION

The uses described in the documents accompanying the application describe the activities as primarily a car park but also include a car wash, detailing service that will be offered.

The Scheme includes the following definitions relevant to the proposal, as follows:

Vehicle parking	*use of land for the parking of motor vehicles.* *Examples include single and multi-storey car parks.*
Service industry	*use of land for cleaning, washing, servicing or repairing articles, machinery, household appliances or vehicles. Examples include a car wash, commercial laundry, electrical repairs, motor repairs and panel beating.*

Council have considered the proposed use as being solely within the Vehicle Parking Use Class. The Scheme provides:

> *8.2 Categorising Use or Development*
>
> *...8.2.2 A use or development that is directly associated with and a subservient part of another use on the same site must be categorised into the same use class as that other use.*
>
> *8.2.3 If a use or development fits a description of more than one use class, the use class most specifically describing the use applies.*
>
> *...8.2.5 If more than one use or development is proposed, each use that is not directly associated with and subservient to another use on the same site must be individually categorised into a use class.*

No information is contained within the application to confirm the operation or intensity related to the proposed carwash and detailing facility to confirm if it will be operated directly associated with and ancillary to the car park operation and therefore that it should not be individually categorised as Service Industry.

4.3 UTILITIES ZONE

The proposed footpath within the road reservation would as a minor utility fall within the No Permit Required category and therefore meet the requirements of the Scheme.

Notwithstanding the road authority, in this case State Growth, and land owners would need to be satisfied that the footpath and more particularly the crossing points for pedestrians and any markings, refuges etc provided an appropriate level of safety for the public.

The Draft Permit issued by Council and forming part of the exhibited documents includes the following conditions:

> *4 FOOTPATH*
>
> *4.1 Prior to the application for a building permit, the developer must have applied to, and received approval from the Northern Midlands Council and the*

Department of State Growth for the footpath between 2 Hudson Fysh Drive and Airport as shown in the endorsed plan S1. The application must include design drawings prepared by a suitably qualified engineer for the footpath detailing:

i) Footpaths to a minimum of 2m wide and of concrete construction.

ii) Access ramps provided at all interfaces between footpath and kerb/roadway.

iii) Walkways across Hudson Fysh Drive and Evandale Road located through the existing roundabout splitter islands via modification to provide flush walkways with a minimum width of 2m.

iv) The new footpath connecting fully to the existing footpath within the Airport property boundary

v) Tactile Ground Surface Indicators provided at all pedestrian holding points in accordance with relevant Australian Standards and Disability Discrimination Act requirements

vi) Provision of pedestrian warning signage on each Evandale Road approach to the existing roundabout

vii) Confirmation that existing street lighting levels at the roundabout are sufficient to light the new pedestrian crossing points to Australian Standard Category V5. If this cannot be attained, the design plans must detail additional street lightning to meet the minimum V5 Category.

viii) Any stormwater drainage, including underground stormwater reticulation that is directed to the State Road reserve.

4.2 Engineering drawings detailing the above requirements must be provided to the Department of State Growth at the preliminary design stage for review and acceptance prior to submitting final detail design drawings along with an application for a Works Permit.

4.3 Prior to the application for a certificate of occupancy, the footpath between 2 Hudson Fysh Drive and the airport must be completed to the approval of the Northern Midlands Council and the Department of State Growth.

The existing footpath within the Airport's land does not currently extend to the property boundary and therefore compliance to the above conditions would be reliant on agreement with the Airport owners. The Airport owners have not received any request or contact in relation to consultation in this regard.

Further the TIA by Midson Traffic indicates the following in relation to this issue:

4.4 Pedestrian Impacts

The proposed development includes a footpath along the eastern boundary of the site. This footpath connects to the footpath across the eastern approach to the roundabout on Evandale Road and the footpath (currently under construction) into the airport site.

The proposed development is unlikely to generate high volumes of pedestrian activity as it is expected that the majority of users will utilise the shuttle bus service to move passengers between the car park and the airport (and vice versa). The footpath construction on the airport access (northern leg of the roundabout) is shown in Figure 4.

It is anticipated that approximately 20% of users will travel between the airport and the development as pedestrians. This results in a approximately 9 pedestrian movements between the airport and the subject site per day. The balance of customers will utilise the mini-bus service that will operate between the car park and the airport.

It is noted that there are existing pedestrian movements between Hudson Fysh Drive and the airport. It is likely that the proposed development will transfer some of these existing movements to the site (ie. previous pick up activity may be replaced by car parking activity). On this basis, the actual increase in pedestrian movements is likely to be minimal.

In relation to the extent of pedestrian movements, the TIA also describes the existing 2 hour parking restriction in Hudson Fysh Drive and that this parking appears to be used by people associated with the airport. Given this parking is short/medium duration it is unclear why The TIA would conclude the people currently using this free on-street parking would rather utilise a long-term paid car park.

While the TIA states that the business will not follow the normal peak times given that generation will accord with flight arrival and take-off times, however there will presumably be times where flight arrivals and departures will not only match peak Airport traffic times but will also overlap with the usual morning and afternoon traffic peaks.

The TIA does not include any count of existing pedestrian movement numbers and makes no specific comment as to whether the proposed road crossings comply with relevant standards based on the traffic environment and pedestrian numbers.

4.4 SPECIFIC AREA PLAN

The site is within the area of the Translink Specific Area Plan and the following provisions are relevant to the subject site and proposed development.

F1.2 Application of Specific Area Plan

F1.2.1 The specific area plan applies to the area of land designated as Translink Specific Area Plan on the Planning Scheme maps, and shown in this Plan as Figure F1.1.

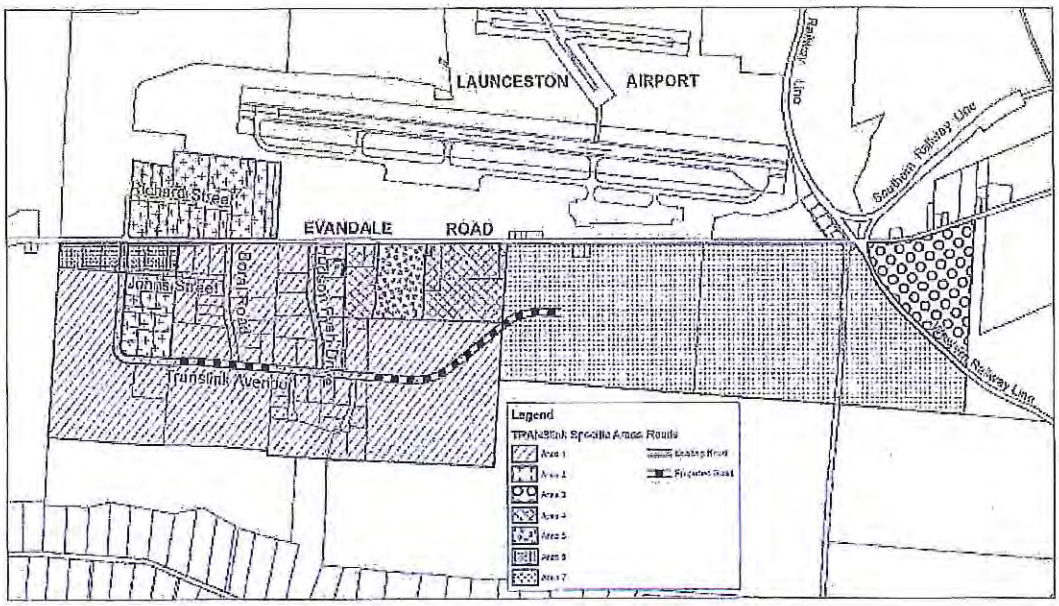


Figure 4: NMIPS Figure F1.1 - Location of Areas 1-7 (Source: NMC)

The figure above indicates that the subject site is within Area 1.

4.4.1 USE TABLES

The Table Of Use for Area 1 indicates that Vehicle Parking and Service Industry are both Permitted use classes.

4.4.2 STANDARDS FOR USE OR DEVELOPMENT

F1.4.3 Height of Buildings

Objective:

(a) To ensure that the design of buildings and other works contributes to the development of an industrial estate set in a landscaped park-like setting.

(b) To protect the safety of Launceston Airport.

SCHEME STANDARD	RESPONSE
A1 *Within Area 1, the maximum height of buildings and other works must not exceed 12 metres.*	The proposed building complies with A1.

F1.4.4 Materials and Presentation

Objective:

(a) To achieve a high quality of development by encouraging the use of a variety of architectural treatments, responding to the rural and landscaped setting and recognising the importance of the area as one of the tourist gateways to Launceston.

(b) Require a high standard of development recognising the prominent location of the zone adjacent to the Airport and that Evandale Main Road is a tourist route.

SCHEME STANDARD	RESPONSE
A1 *Within Areas 1, 2, & 3, a variety of building forms must be used rather than single monolithic structures.* *P1* *The use of a variety of materials or other techniques to help reduce the interpreted scale of the building.*	Only one building is proposed and therefore there is not a variety of building forms, however the building is not monolithic in the context of the site and is broken up by the open middle section and therefore would appear to be consistent with P1 if not technically considered to meet A1.
A2 *Within Areas 1, 2, 3, external walls and roofs must be in face brickwork, form concrete panels or metal clad with a patented pre-treated finish such as colorbond.* *P2* *No performance criteria.*	The design of the building includes colorbond steel, concrete block, glass and a hardiplank product. The design therefore does not appear to comply with A2 and there being no Performance Criteria would not meet this Standard. Notwithstanding the materials proposed appear reasonably appropriate for an industrial area and it maybe that this restrictive provision should be further considered as part of the proposed amendment process.

F1.4.5 Site coverage

Objective: To ensure that the siting and design of buildings and other works contributes to the development of an industrial estate set in a landscaped park-like setting.

SCHEME STANDARD	RESPONSE
A4 *Site coverage for a lot with an area 5000m2 or greater must be:* *a) buildings and covered storage - maximum 65%* *b) landscaped area - minimum 10%*	The site cover proposed meets A4 in relation to both the maximum site cover and minimum landscape area.

F1.4.6 Stormwater

Objective: To ensure that full utility services are available to new development.

SCHEME STANDARD	RESPONSE
A1 *The flow rate of stormwater outside the boundaries of the title shall be no greater than if the land was used for rural purposes. On-site detention devices shall be incorporated in the development.* *P1* *Stormwater may only be discharged from the site in a manner that will not cause an environmental nuisance, and that prevents erosion, siltation or pollution of any waterways, coastal lagoons, coastal estuaries, wetlands or inshore marine areas, having regard to:* *a) the intensity of runoff that already occurs on the site before any development has occurred for a storm event of 1% Annual Exceedance Probability (pre-development levels); and* ... *c) whether any on-site storage devices, retention basins or other Water Sensitive Urban Design (WSUD) techniques are required within the subdivision and the appropriateness of their location; and* *d) overland flow paths for overflows during extreme events both internally and externally for the subdivision, so as to not cause a nuisance.*	The development includes the paving of the vast majority of the subject site and does not include on site retention. Assessment against the Performance Criteria is therefore required. a) The development includes building and paving across just under 90% of the site area and therefore substantially increases the intensity of runoff from the site. The plans describe the stormwater system as being designed for only a 1 in 10 year event and the Draft Permit (Condition 3) proposed by Council has required a system designed to provide for 1:20 year events, neither of these assess the potential impacts required related to 1% Annual Exceedance Probability (a 1:100 event). c) No onsite storage or water sensitive urban design techniques are proposed and the plans describe the stormwater system as being designed for only a 1 in 10 year event. Council's Draft Permit (Condition 3) requires internal detention for 1:20 year events however it is unclear what form this detention may take. Open onsite storage would be a potential bird attractor which would create potential impact on airport operations. Underground or enclosed storage on site could have been accommodated within the design. This would not only provide a more sustainable outcome, by allowing for onsite reuse, it would substantially reduce the potential impact on neighbouring land including the airport site through increased overland flow.

	d) while a calculation of 1:100 year events has been provided it is not apparent how the site or development have been designed to accommodate these volumes. Any additional stormwater from the site has the potential to create downstream flooding at the outfall within the airport land which may impact further upon both the apron and taxiways which are located nearby. Therefore there is significant potential for impact from extreme events to impact on airport operations. On the basis of all of the above the Performance Criteria has not been demonstrated to be met.

F1.4.7 Building Setbacks

Objective: To ensure that the siting and design of buildings and other works contributes to the development of an industrial estate set in a landscaped park-like setting.

SCHEME STANDARD	RESPONSE
A1 *Within Area 1, front, side and rear boundary setbacks for buildings or other works must be a minimum of:* *a) 50m to the Evandale Main Road frontage.* *b) 20m to the Distributor Road frontage.* *c) 10m to an access road frontage.* *d) 5m to the side boundary.* *e) 10m to the rear boundary.*	Hudson Fysh Drive is an Access Road, within the SAP. The setbacks required by A1 are therefore: • 50m to Evandale Road • 10m to Hudson Fysh Drive; and • 5m to other boundaries The development meets A1.

F1.4.8 Open Space and Landscaping

Objective: That open space and landscaping form an integral part of developments to:
i) facilitate the enhanced appearance of buildings and works,
ii) provide screening,
iii) separate activities,
iv) assist in the control of water run-off and erosion,
v) contribute to a reduction in noise levels,
vi) define roads and provide opportunities for passive recreation.

SCHEME STANDARD	RESPONSE
A1 *Within Area 1, the following setback distance must be used for landscaping, excluding those areas sealed for driveway access:* *a) 20m from Evandale Main Road* *b) 7m from the Distributor Road* *c) 3m from an access road*	The existing requirement of A1 is for 20m landscaping along the Evandale Road frontage and 3m landscaping along Hudson Fysh Drive. The development proposes 8.5m of landscaping along Evandale Road and a 3m wide strip along Hudson Fysh Drive which contains minimal landscaping and a path. The proposed subminimum width of the landscaping along Evandale Road is proposed to

P1 *No performance criteria*	be amended and if approved the development would meet the new Performance Criteria in relation to this frontage. The is no existing or proposed Performance Criteria related to other Road frontages and the development proposed for the Hudson Fysh Drive frontage does not appear to comply with the Acceptable Solution as it fails to provide a form of treatment that should be considered as landscaping, as it is designed more as internal pedestrian access through the car park.
A7 *a) Landscaping must be provided for development of a vacant lot or where landscaping has not previously been undertaken.* *b) Landscaping is to be provided with an automated watering system.*	The development plans include landscaping and the notes on the Landscape Plan indicate that an automatic reticulated watering system is to be installed to all landscaped areas. The development meets A7.
A8 *Within Areas 1, 2, & 3, landscaping of lots adjacent to Evandale Main Road must incorporate mounding into the landscaping and shall conform to a comprehensive landscape plan approved by Council*	The Landscape Plan meets A8.

F1.4.9 Outdoor Storage Areas

Objective: To ensure that the siting and design of buildings and other works contributes to the development of an industrial estate set in a landscaped park-like setting.

SCHEME STANDARD	RESPONSE
A1 *Storage areas must be at the rear of buildings and/or where they are not visible from any public road. Where site constraints or other circumstances exist, Council may require additional landscaping and/or mounding to screen outside storage areas*	No storage areas are described however it is presumed that there would be limited or no external storage required and so it is presumed that the development can meet A1, however there are currently no conditions relating to this aspect proposed by Council.

F1.4.10 Fencing

Objective: To ensure that the siting and design of buildings and other works contributes to the development of an industrial estate set in a landscaped park-like setting.

SCHEME STANDARD	RESPONSE
A1 *Security fencing must be located behind the front boundary landscaped area; or* *A2* *Security fencing, including posts and gates,*	The Evandale Road fencing complies with A1 while the Hudson Fysh Drive fence is notated as meeting A2.

must be of dark colours.

F1.4.11 Parking and Internal Circulation

Objective: To provide adequate on-site parking, loading/unloading areas and traffic circulation space for the expected demand generated by development.

SCHEME STANDARD	RESPONSE
A1 *Access and parking must be in accordance with the Car parking and Sustainable Transport Code.*	See comments against Code.
A2 *Vehicles must be able to enter and exit the site in a forward direction.*	The development meets A2.
A3 *Access drives must have a minimum width of 3.6 metres for one-way traffic and 7 metres for two-way traffic.*	The development meets A3.
A4 *Access drives, parking, manoeuvring, loading and unloading areas must be sealed and drained.*	The development is designed to meet A4.
A5 *Outside storage areas must be sealed and drained; or* *A6* *Outside storage areas must be of compacted gravel and drained so that stormwater is discharged from the site in a manner that will not cause siltation or pollution of any stormwater detention or retention basins.*	No outdoor storage areas are described, the development therefore is presumed to meet A5 and A6.

F1.4.12 External Lighting

Objective: To ensure that external lighting does not impact on the operational safety of the Launceston Airport.

SCHEME STANDARD	RESPONSE
A1 *External lighting must be hooded and directed so as not to cause nuisance, threat or hazard to the operation of Launceston Airport.* *P1* *No performance criteria*	External lighting locations appear to be described on one of the site plans which the planning submission describes as: *External lighting will be less than or equal to 10m, hooded and directed so as not to cause nuisance, threat or hazard to the operation of Launceston Airport.* The Draft Permit conditions include the following:

5 CAR PARKING

5.3 Lighting of car park

The lighting of the car park area must be located and designed so that no direct light is emitted outside the site.

9 PROXIMITY TO AIRPORT

9.1 Direct external lighting must not be visible above 3 degrees from the horizontal plane, applicable in all directions.

The proposal does not contain detail on the lighting poles, lights or shielding design, it therefore does not demonstrate it meets A1 and despite the proposed condition, the application should not be approved without detail of lighting design so that the Airport owners have an opportunity to assess whether any inappropriate impact will be created.

F1.4.13 Environmental Quality

Objective:

(a) To ensure that development does not result in environmental harm to the local area

(b) To ensure that development does not impact on the operational safety of the Launceston Airport.

SCHEME STANDARD	RESPONSE
A1 *Emissions must not cause a hazard to the safe operation of Launceston Airport.*	The development would meet A1 as the site will not create emissions.
A2 *Emissions must not cause a hazard to the residents in the Devon Hills Low Density Residential Zone.*	The development proposed would meet A2.

4.5 ROAD AND RAILWAY ASSETS CODE

4.5.1 USE STANDARDS

E4.6.1 Use and road or rail infrastructure

Objective: To ensure that the safety and efficiency of road and rail infrastructure is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.

SCHEME STANDARD	RESPONSE
A2 *For roads with a speed limit of 60km/h or less the use must not generate more than a total of 40 vehicle entry and exit movements per day*	This Standard would be relevant to assessment of Hudson Fysh Drive, the TIA which accompanies the application indicates that in excess of 40 VMPD would be generated. Assessment against P2 is therefore required. The TIA has indicated that the consultant has

P2 *For roads with a speed limit of 60km/h or less, the level of use, number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians and cyclists.*	not identified any safety issues created by the increased traffic generation from the proposed development. On the basis of these findings the Performance Criteria appears to be met.
A3 *For roads with a speed limit of more than 60km/h the use must not increase the annual average daily traffic (AADT) movements at the existing access or junction by more than 10%.*	This Standard would be relevant to the increase in traffic at the intersection of Hudson Fysh Drive and Evandale Road (a Cat. 2 road). The TIA indicates that the VPD for Evandale Road is 9,400 at the subject site. The generation detailed by the development as calculated by the TIA would meet A3 in that it is less than a 10% increase.

4.5.2 DEVELOPMENT STANDARDS

E4.7.1 Development on and adjacent to Existing and Future Arterial Roads and Railways

Objective: To ensure that development on or adjacent to category 1 or 2 roads (outside 60km/h), railways and future roads and railways is managed to:
a) ensure the safe and efficient operation of roads and railways; and
b) allow for future road and rail widening, realignment and upgrading; and
c) avoid undesirable interaction between roads and railways and other use or development.

SCHEME STANDARD	RESPONSE
A1 *The following must be at least 50m from a railway, a future road or railway, and a category 1 or 2 road in an area subject to a speed limit of more than 60km/h:* *a) new road works, buildings, additions and extensions, earthworks and landscaping works; and* *b) building envelopes on new lots; and* *c) outdoor sitting, entertainment and children's play areas* *P1* *Development including buildings, road works, earthworks, landscaping works and level crossings on or within 50m of a category 1 or 2 road, in an area subject to a speed limit of more than 60km/h, a railway or future road or railway must be sited, designed and landscaped to:* *a) maintain or improve the safety and efficiency of the road or railway or future road or railway, including line of sight from*	The development is within 50m of Evandale Road and therefore is required to be assessed against the Performance Criteria. The assessment undertaken and the conclusions of the TIA suggest that P1 would be met.

trains; and *b) mitigate significant transport-related environmental impacts, including noise, air pollution and vibrations in accordance with a report from a suitably qualified person; ...*	

E4.7.2 Management of Road Accesses and Junctions

Objective: To ensure that the safety and efficiency of roads is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.

SCHEME STANDARD	RESPONSE
A1 *For roads with a speed limit of 60km/h or less the development must include only one access providing both entry and exit, or two accesses providing separate entry and exit.*	The access proposed on to Hudson Fysh Drive meets A1.
A2 *For roads with a speed limit of more than 60km/h the development must not include a new access or junction.*	The development meets A2.

E4.7.4 Sight Distance at Accesses, Junctions and Level Crossings

Objective To ensure that use and development involving or adjacent to accesses, junctions and level crossings allows sufficient sight distance between vehicles and between vehicles and trains to enable safe movement of traffic.

SCHEME STANDARD	RESPONSE
A1 *Sight distances at* *a) an access or junction must comply with the Safe Intersection Sight Distance shown in Table E4.7.4; ...*	The TIA has assessed the available sight distances and concluded that A1 is met.

4.6 CAR PARKING AND SUSTAINABLE TRANSPORT CODE

4.6.1 USE STANDARDS

E6.6.1 Car Parking Numbers

Objective: To ensure that an appropriate level of car parking is provided to service use.

SCHEME STANDARD	RESPONSE
A1 *The number of car parking spaces must not be less than the requirements of:* *a) Table E6.1; ...*	Table E6.1 does not list Vehicle Parking as a use requiring parking (understandably) however there is a requirement for the car wash. It is presumed that there would probably only be 1 employee for this component, and the area of the carwash is described as 72m2. It would appear that A1 would require at least 1 space. The application documents do not

Table E6.1: Parking Space Requirements		
Use	Parking Requirement	
	Vehicle	Bicycle
Service Industry (car wash, commercial laundry, repair garage, panel beater)	1 space per 80m² or 2 spaces per 3 employees whichever is greater	1 space per 5 employees

appear to deal with parking associated with the car wash component, but staff car parking could be provided in the layout.

E6.6.2 Bicycle Parking Numbers

Objective: To encourage cycling as a mode of transport within areas subject to urban speed zones by ensuring safe, secure and convenient parking for bicycles.

SCHEME STANDARD	RESPONSE
A1.1 Permanently accessible bicycle parking or storage spaces must be provided either on the site or within 50m of the site in accordance with the requirements of Table E6.1; or *A1.2 The number of spaces must be in accordance with a parking precinct plan contained in Table E6.6: Precinct Parking Plans.* *P1 Permanently accessible bicycle parking or storage spaces must be provided having regard to the:* *a) likely number and type of users of the site and their opportunities and likely preference for bicycle travel; and* *b) location of the site and the distance a cyclist would need to travel to reach the site; and* *c) availability and accessibility of existing and planned parking facilities for bicycles in the vicinity.*	As detailed above, Table E 6.1 requires 1 bicycle parking space per 5 employees. The notes to the Table specify that fractions of parking spaces are to be rounded up and therefore 1 bicycle space is required to meet the acceptable solution. The form of development may be such that compliance with the Performance Criteria could be demonstrated however the application is silent.

E6.6.3 Taxi Drop-off and Pickup

Objective: To ensure that taxis can adequately access developments.

SCHEME STANDARD	RESPONSE
A1 One dedicated taxi drop-off and pickup space must be provided for every 50 car spaces required by Table E6.1 or part thereof (except for dwellings in the General Residential Zone). *P1 No performance criteria.*	There is no Performance Criteria and while the use would probably not generate a need for a dedicated space, the scheme appears to require one.

E6.6.4 Motorbike Parking Provisions

Objective: To ensure that motorbikes are adequately provided for in parking considerations.

SCHEME STANDARD	RESPONSE
A1 One motorbike parking space must be provided for each 20 car spaces required by Table E6.1 or part thereof. *P1 No performance criteria.*	Again, there is no Performance Criteria and while the use would probably not generate a need for a dedicated space, the scheme appears to require one.

4.6.2 DEVELOPMENT STANDARDS

E6.7.1 Construction of Car Parking Spaces and Access Strips

Objective: To ensure that car parking spaces and access strips are constructed to an appropriate standard.

SCHEME STANDARD	RESPONSE
A1 All car parking, access strips manoeuvring and circulation spaces must be: *a) formed to an adequate level and drained; and* *b) except for a single dwelling, provided with an impervious all weather seal; and* *c) except for a single dwelling, line marked or provided with other clear physical means to delineate car spaces.*	The development meets this acceptable solution.

E6.7.2 Design and Layout of Car Parking

Objective: To ensure that car parking and manoeuvring space are designed and laid out to an appropriate standard.

SCHEME STANDARD	RESPONSE
A1.1 Where providing for 4 or more spaces, parking areas ... must be located behind the building line; ...	The development layout does not meet the Acceptable Solution and therefore must meets the Performance Criteria.
P1 The location of car parking and manoeuvring spaces must not be detrimental to the streetscape or the amenity of the surrounding areas, having regard to: *a) the layout of the site and the location of existing buildings; and* *b) views into the site from the road and adjoining public spaces; and* *c) the ability to access the site and the rear of buildings; and* *d) the layout of car parking in the vicinity; and* *e) the level of landscaping proposed for the car parking.*	While the development includes 8.5m of landscaping including a mound along the Evandale Road frontage which if planted appropriately may provide a sufficient screen, the landscaping proposed for the Hudson Fysh Drive frontage has been specifically designed to retain visibility from the road in to the site. The view of the development from Hudson Fysh Drive and the angled views to the development from Evandale Road will impact upon the streetscape. Additional landscaping screening at the corner of the site to reduce the visual impact from Evandale Road would improve the visual impact of the large area of car park and provide an outcome more consistent with P1.

A2.1 Car parking and manoeuvring space must: *a) have a gradient of 10% or less; and* *b) where providing for more than 4 cars, provide for vehicles to enter and exit the site in a forward direction; and* *c) have a width of vehicular access no less than prescribed in Table E6.2 and Table E6.3, and* *A2.2 The layout of car spaces and access ways must be designed in accordance with Australian Standards AS 2890.1 - 2004 Parking Facilities, Part 1: Off Road Car Parking.*	The development layout meets the Acceptable Solution A2.1, however it is unclear if it meets all the requirements of *Australian Standards AS 2890.1 - 2004 Parking Facilities, Part 1: Off Road Car Parking*, with particular consideration to: • the queuing length provided between the road and the entry based on the number of spaces proposed; and • issues related to pedestrian safety between the parking spaces and internal footpaths, and around the car wash doorways, where no wheel stops or safety bollards appear to be described.

E6.7.3 Car Parking Access, Safety and Security

Objective: To ensure adequate access, safety and security for car parking and for deliveries.

SCHEME STANDARD	RESPONSE
A1 Car parking areas with greater than 20 parking spaces must be: *a) secured and lit so that unauthorised persons cannot enter or;* *b) visible from buildings on or adjacent to the site during the times when parking occurs.*	The development meets this Acceptable Solution.

E6.7.4 Parking for Persons with a Disability

Objective: To ensure adequate parking for persons with a disability.

SCHEME STANDARD	RESPONSE
A1 All spaces designated for use by persons with a disability must be located closest to the main entry point to the building. *P1 No performance criteria.*	The parking spaces for people with a disability are not located closest to the main entry point of the building as they are located along the Hudson Fysh Drive frontage. Council has dealt with this issue by proposing a Draft Permit condition as follows: *2 AMENDED PLANS REQUIRED* *Before application is made for a building permit, amended plans must be submitted. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and show:* *a) 7 Disabled parking spaces located closest to the main entrance to the building;...*
A2 One of every 20 parking spaces or part thereof must be constructed and designated	The development appears to meet this Acceptable Solution.

for use by persons with disabilities in accordance with Australian Standards AS/NZ 2890.6 2009. *P2 No performance criteria.*	The Council assessment has identified this issue and has included within the certified amendment changes to P2. The development would meet this Standard is this amendment were to be approved.

E6.7.6 Loading and Unloading of Vehicles, Drop-off and Pickup

Objective: To ensure adequate access for people and goods delivery and collection and to prevent loss of amenity and adverse impacts on traffic flows.

SCHEME STANDARD	RESPONSE
A1 For retail, commercial, industrial, service industry or warehouse or storage uses: *a) at least one loading bay must be provided in accordance with Table E6.4; and* *b) loading and bus bays and access strips must be designed in accordance with Australian Standard AS/NZS 2890.3 2002 for the type of vehicles that will use the site.* *P1 For retail, commercial, industrial, service industry or warehouse or storage uses adequate space must be provided for loading and unloading the type of vehicles associated with delivering and collecting people and goods where these are expected on a regular basis.*	While the application details a shuttle bus service between the car park and the airport no loading bay, bus park or drop-off zone is included in the layout. The development does not therefore demonstrate how this standard is met.

E6.8 Provisions for Sustainable Transport

E6.8.2 Bicycle Parking Access, Safety and Security

Objective: To ensure that parking and storage facilities for bicycles are safe, secure and convenient.

SCHEME STANDARD	RESPONSE
A1.1 Bicycle parking spaces for customers and visitors must: *a) be accessible from a road, footpath or cycle track; and* *b) include a rail or hoop to lock a bicycle to that meets Australian Standard AS 2890.3 1993; and* *c) be located within 50m of and visible or signposted from the entrance to the activity they serve; and* *d) be available and adequately lit in accordance with Australian Standard AS/NZS 1158 2005 Lighting Category C2 during the times they will be used; and* *A1.2 Parking space for residents' and employees' bicycles must be under cover and*	If bicycle parking is required by ***E6.6.2*** these standards would require a suitable location and design be provided. If no bicycle parking is considered to meet the Performance Criteria of E6.6.2 there would be no requirement.

capable of being secured by lock or bicycle lock.	
A2 Bicycle parking spaces must have: *a) minimum dimensions of:* *i) 1.7m in length; and* *ii) 1.2m in height; and* *iii) 0.7m in width at the handlebars; and* *b) unobstructed access with a width of at least 2m and a gradient of no more 5% from a public area where cycling is allowed.*	

E6.8.5 Pedestrian Walkways

Objective: To ensure pedestrian safety is considered in development

SCHEME STANDARD	RESPONSE
A1 Pedestrian access must be provided for in accordance with Table E6.5. *P1 Safe pedestrian access must be provided within car park and between the entrances to buildings and the road.*	A1 is met by the development through the provision of pedestrian pathway through the car park provided it is designed to meet appropriate standards. This standard does not appear to relate to the proposed footpath extension to the other side of the road to the Airport.

4.7 AIRPORTS IMPACT MANAGEMENT CODE

4.7.1 PURPOSE OF THE CODE

The purpose of this provision is to:

(a) *ensure that use or development within identified areas surrounding airports does not unduly restrict the ongoing security, development and use of airport infrastructure; and*

(b) *provide for management of the land use implications of those areas relevant to use and development under the scheme.*

4.7.2 APPLICATION OF THIS CODE

This code applies to use or development of land:

(a) *within Australian noise exposure forecast contours on the maps; and*

(b) *within prescribed air space.*

4.7.3 USE STANDARDS

E12.5.1 Noise Impacts

Objective: To ensure that noise impacts on use within the ANEF contours from aircraft and airports are appropriately managed.

SCHEME STANDARD	RESPONSE
P1 *All new buildings must comply with the Australian Standard 2021- 2000 Acoustics -*	The Planning Submission with the application indicates that the building will meet the required standard Council have included a

Aircraft Noise Intrusion - Building Siting and Construction.	condition on the Draft Permit as follows: *10 ACOUSTIC TREATMENT* *Prior to commencement of use, the applicant must demonstrate by a report from an acoustic engineer, that noise from aircraft, when measured from inside the office is no more than 70dB(A).* It is unclear if this requirement meets P1.
A2 *Sensitive use (whether ancillary to other use or development or not) must not occur within the 25 ANEF contour.* *P2* *No performance criteria.*	The development is not a sensitive use and therefore meets A2.

4.7.4 DEVELOPMENT STANDARDS

E12.6.1 Obstacles to Aircraft Objective

To ensure that development does not impact on the safety of prescribed airspace.

SCHEME STANDARD	RESPONSE
A1 *Development must be approved pursuant to the Airports Act 1996 and the Airport (Protection of Airspace) Regulations 1996 and the Manual of Standards.* *P1* *No performance criteria.*	The height of the buildings, fences and signage will not exceed the OLS. There are no open water storage proposed which would potentially attract birds. Conditions should be imposed on landscape planting selection to ensure they do not provide a bird attracting feature consistent with *Melbourne Airport Planting Guidelines.*

4.8 SIGNS CODE

4.8.1 STANDARDS FOR USE OR DEVELOPMENT

E15.5.3 Design and siting of signage

Objective: To ensure that the design and siting of signs complement or enhance the characteristics of the natural and built environment in which they are located.

Pole Sign

SCHEME STANDARD	RESPONSE
A35 *No acceptable solution* *P35* *A pole sign located in the:* *...· General Industrial Zone; ...* *must demonstrate that:* *a) the sign is integral to the particular use of*	3 pole signs are proposed, 2 smaller ones located either side of the main entry and one larger near the intersection of Hudson Fysh Drive and Evandale Road. There is no Acceptable Solution so the Performance Criteria must be met. The application documentation does not detail why other permitted signage types will not

the site; and *b) no other form of permitted signage will meet the needs of the proprietor; and* *c) the sign does not unreasonably dominate the streetscape and reflects the prevailing character of the area, in terms of shape, proportions and colours; and* *d) it does not conflict with the Zone Purpose as outlined in Part D of this planning scheme.*	meet the needs and it is therefore unclear how P35 b) is met. The Councils Draft Permit includes the following Condition, presumed to relate to the larger pole sign: *2 AMENDED PLANS REQUIRED* *Before application is made for a building permit, amended plans must be submitted. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and show:* *...b) Replacement of the pole sign with a blade sign 2.4m high x 1.2m wide.* This proposed condition would be consistent with P35 and meet the Acceptable Solutions for blade signs.
P36 *If greater than 5m in height or a face greater than 3m in height, it must be demonstrated that the sign will:* *a) be sympathetic to the architectural character and detailing of the building; and* *b) be of appropriate dimensions so as not to dominate the streetscape or premises on which it is located; and* *c) not result in loss of amenity to neighbouring properties; and* *d) not involve the unnecessary repetition of messages or information on the same street frontage; and* *e) not contribute to or exacerbate visual clutter; and* *f) not distract motorists as a result of size illumination or movement; and* *g) under no circumstances exceed 7m in height.*	One of the proposed pole signs exceeds 5m in height and the 2 smaller pole signs do not meet the minimum clearance, therefore the signs do not meet A36 and must be considered against the Performance Criteria. While the Council's proposed condition would remove the larger pole sign the 2 signs proposed to be located either side of the main entrance which appears to result in duplication inconsistent with P36 d) & e).
P37 *For more than one sign per site it must be demonstrated that:* *a) more than one sign is justified by the size of the site or its location on a corner; and* *b) they will be sympathetic to the architectural character and detailing of the building; and*	A37 is not met as more than one pole sign is proposed. While the Council's proposed condition will remove the larger pole sign the repetition proposed by the 2 smaller pole signs at the main entrance, is also inconsistent with P37 e) & f).

c) they will be of appropriate dimensions so as not to dominate the streetscape or premises on which it is located; and

d) they will not result in loss of amenity to neighbouring properties; and

e) they will not involve the unnecessary repetition of messages or information on the same street frontage; and

f) they will not contribute to or exacerbate visual clutter; and

g) not distract motorists as a result of size illumination or movement.

5. CONCLUSION

5.1 PROPOSED AMENDMENT

The amendments proposed are discreet amendment to individual development standards of the Translink Specific Area Plan (SAP) and the Car Parking and Sustainable Transport Code which are both proposed to be site specific amendments.

The location of the subject site is however prominent being on Evandale Road which is a major tourist route and a regional gateway and also directly opposite the main entry to Launceston Airport reduction in site landscaping provided for by the proposed landscaping amendment within the SAP has the potential to reduce the visual amenity for road users.

Additionally the landscape amendment proposed will provide for increased site development which will be inconsistent with other land within the SAP, will provide for a greater area of site development which in turn results in the increase generation of stormwater and the reduction in capacity for onsite management, contrary to the strategies developed for the original SAP development.

The landscaping amendment could additionally be considered to be inconsistent with the parts of the Objectives of the Act and the resulting development and impacts inconsistent with the Objectives of the State Policy on Water Quality.

5.2 PROPOSED DEVELOPMENT

The assessment of the proposed development against the provisions of the Planning Scheme has identified the following issues:

5.2.1 PUBLIC PEDESTRIAN FOOTPATH

The existing footpath within the Airport's land does not currently extend to the property boundary, Council's Draft Permit includes conditions relating to joining the proposed pedestrian footpath to the one existing within the Airport site, therefore compliance to the above conditions would be reliant on agreement with the Airport owners. The Airport owners have not received any request or contact in relation to consultation on this issue.

The TIA by Midson Traffic includes some assessment of the proposed pedestrian footpath from the development site, across Hudson Fysh Drive and Evandale road to connect to the footpath at the entry to the Launceston Airport.

This assessment describes a minimal increase in pedestrian activity and in relation to the extent of pedestrian movements, the TIA describes the existing 2 hour parking restriction in Hudson Fysh Drive and that this parking appears to be associated with the airport.

Given this on street parking is short/medium duration it is unclear why the TIA concludes people who are currently using this free on-street parking would rather utilise a long-term paid car park.

While the TIA states that the proposed business will not follow the normal peak times given that generation will accord with flight arrival and take-off times, however there will presumably be times where flight arrivals and departures will not only match peak Airport traffic times but will also overlap with the usual morning and afternoon traffic peaks.

5.2.2 F1 SPECIFIC AREA PLAN

F1.4.4 Materials and Presentation - The building materials do not appear to meet the Acceptable Solution and there being no Performance Criteria therefore do not meet the Standard. Notwithstanding the materials proposed appear reasonably appropriate for the area and it maybe that this restrictive provision should be further considered as part of the proposed amendment.

F1.4.6 Stormwater - The development includes the paving of the vast majority of the subject site and did not propose to include on site retention. Assessment against the Performance Criteria is therefore required.

- The development includes building and paving across just under 90% of the site area and therefore substantially increases the intensity of runoff from the site.
- No onsite storage or water sensitive urban design techniques are proposed and the plans describe the stormwater system as being designed for only a 1 in 10 year event. Council's Draft condition requires onsite detention for 1:20 year events. Open onsite storage would be a potential bird attractor which would not be supported because of the potential impact on airport operations, underground or enclosed storage on site could have been accommodated within the design. Neither of the above assess the potential impacts required related to 1% Annual Exceedance Probability (a 1:100 event) including the potential impact on neighbouring land include the airport site through increased overland flow.
- while a calculation of 1:100 year events has been provided it is not apparent how the site or development have been designed to accommodate these volumes. Any additional stormwater from the site has the potential to create downstream flooding at the outfall within the airport land which may impact further upon both the apron and taxiways which are located nearby. Therefore there is significant potential for impact from extreme events to impact on airport operations.

On the basis of the above the Performance Criteria has not been demonstrated to be met.

F1.4.8 Open Space and Landscaping - The existing A1 requires 20m landscaping along the Evandale Road frontage and 3m landscaping along Hudson Fysh Drive. If approved the amendment would allow the Evandale Road landscaping to be reduced to 8m.

While the Evandale Road landscaping area would comply with P1 if the amendment is approved, the reduction in width of landscaping by 57.5% would result in an outcome inconsistent with the landscaping provided on neighbouring land and diminish its effectiveness.

Additionally, the Hudson Fysh Drive landscaping area, of which half (1.5m of its 3m width) is occupied by a footpath, does not appear to meet the intent of the standard.

F1.4.12 External Lighting - External lighting locations are described on a site plan and the planning submission which forms part of the application describes the lighting as:

External lighting will be less than or equal to 10m, hooded and directed so as not to cause nuisance, threat or hazard to the operation of Launceston Airport.

The proposal does not contain detail on the lighting poles, lights or shielding design, it therefore does not demonstrate it meets A1 and despite the proposed condition, the application should not be approved without detail of lighting design so that the Airport owners have an opportunity to assess whether any inappropriate impact will be created.

5.2.3 CAR PARKING AND SUSTAINABLE TRANSPORT CODE

E6.6.1 Car Parking Numbers - No provision has been made for staff parking related to the proposed Service Industry (detailing / car wash)

E6.6.2 Bicycle Parking Numbers - No provision has been made for parking related to the proposed Service Industry (detailing / car wash)

E6.6.3 Taxi Drop-off and Pickup - The development has not provided the mandatory required space

E6.6.4 Motorbike Parking Provisions - The development has not provided the mandatory required space

E6.7.2 Design and Layout of Car Parking - The development may not meet the requirements of the Australian Standard in relation to the provision of queuing between the road and access control point and it is unclear how pedestrian safety is sufficiently protected by wheel stops or bollards along internal footpaths an near the entrance to the car wash bays.

E6.7.6 Loading and Unloading of Vehicles, Drop-off and Pickup - While the application details a shuttle bus service between the car park and the airport no loading bay, bus park or drop-off zone is included in the layout. The development does not therefore demonstrate how this standard is met. The TIA assessment of timing and shuttle arrangements do not appear to relate to the airport operations which in summer has 42 flights (incoming and outgoing) between 6am to 8.30pm with people arriving from 4.30am and departing until 9.00pm or later with delays.

5.2.4 E12 AIRPORTS IMPACT MANAGEMENT CODE

E12.5.1 Noise Impacts - The Planning Submission with the application indicates that the building will meet the required standard (*Australian Standard 2021- 2000 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction*) however no notes to this affect on the plans, Council's Draft Permit requires *"noise from aircraft, when measured from inside the office is no more than 70dB(A)"* however it is unclear if this is consistent with the requirements of the Australian Standard.

E12.6.1 Obstacles to Aircraft Objective - This standard requires : *"Development must be approved pursuant to the Airports Act 1996 and the Airport (Protection of Airspace) Regulations 1996 and the Manual of Standards."* The height of the buildings, fences and signage will not exceed the OLS. There are no open water storage proposed which would potentially attract birds however some of the landscape planting proposed are not recommended by the Melbourne Airport Planting Guidelines as they are identified as potentially bird attracting and therefore should be subject to appropriate Permit conditions.

5.2.5 E15 SIGNS CODE

E15.5.3 Design and siting of signage - 3 pole signs are proposed, 2 smaller ones located either side of the main entry and one larger near the intersection of Hudson Fysh Drive and Evandale Road.

- There is no Acceptable Solution for A35, so the Performance Criteria must be met.

The application documentation does not detail why other permitted signage types will not meet the needs and it is therefore unclear how P35 b) is met. Council's Draft Permit condition requires the larger pole sign be altered to a blade sign and this would meet the standards relevant to that type of sign

- The signage appears broadly consistent with the Performance Criteria with the exception of the 2 signs proposed to be located either side of the main entrance which appears to result in duplication inconsistent with P36 d) & e).
- A37 is not met as more than one pole sign is proposed.

  The repetition proposed by the 2 smaller pole signs at the main entrance, which appear inconsistent with P37 e) & f).

NORTHERN MIDLANDS INTERIM PLANNING SCHEME 2013

AMENDMENT 07/2015

To allow the land at 2 Hudson Fysh Drive, Western Junction to be used and developed for a car park with a variation to the landscaping setbacks from Evandale Main Road and Hudson Fysh Drive boundaries) and the parking provisions, by amending the Ordinance as follows:

Clause F1.4.8 Open Space and Landscaping by adding ', except that on 2 Hudson Fysh Drive (CT 146537/2) the setback from Evandale Road may be varied to no less than 8m provided that there is still effective screening of buildings and works from Evandale Main Road' after 'P1 No performance criteria'.

and

Clause E6.7.4 Parking for Persons with a Disability by adding ', except that on 2 Hudson Fysh Drive (CT 146537/2), where used and developed for vehicle parking, one of every 50 parking spaces or part thereof must be constructed and designated for use by persons with disabilities in accordance with Australian Standards AS/NZ 2890.6 2009' after 'P2 No performance criteria'.

The **COMMON SEAL** of the Northern)
Midlands Council is affixed hereto,)
Pursuant to the Council's resolution of)
15 February 2016 in the presence of:)

NORTHERN MIDLANDS COUNCIL 1993

.....
Mayor

.....
General Manager

Heathydan Pty Ltd
PO BOX 71
Berrimah, NT, 0871
Ph: 0417 095 189
heathydan@gmail.com

7 April 2016

General Manager

Northern Midlands Council

13 Smith St

LONGFORD TAS 7301

Dear Sir,

Re: Representations received to Planning Application P15-331 - Draft Amendment 07/15

Thank you for providing copies of representations', two in total, received on the above application and the opportunity to provide comment.

Representation 1 – Jacqui Blowfield, Senior Planner, IreneInc Planning on behalf of Australia Pacific Airports Corporation, operator of the Launceston Airport.

Heathydan thanks Launceston Airport for their detailed interest in planning matters and the proposed development. In general, detailed comments have been provided regarding the proposed development that go far beyond the impact of the proposed development on the Launceston Airport. The intentions of Launceston Airport to do so are questionable.

Heathydan provides the following comments regarding this representation:

Comment	Response
Proposed amendments	Concern is raised regarding the prominent nature of the site and the potential to reduce visual amenity for road users. Whilst the concern is recognised, the reduced landscape setback will adequately screen the proposed development from road users. The planning application section 7 provided demonstration that

clause F.1.4.8 Open Space and Landscaping Objectives of the NMC Interim Planning Scheme 2013 (Scheme) remain met. It also demonstrated that the proposed amendment is consistent with various Tasmanian Acts and Policies. Extract from the planning application is provide as Appendix 1 below.

The proposed development meets clause F1.4.8 of the Scheme in all respects besides the amount of setback and includes mounding to 1m and landscaping and planting to screen the development.

The setback proposed of 8m provides adequate space to screen the development whilst allowing the proposed development to be economically viable, and for competition in Launceston airport parking to be created. Such competition would create a more economically efficient outcome for Tasmanians and visitors to Tasmanian.

Also compared to surrounding developments, including the Launceston Airport (opposite) and Thrifty (next door) there will be significantly more screening of the proposed development. Further details are provided in Appendix 2 below showing these and other developments within the immediate area so that the proposed development can be seen in context.

Therefore, concerns regarding reducing visual amenity are unfounded. The proposed development will fit within the area and will not have any significant effect on visual amenity for tourists and passers-by.

The second comment relates for the potential to increase generation of stormwater and reduced capacity for onsite management. I appreciate this is a significant issue and concern.

Any development on the proposed site will lead to an increase in stormwater that would need to be dealt with as per F1.4.6 of the Scheme. I confirm that the proposed development will comply with the Scheme and Councils requirements in relation to stormwater and retention. This includes onsite detention in pipework and connection to the Stormwater system. Therefore, the concern raised is unfounded in relation to this development, and is unrelated to the amendment. It would not matter what proportion of the site is developed runoff and stormwater can be and will be dealt with appropriately.

The third comment relates to the development could be inconsistent with the Objectives of the Act (the Act is not stated) and the Objectives of the State Policy on Water Quality. It has not been demonstrated how the proposed amendment would be inconsistent these Acts and Policies.

Regarding the development, as previously stated the propose development is consistent with Tasmanian Acts and policies as demonstrated in Appendix 1. Specifically regarding water quality, an oil water separator will be installed connecting drainage from

	the hand car wash bays. The separator will remove hydrocarbons and sediments prior to discharge to the sewerage system. The separator will be regularly maintained during operation. Runoff from the car park itself will be no worse than from a driveway or road. Runoff will be retained onsite and discharged to the stormwater system. This meets the Scheme and Council requirements in this regard.
Proposed Development	
Public Pedestrian Footpath	Consultation will be held with Launceston Airport due to the issue raised about a short length of footpath that possibly is on Launceston Airport land that will need to be constructed in the interests of public safety and connection to the existing footpath. The TIA was produced by Midson Traffic Pty Ltd, a high reputable traffic engineer with many years of experience in Tasmania. The Department of State Growth has reviewed and commented on the planning application including imposing conditions on the development. These conditions will be complied with.
F1.4.4 Materials and Presentation	The buildings are a relatively small part of the proposed developrnent, are low rise and are not on an 'industrial' scale. There is no single monolithic structure proposed. There development uses a variety of materials with a clad 30m2 office, a concrete block 70m2 car wash bay and a 450m2 open roof area.
F1.4.6 Stormwater	See previous comment
F1.4.8 Open Space and Landscaping	See previous comment
F1.4.12 External Lighting	The comments are noted. It is unrealistic for a complete detailed design of the facility to be completed before a planning application, when there is no certainty of the development proceeding. Sufficient detail has been provided and assessed. Launceston Airport has had adequate opportunity to comment on the proposed lighting and Council have imposed planning conditions in this regard. This is considered adequate. Heathydan understands the concerns raised and will ensure that an appropriately detailed lighting plan will be submitted at the building permit stage and this will be assessed by Council.
E6.6.1 and E6.6.2 Car Parking	Staff will be able to park within any free bay within the car park facility.

E6.6.3 Taxi Drop off and Pickup	There is no category within Table E6.1 for Vehicle Parking and therefore the requirement for taxi drop off and pickup space is not applicable. Having said that, Taxis will be able to enter the car park (for free provided they exit with 15 minutes) and park in the bays adjacent to the office (shared with the shuttle bus parking) in the rare event that Taxis will be dropping people off or picking them up from the facility.
E6.6.4 Motorbike parking	There is no category within Table E6.1 for Vehicle Parking and therefore the requirement for motorbike parking is not applicable. Motorcycles entering the car park will be treated the same as other vehicles and therefore can park with any free bay, as is consistent with other long term airport parking facilities including the Launceston Airport.
E6.7.2 Design and Layout of Car Parking	Queuing was reviewing by Midson Traffic and was considered to be adequate due to the limited traffic volume generated. Separation of vehicles from pedestrians via wheel stops and bollards near to the car wash bays are about separation of vehicles and pedestrians in the interests of public safety. Furthermore, windows have been put into the ends of the car wash building to allow visual checks for pedestrians when exiting the car wash building by vehicle, further enhancing public safety.
E6.7.6 Loading and Unloading of Vehicles, Drop-off and Pickup	There will not be deliveries on regular basis and therefore the development complies with E6.7.6 P1.
E12.5.1 Noise Impacts	The noise contours of Launceston Airport have been addressed and there are no issues in regards to noise and particularly once the attenuation of being inside is considered. Whilst the requirement is unusual Heathydan is willing to comply.
E12.6.1 Obstacles to Aircraft Objective	Council have proposed "Landscaping works as shown on the landscape plan shall be completed within three months from date of the Certificate of Completion and then maintained for the duration of the use, with vegetation to be of a type as to not attract birds." Heathydan will comply with this and by selecting plant species from the Melbourne Airport Planting Guide.
E15.5.3 Signage	Council have required that the pole sign be replaced with a blade sign as a permit condition. Heathydan will comply this requirement.

Representation 2

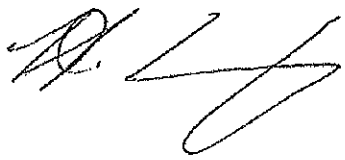
Heathydan thanks the person for their time taken to comment on the proposed development and provides the following comments regarding this representation:

Comment	Response
2.2.2.4.b	Concern is raised regarding protection of major tourism routes. As per the comments against Representation 1 the proposed development will fit within the area and will not have any significant effect on visual amenity for tourist and passers-by. This is highlighted when the current built environment presented in Appendix 2 is taken into account. The proposed development will have significantly more screening than other sites in the area such as the Launceston Airport, Thrifty, Avis, Hertz, Europcar, Budget, Rent for Less, RC Caravans, etc. Therefore, the concern is unfounded in respect of this development.
2.2.2.6.a	Whilst the concern is appreciated Heathydan is not aware of the old Evandale Scheme and in any case this is no longer applicable. The development will be appropriately screened. Furthermore, on 2.2.2.6.a locating the proposed car park development where it is planned will maximise the use of existing and planned services (such as the Airport).
2.2.2.8	There will no significant affect due to the proposed development on Aboriginal or European heritage.
3.5	The same comments above apply to comment against this item. There will be no impact on tourism of the proposed development. If this argument was valid then there would be no vehicle parking, hire vehicle and the like allowed near to the Airport. Tourists expect vehicle parking near to Airports and therefore this development will be entirely consistent with their expectations.
F1.4.8 and precedent	The objectives of F1.4.8 are met as highlighted above and in the Planning Application. Regarding precedence, the proposed amendment is only in relation to Lot 2 Hudson Fysh Drive. Other developers would need to go through the same process for their Lot, providing the public adequate opportunity to comment should an inappropriate amendment be proposed.
3.7.1	Heathydan believes the Council is acting as an efficient and consistent development control authority. Amendments to the Scheme are regularly proposed by proponents and it is the role of Council to assess these on their merits and against the Scheme. This has been done in this case. Also of note in 3.7.1. is council's role to provide vision, leadership and confidence to the investment sector. Council are providing

vision, leadership and confidence. Heathydan and its associated investors wish to invest in the proposed development which will actively contribute to the Tasmanian economy both during construction and operation, including the creation of jobs for Tasmanian's long term.

Please contact me if you require any further information on or should you wish to discuss any of these comments.

Kind regards



Heath Lang

Director – Heathydan Pty Ltd

Appendix 1 – Statement on planning amendment made in the Planning Application

An amendment to the Northern Midlands Interim Planning Scheme 2013 is required to enable this car park development to be economically viable and to proceed. The amendment proposes to reduce the landscape setback distance from Evandale Road by putting in place performance criteria for Item 1 of **F.1.4.8 Open Space and Landscaping** such that the objectives remain met. Therefore, orderly planning is maintained, whilst facilitating development.

The amendment is as follows:

Section F.1.4.8, Performance Criteria P1, Page F1-20

Replace the words "*No performance criteria*" with "For Lot 2 Hudson Fysh Drive, Western Junction *setback may be varied to provide a setback from Evandale Main Road of at least 8m provided that there is still effective screening of buildings and works from Evandale Main Road*".

1.1 NMC Interim Planning Scheme F1.4.8 Objectives

The objectives of F1.4.8 are still met as follows:

Objective	Amendment effect
That open space and landscaping form an integral part of developments to: i) facilitate the enhanced appearance of buildings and works,	For this development the proposed building and works are limited and the native screening area will enhance the appearance of the buildings and works.
ii) provide screening,	Proposed landscape zone with native planting screening and mounding provides effective screening of the limited buildings and works.
iii) separate activities,	No effect. Activities remain separated.
iv) assist in the control of water run-off and erosion,	The landscape area will still assist in the control of water run-off and erosion. Also there are other provisions in the scheme such as F1.4.6 that deal with stormwater control.
v) contribute to a reduction in noise levels,	Landscaped area will still contribute to a reduction in noise levels. For this development there are no significant noise levels being generated. This is particularly the case when the background noise levels due to traffic on Evandale Road.
vi) define roads and provide opportunities for passive recreation.	No effect. Roads remain defined and an opportunity for passive recreation is maintained.