ORDINARY COUNCIL MEETING

23 March 2021

Attachment Booklet – March 2021

ATTACHMENT: CC01

Accounts for Payment – February 2021

Attachment 1
Accounts for Payment – February 2021

Shire of Irwin

List of Accounts paid February 2021 for presentation to the Council Meeting 23 March 2021

MUNICIPAL/(TRUST) PAYMENTS

EFT/CHQ #	DATE		DESCRIPTION	PAYMENTS
EFT26921	03/02/2021	IRWIN SHIRE - RATES	PAYROLL DEDUCTIONS	-1,140.00
EFT26922	03/02/2021	SHIRE OF IRWIN - SUNDRY DEBTORS	PAYROLL DEDUCTIONS	-53.64
EFT26923	03/02/2021	SHIRE OF IRWIN - LOTTO FUND	PAYROLL DEDUCTIONS	-80.00
EFT26924	04/02/2021	ATC WORK SMART	SCHOOL BASED TRAINEESHIP	-948.18
EFT26925	04/02/2021	ATOM	CONSUMABLES FOR OPERATIONS DEPOT	-184.86
EFT26926	04/02/2021	AUSSIE TREE SERVICES	CONDUCT UNDER POWER LINE CLEARANCES WITHIN THE 70 ZONE ON BRAND HIGHWAY	-6,228.92
EFT26927	04/02/2021	AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY	BROADCASTING/TRANSMISSION ANNUAL LICENCE RENEWAL	-114.00
EFT26928	04/02/2021	AUSTRALIA POST	POSTAGE & FREIGHT CHARGES	-467.42
EFT26929	04/02/2021	DONGARA BAKERY	CATERING	-591.50
EFT26930	04/02/2021	BATAVIA COAST TRIMMERS	REINSTALL SHADE SAILS BEFORE SUMMER	-1,960.00
EFT26931	04/02/2021	CONSTRUCTION TRAINING FUND	CONSTRUCTION TRAINING FUND	-705.25
EFT26932	04/02/2021	BEAUREPAIRES GERALDTON	TYRES FOR SIDE TIPPING TRAILER AND PUNCTURE REPAIR TO DROP DECK TRAILER	-3,464.67
EFT26933	04/02/2021	TARTS & CO	FLOWERS FOR AUSTRALIA DAY CITIZENSHIP AWARDS	-240.00
EFT26934	04/02/2021	DEPARTMENT OF MINES INDUSTRY REGULATION AND SAFETY	BUILDING SERVICES LEVY RECONCILIATION	-852.35
EFT26935	04/02/2021	BOB WADDELL CONSULTANT	FINANCIAL ASSISTANCE	-363.00
EFT26936	04/02/2021	CANINE CONTROL	CONTRACT RANGER SERVICES	-1,500.00
EFT26937	04/02/2021	CATWEST PTY LTD	ALLANOOKA SPRINGS ROAD - SEAL REPAIRS	-15,698.32
EFT26938	04/02/2021	CHAMPION BAY TROPHIES	GOLF STAFF NAME PLAQUES FOR COUNCIL MEETINGS AND SMALL PLAQUE FOR GERALDTON RESIDENTIAL COLLEGE	-176.80
EFT26939	04/02/2021	IRWIN RURAL SUPPLIES & STOCKFEEDS	GROWER CRUMBLES FOR CHICKENS	-29.00
EFT26940	04/02/2021	TOLL	FREIGHT CHARGES	-347.73
EFT26941	04/02/2021	DIAL BEFORE YOU DIG	QUARTERLY REFERRAL FEE	-265.65
EFT26942	04/02/2021	DONGARA FREIGHT	FREIGHT CHARGES	-166.10
EFT26943	04/02/2021	DELTA CLEANING SERVICES	CLEANING CONTRACT - DECEMBER & JANUARY	-28,947.98
EFT26944	04/02/2021	DONGARA HANDYMAN SERVICE	REPLACE DOUBLE EXIT DOORS AT REC CENTRE, BUILDING MAINTENANCE WORKS AT COASTAL NODES, SHIRE ABLUTIONS AND FACILITIES AND THE VILLAGE	-3,822.50
EFT26945	04/02/2021	DONGARA BOBCAT & CONTRACTING SERVICES	RECONSTRUCTION OF SEVEN MILE BEACH ACCESS, GRAVE DIG, HARLEY RAKE SOUTH BEACH AND DELIVER FUEL TANKS TO CLIFF HEAD	-3,063.50
EFT26946	04/02/2021	DONGARA BODY BUILDERS	SERVICE OF SIDE TIPPERS AND WATER TANK TRAILER, REPAIRS TO NISSAN PRIME MOVER, DROP TECK TRAILER AND PARTS FOR TRAILER	-3,542.00
EFT26947	04/02/2021	DONGARA BUILDING & TRADE SUPPLIES	PARKS, GARDEN, BUILDING, ROAD AND BUILDING MAINTENANCE SUPPLIES	-1,272.47
EFT26948	04/02/2021	DONGARA DRILLING & ELECTRICAL	ELECTRICAL REPAIRS AT THE VILLAGE, MEDICAL CENTRE, HENRY ROAD AND RETICULATION SUPPLIES	-1,054.99
EFT26949	04/02/2021	DONGARA HARDWARE	WATER FOR ADMIN, REC CENTRE, DEPOT AND VISITOR CENTRE	-333.50
EFT26950	04/02/2021	TYREPOWER DONGARA	BATTERY FOR DROP DECK TRAILER	-184.70
EFT26951	04/02/2021	DONGARA TREE SERVICES	REMOVE TREE ON CANNY PLACE AND REMOVE WATTLE AND DEAD TREES ON OCEAN DRIVE	-4,125.00
EFT26952	04/02/2021	EASY AUTO CARE	SERVICE OF FORD RANGER VEHICLE AND REPAIRS TO SWEEPER	-1,061.55
EFT26953	04/02/2021	ECHELON AUSTRALIA PTY LTD	REGIONAL RISK COORDINATOR	-6,762.07
EFT26954	04/02/2021	EJ DIESEL	REPLACE GLOBE ON JCB TELEHANDLER	-30.14
EFT26955	04/02/2021	EPPY'S REMOVAL & STORAGE	ASSISTANCE WITH MOVING OFFICE FURNITURE	-946.00
EFT26956	04/02/2021	FIVESTAR BUSINESS SOLUTIONS & INNOVATION	PRINTER CHARGES - ADMIN, VISITOR CENTRE & REC CENTRE	-434.19
EFT26957	04/02/2021	FIVEGUMS FAMILY MEDICAL PRACTICE	RENTAL ALLOWANCE	-12,600.00
EFT26958	04/02/2021	GERALDTON MOWER & REPAIR	CHAINS FOR WORKSHOP	-576.70
EFT26959	04/02/2021	CITY OF GREATER GERALDTON	MERU WASTE DISPOSAL AND BUILDING CERTIFICATION SERVICES	-25,396.46
EFT26960	04/02/2021	GERALDTON TROPHY & ENGRAVING CENTRE	NICHE WALL PLAQUES	-705.00
EFT26961	04/02/2021	GERALDTON PARTY HIRE	HIRE OF MARQUEE FOR AUSTRALIA DAY CELEBRATIONS	-600.00
EFT26962	04/02/2021	REFUEL AUSTRALIA	BULK DIESEL AND FUEL CARD PURCHASES	-13,564.43
EFT26963	04/02/2021	GREEN FROG SYSTEMS	HALO SECURITY SENSOR LIGHTS FOR VILLAGE COMMON AREAS	-493.28
EFT26964	04/02/2021	GLASS CO WA	MAINTENANCE REPAIRS AT 2 KENNEDY HEIGHTS, RESOURCE CENTRE AND THE VILLAGE	-1,097.28
EFT26965	04/02/2021	GREAT NORTHERN RURAL SERVICES	GRASS SEED FOR PLANTING AT DRIVE IN AND RETICULATION SUPPLIES	-2,526.54
EFT26966	04/02/2021	GERALDTON TRANSPORT	FREIGHT CHARGES	-704.00
EFT26967	04/02/2021	JR & A HERSEY	PROTECTIVE EQUIPMENT	-477.14
EFT26968	04/02/2021	HLS LEGAL	PROFESSIONAL LEGAL ADVICE	-1,935.70
EFT26969	04/02/2021	INCITE SECURITY	QUARTERLY MONITORING AT REC CENTRE AND ADMIN	-313.50
EFT26970	04/02/2021	INTEGRITY COACH LINES (AUST) PTY LTD	BUS TICKET SALES	-135.15
EFT26971	04/02/2021	IT VISION AUSTRALIA PTY LTD	UPGRADE OF SYNERGYSOFT AND DEFINITIV SYSTEMS	-742.50
EFT26972	04/02/2021	JASON SIGNMAKERS	ROAD SIGNS	-1,430.79
EFT26973	04/02/2021	JODEY EDWARDS	CONTRACT LANDSCAPING - THE VILLAGE	-2,871.00
EFT26974	04/02/2021	KLEENHEAT GAS	BULK TANK RENTAL CHARGE - REC CENTRE	-559.21
EFT26975	04/02/2021	KUPSCH FARMING	UNPROCESSED GRAVEL FOR TABLETOP RD RE-SHEET	-33,000.00
EFT26976	04/02/2021	DONGARA DENISON LIONS CLUB INC	REFUND	-500.00
EFT26977	04/02/2021	GEOFFREY IAN LITTLEFAIR	ASBESTOS REMOVAL WORKS AND TESTING AT DRIVE IN	-6,727.00
EFT26978	04/02/2021	LOCK, STOCK & FARRELL	PADLOCKS AND KEYS FOR PAID CAMPING TOLL BOXES	-207.80
EFT26979	04/02/2021	MARSDEN'S BECKENHAM TRANSPORT PTY LTD	FREIGHT CHARGES	-550.00
EFT26980	04/02/2021	MARKET CREATIONS	SUPPORT AGREEMENT, HOSTING SERVICES, VOIP SERVICES FOR SHIRE FACILITIES AND MEDICAL CENTRE	-23,378.32

Shire of Irwin

List of Accounts paid February 2021 for presentation to the Council Meeting 23 March 2021

MUNICIPAL/(TRUST) PAYMENTS

EFT/CHQ #	DATE		DESCRIPTION	PAYMENTS
EFT26981	04/02/2021	MARKETFORCE PTY LTD	ADVERTISING	-501.91
EFT26982	04/02/2021	MARKS WATERTRUCK	WATER TRUCK HIRE FOR RURAL ROAD WORKS	-9,256.50
EFT26983	04/02/2021	MIDWEST BOUNCE AND FUN	ACTIVITIES FOR AUSTRALIA DAY CELEBRATIONS	-1,010.00
EFT26984	04/02/2021	MCLEODS BARRISTERS & SOLICITORS	LEGAL ADVICE	-731.68
EFT26985	04/02/2021	MIDWEST MOWERS & SMALL ENGINES	TRIMMER HEADS FOR SUNDRY PLANT	-135.00
EFT26986	04/02/2021	MIDWEST FIRE PROTECTION & SAFETY SERVICES	SERVICING OF FIRE EQUIPMENT AT DENISON HOUSE, STARFISH CAFÉ, GOLF CLUB, PISTOL CLUB AND REC CENTRE	-892.10
EFT26987	04/02/2021	MIDWEST SOLAR AND WATER	PLUMBING UPGRADE AND REPAIRS AT THE VILLAGE AND SHIRE FACILITIES	-5,255.80
EFT26988	04/02/2021	NORDIC BUILDERS	RENOVATION WORKS AT ADMIN	-3,850.00
EFT26989	04/02/2021	OCTANE PLUMBING	SUPPLY AND INSTALL FIRE HYDRANT AT HENRY ROAD	-11,858.00
EFT26990	04/02/2021	PEAK CONSULTANTS PTY LTD	MORETON TCE LIGHTING DESIGN	-3,289.00
EFT26991	04/02/2021	PIXIES SCREEN PRINTS	PROTECTIVE EQUIPMENT	-109.00
EFT26992	04/02/2021	PLUNKETT HOMES	REFUND	-1,000.00
EFT26993	04/02/2021	ROSELAKE HOLDINGS PTY LTD	SPRAYING OF URBAN AND RURAL ROAD NETWORK	-10,109.00
EFT26994	04/02/2021	SHORELINE OUTDOOR WORLD	REPAIRS TO GARAGE DOOR AT 2 KENNEDY HEIGHTS	-360.80
EFT26995	04/02/2021	SMYTH AGRI SERVICES	MATERIALS - IRWIN BUSHFIRE BRIGADE	-211.54
EFT26996	04/02/2021	DONGARA IGA	MONTHLY CONSUMABLES	-1,912.53
EFT26997	04/02/2021	TOURISM COUNCIL WESTERN AUSTRALIA LTD	2021 MEMBERSHIP RENEWAL	-1,579.00
EFT26998	04/02/2021	CLEANAWAY CO PTY LTD	RESIDENTIAL, COMMERCIAL AND STREET BINS COLLECTION, FRONT LIFT COLLECTION, TRANSFER STATION MTCE AND LANDFILL MTCE	-51,143.10
EFT26999	04/02/2021	TRUCK CENTRE (WA) PTY LTD	PARTS - AIRLINE JOINERS	-279.62
EFT27000	04/02/2021	TYREPOWER LIMITED	TYRES FOR FORD RANGER - WORK CREW	-1,063.47
EFT27001	04/02/2021	WA HINO	PARTS FOR HINO PRIME MOVER	-202.36
EFT27002	04/02/2021	WA LOCAL GOVERNMENT ASSOCIATION	ELEARNING - INTRODUCTION TO LOCAL GOVERNMENT	-215.00
EFT27003	04/02/2021	WA RETURN RECYCLE RENEW LIMITED	MERCHANDISE BAGS FOR CONTAINER DEPOSIT SCHEMES	-770.00
EFT27004	04/02/2021	WELL DONE INTERNATIONAL	CALL CENTRE CHARGES	-1,464.10
EFT27005	04/02/2021	SYNERGY	ELECTRICITY CHARGES	-10,988.50
EFT27006	04/02/2021	WESTRAC EQUIPMENT	PARTS FOR CAT GRADER	-1,445.82
EFT27007	04/02/2021	WET N DRY ELECTRICS	REPAIR FAULTY SIREN UNIT AND ADDITIONAL REPAIRS TO TOWN HINO	-937.75
EFT27008	04/02/2021	WILL CACHARD	REFUND	-176.00
EFT27009	04/02/2021	WILD SIDE COFFEE	REFRESHMENTS DURING AUSTRALIA DAY CELEBRATIONS	-50.70
EFT27010	04/02/2021	YOUNG MOTORS PTY LTD	SERVICE OF HOLDEN COLORADO'S	-1,900.02
EFT27011	12/02/2021	EDGE DIGITAL TECHNOLOGY	PARTS, REPAIRS AND SERVICE OF DRIVE IN PROJECTOR	-5,377.90
EFT27012	12/02/2021	NODE 1 PTY LTD	NBN FIBRE CONNECTION FEE	-179.90
EFT27013	12/02/2021	OFFICE NATIONAL	STATIONERY CONSUMABLES	-755.09
EFT27014	15/02/2021	STRAND LEGAL & CONVEYANCING	REFUND	-379.23
EFT27015	17/02/2021	IRWIN SHIRE - RATES	PAYROLL DEDUCTIONS	-1,140.00
EFT27016	17/02/2021	SHIRE OF IRWIN - LOTTO FUND	PAYROLL DEDUCTIONS	-80.00
EFT27017	18/02/2021	DONGARA FENCING	SUPPLY AND INSTALL COLOURBOND FENCE AT RSL BUILDING	-4,638.48
EFT27018	22/02/2021	AUSTRALIAN TAXATION OFFICE - BAS	BAS RECONCILIATION JANUARY 2021	-18,127.00
EFT27019	25/02/2021	AUS RECORD	ARCHIVE BOXES	-440.00
EFT27020	25/02/2021	BILLI MARSHALL	REFUND	-400.00
EFT27021	25/02/2021	BOB WADDELL CONSULTANT	FINANCIAL ASSISTANCE	-264.00
EFT27022	25/02/2021	TOLL	FREIGHT CHARGES	-486.34
EFT27023	25/02/2021	CIVIC WORKFORCE MANAGEMENT	HR SUPPORT AND MENTORING SERVICES	-1,218.75
EFT27024	25/02/2021	DAZFAB ENGINEERING	INSPECT AND REPAIR HAND RAIL ON DISABLED FISHING PLATFORM	-528.00
EFT27025	25/02/2021	DC TWO PTY LTD	VOIP PHONE CHARGES - ADMIN JANUARY 2021	-1,709.55
EFT27026	25/02/2021	DONGARA HANDYMAN SERVICE	BUILDING MAINTENANCE WORKS AT RICHARDSON RD RESIDENCE, THE VILLAGE AND SHIRE ABLUTIONS AND FACILITIES	-2,359.50
EFT27027	25/02/2021	DONGARA BODY BUILDERS	CONSTRUCT 3 PAY STATIONS FOR PAID CAMPING IMPLEMENTATION	-5,362.50
EFT27028	25/02/2021	DONGARA BUILDING & TRADE SUPPLIES	PARKS, GARDENS, BUILDING, ROAD MAINTENANCE SUPPLIES	-872.09
EFT27029	25/02/2021	DONGARA YOUTHCARE	DONATION TO CHAPLAINCY SUPPORT 2021	-2,500.00
EFT27030	25/02/2021	DIRECT TRAFFIC MANAGEMENT	SIGNAGE FOR TRAFFIC MANAGEMENT ROADWORKS	-5,356.89
EFT27031	25/02/2021	REFUEL AUSTRALIA	FUEL CARD PURCHASES	-1,439.32
EFT27032	25/02/2021	JOSH BYRNE & ASSOCIATES	PROGRESS PAYMENTS - FORESHORE MASTERPLAN, MORETON TCE ENTRY STATEMENT AND WALK TRAILS DESIGNS	-12,563.10
EFT27033	25/02/2021	DONGARA DENISON LIONS CLUB INC	AUSTRALIA DAY CONTRIBUTION	-647.18
EFT27034	25/02/2021	MCDONALDS WHOLESALERS	REC CENTRE KIOSK SUPPLIES	-458.95
EFT27035	25/02/2021	MIRACLE RECREATION EQUIPMENT PTY LTD	PLAYGROUND INSPECTION INCLUDING REPORT	-2,673.00
EFT27036	25/02/2021	OFFICE OF THE AUDITOR GENERAL	CERTIFICATION OF ROAD TO RECOVERY FUNDING	-1,980.00
EFT27037	25/02/2021	PEMCO DIESEL	SERVICE OF NISSAN PRIME MOVER, ISUZU TRUCK, TORO GROUND MASTER MOWER, KUBOTA TRACTOR AND BOMAG ROLLER	-4,556.23
EFT27038	25/02/2021	WARWICK TRANT	MUSIC AND PA EQUIPMENT FOR AUSTRALIA DAY 2021	-300.00
EFT27039	25/02/2021	VISIMAX	INFRINGEMENT BOOK AMENDMENT STICKERS	-35.60
EFT27040	25/02/2021	ON HOLD ON LINE	MONTHLY ON HOLD MESSAGE	-207.00
EFT27041	25/02/2021	WINC AUSTRALIA PTY LTD	PRINTER CHARGES - DEPOT	-278.66
EFT27042	25/02/2021	ZURICH AUSTRALIAN INSURANCE LIMITED	EXCESS CLAIM	-300.00
32031	11/02/2021	CANCELLED		0.00
32032	11/02/2021	DEPARTMENT OF TRANSPORT	SHIRE OF IRWIN NUMBER PLATES	-200.00
32033	16/02/2021	SHIRE OF IRWIN	CONTAINER DEPOSIT SCHEME	-3,975.00
32034	18/02/2021	DEPARTMENT OF TRANSPORT	SHIRE OF IRWIN NUMBER PLATES	-200.00
DD20857.1	01/02/2021	TELSTRA AUSTRALIA	VARIOUS MOBILE AND DATA CHARGES	-2,328.90

Shire of Irwin

List of Accounts paid February 2021 for presentation to the Council Meeting 23 March 2021

MUNICIPAL/(TRUST) PAYMENTS

EFT/CHQ #	DATE	DESCRIPTION	PAYMENTS
DD20874.1	10/02/2021 TELSTRA AUSTRALIA	TELSTRA INTEGRATED MESSAGING	-1,475.88
DD20896.1	24/02/2021 TELSTRA AUSTRALIA	FREE WIFI DATA CHARGES	-80.00
DD20868.1	08/02/2021 WA TREASURY CORPORATION	LOAN 93 - RECREATION CENTRE	-20,727.35
SOL 02/21	16/02/2021 SHINE TECH SOLAR	SOLAR REPAYMENT FEBRUARY 2021	-1,947.66
DD20859.1	01/02/2021 HUNTER PREMIUM FUNDING	INSURANCE PREMIUM FUNDING REPAYMENT - SEVENTH INSTALMENT	-28,344.32
CR 020221	02/02/2021 NAB BUSINESS VISA	NAB BUSINESS VISA TRANSACTIONS INCLUDING COMPUTER EXPENSES, PRINTER FOR MEDICAL CENTRE, WEATHER TRACKER FOR FIRE BANS, DUST KIT FOR DEPOT AND REC CENTRE EXPENSES	-5,303.44
DD20826.8	02/02/2021 THE M & L OLSEN SUPERANNUATION FUND	SUPERANNUATION	-94.80
DD20863.1	09/02/2021 ANZ SMART CHOICE SUPER	SUPERANNUATION	-263.63
DD20863.2	09/02/2021 ASGARD SUPERANNUATION	SUPERANNUATION	-170.96
DD20863.3	09/02/2021 AUSTRALIAN SUPER	SUPERANNUATION	-1,181.43
DD20863.4	09/02/2021 AWARE SUPER PTY LTD	SUPERANNUATION	-12,360.05
DD20863.5	09/02/2021 HOSTPLUS	SUPERANNUATION	-322.87
DD20863.6	09/02/2021 RUSSELL SUPERSOLUTION MASTER TRUST	SUPERANNUATION	-245.51
DD20863.7	09/02/2021 MLC SUPER FUND	SUPERANNUATION	-997.63
DD20883.1	23/02/2021 ANZ SMART CHOICE SUPER	SUPERANNUATION	-294.65
DD20883.2	23/02/2021 REST SUPERANNUATION	SUPERANNUATION	-342.85
DD20883.3	23/02/2021 ASGARD SUPERANNUATION	SUPERANNUATION	-162.85
DD20883.4	23/02/2021 AUSTRALIAN SUPER	SUPERANNUATION	-1,067.30
DD20883.5	23/02/2021 AWARE SUPER PTY LTD	SUPERANNUATION	-11,354.04
DD20883.6	23/02/2021 GESB - WEST STATE SUPER SCHEME	SUPERANNUATION	-362.71
DD20883.7	23/02/2021 HOSTPLUS	SUPERANNUATION	-359.30
DD20883.8	23/02/2021 RUSSELL SUPERSOLUTION MASTER TRUST	SUPERANNUATION	-227.50
DD20883.9	23/02/2021 MLC SUPER FUND	SUPERANNUATION	-1,102.08
DD20906.1	10/02/2021 REST SUPERANNUATION	SUPERANNUATION	-353.95
DD20906.2	16/02/2021 THE M & L OLSEN SUPERANNUATION FUND	SUPERANNUATION	-78.98
DD20922.1	23/02/2021 AWARE SUPER PTY LTD	SUPERANNUATION	-63.46
			-518,551.44

Sundry Creditors as at 28/02/2021 **107,033.71**

The Payments included in the above list of Accounts Paid, have been authorised by the Chief Executive Officer under delegation from Council.

16/3/21
DATE

Shane Ivers
Chief Executive Officer

Shire of Irwin

Corporate Credit Card Expenditure - Payment Reference CR 020221

S.Ivers Credit Card Expenses

MYOB Australia	Upgrade of MYOB at Visitor Centre Monthly Charge	70.50
Harvey Norman	Printer for Medical Centre	499.00
Spotify	Rec Centre Gym Music	11.99
Davis Instruments	Weather Trackers - Fire Bans	3,899.50
Exo Env Burswood	Dust Kit - Depot	813.45
NAB	Card Fee	9.00
		5,303.44

TOTAL PAYMENT TO CORPORATE CREDIT CARD ACCOUNT 5,303.44

ATTACHMENT: CC02

Monthly Financial Statements for the Period Ended 28 February 2021

Attachment 1
Financial Statements for the Period Ended 28 February 2021

SHIRE OF IRWIN

MONTHLY FINANCIAL REPORT
(Containing the Statement of Financial Activity)
For the Period Ended 28 February 2021

LOCAL GOVERNMENT ACT 1995

LOCAL GOVERNMENT (FINANCIAL MANAGEMENT) REGULATIONS 1996

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KEY INFORMATION

Items of Significance

The material variance adopted by the Shire of Irwin for the 2020/21 year is $10,000 and 10%. The following selected items have been highlighted due to the amount of the variance to the budget or due to the nature of the revenue/expenditure. A full listing and explanation of all items considered of significant/material variance is disclosed in Note 15.

	% Collected / Completed	Amended Annual Budget	Amended YTD Budget	YTD Actual	Variance (Under)/Over
Significant Projects					
AGED APPROPRIATE HOUSING - STAGE 2	10%	2,259,327	1,505,608	234,580	1,271,028
R2R - FANE ROAD	2%	64,000	53,752	1,017	52,735
R2R - PIGGERY LANE	1%	129,540	108,805	818	107,987
R2R - BELAURA PLACE	0%	21,259	17,850	0	17,850
CASUARINAS ROAD - RRG	73%	357,000	299,872	260,311	39,561
MORETON TERRACE	19%	450,000	378,000	86,198	291,802
TABLETOP ROAD - RRG	25%	422,500	354,892	106,014	248,878
BURMA ROAD - RRG	20%	251,500	211,240	51,450	159,790
MILO ROAD DESIGN	0%	38,528	32,360	0	32,360
BLENHEIM ROAD	70%	7,100	5,964	4,950	1,014
GENERAL FOOTPATHS	23%	5,000	4,200	1,150	3,050
CEMETERY REVITILISATION	5%	130,000	130,000	5,929	124,071
CLIFF HEAD - PAID CAMPING IMPLEMENTATION	66%	15,000	15,000	9,859	5,141
SKATE PARK - PUMP TRACK	111%	238,000	238,000	263,479	(25,479)
RURAL SIGNS	31%	69,000	57,960	21,221	36,739
Grants, Subsidies and Contributions					
Operating Grants, Subsidies and Contributions	33%	1,041,725	532,938	338,767	(194,171)
Non-operating Grants, Subsidies and Contributions	19%	4,102,922	2,766,449	764,512	(2,001,937)
	21%	5,144,647	3,299,387	1,103,278	(2,196,109)
Rates Levied	100%	5,394,500	5,391,156	5,373,775	(17,381)

% Compares current ytd actuals to annual budget

Financial Position		**Prior Year 29 February 2020**	**Current Year 28 February 2021**
Adjusted Net Current Assets	101%	$ 2,636,348	$ 2,649,793
Cash and Equivalent - Unrestricted	203%	$ 2,351,923	$ 4,785,841
Cash and Equivalent - Restricted	98%	$ 1,321,145	$ 1,296,858
Receivables - Rates	70%	$ 1,141,369	$ 796,812
Receivables - Other	53%	$ 162,373	$ 86,766
Payables	161%	$ 194,722	$ 313,727

% Compares current ytd actuals to prior year actuals at the same time

Note: The Statements and accompanying notes are prepared based on all transactions recorded at the time of preparation and may vary due to transactions being processed for the reporting period after the date of preparation.

SUMMARY INFORMATION

PREPARATION TIMING AND REVIEW

Date prepared: All known transactions up to 28 February 2021
Prepared by:Jenny Goodbourn (Senior Finance Officer)
Reviewed by: Shane Ivers (CEO)

BASIS OF PREPARATION

REPORT PURPOSE

This report is prepared to meet the requirements of Local Government (Financial Management) Regulations 1996, Regulation 34 . Note: The Statements and accompanying notes are prepared based on all transactions recorded at the time of preparation and may vary due to transactions being processed for the reporting period after the date of preparation.

BASIS OF ACCOUNTING

This statement comprises a special purpose financial report which has been prepared in accordance with Australian Accounting Standards (as they apply to local governments and not-for-profit entities), Australian Accounting Interpretations, other authoritative pronouncements of the Australian Accounting Standards Board, the Local Government Act 1995 and accompanying regulations. Material accounting policies which have been adopted in the preparation of this statement are presented below and have been consistently applied unless stated otherwise. Except for cash flow and rate setting information, the report has also been prepared on the accrual basis and is based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and liabilities.

THE LOCAL GOVERNMENT REPORTING ENTITY

All Funds through which the Council controls resources to carry on its functions have been included in this statement. In the process of reporting on the local government as a single unit, all transactions and balances between those funds (for example, loans and transfers between Funds) have been eliminated. All monies held in the Trust Fund are excluded from the statement, but a separate statement of those monies appears at Note 14.

SIGNIFICANT ACCOUNTING POLICES

GOODS AND SERVICES TAX

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). Receivables and payables are stated inclusive of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with receivables or payables in the statement of financial position. Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are presented as operating cash flows.

CRITICAL ACCOUNTING ESTIMATES

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that effect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances; the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

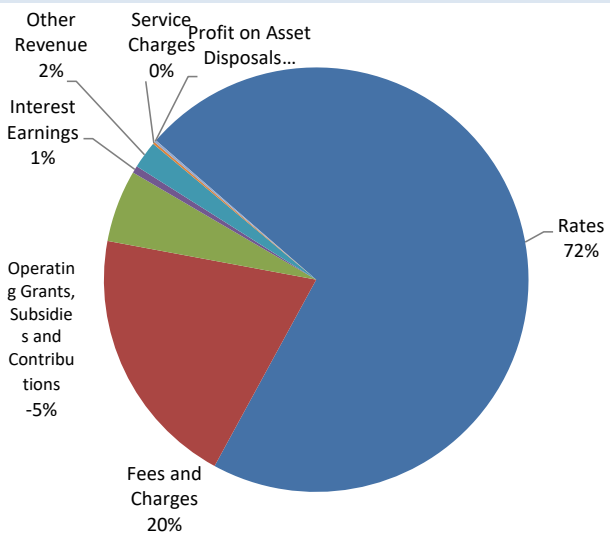
ROUNDING OFF FIGURES

All figures shown in this statement are rounded to the nearest dollar.

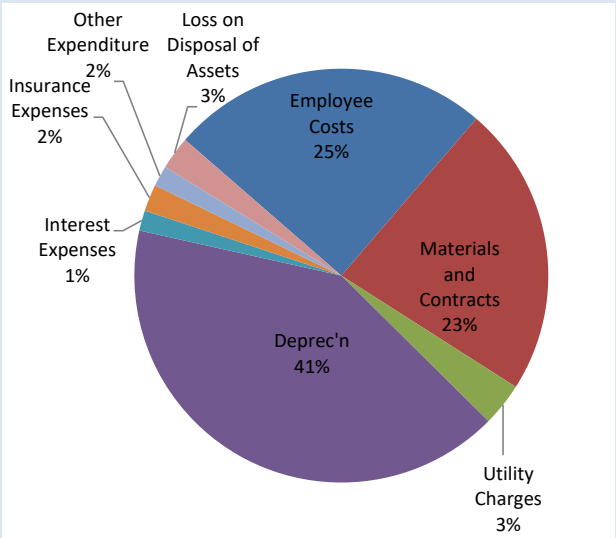
SHIRE OF IRWIN
MONTHLY FINANCIAL REPORT
FOR THE PERIOD ENDED 28 FEBRUARY 2021

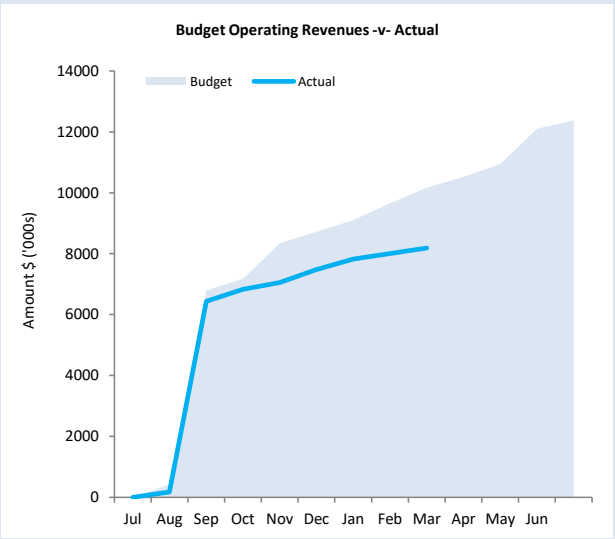
SUMMARY GRAPHS

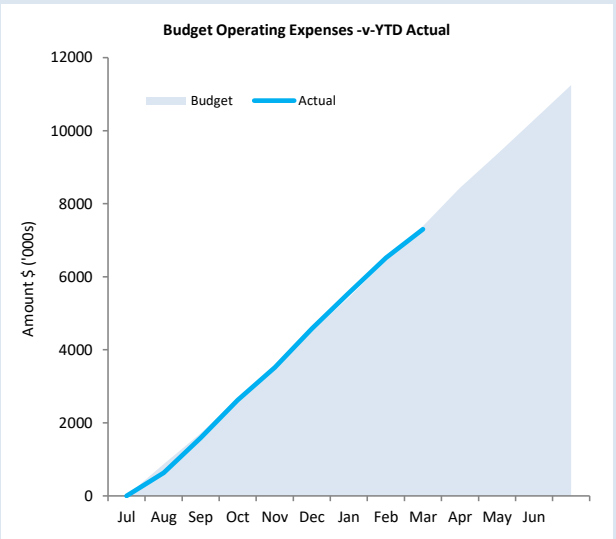
OPERATING REVENUE



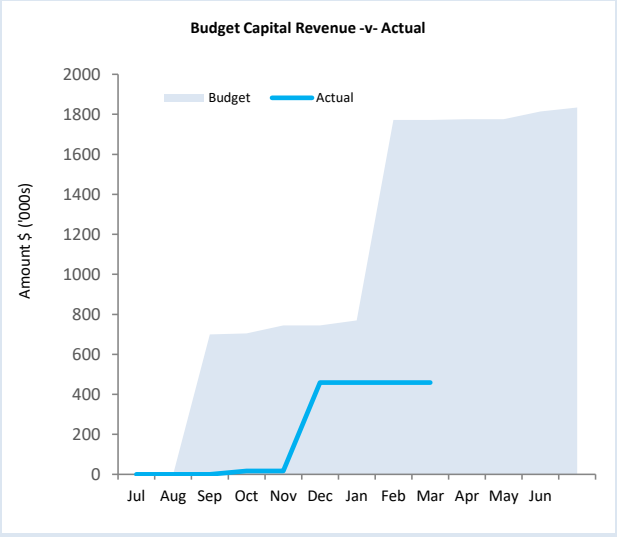
OPERATING EXPENSES



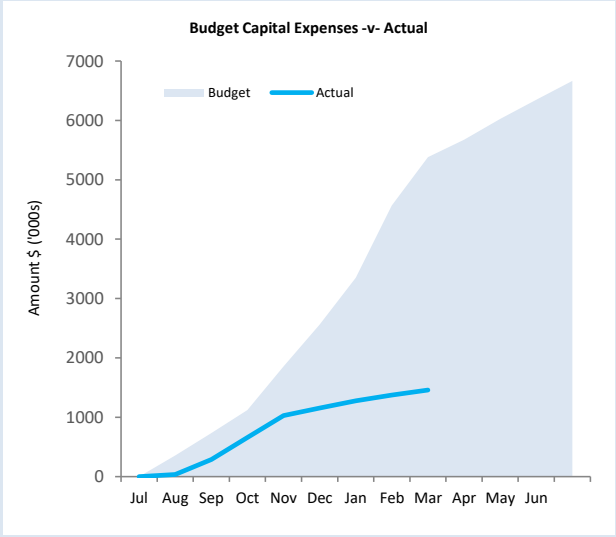




CAPITAL REVENUE



CAPITAL EXPENSES



This information is to be read in conjunction with the accompanying Financial Statements and Notes.

STATUTORY REPORTING PROGRAMS

Shire operations as disclosed in these financial statements encompass the following service orientated activities/programs.

	ACTIVITIES
GOVERNANCE	
To provide a decision making process for the efficient allocation of scarce resources.	Includes the activities of members of council and the administrative support available to the council for the provision of governance of the district. Other costs relate to the task of assisting elected members and ratepayers on matters which do not concern a specific council services.
GENERAL PURPOSEFUNDING	
To collect revenue to allow for the provision of services.	Rates, general purpose government grants and interest revenue.
LAW, ORDER, PUBLIC SAFETY	
To provide services to help ensure a safer and environmentally conscious community.	Supervision and enforcement of various local laws relating to fire prevention, animal control and other aspects of public safety including emergency services.
HEALTH	
To provide an operational framework for environmental and community health.	Inspection of food outlets and their control, provision of meat inspection services, noise control and waste disposal compliance.
EDUCATION AND WELFARE	
To provide services to the elderly, children and youth.	Maintenance of playgroup centre and senior citizen centre. Provision of youth support services.
HOUSING	
To provide and maintain elderly residents housing.	Provision and maintenance of elderly residents housing.
COMMUNITY AMENITIES	
To provide services required by the community.	Rubbish collection services, operation of rubbish transfer site, litter control, protection of the environment and administration of town planning schemes, cemetery and public conveniences.
RECREATION AND CULTURE	
To establish and effectively manage infrastructure and resource which will help the social wellbeing of the community.	Maintenance of public halls, heritage buildings, civic centres, beaches, recreation centres and various sporting facilities. Provision and maintenance of parks, gardens and playgrounds. Operation of library, television and radio rebroadcasting and other cultural facilities.
TRANSPORT	
To provide safe, effective and efficient transport services to the community.	Construction and maintenance of roads, streets, footpaths, depots, cycle ways, parking facilities and traffic control. Cleaning of streets and maintenance of street trees, street lighting etc.
ECONOMIC SERVICES	
To help promote the Shire and its economic wellbeing.	Tourism and area promotion. Provision of rural services including weed control, vermin control and standpipes. Building control.
OTHER PROPERTY AND SERVICES	
To monitor and control Shire's overheads operating accounts.	Private works operation, plant repair and operation costs and engineering operation costs.

SHIRE OF IRWIN
STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 28 FEBRUARY 2021

STATUTORY REPORTING PROGRAMS

	Note	Adopted Annual Budget	Amended Annual Budget (d)	Amended YTD Budget (a)	YTD Actual (b)	Var. $ (b)-(a)	Var. % (b)-(a)/(a)	Var. ▲▼	Significant Var. S
		$	$	$	$	$	%		
Opening Funding Surplus(Deficit)	1	(168,015)	(412,904)	(412,904)	**(412,904)**	0	0%		
Governance		0	0	0	**0**	0			
General Purpose Funding - Rates	6	5,394,500	5,394,500	5,388,356	**5,373,775**	(14,581)	(0%)	▼	
General Purpose Funding - Other		316,641	316,641	235,456	**245,086**	9,630	4%	▲	
Law, Order and Public Safety		172,994	172,994	95,316	**65,049**	(30,267)	(32%)	▼	S
Health		60,700	60,700	46,864	**59,726**	12,862	27%	▲	S
Education and Welfare		8,550	8,550	6,360	**1,144**	(5,216)	(82%)	▼	
Housing		353,000	353,000	235,328	**231,649**	(3,679)	(2%)	▼	
Community Amenities		853,855	853,855	803,495	**924,567**	121,072	15%	▲	S
Recreation and Culture		153,817	273,817	194,583	**143,982**	(50,601)	(26%)	▼	S
Transport		85,766	635,766	263,918	**95,730**	(168,188)	(64%)	▼	S
Economic Services		131,657	131,657	89,175	**203,609**	114,434	128%	▲	S
Other Property and Services		69,500	69,500	41,360	**78,736**	37,376	90%	▲	S
		7,600,980	**8,270,980**	**7,400,211**	**7,423,053**				
Expenditure from operating activities									
Governance		(558,300)	(583,300)	(390,589)	**(301,449)**	89,140	23%	▲	S
General Purpose Funding		(1,460,715)	(597,827)	(391,856)	**(367,979)**	23,877	6%	▲	
Law, Order and Public Safety		(471,125)	(467,858)	(315,663)	**(307,035)**	8,628	3%	▲	
Health		(339,547)	(339,547)	(222,257)	**(250,032)**	(27,775)	(12%)	▼	S
Education and Welfare		(62,370)	(62,370)	(43,772)	**(43,059)**	713	2%	▲	
Housing		(590,171)	(591,550)	(400,799)	**(603,242)**	(202,443)	(51%)	▼	S
Community Amenities		(1,199,904)	(1,304,592)	(871,553)	**(784,082)**	87,471	10%	▲	S
Recreation and Culture		(2,555,055)	(2,576,129)	(1,721,275)	**(1,655,518)**	65,758	4%	▲	
Transport		(3,440,854)	(4,055,354)	(2,512,209)	**(2,533,709)**	(21,500)	(1%)	▼	
Economic Services		(383,644)	(388,144)	(258,399)	**(237,501)**	20,898	8%	▲	
Other Property and Services		(48,500)	(281,441)	(259,296)	**(218,191)**	41,105	16%	▲	S
		(11,110,185)	**(11,248,112)**	**(7,387,668)**	**(7,301,796)**				
Operating activities excluded from budget									
Add back Depreciation		4,358,601	4,358,601	2,905,656	**2,999,608**	93,952	3%	▲	
Adjust (Profit)/Loss on Asset Disposal	7	9,620	10,013	11,188	**176,479**	165,291	1477%	▲	S
Movement in Leave Reserve (Added Back)		1,334	1,334	888	**390**	(498)	(56%)	▼	
Movement in Deferred Pensioner Rates/ESL		0	0	0	**0**	0			
Movement in Employee Benefit Provisions		0	0	0	**0**	0			
Rounding Adjustments		0	0	0	**0**	0			
Movement Due to Changes in Accounting Standards		0	0	0	**0**	0			
Loss on Asset Revaluation		0	0	0	**0**	0			
Adjustment in Fixed Assets		0	0	0	**0**	0			
Amount attributable to operating activities		**860,350**	**1,392,816**	**2,930,275**	**3,297,735**				
Investing Activities									
Non-operating Grants, Subsidies and Contributions	13	3,628,255	4,102,922	2,766,449	**764,512**	(2,001,937)	(72%)	▼	S
Proceeds from Disposal of Assets	7	40,000	65,000	65,000	**454,961**	389,961	600%	▲	S
Land Held for Resale	8	0	0	0	**0**	0			
Land and Buildings	8	(2,329,327)	(2,327,327)	(1,565,358)	**(345,294)**	1,220,064	78%	▲	S
Plant and Equipment	8	(66,000)	(720,000)	(720,000)	**(31,075)**	688,925	96%	▲	S
Furniture and Equipment	8	(26,100)	(51,700)	(51,700)	**(35,861)**	15,839	31%	▲	S
Infrastructure Assets - Roads	8	(1,791,127)	(2,533,127)	(2,222,460)	**(532,660)**	1,689,800	76%	▲	S
Infrastructure Assets - Drainage	8	0	0	0	**0**	0			
Infrastructure Assets - Footpaths	8	0	0	0	**0**	0			
Infrastructure Assets - Public Facilities	8	0	0	0	**0**	0			
Infrastructure Assets - Other	8	(495,000)	(608,000)	(558,960)	**(308,594)**	250,366	45%	▲	S
Amount attributable to investing activities		**(1,039,299)**	**(2,072,232)**	**(2,287,029)**	**(34,010)**				
Financing Actvities									
Proceeds from New Debentures	9	1,095,010	1,625,010	1,625,010	**0**	(1,625,010)	(100%)	▼	S
Repayment of Debentures	9	(391,148)	(391,148)	(238,601)	**(187,729)**	50,872	21%	▲	S
Repayment of Lease Financing	9	(19,929)	(19,929)	(13,272)	**(13,227)**	46	0%	▲	
Advances to Community Groups		(395,010)	(395,010)	(395,010)	**0**	395,010	100%	▲	S
Proceeds from Advances		0	0	0	**0**	0			
Self-Supporting Loan Principal		25,941	25,941	21,890	**4,023**	(17,867)	(82%)	▼	S
Transfer to Restricted Cash - Other		0	0	0	**0**	0			
Transfer from Restricted Cash - Other		0	0	0	**0**	0			
Transfer from Reserves	10	20,000	118,135	60,000	**0**	(60,000)	(100%)	▼	S
Transfer to Reserves	10	(14,000)	(14,000)	(9,328)	**(4,095)**	5,233	56%	▲	
Amount attributable to financing activities		**320,864**	**948,999**	**1,050,689**	**(201,027)**				
Closing Funding Surplus(Deficit)	1	**(26,099)**	**(143,321)**	**1,281,031**	**2,649,793**				

KEY INFORMATION
▲▼ Indicates a variance between Year to Date (YTD) Budget and YTD Actual data as per the adopted materiality threshold.
Refer to Note 15 for an explanation of the reasons for the variance.
The material variance adopted by Council for the 2020/21 year is $10,000 and 10%.

This statement is to be read in conjunction with the accompanying Financial Statements and notes.

NATURE OR TYPE DESCRIPTIONS

REVENUE

RATES
All rates levied under the Local Government Act 1995. Includes general, differential, specific area rates, minimum rates, interim rates, back rates, ex-gratia rates, less discounts offered. Exclude administration fees, interest on instalments, interest on arrears and service charges.

OPERATING GRANTS, SUBSIDIES AND CONTRIBUTIONS
Refer to all amounts received as grants, subsidies and contributions that are not non-operating grants.

NON-OPERATING GRANTS, SUBSIDIES AND CONTRIBUTIONS
Amounts received specifically for the acquisition, construction of new or the upgrading of non-current assets paid to a local government, irrespective of whether these amounts are received as capital grants, subsidies, contributions or donations.

PROFIT ON ASSET DISPOSAL
Profit on the disposal of assets including gains on the disposal of long term investments. Losses are disclosed under the expenditure classifications.

FEES AND CHARGEES
Revenues (other than service charges) from the use of facilities and charges made for local government services, sewerage rates, rentals, hire charges, fee for service, photocopying charges, licences, sale of goods or information, fines, penalties and administration fees. Local governments may wish to disclose more detail such as rubbish collection fees, rental of property, fines and penalties, other fees and charges.

SERVICE CHARGES
Service charges imposed under Division 6 of Part 6 of the Local Government Act 1995. Regulation 54 of the Local Government (Financial Management) Regulations 1996 identifies these as television and radio broadcasting, underground electricity and neighbourhood surveillance services. Exclude rubbish removal charges. Interest and other items of a similar nature received from bank and investment accounts, interest on rate instalments, interest on rate arrears and interest on debtors.

INTEREST EARNINGS
Interest and other items of a similar nature received from bank and investment accounts, interest on rate instalments, interest on rate arrears and interest on debtors.

OTHER REVENUE / INCOME
Other revenue, which can not be classified under the above headings, includes dividends, discounts, rebates etc.

EXPENSES

EMPLOYEE COSTS
All costs associate with the employment of person such as salaries, wages, allowances, benefits such as vehicle and housing, superannuation, employment expenses, removal expenses, relocation expenses, worker's compensation insurance, training costs, conferences, safety expenses, medical examinations, fringe benefit tax, etc.

MATERIALS AND CONTRACTS
All expenditures on materials, supplies and contracts not classified under other headings. These include supply of goods and materials, legal expenses, consultancy, maintenance agreements, communication expenses, advertising expenses, membership, periodicals, publications, hire expenses, rental, leases, postage and freight etc. Local governments may wish to disclose more detail such as contract services, consultancy, information technology, rental or lease expenditures.

UTILITIES (GAS, ELECTRICITY, WATER, ETC.)
Expenditures made to the respective agencies for the provision of power, gas or water. Exclude expenditures incurred for the reinstatement of roadwork on behalf of these agencies.

INSURANCE
All insurance other than worker's compensation and health benefit insurance included as a cost of employment.

LOSS ON ASSET DISPOSAL
Loss on the disposal of fixed assets.

DEPRECIATION ON NON-CURRENT ASSETS
Depreciation expense raised on all classes of assets.

INTEREST EXPENSES
Interest and other costs of finance paid, including costs of finance for loan debentures, overdraft accommodation and refinancing expenses.

OTHER EXPENDITURE
Statutory fees, taxes, provision for bad debts, member's fees or State taxes. Donations and subsidies made to community groups.

SHIRE OF IRWIN
STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 28 FEBRUARY 2021

BY NATURE OR TYPE

	Note	Adopted Annual Budget	Amended Annual Budget	Amended YTD Budget (a)	YTD Actual (b)	Var. $ (b)-(a)	Var. % (b)-(a)/(a)	Var. ▲▼	Significant Var. S
		$	$	$	$	$	%		
Opening Funding Surplus (Deficit)	1	(168,015)	(412,904)	(412,904)	**(412,904)**	0	0%		
Rates	6	5,394,500	5,394,500	5,391,156	**5,373,775**	(17,381)	(0%)	▼	
Operating Grants, Subsidies and Contributions	12	491,725	1,041,725	532,938	**338,767**	(194,171)	(36%)	▼	S
Fees and Charges		1,391,062	1,589,062	1,305,250	**1,500,243**	194,993	15%	▲	S
Service Charges		0	0	0	**0**	0			
Interest Earnings		53,167	53,167	36,815	**40,860**	4,045	11%	▲	
Other Revenue		269,350	191,350	134,052	**156,885**	22,833	17%	▲	S
Profit on Disposal of Assets	7	1,176	1,176	0	**12,524**	12,524		▲	S
Gain FV Valuation of Assets		0		0	**0**	0			
		7,600,980	**8,270,980**	**7,400,211**	**7,423,053**				
Expenditure from operating activities									
Employee Costs		(2,403,645)	(2,543,983)	(1,702,975)	**(1,819,619)**	(116,644)	(7%)	▼	
Materials and Contracts		(2,541,343)	(3,401,428)	(2,125,257)	**(1,659,421)**	465,836	22%	▲	S
Utility Charges		(346,700)	(346,700)	(225,490)	**(246,992)**	(21,502)	(10%)	▼	
Depreciation on Non-Current Assets		(4,358,601)	(4,358,601)	(2,905,656)	**(2,999,608)**	(93,952)	(3%)	▼	
Interest Expenses		(222,963)	(222,963)	(144,317)	**(115,708)**	28,609	20%	▲	S
Insurance Expenses		(188,849)	(188,849)	(169,775)	**(153,317)**	16,458	10%	▲	
Other Expenditure		(1,037,288)	(174,400)	(103,010)	**(118,127)**	(15,117)	(15%)	▼	S
Loss on Disposal of Assets	7	(10,796)	(11,189)	(11,188)	**(189,003)**	(177,815)	(1589%)	▼	S
Loss FV Valuation of Assets		0	0	0	**0**	0			
		(11,110,185)	**(11,248,112)**	**(7,387,668)**	**(7,301,796)**				
Operating activities excluded from budget									
Add back Depreciation		4,358,601	4,358,601	2,905,656	**2,999,608**	93,952	3%	▲	
Adjust (Profit)/Loss on Asset Disposal	7	9,620	10,013	11,188	**176,479**	165,291	1477%	▲	S
Movement in Leave Reserve (Added Back)		1,334	1,334	888	**390**	(498)	(56%)	▼	
Movement in Employee Benefit Provisions		0	0	0	**0**	0			
Rounding Adjustments		0	0	0	**0**	0			
Movement Due to Changes in Accounting Standards		0	0	0	**0**	0			
Loss on Asset Revaluation		0	0	0	**0**	0			
Adjustment in Fixed Assets		0	0	0	**0**	0			
Amount attributable to operating activities		**860,350**	**1,392,816**	**2,930,275**	**3,297,735**				
Investing activities									
Non-Operating Grants, Subsidies and Contributions	13	3,628,255	4,102,922	2,766,449	**764,512**	(2,001,937)	(72%)	▼	S
Proceeds from Disposal of Assets	7	40,000	65,000	65,000	**454,961**	389,961	600%	▲	S
Land Held for Resale	8	0	0	0	**0**	0			
Land and Buildings	8	(2,329,327)	(2,327,327)	(1,565,358)	**(345,294)**	1,220,064	78%	▲	S
Plant and Equipment	8	(66,000)	(720,000)	(720,000)	**(31,075)**	688,925	96%	▲	S
Furniture and Equipment	8	(26,100)	(51,700)	(51,700)	**(35,861)**	15,839	31%	▲	S
Infrastructure Assets - Roads	8	(1,791,127)	(2,533,127)	(2,222,460)	**(532,660)**	1,689,800	76%	▲	S
Infrastructure Assets - Drainage	8	0	0	0	**0**	0			
Infrastructure Assets - Footpaths	8	0	0	0	**0**	0			
Infrastructure Assets - Public Facilities	8	0	0	0	**0**	0			
Infrastructure Assets - Other	8	(495,000)	(608,000)	(558,960)	**(308,594)**	250,366	45%	▲	S
Amount attributable to investing activities		**(1,039,299)**	**(2,072,232)**	**(2,287,029)**	**(34,010)**				
Financing Activities									
Proceeds from New Debentures		1,095,010	1,625,010	1,625,010	**0**	(1,625,010)	(100%)	▼	S
Repayment of Debentures	9	(391,148)	(391,148)	(238,601)	**(187,729)**	50,872	21%	▲	S
Repayment of Lease Financing	9	(19,929)	(19,929)	(13,272)	**(13,227)**	46	0%	▲	
Advances to Community Groups		(395,010)	(395,010)	(395,010)	**0**	395,010	100%	▲	S
Proceeds from Advances		0	0	0	**0**	0			
Self-Supporting Loan Principal	9	25,941	25,941	21,890	**4,023**	(17,867)	(82%)	▼	S
Transfer to Restricted Cash - Other		0	0	0	**0**	0			
Transfer from Restricted Cash - Other		0	0	0	**0**	0			
Transfer from Reserves	10	20,000	118,135	60,000	**0**	(60,000)	(100%)	▼	S
Transfer to Reserves	10	(14,000)	(14,000)	(9,328)	**(4,095)**	5,233	56%	▲	
Amount attributable to financing activities		**320,864**	**948,999**	**1,050,689**	**(201,027)**				
Closing Funding Surplus (Deficit)	1	**(26,099)**	**(143,321)**	**1,281,031**	**2,649,793**				

▲▼ Indicates a variance between Year to Date (YTD) Budget and YTD Actual data as per the adopted materiality threshold.
Refer to Note 15 for an explanation of the reasons for the variance.
The material variance adopted by Council for the 2020/21 year is $10,000 and 10%.

This statement is to be read in conjunction with the accompanying Financial Statements and notes.

OPERATING ACTIVITIES
NOTE 1
ADJUSTED NET CURRENT ASSETS

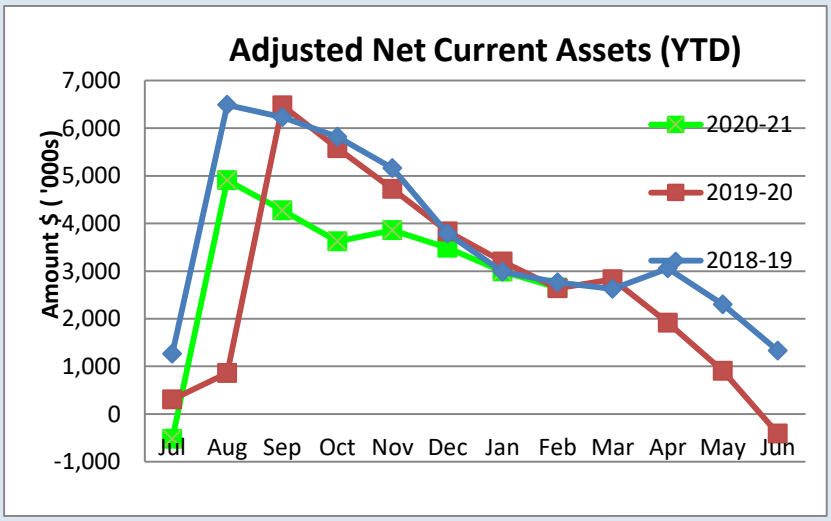
Adjusted Net Current Assets	Note	Last Years Closing 30/06/2020	This Time Last Year 29/02/2020	Year to Date Actual 28/02/2021
		$	$	$
Current Assets				
Cash Unrestricted	2	1,651,177	2,351,923	4,785,841
Cash Restricted - Reserves	2	1,292,763	1,321,145	1,296,858
Cash Restricted - General	2	362,875	376,298	362,875
Cash Restricted - Bonds & Deposits	2	198,687	200,040	202,309
Receivables - Rates	3	403,418	1,141,369	796,812
Receivables - Other	3	189,988	162,373	86,766
Inventories	4	18,521	20,118	18,521
		4,117,429	5,573,267	7,549,982
Less: Current Liabilities				
Payables	5	(816,575)	(194,722)	(313,727)
Contract Liabilities	11	(1,277,058)	(851,007)	(2,146,459)
Financial Liabilities	5	(140,508)	(140,508)	(140,508)
Bonds & Deposits	14	(198,687)	(200,040)	(202,309)
Loan and Lease Liability	9	(361,613)	(126,556)	(160,657)
Provisions	11	(416,446)	(348,465)	(416,446)
		(3,210,887)	(1,861,298)	(3,380,106)
Less: Cash Reserves	10	(1,292,763)	(1,321,145)	(1,296,858)
Add Back: Component of Leave Liability not Required to be funded		123,184	122,936	123,574
Add Back: Loan and Lease Liability		361,613	126,556	160,657
Less : Loan Receivable - clubs/institutions		(8,098)	(3,968)	(4,075)
Less : Restricted Cash General	15	(503,383)	0	(503,383)
Net Current Funding Position		**(412,904)**	**2,636,348**	**2,649,793**

SIGNIFICANT ACCOUNTING POLICIES

Please see Note 1(a) for information on significant accounting polices relating to Net Current Assets.

KEY INFORMATION

The amount of the adjusted net current assets at the end of the period represents the actual surplus (or deficit if the figure is a negative) as presented on the Rate Setting Statement.



This Year YTD Surplus(Deficit)
$2.65 M

Last Year YTD Surplus(Deficit)
$2.64 M

OPERATING ACTIVITIES
NOTE 2
CASH AND FINANCIAL ASSETS

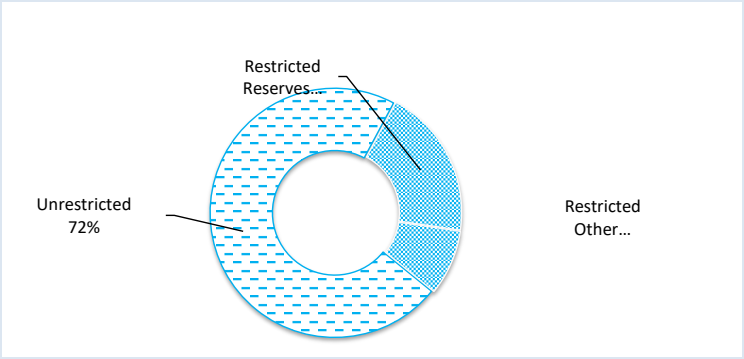
	Unrestricted	Restricted Reserves	Restricted Muni	Total Amount	Institution	Interest Rate	Maturity Date
	$	$	$	$			
Cash on Hand							
CASH ADVANCES	2,050			2,050	Cash on Hand	Nil	On Hand
At Call Deposits							
CASH AT BANK MUNI A/C	4,783,791			4,783,791	NAB	0.25%	At Call
RESERVE FUND BANK A/C		1,296,858		1,296,858	NAB	0.25%	At Call
RESTRICTED ASSETS BANK			362,875	362,875	NAB	0.25%	At Call
BONDS AND DEPOSITS HELD BANK (OLD TRUST FUND BANK)			202,309	202,309	NAB	0.25%	At Call
Term Deposits							
Nil							
Total	**4,785,841**	**1,296,858**	**565,184**	**6,647,883**			

SIGNIFICANT ACCOUNTING POLICIES

Cash and cash equivalents include cash on hand, cash at bank, deposits available on demand with banks and other short term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value and bank overdrafts. Bank overdrafts are reported as short term borrowings in current liabilities in the statement of financial position.

KEY INFORMATION

Cash and cash equivalents include cash on hand, cash at bank, deposits available on demand with banks and other short term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value and bank overdrafts. Bank overdrafts are reported as short term borrowings in current liabilities in the statement of financial position.



Total Cash	Unrestricted
$6.65 M	$1.3 M

OPERATING ACTIVITIES
NOTE 3
RECEIVABLES

Receivables - Rates & Rubbish	30 June 2020	28 Feb 21
	$	$
Opening Arrears Previous Years	350,992	472,740
Levied this year	6,085,751	6,114,212
Less Collections to date	(5,964,004)	(5,720,818)
Equals Current Outstanding	472,740	866,135
Net Rates Collectable	**472,740**	**866,135**
% Collected	92.66%	86.85%

Receivables - General	Current	30 Days	60 Days	90+ Days	Total
	$	$	$	$	$
Receivables - General	9,621	1,807	891	63,029	75,348
Percentage	13%	2%	1%	84%	
Balance per Trial Balance					
Sundry Debtors					75,348
Receivables - Other					11,418
Total Receivables General Outstanding					**86,766**

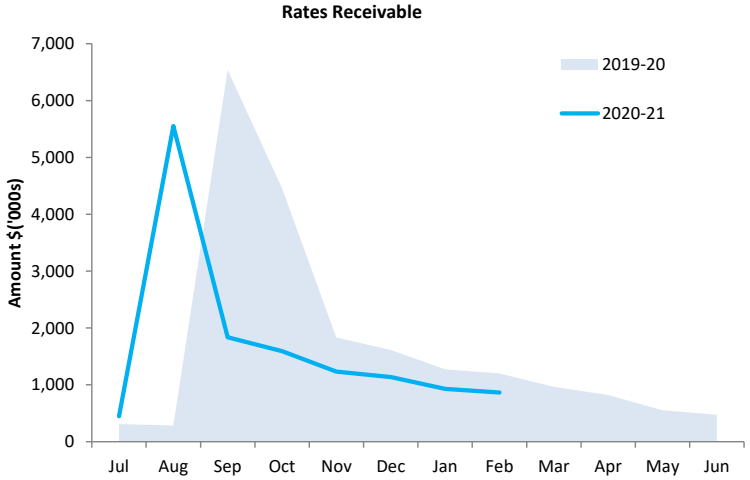
Amounts shown above include GST (where applicable)

KEY INFORMATION

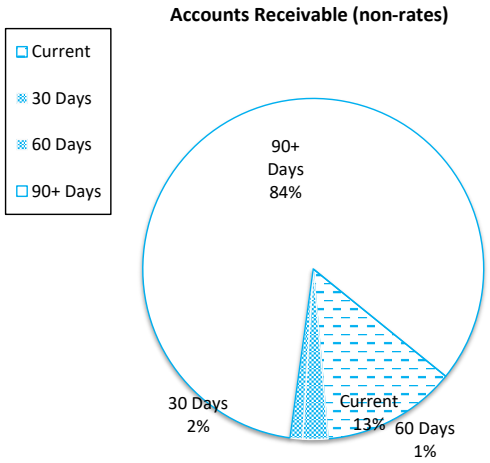
Trade and other receivables include amounts due from ratepayers for unpaid rates and service charges and other amounts due from third parties for goods sold and services performed in the ordinary course of business.

SIGNIFICANT ACCOUNTING POLICIES

Trade and other receivables include amounts due from ratepayers for unpaid rates and service charges and other amounts due from third parties for goods sold and services performed in the ordinary course of business. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets. Collectability of trade and other receivables is reviewed on an ongoing basis. Debts that are known to be uncollectible are written off when identified. An allowance for doubtful debts is raised when there is objective evidence that they will not be collectible.



Collected	Rates Due
87%	$866,135



Debtors Due
$86,766

Over 30 Days
87%

Over 90 Days
84%

OPERATING ACTIVITIES
NOTE 4
OTHER CURRENT ASSETS

Other Current Assets	Opening Balance 1 Jul 2020	Asset Increase	Asset Reduction	Closing Balance 28 Feb 2021
	$	$	$	$
Other Financial Assets at Amortised Cost				
Financial assets at amortised cost - self supporting loans	20,638	0	(4,023)	16,615
Inventory				
Fuel, Visitor and Rec Centres stock on hand	18,521	0	0	18,521
Accrued income and prepayments				
Accrued income and prepayments	15,302	0	(15,302)	0
Contract assets				
Contract assets	0	0	0	0
Total Other Current assets				**35,136**

Amounts shown above include GST (where applicable)

KEY INFORMATION

Other financial assets at amortised cost

The Shire classifies financial assets at amortised cost if both of the following criteria are met:
- the asset is held within a business model whose objective is to collect the contractual cashflows, and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

Inventory

Inventories are measured at the lower of cost and net realisable value.
Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Land held for resale

Land held for development and resale is valued at the lower of cost and net realisable value. Cost includes the cost of acquisition, development, borrowing costs and holding costs until completion of development. Borrowing costs and holding charges incurred after development is completed are expensed.

Gains and losses are recognised in profit or loss at the time of signing an unconditional contract of sale if significant risks and rewards, and effective control over the land, are passed onto the buyer at this point.

Land held for resale is classified as current except where it is held as non-current based on the Council's intentions to release for sale.

CONTRACT ASSETS

A contract asset is the right to consideration in exchange for goods or services the entity has transferred to a customer when that right is conditioned on something other than the passage of time.

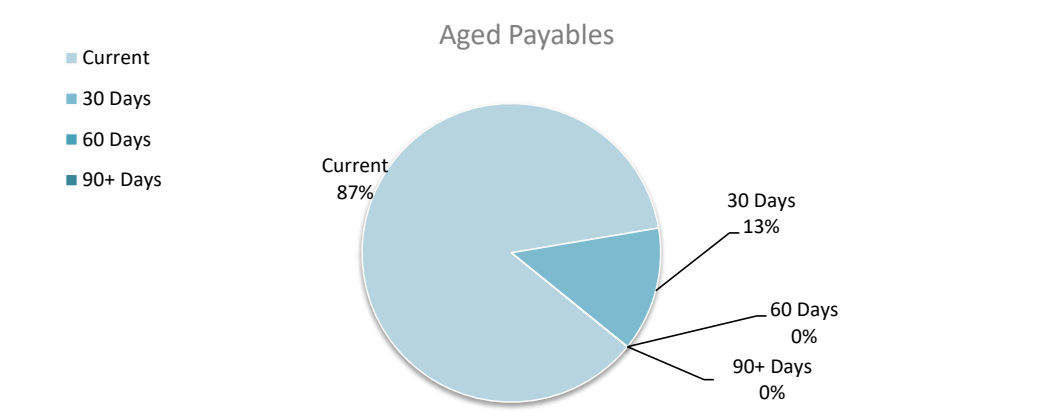
OPERATING ACTIVITIES
NOTE 5
Payables

Payables - General	Current	30 Days	60 Days	90+ Days	Total
	$	$	$	$	$
Payables (Sundry Creditors) - General	92,602	14,432	0	0	107,034
Percentage	86.5%	13.5%	0%	0%	
Balance per Trial Balance					
Sundry creditors - General					107,034
Other creditors					157,797
Accrued salaries and wages					0
ATO liabilities					48,896
Financial liabilities (Developer Contributions)					140,508
Other accruals/payables					0
Total Payables General Outstanding					**454,235**

Amounts shown above include GST (where applicable)

KEY INFORMATION

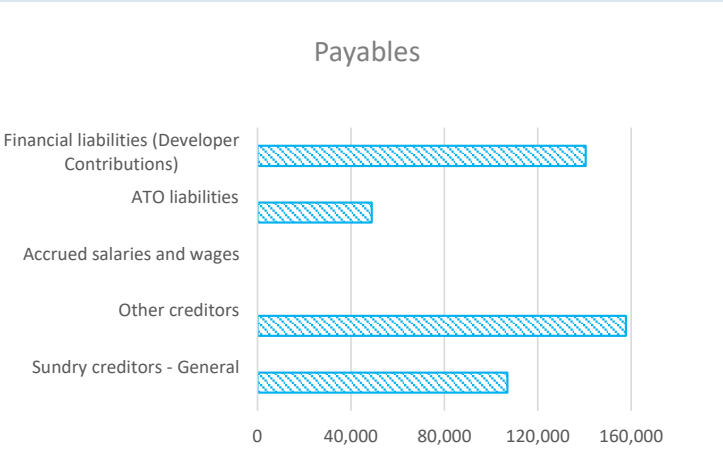
Trade and other payables represent liabilities for goods and services provided to the Shire that are unpaid and arise when the Shire becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured, are recognised as a current liability and are normally paid within 30 days of recognition.

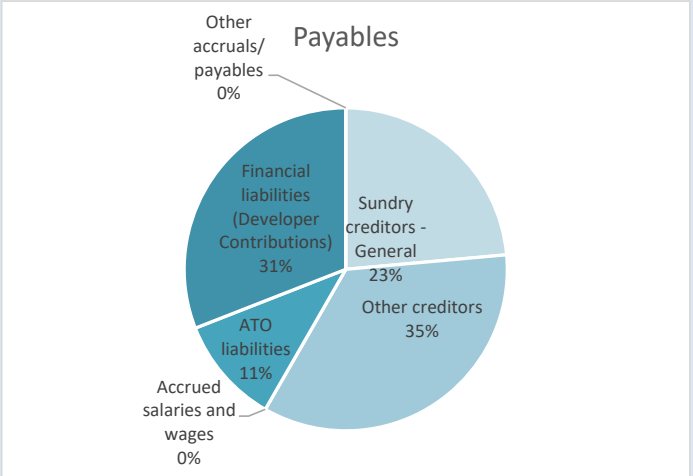


Creditors Due
$454,235

Over 30 Days
14%

Over 90 Days
0%



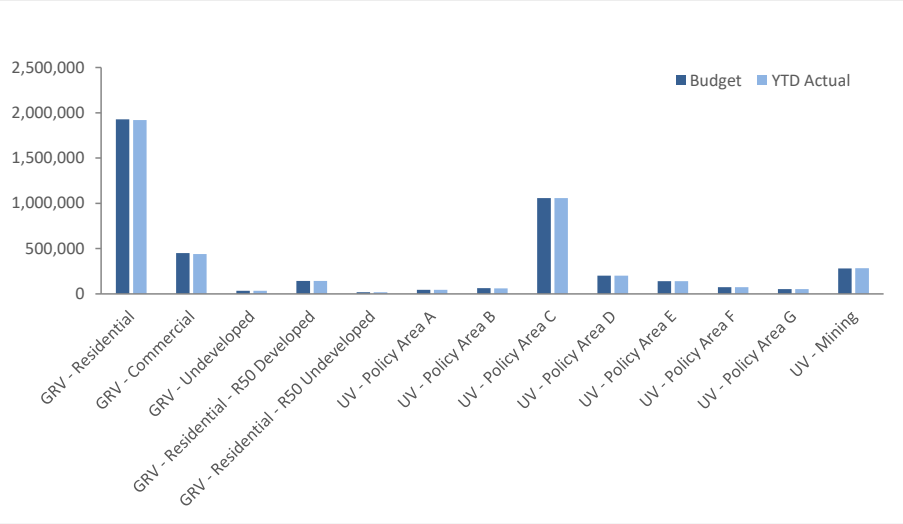


OPERATING ACTIVITIES
NOTE 6
RATE REVENUE

		Budget					YTD Acutal			
RATE TYPE	Rate in	Number of Properties	Rateable Value	Rate Revenue	Interim Rate	Back Rate	Total Revenue	Rate Revenue	Interim Rates	Back Rates	Total Revenue
	$			$	$	$	$	$	$	$	$
Differential General Rate											
GRV - Residential	0.111808	1,334	17,151,409	1,917,663	5,000	5,000	1,927,663	1,917,662.88	1,561	0	1,919,224
GRV - Commercial	0.111808	121	4,037,910	451,470	0	0	451,470	443,329.86	0	(2,327)	441,003
GRV - Undeveloped	0.111808	20	311,776	34,859	0	0	34,859	34,859.02	0	0	34,859
GRV - Residential - R50 Develope	0.111808	75	1,286,620	143,854	0	0	143,854	143,854.51	0	0	143,855
GRV - Residential - R50 Undevelc	0.111808	12	166,050	18,566	0	0	18,566	18,565.74	0	0	18,566
UV - Policy Area A	0.014193	5	3,160,000	44,850	0	0	44,850	44,849.88	0	0	44,850
UV - Policy Area B	0.014193	13	4,451,902	63,186	0	0	63,186	63,185.84	(412)	(866)	61,908
UV - Policy Area C	0.014193	132	74,477,529	1,057,060	0	0	1,057,060	1,057,002.80	1,105	0	1,058,108
UV - Policy Area D	0.014193	109	14,172,852	201,155	0	0	201,155	201,155.30	0	0	201,155
UV - Policy Area E	0.014193	40	9,917,800	140,763	0	0	140,763	140,763.34	0	0	140,763
UV - Policy Area F	0.014193	24	5,209,350	73,936	0	0	73,936	73,936.31	0	0	73,936
UV - Policy Area G	0.014193	27	3,704,751	52,582	0	0	52,582	52,581.53	0	0	52,582
UV - Mining	0.189882	28	1,480,782	281,174	0	0	281,174	282,811.59	(820)	379	282,371
UV - Mining Developed	0.189882	9	887,524	168,525	0	0	168,525	168,524.83	0	0	168,525
Sub-Totals		**1,949**	**140,416,255**	**4,649,643**	**5,000**	**5,000**	**4,659,643**	**4,643,083**	**1,435**	**(2,813)**	**4,641,705**
	Minimum										
Minimum Payment	**$**										
GRV - Residential	1,021	98	760,027	100,058	0	0	100,058	100,058	0	0	100,058
GRV - Commercial	1,021	65	295,666	66,365	0	0	66,365	66,365	0	0	66,365
GRV - Undeveloped	1,021	457	1,310,417	466,597	0	0	466,597	466,597	0	0	466,597
GRV - Residential - R50 Develope	1,021	7	58,658	7,147	0	0	7,147	7,147	0	0	7,147
GRV - Residential - R50 Undevelc	1,021	14	73,830	14,294	0	0	14,294	14,294	0	0	14,294
UV - Policy Area A	1,021	4	185,500	4,084	0	0	4,084	4,084	0	0	4,084
UV - Policy Area B	1,021	2	146,998	4,084	0	0	4,084	2,042	0	0	2,042
UV - Policy Area C	1,021	27	1,274,271	27,567	0	0	27,567	27,567	0	0	27,567
UV - Policy Area D	1,021	11	595,198	11,231	0	0	11,231	11,231	0	0	11,231
UV - Policy Area E	1,021	0	0	0	0	0	0	0	0	0	0
UV - Policy Area F	1,021	11	598,500	11,231	0	0	11,231	11,231	0	0	11,231
UV - Policy Area G	1,021	1	66,499	1,021	0	0	1,021	0	0	0	0
UV - Mining	1,021	18	46,545	18,378	0	0	18,378	18,378	0	0	18,378
UV - Mining Developed	1,021	0	0	0	0	0	0	0	0	0	0
Sub-Totals		**715**	**5,412,109**	**732,057**	**0**	**0**	**732,057**	**728,994**	**0**	**0**	**728,994**
		2,664	**145,828,364**	**5,381,700**	**5,000**	**5,000**	**5,391,700**	**5,372,077**	**1,435**	**(2,813)**	**5,370,699**
Discounts							0				0
Concession							0				0
Amount from General Rates							**5,391,700**				**5,370,699**
Ex-Gratia Rates							2,800				3,076
Movement in Excess Rates							0				0
Specified Area Rates							0				0
Total Rates							**5,394,500**				**5,373,775**

OPERATING ACTIVITIES
NOTE 6
RATE REVENUE

KEY INFORMATION
Rates, grants, donations and other contributions are recognised as revenues when the local government obtains control over the assets comprising the contributions. Control over assets acquired from rates is obtained at the commencement of the rating period or, where earlier, upon receipt of the rates.

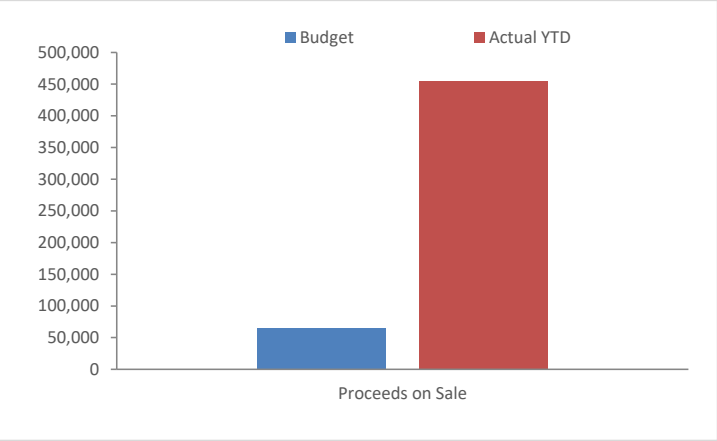


General Rates		
Budget	YTD Actual	%
$5.39 M	$5.37 M	100%

OPERATING ACTIVITIES
NOTE 7
DISPOSAL OF ASSETS

Asset Number	Asset Description	Amended Budget Net Book Value	Amended Budget Proceeds	Amended Budget Profit	Amended Budget (Loss)	YTD Actual Net Book Value	YTD Actual Proceeds	YTD Actual Profit	YTD Actual (Loss)
		$	$	$	$	$	$	$	$
	Land and Buildings								
2646	Land - 4 Kennedy Heights	0	0			160,000	160,000		
2598	Duplex 4A Kennedy Heights	0	0			215,310	125,000		(90,310)
2599	Duplex 4B Kennedy Heights	0	0			220,657	125,000		(95,657)
	Plant and Equipment								
634	John Deere Tractor Mower Ir420	15,796	5,000		(10,796)	0	0		
970	2010 Fuso Canter 2 Way Tip Body Ir197	25,392	25,000		(392)				
2758	Skid Steer Loader 226D	33,824	35,000	1,176.08		34,774	31,737		(3,036)
810	10 Cubic Metre Tipping Body	0	0			700	13,224	12,524	
		0	0						
		0	0						
		75,013	**65,000**	**1,176**	**(11,189)**	**631,440**	**454,961**	**12,524**	**(189,003)**

KEY INFORMATION



Proceeds on Sale		
Budget	**YTD Actual**	**%**
$65,000	**$454,961**	**700%**

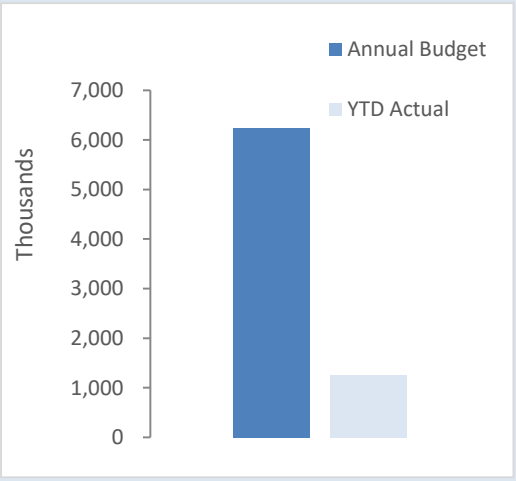
INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Capital Acquisitions	Adopted Annual Budget	YTD Budget	Amended Annual Budget	YTD Actual Total	YTD Budget Variance
	$	$	$	$	$
Land Held for Resale	0	0	0	**0**	0
Land and Buildings	2,329,327	1,565,358	2,327,327	**345,294**	(1,220,064)
Plant and Equipment	66,000	720,000	720,000	**31,075**	(688,925)
Furniture and Equipment	26,100	51,700	51,700	**35,861**	(15,839)
Infrastructure Assets - Roads	1,791,127	2,222,460	2,533,127	**532,660**	(1,689,800)
Infrastructure Assets - Drainage	0	0	0	**0**	0
Infrastructure Assets - Footpaths	0	0	0	**0**	0
Infrastructure Assets - Public Facilities	0	0	0	**0**	0
Infrastructure Assets - Other	495,000	558,960	608,000	**308,594**	(250,366)
Capital Expenditure Totals	4,707,554	5,118,478	6,240,154	**1,253,483**	(3,864,995)
Capital acquisitions funded by:					
	$	$	$	$	$
Capital Grants and Contributions	3,628,255	2,766,449	4,102,922	**764,512**	(2,001,937)
Borrowings	1,095,010	1,625,010	1,625,010	**0**	(1,625,010)
Other (Disposals & C/Fwd)	40,000	65,000	65,000	**454,961**	389,961
Council contribution - Cash Backed Reserves					
Various Reserves		60,000	118,135	**0**	(60,000)
Council contribution - operations		**602,019**	**329,087**	**34,011**	(568,009)
Capital Funding Total		**5,118,478**	**6,240,154**	**1,253,483**	**(3,864,995)**

SIGNIFICANT ACCOUNTING POLICIES

All assets are initially recognised at cost. Cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition. For assets acquired at no cost or for nominal consideration, cost is determined as fair value at the date of acquisition. The cost of non-current assets constructed by the local government includes the cost of all materials used in the construction, direct labour on the project and an appropriate proportion of variable and fixed overhead. Certain asset classes may be revalued on a regular basis such that the carrying values are not materially different from fair value. Assets carried at fair value are to be revalued with sufficient regularity to ensure the carrying amount does not differ materially from that determined using fair value at reporting date.

KEY INFORMATION



Acquisitions	Annual Budget	YTD Actual	% Spent
	$6.24 M	$1.25 M	20%

Capital Grant	Annual Budget	YTD Actual	% Received
	$4.1 M	$.76 M	19%

INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Capital Expenditure Total
Level of Completion Indicators
0%
20%
40%
60%
80%
100%
Over 100%

Percentage YTD Actual to Annual Budget
Expenditure over budget highlighted in red.

Level of completion indicator, please see table at the top of this note for further detail.

% of Completion	Assets	Account Number	Balance Sheet Category	Job Number	Adopted Annual Budget	Amended Annual Budget	YTD Budget	Total YTD	Variance (Under)/Over
					$	$	$	$	$
	Buildings								
	Other Health								
	Total - Other Health				**0**	**0**	**0**	**0**	**0**
	Housing								
1.00	AGED APPROPRIATE HOUSING - STAGE 1	2574	1311	1626	0	0	0	(25,854)	(25,854)
0.10	AGED APPROPRIATE HOUSING - STAGE 2	2574	1311	CJ18	(2,259,327)	(2,259,327)	(1,505,608)	(234,580)	1,271,028
1.00	AGED APPROPRIATE HOUSING - LIVABLE HOUSING AUSTRALIA PLAT	2574	1311	CJ31	0	0	0	(44,363)	(44,363)
	Total - Housing				**(2,259,327)**	**(2,259,327)**	**(1,505,608)**	**(304,798)**	**1,200,810**
	Community Amenities								
2.02	CONTAINER DEPOSIT SCHEME	1944	1311	CJ70	(20,000)	(20,000)	(20,000)	(40,496)	(20,496)
	Total - Community Amenities				**(20,000)**	**(20,000)**	**(20,000)**	**(40,496)**	**(20,496)**
	Recreation And Culture								
0.00	IRWIN REC CENTRE BUILDING - RENEWAL	2834	1311	CJ05	(25,000)	(23,000)	(23,000)	0	23,000
0.00	REC JETTY	2834	1311	CJ908	(25,000)	(25,000)	(16,750)	0	16,750
	Total - Recreation And Culture				**(50,000)**	**(48,000)**	**(39,750)**	**0**	**39,750**
0.15	**Total - Buildings**				**(2,329,327)**	**(2,327,327)**	**(1,565,358)**	**(345,294)**	**1,220,064**
	Plant & Equipment								
	Recreation & Culture								
0.00	PARKS & GARDENS - TRACTOR MOWER - REG IR420	2844	1312	V420	(35,000)	(35,000)	(35,000)	0	35,000
0.00	NEW TRUCK - PARKS & GARDENS	2844	1312	V852	0	(85,000)	(85,000)	0	85,000
	Total - Recreation & Culture				**(35,000)**	**(120,000)**	**(120,000)**	**0**	**120,000**
	Transport								
0.99	SIDE TIPPER	3534	1312	CJ52	(5,000)	(5,000)	(5,000)	(4,930)	70
0.00	PRIME-MOVER	3534	1312	V850	0	(309,000)	(309,000)	0	309,000
0.00	SIDE TIPPING SEMI TRAILER	3534	1312	V851	0	(260,000)	(260,000)	0	
0.95	NISSAN UD PRME MOVER 540IR	3534	1312	V526	(14,000)	(14,000)	(14,000)	(13,288)	712
1.07	BULK FUEL STORAGE TANK & SYSTEM	3584	1312	CJ44	(12,000)	(12,000)	(12,000)	(12,857)	(857)
	Total - Transport				**(31,000)**	**(600,000)**	**(600,000)**	**(31,075)**	**308,925**
0.04	**Total - Plant & Equipment**				**(66,000)**	**(720,000)**	**(720,000)**	**(31,075)**	**428,925**
	Furniture & Equipment								
	Recreation & Culture								
0.60	BASKETBALL SCOREBOARD	2824	1314	CJ81	(15,000)	(15,000)	(15,000)	(9,065)	5,935
0.57	GYMNASTICS EQUIPMENT - MATS, BOARDS, BEAM ETC	2824	1314	CJ35	0	(7,000)	(7,000)	(4,015)	2,985
	Total - Recreation & Culture				**(15,000)**	**(22,000)**	**(22,000)**	**(13,080)**	**8,920**
	Other Property & Services								
0.35	IT - HARDWARE	0264	1314	CJ33	(11,100)	(29,700)	(29,700)	(10,281)	19,419
1.00	IT - WEBSITE & INTRANET	0264	1314	CJ34	0	0	0	(12,500)	(12,500)
	Total - Other Property & Services				**(11,100)**	**(29,700)**	**(29,700)**	**(22,781)**	**6,919**
0.69	**Total - Furniture & Equipment**				**(26,100)**	**(51,700)**	**(51,700)**	**(35,861)**	**15,839**
	Roads								
	Housing								
0.00	THE VILLAGE - FOOTPATHS, HANDRAILS, KERBS	2586	1317	CJ45	(44,700)	(44,700)	(33,525)	0	33,525
	Total - Housing				**(44,700)**	**(44,700)**	**(33,525)**	**0**	**33,525**
	Transport								
0.02	R2R - FANE ROAD	6644	1317	CJ75	(64,000)	(64,000)	(53,752)	(1,017)	52,735
0.01	R2R - PIGGERY LANE	6644	1317	CJ76	(129,540)	(129,540)	(108,805)	(818)	107,987
0.00	R2R - BELAURA PLACE	6644	1317	CJ77	(21,259)	(21,259)	(17,850)	0	17,850
0.00	TABLETOP ROAD - SEAL - RRG	6644	1317	CJ78	0	(262,000)	(262,000)	0	262,000
0.00	ALLANOOKA SPRINGS ROAD - SEAL - RRG	6644	1317	CJ79	0	(450,000)	(450,000)	0	450,000
0.19	MORETON TERRACE	6664	1317	CJ22	(450,000)	(450,000)	(378,000)	(86,198)	291,802
0.73	CASUARINAS ROAD - RRG	6674	1317	CJ72	(357,000)	(357,000)	(299,872)	(260,311)	39,561
0.25	TABLETOP ROAD - RRG	6674	1317	CJ73	(422,500)	(422,500)	(354,892)	(106,014)	248,878
0.20	BURMA ROAD - RRG	6674	1317	CJ74	(251,500)	(251,500)	(211,240)	(51,450)	159,790
0.00	MILO ROAD DESIGN	6674	1317	CJ23	(38,528)	(38,528)	(32,360)	0	32,360
0.70	BLENHEIM ROAD	6694	1317	CJ24	(7,100)	(7,100)	(5,964)	(4,950)	1,014
0.48	ALLANOOKA RD SHOULDERS - SAFETY CRITICAL WORKS	6754	1317	SC01	0	(30,000)	(10,000)	(14,271)	(4,271)
1.00	DRAINAGE RENEWAL - GENERAL	6754	1317	DR01	0	0	0	(6,480)	(6,480)
0.23	GENERAL FOOTPATHS	6784	1317	CJ26	(5,000)	(5,000)	(4,200)	(1,150)	3,050
	Total - Transport				**(1,746,427)**	**(2,488,427)**	**(2,188,935)**	**(532,660)**	**1,656,275**
0.21	**Total - Roads**				**(1,791,127)**	**(2,533,127)**	**(2,222,460)**	**(532,660)**	**1,689,800**
	Infrastructure - Other								

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 28 FEBRUARY 2021

INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Capital Expenditure Total
Level of Completion Indicators
0%
20%
40%
60%
80%
100%
Over 100%

Percentage YTD Actual to Annual Budget
Expenditure over budget highlighted in red.

Level of completion indicator, please see table at the top of this note for further detail.

% of Completion	Assets	Account Number	Balance Sheet Category	Job Number	Adopted Annual Budget	Amended Annual Budget	YTD Budget	Total YTD	Variance (Under)/Over
					$	$	$	$	$
	Community Amenities								
0.05	CEMETERY REVITILISATION	2644	1318	CJ03	(130,000)	(130,000)	(130,000)	(5,929)	124,071
	Total - Community Amenities				**(130,000)**	**(130,000)**	**(130,000)**	**(5,929)**	**124,071**
	Recreation And Culture								
0.66	CLIFF HEAD - PAID CAMPING IMPLEMENTATION	8054	1318	CJ71	0	(15,000)	(15,000)	(9,859)	5,141
0.00	GRANNY'S BEACH - WALL	8054	1318	CJ86	0	(55,000)	(55,000)	0	55,000
0.00	SHADE SAILS - PARKS	2864	1318	1429	0	(9,000)	(9,000)	0	9,000
0.00	REHABILITAION FORMER FISHERMANS HALL AREA	2864	1318	CJ80	(55,000)	(55,000)	(27,500)	0	27,500
1.01	REPLACEMENT BBQ - FORESHORE	2864	1318	CJ84	0	(8,000)	(8,000)	(8,106)	(106)
1.11	SKATE PARK - PUMP TRACK	2864	1318	CJ37	(220,000)	(238,000)	(238,000)	(263,479)	(25,479)
0.00	TREE PLANTING	2864	1318	CJ49	(21,000)	(21,000)	(10,500)	0	10,500
0.00	CRICKET PITCH UPGRADE	2904	1318	CJ85	0	(8,000)	(8,000)	0	8,000
	Total - Recreation And Culture				**(296,000)**	**(409,000)**	**(371,000)**	**(281,444)**	**89,556**
	Transport								
0.31	RURAL SIGNS	6794	1318	CJ10	(69,000)	(69,000)	(57,960)	(21,221)	36,739
	Total - Transport				**(69,000)**	**(69,000)**	**(57,960)**	**(21,221)**	**36,739**
0.51	**Total - Infrastructure - Other**				**(495,000)**	**(608,000)**	**(558,960)**	**(308,594)**	**250,366**
0.20	**Grand Total**				**(4,707,554)**	**(6,240,154)**	**(5,118,478)**	**(1,253,483)**	**3,604,995**

FINANCING ACTIVITIES
NOTE 9
LOAN DEBENTURE BORROWINGS AND FINANCING

(a) Information on Loan Debenture Borrowings

		New Loans			Principal Repayments			Principal Outstanding			Interest & Guarantee Fee Repayments		
Particulars/Purpose	01 Jul 2020	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget
		$	$	$	$	$	$	$	$	$	$	$	$
Other Health													
Loan 99 - Medical Centre	1,450,000	0	0	0	29,326	58,961	58,961	1,420,674	1,391,039	1,391,039	15,560	32,786	32,786
Other Housing													
Loan 100- SIHI Completion	0	0	700,000	700,000	0	31,621	31,621	0	668,379	668,379	0	7,385	7,385
Recreation and Culture													
Loan 93 - Recreation Centre	2,105,156	0	0	0	72,502	109,992	109,992	2,032,654	1,995,164	1,995,164	91,082	152,737	152,737
Loan 96 - Tennis Courts Resurfacing	79,897	0	0	0	19,623	39,478	39,478	60,274	40,419	40,419	1,173	2,311	2,311
Transport													
Loan 98 - Plant	791,096	0	0	0	62,256	125,155	125,155	728,840	665,940	665,940	6,798	21,631	21,631
Loan 101 - Plant	0	0	530,000	0	0	0	0	0	530,000	0	0	0	0
	4,426,148	0	1,230,000	700,000	183,706	365,207	365,207	4,242,442	5,290,942	4,760,942	114,613	216,849	216,849
Self supporting loans													
Recreation and Culture													
Loan 97 - Golf Club	20,638	0	0	0	4,023	8,098	8,098	16,615	12,541	12,541	157	629	629
Loan 101 - Golf Club - Not proceeding	0	0	40,000	40,000	0	1,807	1,807	0	38,193	38,193	0	422	422
Loan 102 - Denison Bowling Club	0	0	355,010	355,010	0	16,037	16,037	0	338,973	338,973	0	3,745	3,745
	20,638	0	395,010	395,010	4,023	25,941	25,941	16,615	389,707	389,707	157	4,796	4,796
Total	4,446,787	0	1,625,010	1,095,010	187,729	391,148	391,148	4,259,058	5,680,649	5,150,649	114,770	221,646	221,646
Current loan borrowings	341,683							153,954					
Non-current loan borrowings	4,105,103							4,105,103					
	4,446,787							4,259,058					

All debenture repayments were financed by general purpose revenue except the Self Supporting Loan.

(b) Information on Financing

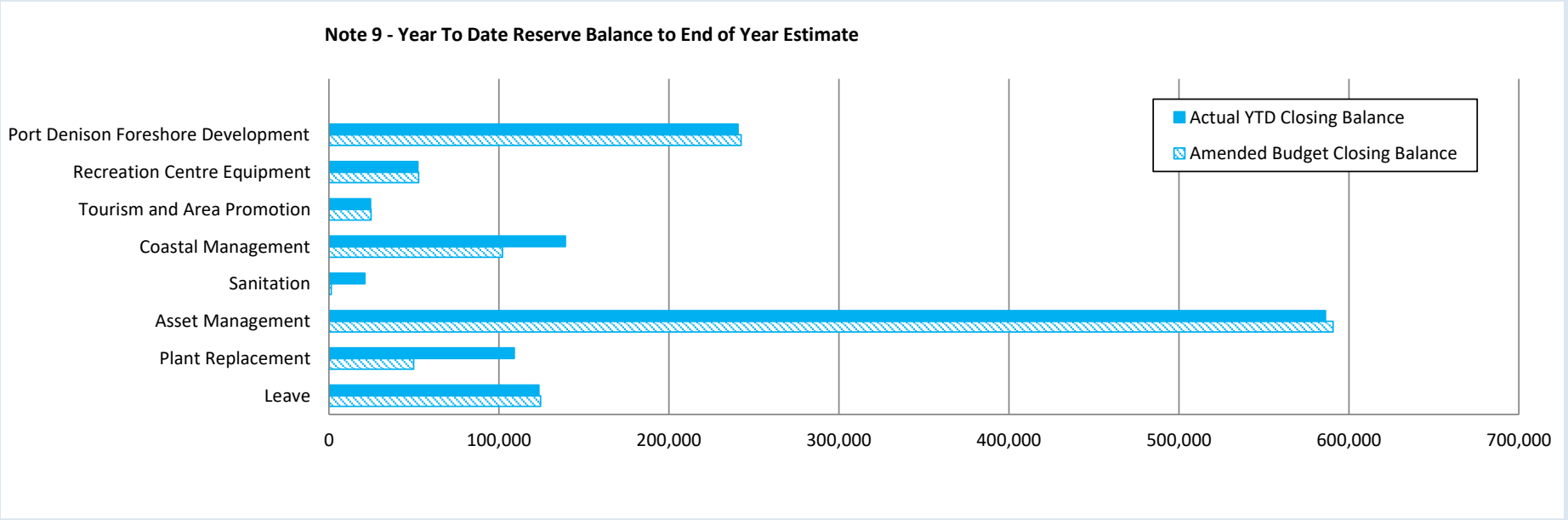
		New Financing			Lease Financing Principal Repayments			Lease Financing Principal Outstanding			Lease Financing Interest Repayments		
Particulars/Purpose	01 Jul 2020	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget
		$	$	$	$	$	$	$	$	$	$	$	$
Recreation and Culture													
Solar Panels (67.941%)	39,333	0	0	0	8,986	13,540	13,540	30,347	25,793	25,793	637	895	895
Other Property and Services													
Solar Panels (32.059%)	18,560	0	0	0	4,240	6,389	6,389	14,320	12,171	12,171	301	422	422
	57,893	0	0	0	13,227	19,929	19,929	44,666	37,964	37,964	938	1,317	1,317
Total	57,893	0	0	0	13,227	19,929	19,929	44,666	37,964	37,964	938	1,317	1,317
Current financing borrowings	19,930							6,703					
Non-current financing borrowings	37,963							37,963					
	57,893							44,666					

OPERATING ACTIVITIES
NOTE 10
CASH BACKED RESEVES

Cash Backed Reserve

Reserve Name	Opening Balance	Amended Budget Interest Earned	Actual Interest Earned	Amended Budget Transfers In (+)	Actual Transfers In (+)	Amended Budget Transfers Out (-)	Actual Transfers Out (-)	Amended Budget Closing Balance	Actual YTD Closing Balance
	$	$	$	$	$	$	$	$	$
Leave	123,184	1,334	390	0	0	0	0	124,518	123,574
Plant Replacement	108,736	1,178	344	0	0	(60,000)	0	49,914	109,081
Asset Management	584,401	6,329	1,851	0	0	0	0	590,730	586,252
Sanitation	21,161	229	67	0	0	(20,000)	0	1,390	21,228
Coastal Management	138,669	1,502	439	0	0	(38,135)	0	102,036	139,108
Tourism and Area Promotion	24,469	265	78	0	0	0	0	24,734	24,546
Recreation Centre Equipment	52,183	565	165	0	0	0	0	52,748	52,348
Port Denison Foreshore Development	239,960	2,598	760	0	0	0	0	242,558	240,720
	1,292,763	**14,000**	**4,095**	**0**	**0**	**(118,135)**	**0**	**1,188,628**	**1,296,858**

KEY INFORMATION



OPERATING ACTIVITIES
NOTE 11
OTHER CURRENT LIABILITIES

Other Current Liabilities	Note	Opening Balance 1 Jul 2020	Liability Increase	Liability Reduction	Closing Balance 28 Feb 2021
		$	$	$	$
Contract Liabilities					
Unspent grants, contributions and reimbursements					
- operating	**12**	85,372	35,997	(33,548)	87,821
- non-operating	**13**	1,191,686	1,631,463	(764,512)	2,058,638
Total unspent grants, contributions and reimbursements		1,277,058	1,667,460	(798,059)	**2,146,459**
Provisions					
Annual leave		211,873	0	0	211,873
Long service leave		204,573	0	0	204,573
Total Provisions		416,446	0	0	**416,446**
Total Other Current Liabilities					**2,562,905**

Amounts shown above include GST (where applicable)

KEY INFORMATION

PROVISIONS

Provisions are recognised when the Shire has a present legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

Provisions are measured using the best estimate of the amounts required to settle the obligation at the end of the reporting period.

EMPLOYEE BENEFITS

Short-term employee benefits

Provision is made for the Shire's obligations for short-term employee benefits. Short-term employee benefits are benefits (other than termination benefits) that are expected to be settled wholly before 12 months after the end of the annual reporting period in which the employees render the related service, including wages, salaries and sick leave. Short-term employee benefits are measured at the (undiscounted) amounts expected to be paid when the obligation is settled.

The Shire's obligations for short-term employee benefits such as wages, salaries and sick leave are recognised as a part of current trade and other payables in the calculation of net current assets.

Other long-term employee benefits

The Shire's obligations for employees' annual leave and long service leave entitlements are recognised as provisions in the statement of financial position.

Long-term employee benefits are measured at the present value of the expected future payments to be made to employees. Expected future payments incorporate anticipated future wage and salary levels, durations of service and employee departures and are discounted at rates determined by reference to market yields at the end of the reporting period on government bonds that have maturity dates that approximate the terms of the obligations. Any remeasurements for changes in assumptions of obligations for other long-term employee benefits are recognised in profit or loss in the periods in which the changes occur. The Shire's obligations for long-term employee benefits are presented as non-current provisions in its statement of financial position, except where the Shire does not have an unconditional right to defer settlement for at least 12 months after the end of the reporting period, in which case the obligations are presented as current provisions.

NOTE 12
OPERATING GRANTS AND CONTRIBUTIONS

Provider	Unspent Operating Grant, Subsidies and Contributions Liability					Operating Grants, Subsidies and Contributions Revenue			
	Liability 1 Jul 2020	Increase in Liability	Liability Reduction (As revenue)	Liability 28 Feb 2021	Current Liability 28 Feb 2021	Adopted Budget Revenue	Amended Annual Budget	Amended YTD Budget	YTD Actual Revenue
	$	$	$	$	$	$	$	$	$
Operating Grants and Subsidies									
General purpose funding									
Grants Commission - Roads (WALGGC)	0	0	0	0	0	155,310	155,310	116,481	114,248
Grants Commission - General (WALGGC)	0	0	0	0	0	103,831	103,831	77,871	73,223
Law, order, public safety								0	
DFES Grant - Operating Bush Fire Brigade	15,583	23,997	(22,991)	16,588	16,588	47,994	47,994	23,996	22,991
DFES Bushfire Risk Management Project	23,923	0	0	23,923	23,923	0	0	0	0
Seniors Week Grant (Council on the Ageing)	0	0	0	0	0	2,000	2,000	2,000	0
Community amenities						0	0	0	0
Local Planning Scheme Review	22,283	0	0	22,283	22,283	0	0	0	0
Springfield Structure Plan Grant	9,392	0	0	9,392	9,392	0	0	0	0
Recreation and culture						0	0	0	0
Dept Land & Development Coastal Nodes	1,500	0	0	1,500	1,500	0	0	0	0
Coastal Management	6,600	12,000	(10,556)	8,044	8,044	0	0	0	10,556
State Library - General Excellence Award Grant	5,000	0	0	5,000	5,000	0	0	0	0
Transport						0	0	0	0
DRFAWA - Grant - storm damage	0	0	0	0	0	0	550,000	180,000	0
Direct Grant (MRWA)	0	0	0	0	0	82,590	82,590	82,590	82,590
	84,281	**35,997**	**(33,548)**	**86,730**	**86,730**	**391,725**	**941,725**	**482,938**	**303,609**
Operating Contributions									
Law, order, public safety									
DFES - Community Emergency Services Manager	0	0	0	0	0	100,000	100,000	50,000	25,157
Community amenities									
Dongara Pop-up Shop - Sustainable Environment Commit	1,091	0	0	1,091	1,091	0	0	0	0
Other property and services									
Employer Incentive Funding	0	0	0	0	0	0	0	0	10,000
	1,091	**0**	**0**	**1,091**	**1,091**	**100,000**	**100,000**	**50,000**	**35,157**
TOTALS	**85,372**	**35,997**	**(33,548)**	**87,821**	**87,821**	**491,725**	**1,041,725**	**532,938**	**338,767**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 28 FEBRUARY 2021

NOTE 13
NON-OPERATING GRANTS AND CONTRIBUTIONS

	Unspent Non Operating Grants, Subsidies and Contributions Liability					Non Operating Grants, Subsidies and Contributions Revenue			
Provider	Liability 1 Jul 2020	Increase in Liability	Liability Reduction (As revenue)	Liability 28 Feb 2021	Current Liability 28 Feb 2021	Adopted Budget Revenue	Amended Annual Budget	Amended YTD Budget	YTD Actual Revenue
	$	$	$	$	$	$	$	$	$
Non-Operating Grants and Subsidies									
Housing									
SIHI Ageing in Place (WA Country Health Service)	1,078,741	0	(228,651)	850,090	850,090	1,559,327	1,559,327	779,663	228,651
Recreation and culture									
Skate Park - Pump Track (Lotterywest)	0	250,000	(250,000)	0	0	250,000	250,000	250,000	250,000
Coastal Reserve Works	15,463	0	0	15,463	15,463	0	0	0	0
Transport									
RTR Grant - Casuarinas Rd (CJ72)	0	104,252	0	104,252	104,252	119,000	119,000	89,250	0
RTR Grant - Tabletop Rd (CJ73)	0	16,155	0	16,155	16,155	140,833	140,833	105,624	0
RTR Grant - Burma Rd (CJ74)	0	40,011	0	40,011	40,011	83,833	83,833	62,874	0
RTR Grant - Fane Rd (CJ75)	0	16,000	(1,017)	14,983	14,983	64,000	64,000	48,000	1,017
RTR Grant - Piggery Lane (CJ76)	0	32,385	(818)	31,567	31,567	129,540	129,540	97,155	818
RTR Grant - Bileaura Rd (CJ77)	0	5,314	0	5,314	5,314	21,259	21,259	15,942	0
RRG Grant - Moreton Terrace (CJ22)	73,204	0	(49,065)	24,139	24,139	300,000	300,000	225,000	49,065
RRG Grant - Milo Road Design (CJ23)	2,595	0	0	2,595	2,595	22,195	22,195	16,644	0
RRG Grant - Casuarinas RD (CJ72)	0	199,920	(169,315)	30,605	30,605	238,000	238,000	178,500	169,315
RRG Grant - Tabletop Rd (CJ73)	0	112,667	(10,465)	102,202	102,202	281,667	281,667	211,248	10,465
RRG Grant - Burma RD (CJ74)	0	67,067	(34,300)	32,767	32,767	167,667	167,667	125,748	34,300
RRG Grant - Tabletop Rd Seal (CJ78)	0	76,854	0	76,854	76,854	0	174,667	69,867	0
RRG Grant -Allanooka Spring Rd Seal (CJ79)	0	130,826	0	130,826	130,826	0	300,000	240,000	0
Roadwise Funds	6,776	0	0	6,776	6,776	0	0	0	0
Bridge Grant	14,907	0	0	14,907	14,907	0	0	0	0
LRCIP Grant - Cemetery Revaitalisation CJ03	0	65,000	(5,929)	59,071	59,071	130,000	130,000	130,000	5,929
LRCIP Grant - Rehabilitate Former Fisherman's Hall CJ80	0	25,967	0	25,967	25,967	51,934	51,934	51,934	0
LRCIP Grant - Rural Signage CJ10	0	34,500	(14,951)	19,549	19,549	69,000	69,000	69,000	14,951
LRCIP Grant - Surf Beach Stabilisation CJ87	0	0	0	0	0	0	0	0	0
DCPE Grant - Moreton Terrace CJ88	0	454,545	0	454,545	454,545	0	0	0	0
	1,191,686	**1,631,463**	**(764,512)**	**2,058,638**	**2,058,638**	**3,628,255**	**4,102,922**	**2,766,449**	**764,512**
Total Non-operating grants, subsidies and contributions	**1,191,686**	**1,631,463**	**(764,512)**	**2,058,638**	**2,058,638**	**3,628,255**	**4,102,922**	**2,766,449**	**764,512**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY **NOTE 14**
FOR THE PERIOD ENDED 28 FEBRUARY 2021 **BONDS & DEPOSITS AND TRUST FUNDS**

In previous years, bonds and deposits were held as trust monies. They are still reported in this Note but also included in Restricted Cash - Bonds and Deposits and as a current liability in the books of Council.

Trust funds held at balance date over which the Shire has no control and which are not included in this statement are as follows:

Description	Opening Balance 01 Jul 2020	Amount Received	Amount Paid	Closing Balance 28 Feb 2021
	$	$	$	$
Restricted Cash - Bonds and Deposits				
Nomination Deposits	0.00	0.00	0.00	**0.00**
DDHS Rock Esteidford Funds	0.00	0.00	0.00	**0.00**
Aged Persons Units - Bonds	18,689.76	621.50	0.00	**19,311.26**
Youth Advisory Council	17,014.33	0.00	0.00	**17,014.33**
Kerbing Deposits	23,900.00	9,000.00	(6,000.00)	**26,900.00**
Dongara Childrens Centre	0.00	0.00	0.00	**0.00**
Old Mill Restoration	0.00	0.00	0.00	**0.00**
Water Main Contributions	0.00	0.00	0.00	**0.00**
Performance Bonds	75,832.52	0.00	0.00	**75,832.52**
Key Bonds & Various	2,070.00	0.00	0.00	**2,070.00**
Safer WA Committee	340.52	0.00	0.00	**340.52**
Other Grant Funds	6,643.50	0.00	0.00	**6,643.50**
Various Bonds	2,654.05	1,100.00	(1,100.00)	**2,654.05**
Basketball Club Funds	0.00	0.00	0.00	**0.00**
Shire Of Irwin - LEMC	4,887.30	0.00	0.00	**4,887.30**
BROC Funds	0.00	0.00	0.00	**0.00**
Dongara Community Festival	0.00	0.00	0.00	**0.00**
Toddler Time - Rec Centre	702.97	0.00	0.00	**702.97**
Contributions To Roads_P.O.S.	45,912.11	0.00	0.00	**45,912.11**
Transport	0.00	0.00	0.00	**0.00**
Dongara Public Cemetery	0.00	0.00	0.00	**0.00**
Non Shire - Internal Activity	40.00	0.00	0.00	**40.00**
Interest Earned On Trust Items	0.00	0.00	0.00	**0.00**
Sub-Total	198,687.06	10,721.50	(7,100.00)	**202,308.56**
Trust Funds				
Nil				
Sub-Total	0.00	0.00	0.00	**0.00**
	198,687.06	**10,721.50**	**(7,100.00)**	**202,308.56**

KEY INFORMATION

NOTE 15
EXPLANATION OF SIGNIFICANT VARIANCES

The material variance thresholds are adopted annually by Council as an indicator of whether the actual expenditure or revenue varies from the year to date budget materially.
The material variance adopted by Council for the 2020/21 year is $10,000 and 10%.

	Var. $	Var. %	Var. ▲▼	Significant Var. S	Timing/ Permanent	Explanation of Variance
	$	%				
Law, Order and Public Safety	(30,267)	(32%)	▼	S	Timing	Op Grant recived but shown as contract liability until expended
Health	12,862	27%	▲	S	Timing	Timing of lease payment later than budgeted
Community Amenities	121,072	15%	▲	S	Permanent	Commercial collection higher. Income from CDS higher than budgeted
Recreation and Culture	(50,601)	(26%)	▼	S	Timing	Income running slightly behind budget
Transport	(168,188)	(64%)	▼	S	Permanent	Disposal of tip body - not budgted for
Economic Services	114,434	128%	▲	S	Permanent	Leases on caravan parks higher than budgeted
Other Property and Services	37,376	90%	▲	S	Timing	Workers Compensation received sooner than budgeted.
Expenditure from operating activities						
Governance	89,140	23%	▲	S	Timing	Audit fees budgeted for Sept - not yet paid
Health	(27,775)	(12%)	▼	S	Timing	Medical centre IT costs running higher than budgeted
Housing	(202,443)	(51%)	▼	S	Permanent	Loss on sale of Kennedy Heights
Community Amenities	87,471	10%	▲	S	Timing	Tiing of Cleanaway invoices
Other Property and Services	41,105	16%	▲	S	Timing	PWO and plant recovery rates to be checked
Investing Activities						
Non-operating Grants, Subsidies and Contributions	(2,001,937)	(72%)	▼	S	Timing	Road grants received but cannot be recognised until road construction jobs completed
Proceeds from Disposal of Assets	389,961	600%	▲	S	Permanent	Tip body disposed off via Pickles - not budgeted. Sale of 4A & 4B Kennedy Heights
Land and Buildings	1,220,064	78%	▲	S	Timing	Timing of SIHI construction works - budget spread monthly - works waiting on new tender.
Plant and Equipment	688,925	96%	▲	S	Timing	Timing of purchases
Furniture and Equipment	15,839	31%	▲	S	Timing	Timing of purchases
Infrastructure Assets - Roads	1,689,800	76%	▲	S	Timing	Timing of construction works
Infrastructure Assets - Other	250,366	45%	▲	S	Timing	Timing of constructions works - behind budget
Financing Actvities						
Proceeds from New Debentures	(1,625,010)	(100%)	▼	S	Timing	SIHI loan not yet processed
Repayment of Debentures	50,872	21%	▲	S	Timing	Timing of Loan Payments
Advances to Community Groups	395,010	100%	▲	S	Timing	Loan funds not yet confirmed
Self-Supporting Loan Principal	(17,867)	(82%)	▼	S	Timing	Self Supporting Loans no yet confirmed
Transfer from Reserves	(60,000)	(100%)	▼	S	Timing	Timing of Plant Purchases

Reporting Nature or Type	Var. $	Var. %	Var. ▲▼	Significant Var. S	Timing/ Permanent	Explanation of Variance
0						
Operating Grants, Subsidies and Contributions	(194,171)	(36%)	▼	S	Timing	Timing of CESM recoup and DFES Op-Grant
Fees and Charges	194,993	15%	▲	S	Timing	CDS Income, Caravan Park Leases and Standpipe Water Fees higher than budgeted.
Other Revenue	22,833	17%	▲	S	Timing	Workers Comp Reimbursement sooner than budgeted.
Profit on Disposal of Assets	12,524		▲	S	Permanent	Sale of tipper body
Expenditure from operating activities						
Materials and Contracts	465,836	22%	▲	S	Timing	Running below budget - timing of projects
Interest Expenses	28,609	20%	▲	S	Timing	Accrued interest as at 30 June 2020
Other Expenditure	(15,117)	(15%)	▼	S	Timing	Henry Road Bonds - collection and sending to DTF
Loss on Disposal of Assets	(177,815)	(1589%)	▼	S	Timing	Sale of 4A & 4B Kennedy Heights

NOTE 16
BUDGET AMENDMENTS

GL Code	Job #	Description	Council Resolution	Classification	Non Cash Adjustment	Increase in Available Cash	Decrease in Available Cash	Amended Budget Running Balance
					$	$	$	$
		Budget Adoption		Opening Surplus(Deficit)			(26,099)	(26,099)
		Permanent Changes					(104,381)	(130,480)
		October Review of Capital Works	041020	Capital Projects			(442,933)	(573,413)
		October Review of Operating Inc/Exp	041020	Opearating Expenditure			(293,350)	(866,763)
		Salaries & Wages - Restructure at review	041020	Salaries & Wages			(118,928)	(985,691)
		Increase in Rec Centre Rev. Review	041020	Operating Income		20,000		(965,691)
		Deletion of COVID proviison on rates	041020	Rate Income		962,888		(2,803)
					0	**982,888**	**(985,691)**	

KEY INFORMATION

ATTACHMENT: CC03

Budget Review 2020/21

Attachment 1
Budget Review 2021/21

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

Shire of Irwin

Annual Budget Review 2020/21

March 2021

innovation
accountability
integrity
respect

Document Control

Document No.	Date Originated	Previous Version	
Revision No.	**Date Reviewed**	**Adopted by Council - Date**	**Adopted by Council – Minute Ref**
DRAFT	19 March 2021		

Amendments

Details of amendments	Reviewed/Amended Date	Record No.	Council Minute Ref.
New Format – Annual Budget Review 2020/21	19 March 2021		

SHIRE OF IRWIN

ANNUAL BUDGET REVIEW

Based on the figures for the Period Ended 31 January 2021

LOCAL GOVERNMENT ACT 1995

LOCAL GOVERNMENT (FINANCIAL MANAGEMENT) REGULATIONS 1996

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Forecast Reserves Statement

SHIRE OF IRWIN
STATEMENT OF FINANCIAL ACTIVITY
BUDGET REVIEW 2020/21

	Note	Adopted Annual Budget	Amended Annual Budget (d)	Amended YTD Budget (a)	YTD Actual (b)	Forecast Actual (e)	Var. ▲▼	Significant Var. s
		$	$	$	$	$		
Opening Funding Surplus(Deficit)	1	(168,015)	(412,904)	(412,904)	**(412,904)**	**(412,904)**		
Revenue from operating activities								
Governance		0	0	0	**0**	**0**		
General Purpose Funding - Rates	6	5,394,500	5,394,500	5,387,524	**5,370,699**	**5,388,077**	▼	
General Purpose Funding - Other		316,641	316,641	165,884	**177,805**	**326,517**	▲	
Law, Order and Public Safety		172,994	172,994	94,401	**64,402**	**177,494**	▲	
Health		60,700	60,700	46,531	**55,022**	**86,200**	▲	s
Education and Welfare		8,550	8,550	5,815	**1,144**	**3,550**	▼	
Housing		353,000	353,000	205,912	**202,008**	**371,160**	▲	
Community Amenities		853,855	853,855	790,915	**898,809**	**1,034,100**	▲	s
Recreation and Culture		153,817	273,817	161,906	**127,200**	**268,950**	▼	
Transport		85,766	635,766	173,752	**95,730**	**95,114**	▼	s
Economic Services		131,657	131,657	78,492	**180,845**	**249,575**	▲	s
Other Property and Services		69,500	69,500	35,110	**64,544**	**123,000**	▲	s
		7,600,980	**8,270,980**	**7,146,242**	**7,238,207**	**8,123,737**		
Expenditure from operating activities								
Governance		(558,300)	(583,300)	(356,292)	**(275,274)**	**(609,552)**	▲	
General Purpose Funding		(1,460,715)	(597,827)	(342,874)	**(331,565)**	**(691,260)**	▲	s
Law, Order and Public Safety		(471,125)	(467,858)	(276,433)	**(267,799)**	**(468,280)**	▲	
Health		(339,547)	(339,547)	(196,698)	**(217,893)**	**(497,070)**	▲	s
Education and Welfare		(62,370)	(62,370)	(38,894)	**(36,050)**	**(67,650)**	▲	
Housing		(590,171)	(591,550)	(353,864)	**(563,714)**	**(817,942)**	▲	s
Community Amenities		(1,199,904)	(1,304,592)	(767,764)	**(690,021)**	**(1,391,744)**	▲	
Recreation and Culture		(2,555,055)	(2,576,129)	(1,520,414)	**(1,473,729)**	**(2,736,644)**	▲	
Transport		(3,440,854)	(4,055,354)	(2,135,324)	**(2,259,206)**	**(4,186,635)**	▲	
Economic Services		(383,644)	(388,144)	(222,227)	**(215,319)**	**(445,444)**	▲	s
Other Property and Services		(48,500)	(281,441)	(235,957)	**(187,071)**	**(66,000)**	▼	s
		(11,110,185)	**(11,248,112)**	**(6,446,741)**	**(6,517,641)**	**(11,978,220)**		
Operating activities excluded from budget								
Add back Depreciation		4,358,601	4,358,601	2,542,449	**2,657,220**	**4,348,543**	▼	
Adjust (Profit)/Loss on Asset Disposal	7	9,620	10,013	11,188	**176,479**	**186,871**	▲	s
Movement in Leave Reserve (Added Back)		1,334	600	777	**352**	**352**	▼	
Movement in Deferred Pensioner Rates/ESL		0	0	0	**0**	**0**		
Movement in Employee Benefit Provisions		0	0	0	**0**	**0**		
Rounding Adjustments		0	0	0	**0**	**0**		
Movement Due to Changes in Accounting Standards		0	0	0	**0**	**0**		
Loss on Asset Revaluation		0	0	0	**0**	**0**		
Adjustment in Fixed Assets		0	0	0	**0**	**0**		
Amount attributable to operating activities		**860,350**	**1,392,082**	**3,253,915**	**3,554,617**	**681,283**		
Investing Activities								
Non-operating Grants, Subsidies and Contributions	13	3,628,255	4,102,922	2,506,834	**764,512**	**5,860,315**	▲	s
Proceeds from Disposal of Assets	7	40,000	65,000	65,000	**454,961**	**469,961**	▲	s
Land Held for Resale	8	0	0	0	**0**	**0**		
Land and Buildings	8	(2,329,327)	(2,327,327)	(1,368,907)	**(333,436)**	**(2,172,816)**	▼	
Plant and Equipment	8	(66,000)	(720,000)	(720,000)	**(31,075)**	**(688,500)**	▼	
Furniture and Equipment	8	(26,100)	(51,700)	(51,700)	**(35,861)**	**(44,200)**	▼	
Infrastructure Assets - Roads	8	(1,791,127)	(2,533,127)	(1,649,436)	**(493,703)**	**(3,506,930)**	▲	s
Infrastructure Assets - Drainage	8	0	0	0	**0**	**0**		
Infrastructure Assets - Footpaths	8	0	0	0	**0**	**0**		
Infrastructure Assets - Public Facilities	8	0	0	0	**0**	**0**		
Infrastructure Assets - Other	8	(495,000)	(608,000)	(527,225)	**(285,848)**	**(872,300)**	▲	s
Amount attributable to investing activities		**(1,039,299)**	**(2,072,232)**	**(1,745,434)**	**39,550**	**(954,470)**		
Financing Actvities								
Proceeds from New Debentures	9	1,095,010	1,625,010	1,625,010	**0**	**1,585,010**	▼	
Repayment of Debentures	9	(391,148)	(391,148)	(229,439)	**(178,487)**	**(341,683)**	▼	s
Repayment of Lease Financing	9	(19,929)	(19,929)	(11,613)	**(11,560)**	**(19,929)**		
Advances to Community Groups		(395,010)	(395,010)	(395,010)	**0**	**(355,010)**	▼	s
Proceeds from Advances		0	0	0	**0**	**0**		
Self-Supporting Loan Principal		25,941	25,941	21,890	**4,023**	**8,098**	▼	s
Transfer to Restricted Cash - Other		0	0	0	**0**	**0**		
Transfer from Restricted Cash - Other		0	0	0	**0**	**0**		
Transfer from Reserves	10	20,000	118,135	60,000	**0**	**228,135**	▲	s
Transfer to Reserves	10	(14,000)	(14,000)	(8,162)	**(3,697)**	**(416,300)**	▲	s
Amount attributable to financing activities		**320,864**	**948,999**	**1,062,676**	**(189,721)**	**688,320**		
Closing Funding Surplus(Deficit)	1	**(26,099)**	**(144,055)**	**2,158,253**	**2,991,542**	**2,229**		

KEY INFORMATION

▲▼ Indicates a variance between Amended Annual (d) and Forecast Actual€ data as per the adopted materiality threshold.
Refer to Note 15 for an explanation of the reasons for the variance
The material variance adopted by Council for the 2020/21 year is $10,000 and 10%

SHIRE OF IRWIN

NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY

BUDGET REVIEW 2020/21

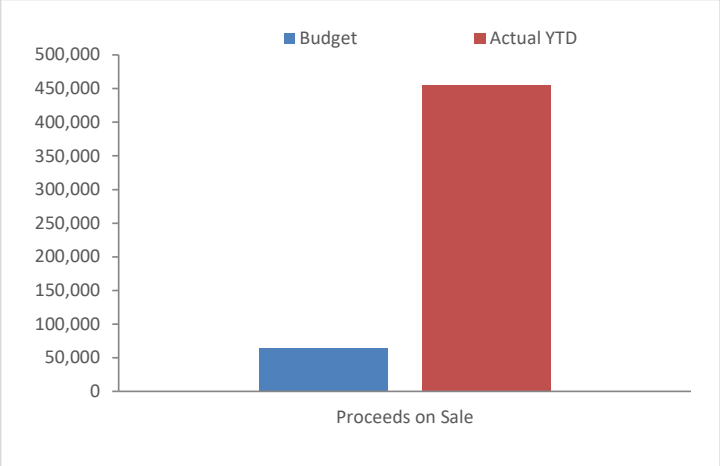
OPERATING ACTIVITIES
NOTE 1
ADJUSTED NET CURRENT ASSETS

Adjusted Net Current Assets	Note	Last Years Closing 30/06/2020	This Time Last Year 31/01/2020	Year to Date Actual 31/01/2021	Forecast 30/06/2021	Movements In Year End Balances Balances	Proposed Year End Balances Balances
		$	$	$	$	$	$
Current Assets							
Cash Unrestricted	2	1,651,177	2,654,125	4,720,715	915,252		
Cash Restricted - Reserves	2	1,292,763	1,320,082	1,296,460	1,480,928		
Cash Restricted - General	2	362,875	376,298	362,875	362,875	0	362,875
Cash Restricted - Bonds & Deposits	2	198,687	200,040	199,789	199,789		
Receivables - Rates	3	403,418	1,214,780	858,591	400,000	(458,591)	400,000
Receivables - Other	3	189,988	337,230	138,288	200,000	61,712	200,000
Inventories	4	18,521	20,118	18,521	19,000	479	19,000
		4,117,429	6,122,672	7,595,239	3,577,843		
Less: Current Liabilities							
Payables	5	(816,575)	(182,159)	(474,660)	(800,000)	(325,340)	(800,000)
Contract Liabilities	11	(1,277,058)	(851,007)	(1,691,914)	(991,515)	700,399	(991,515)
Financial Liabilities	5	(140,508)	(140,508)	(140,508)	(140,508)	(0)	(140,508)
Bonds & Deposits	14	(198,687)	(200,040)	(199,789)	(199,789)	0	(199,789)
Loan and Lease Liability	9	(361,613)	(136,818)	(171,565)	(380,000)	(208,435)	(380,000)
Provisions	11	(416,446)	(348,465)	(416,446)	(400,000)	16,446	(400,000)
		(3,210,887)	(1,858,997)	(3,094,881)	(2,911,811)		
Less: Cash Reserves	10	(1,292,763)	(1,320,082)	(1,296,460)	(1,480,928)		
Add Back: Component of Leave Liability not Required to be funded		123,184	122,838	123,536	400,000	276,464	400,000
Add Back: Loan and Lease Liability		361,613	136,818	171,565	380,000	208,435	380,000
Less : Loan Receivable - clubs/institutions		(8,098)	(3,968)	(4,075)	400,000	404,075	400,000
Less : Restricted Cash General	15	(503,383)	0	(503,383)	(362,875)	140,508	(362,875)
Net Current Funding Position		**(412,904)**	**3,199,282**	**2,991,542**	**2,229**	**816,151**	

OPERATING ACTIVITIES
NOTE 7
DISPOSAL OF ASSETS

Asset Number	Asset Description	Amended Budget Net Book Value	Amended Budget Proceeds	Amended Budget Profit	Amended Budget (Loss)	YTD Actual Net Book Value	YTD Actual Proceeds	YTD Actual Profit	YTD Actual (Loss)	Forecast Actual Net Book Value	Forecast Actual Proceeds	Forecast Actual Profit	Forecast Actual (Loss)
		$	$	$	$	$	$	$	$	$	$	$	$
	Land and Buildings												
2646	Land - 4 Kennedy Heights	0	0			160,000	160,000			160,000	160,000		
2598	Duplex 4A Kennedy Heights	0	0			215,310	125,000		(90,310)	215,310	125,000		(90,310)
2599	Duplex 4B Kennedy Heights	0	0			220,657	125,000		(95,657)	220,657	125,000		(95,657)
										0	0		
	Plant and Equipment												
634	John Deere Tractor Mower Ir420	15,796	5,000		(10,796)	0	0			0	0		
970	2010 Fuso Canter 2 Way Tip Body Ir197	25,392	25,000		(392)					25,392	15,000		(10,392)
2758	Skid Steer Loader 226D	33,824	35,000	1,176.08		34,774	31,737		(3,036)	34,774	31,737		(3,036)
810	10 Cubic Metre Tipping Body	0	0			700	13,224	12,524		700	13,224	12,524	
		0	0							0	0		
		0	0							0	0		
		75,013	**65,000**	**1,176**	**(11,189)**	**631,440**	**454,961**	**12,524**	**(189,003)**	**656,832**	**469,961**	**12,524**	**(199,395)**

KEY INFORMATION



Proceeds on Sale		
Amended Budget	**Forecast Actual**	**%**
$65,000	**$469,961**	**700%**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
BUDGET REVIEW 2020/21

INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Assets	Account Number	Balance Sheet Category	Job Number	Adopted Annual Budget	Amended Annual Budget	YTD Budget	Total YTD	Total Forecast	Variance (Under)/Over
				$	$	$	$	$	
Buildings									
Housing									
AGED APPROPRIATE HOUSING - STAGE 1	2574	1311	1626	0	0	0	(19,925)	(26,000)	26,000
AGED APPROPRIATE HOUSING - STAGE 2	2574	1311	CJ18	(2,259,327)	(2,259,327)	(1,317,407)	(228,651)	(2,042,453)	(216,874)
AGED APPROPRIATE HOUSING - LIVABLE HOUSING AUSTRALIA PLATINUM CONSTRUCTION	2574	1311	CJ31	0	0	0	(44,363)	(44,363)	0
Total - Housing				**(2,259,327)**	**(2,259,327)**	**(1,317,407)**	**(292,940)**	**(2,112,816)**	**(190,874)**
Community Amenities									
CONTAINER DEPOSIT SCHEME	1944	1311	CJ70	(20,000)	(20,000)	(20,000)	(40,496)	(40,500)	20,500
Total - Community Amenities				**(20,000)**	**(20,000)**	**(20,000)**	**(40,496)**	**(40,500)**	**20,500**
Recreation And Culture									
IRWIN REC CENTRE BUILDING - RENEWAL	2834	1311	CJ05	(25,000)	(23,000)	(23,000)	0	(12,500)	(10,500)
REC JETTY	2834	1311	CJ908	(25,000)	(25,000)	(8,500)	0		(25,000)
Total - Recreation And Culture				**(50,000)**	**(48,000)**	**(31,500)**	**0**	**(12,500)**	**(35,500)**
Total - Buildings				**(2,329,327)**	**(2,327,327)**	**(1,368,907)**	**(333,436)**	**(2,165,816)**	**(205,874)**
Plant & Equipment									
Recreation & Culture									
PARKS & GARDENS - TRACTOR MOWER - REG IR420	2844	1312	V420	(35,000)	(35,000)	(35,000)	0	(50,000)	15,000
NEW TRUCK - PARKS & GARDENS	2844	1312	V852	0	(85,000)	(85,000)	0	(77,000)	(8,000)
Total - Recreation & Culture				**(35,000)**	**(120,000)**	**(120,000)**	**0**	**(127,000)**	**7,000**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
BUDGET REVIEW 2020/21

INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Assets	Account Number	Balance Sheet Category	Job Number	Adopted Annual Budget	Amended Annual Budget	YTD Budget	Total YTD	Total Forecast	Variance (Under)/Over
				$	$	$	$	$	
Transport									
SIDE TIPPER	3534	1312	CJ52	(5,000)	(5,000)	(5,000)	(4,930)	(5,000)	0
PRIME-MOVER	3534	1312	V850	0	(309,000)	(309,000)	0	(309,000)	0
SIDE TIPPING SEMI TRAILER	3534	1312	V851	0	(260,000)	(260,000)	0	(221,000)	(39,000)
NISSAN UD PRME MOVER 540IR	3534	1312	V526	(14,000)	(14,000)	(14,000)	(13,288)	(13,500)	(500)
BULK FUEL STORAGE TANK & SYSTEM	3584	1312	CJ44	(12,000)	(12,000)	(12,000)	(12,857)	(13,000)	1,000
Total - Transport				**(31,000)**	**(600,000)**	**(600,000)**	**(31,075)**	**(561,500)**	**(38,500)**
Total - Plant & Equipment				**(66,000)**	**(720,000)**	**(720,000)**	**(31,075)**	**(688,500)**	**(31,500)**
Furniture & Equipment									
Other Health									
DONGARA MEDICAL CENTRE - FURNITURE & EQUIP	4984	1314	CJ83	0	0	0	0	(6,000)	6,000
Total - Other Health				**0**	**0**	**0**	**0**	**(6,000)**	**6,000**
Recreation & Culture									
BASKETBALL SCOREBOARD	2824	1314	CJ81	(15,000)	(15,000)	(15,000)	(9,065)	(9,100)	(5,900)
GYMNASTICS EQUIPMENT - MATS, BOARDS, BEAM ETC	2824	1314	CJ35	0	(7,000)	(7,000)	(4,015)	(5,500)	(1,500)
Total - Recreation & Culture				**(15,000)**	**(22,000)**	**(22,000)**	**(13,080)**	**(14,600)**	**(7,400)**
Other Property & Services									
IT - HARDWARE	0264	1314	CJ33	(11,100)	(29,700)	(29,700)	(10,281)	(11,100)	(18,600)
UPGRADE EXISTING ADMINISTRATION BUILDING	0394	1311	C191	0	0	0	0	(7,000)	7,000
IT - WEBSITE & INTRANET	0264	1314	CJ34	0	0	0	(12,500)	(12,500)	12,500
Total - Other Property & Services				**(11,100)**	**(29,700)**	**(29,700)**	**(22,781)**	**(30,600)**	**900**
Total - Furniture & Equipment				**(26,100)**	**(51,700)**	**(51,700)**	**(35,861)**	**(51,200)**	**(500)**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
BUDGET REVIEW 2020/21

INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Assets	Account Number	Balance Sheet Category	Job Number	Adopted Annual Budget	Amended Annual Budget	YTD Budget	Total YTD	Total Forecast	Variance (Under)/Over
				$	$	$	$	$	
Roads									
Housing									
THE VILLAGE - FOOTPATHS, HANDRAILS, KERBS	2586	1317	CJ45	(44,700)	(44,700)	(22,350)	0	0	(44,700)
Total - Housing				**(44,700)**	**(44,700)**	**(22,350)**	**0**	**0**	**(44,700)**
Transport									
R2R - FANE ROAD	6644	1317	CJ75	(64,000)	(64,000)	(51,193)	(1,017)	(1,000)	(63,000)
R2R - PIGGERY LANE	6644	1317	CJ76	(129,540)	(129,540)	(103,625)	(818)	(1,000)	(128,540)
R2R - BELAURA PLACE	6644	1317	CJ77	(21,259)	(21,259)	(17,001)	0	0	(21,259)
TABLETOP ROAD - SEAL - RRG	6644	1317	CJ78	0	(262,000)	0	0	(262,000)	0
ALLANOOKA SPRINGS ROAD - SEAL - RRG	6644	1317	CJ79	0	(450,000)	(225,000)	0	(450,000)	0
MORETON TERRACE	6664	1317	CJ22	(450,000)	(450,000)	(360,000)	(85,493)	(722,000)	272,000
CASUARINAS ROAD - RRG	6674	1317	CJ72	(357,000)	(357,000)	(285,593)	(259,240)	(357,000)	0
TABLETOP ROAD - RRG	6674	1317	CJ73	(422,500)	(422,500)	(337,993)	(68,834)	(422,500)	0
BURMA ROAD - RRG	6674	1317	CJ74	(251,500)	(251,500)	(201,182)	(51,450)	(251,500)	0
MILO ROAD DESIGN	6674	1317	CJ23	(38,528)	(38,528)	(30,819)	0	0	(38,528)
MORETON TERRACE	6684	1317	CJ88	0	0	0	0	(1,000,000)	1,000,000
BLENHEIM ROAD	6694	1317	CJ24	(7,100)	(7,100)	(5,680)	(4,950)	(4,950)	(2,150)
ALLANOOKA RD SHOULDERS - SAFETY CRITICAL WORKS	6754	1317	SC01	0	(30,000)	(5,000)	(14,271)	(23,500)	(6,500)
DRAINAGE RENEWAL - GENERAL	6754	1317	DR01	0	0	0	(6,480)	(6,480)	6,480
GENERAL FOOTPATHS	6784	1317	CJ26	(5,000)	(5,000)	(4,000)	(1,150)	(5,000)	0
Total - Transport				**(1,746,427)**	**(2,488,427)**	**(1,627,086)**	**(493,703)**	**(3,506,930)**	**1,018,503**
Total - Roads				**(1,791,127)**	**(2,533,127)**	**(1,649,436)**	**(493,703)**	**(3,506,930)**	**973,803**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
BUDGET REVIEW 2020/21

INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

Assets	Account Number	Balance Sheet Category	Job Number	Adopted Annual Budget	Amended Annual Budget	YTD Budget	Total YTD	Total Forecast	Variance (Under)/Over
				$	$	$	$	$	
Infrastructure - Other									
Community Amenities									
CEMETERY REVITILISATION	2644	1318	CJ03	(130,000)	(130,000)	(107,900)	(5,929)	(130,000)	0
Total - Community Amenities				**(130,000)**	**(130,000)**	**(107,900)**	**(5,929)**	**(130,000)**	**0**
Recreation And Culture									
CLIFF HEAD - PAID CAMPING IMPLEMENTATION	8054	1318	CJ71	0	(15,000)	(15,000)	(189)	(15,000)	0
GRANNY'S BEACH - WALL	8054	1318	CJ86	0	(55,000)	(55,000)	0	(55,000)	0
SURF BEACH STABILISATION	8054	1318	CJ87	0	0	0	0	(247,300)	247,300
SHADE SAILS - PARKS	2864	1318	1429	0	(9,000)	(9,000)	0	(9,000)	0
REHABILITAION FORMER FISHERMANS HALL AREA	2864	1318	CJ80	(55,000)	(55,000)	(20,625)	0	(55,000)	0
REPLACEMENT BBQ - FORESHORE	2864	1318	CJ84	0	(8,000)	(8,000)	0	(7,500)	(500)
SKATE PARK - PUMP TRACK	2864	1318	CJ37	(220,000)	(238,000)	(238,000)	(263,479)	(263,500)	25,500
TREE PLANTING	2864	1318	CJ49	(21,000)	(21,000)	(10,500)	0	(21,000)	0
CRICKET PITCH UPGRADE	2904	1318	CJ85	0	(8,000)	(8,000)	0	0	(8,000)
Total - Recreation And Culture				**(296,000)**	**(409,000)**	**(364,125)**	**(263,668)**	**(673,300)**	**264,300**
Transport									
RURAL SIGNS	6794	1318	CJ10	(69,000)	(69,000)	(55,200)	(16,252)	(69,000)	0
Total - Transport				**(69,000)**	**(69,000)**	**(55,200)**	**(16,252)**	**(69,000)**	**0**
Total - Infrastructure - Other				**(495,000)**	**(608,000)**	**(527,225)**	**(285,848)**	**(872,300)**	**264,300**
Grand Total				**(4,707,554)**	**(6,240,154)**	**(4,317,268)**	**(1,179,923)**	**(7,284,746)**	**1,000,229**

SHIRE OF IRWIN
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
BUDGET REVIEW 2020/21

FINANCING ACTIVITIES
NOTE 9
LOAN DEBENTURE BORROWINGS AND FINANCING

(a) Information on Loan Debenture Borrowings

		New Loans				Principal Repayments				Principal Outstanding				Interest & Guarantee Fee Repayments			
Particulars/Purpose	01 Jul 2020	Actual	Amended Budget	Adopted Budget	Forecast Actual	Actual	Amended Budget	Adopted Budget	Forecast Actual	Actual	Amended Budget	Adopted Budget	Forecast Actual	Actual	Amended Budget	Adopted Budget	Forecast Actual
		$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Other Health																	
Loan 99 - Medical Centre	1,450,000	0	0	0	0	29,326	58,961	58,961	58,961	1,420,674	1,391,039	1,391,039	1,391,039	15,560	32,786	32,786	32,786
Other Housing																	
Loan 100- SIHI Completion	0	0	700,000	700,000	700,000	0	31,621	31,621	0	0	668,379	668,379	700,000	0	7,385	7,385	0
Recreation and Culture																	
Loan 93 - Recreation Centre	2,105,156	0	0	0	0	63,260	109,992	109,992	109,992	2,041,896	1,995,164	1,995,164	1,995,164	79,596	152,737	152,737	152,737
Loan 96 - Tennis Courts Resurfacing	79,897	0	0	0	0	19,623	39,478	39,478	39,478	60,274	40,419	40,419	40,419	1,173	2,311	2,311	2,311
Transport																	
Loan 98 - Plant	791,096	0	0	0	0	62,256	125,155	125,155	125,155	728,840	665,940	665,940	665,940	6,798	21,631	21,631	21,631
Loan 101 - Plant	0	0	530,000	0	530,000	0	0	0	0	0	530,000	0	530,000	0	0	0	0
	4,426,148	0	1,230,000	700,000	1,230,000	174,464	365,207	365,207	333,586	4,251,684	5,290,942	4,760,942	5,322,563	103,127	216,849	216,849	209,464
Self supporting loans																	
Recreation and Culture																	
Loan 97 - Golf Club	20,638	0	0	0	0	4,023	8,098	8,098	8,098	16,615	12,541	12,541	12,541	157	629	629	629
Loan 101 - Golf Club - Not proceeding	0	0	40,000	40,000	0	0	1,807	1,807	0	0	38,193	38,193	0	0	422	422	0
Loan 102 - Denison Bowling Club	0	0	355,010	355,010	355,010	0	16,037	16,037	0	0	338,973	338,973	355,010	0	3,745	3,745	0
	20,638	0	395,010	395,010	355,010	4,023	25,941	25,941	8,098	16,615	389,707	389,707	367,551	157	4,796	4,796	629
Total	4,446,787	0	1,625,010	1,095,010	1,585,010	178,487	391,148	391,148	341,683	4,268,299	5,680,649	5,150,649	5,690,113	103,284	221,646	221,646	210,093
Current loan borrowings	341,683									163,196							
Non-current loan borrowings	4,105,103									4,105,103							
	4,446,787									4,268,299							

All debenture repayments were financed by general purpose revenue except the Self Supporting Loan.

(b) Information on Financing

		New Financing				Lease Financing Principal Repayments				Lease Financing Principal Outstanding				Lease Financing Interest Repayments			
Particulars/Purpose	01 Jul 2020	Actual	Amended Budget	Adopted Budget	Forecast Actual	Actual	Amended Budget	Adopted Budget	Forecast Actual	Actual	Amended Budget	Adopted Budget	Forecast Actual	Actual	Amended Budget	Adopted Budget	Forecast Actual
		$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Recreation and Culture																	
Solar Panels (67.941%)	39,333	0	0	0	0	7,854	13,540	13,540	13,540	31,479	25,793	25,793	25,793	567	895	895	895
Other Property and Services																	
Solar Panels (32.059%)	18,560	0	0	0	0	3,706	6,389	6,389	6,389	14,854	12,171	12,171	12,171	267	422	422	422
	57,893	0	0	0	0	11,560	19,929	19,929	19,929	46,333	37,964	37,964	37,964	834	1,317	1,317	1,317
Total	57,893	0	0	0	0	11,560	19,929	19,929	19,929	46,333	37,964	37,964	37,964	834	1,317	1,317	1,317
Current financing borrowings	19,930									8,369							
Non-current financing borrowings	37,963									37,963							
	57,893									46,333							

SHIRE OF IRWIN

NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY

BUDGET REVIEW 2020/21

NOTE 15
EXPLANATION OF SIGNIFICANT VARIANCES

The material variance thresholds are adopted annually by Council as an indicator of whether the actual expenditure or revenue varies from the year to date budget materially.
The material variance adopted by Council for the 2020/21 year is $10,000 and 10%.

Reporting Program	Var. $	Var. %	Var. ▲▼	Significant Var. S	Explanation of Variance
Revenue from operating activities	$	%			
Governance	0				
General Purpose Funding - Rates	(6,423)	(0%)	▼		
General Purpose Funding - Other	9,876	3%	▲		
Law, Order and Public Safety	4,500	3%	▲		
Health	25,500	42%	▲	S	Recovery of Medical Centre costs as per lease
Education and Welfare	(5,000)	(58%)	▼		
Housing	18,160	5%	▲		
Community Amenities	180,245	21%	▲	S	Income from CDS higher than expected. Development revenue higher than expected due to building assistance grants
Recreation and Culture	(4,867)	(2%)	▼		
Transport	(540,652)	(85%)	▼	S	Some Roads to Recovery jobs cancelled as well as timing on construction jobs
Economic Services	117,918	90%	▲	S	Caravan Park leases - recovery from COVID better than expected
Other Property and Services	53,500	77%	▲	S	Workers compensation and employer incentive income
Expenditure from operating activities					
Governance	(26,252)	(5%)	▲		
General Purpose Funding	(93,433)	(16%)	▲	S	Increased Administration allocation
Law, Order and Public Safety	(422)	(0%)	▲		
Health	(157,523)	(46%)	▲	S	Medical centre costs and extra EHO time for COVID and asbestos
Education and Welfare	(5,280)	(8%)	▲		
Housing	(226,392)	(38%)	▲	S	Loss on sale of 4A & 4B Kennedy Heights
Community Amenities	(87,152)	(7%)	▲		
Recreation and Culture	(160,515)	(6%)	▲		
Transport	(131,281)	(3%)	▲		
Economic Services	(57,300)	(15%)	▲	S	Standpipe mtce budget was removed due to COVID, now brought back in as well as increased Administration allocation
Other Property and Services	215,441	77%	▼	S	Reduction in expenditure in Public Works Overheads including fuels and oils
Investing Activities					
Non-operating Grants, Subsidies and Contributions	1,757,393	43%	▲	S	Timing of construction works
Proceeds from Disposal of Assets	404,961	623%	▲	S	Tip body disposed off via Pickles - not budgeted. Sale of 4A & 4B Kennedy Heights
Land Held for Resale	0				
Land and Buildings	154,511	7%	▼		
Plant and Equipment	31,500	4%	▼		
Furniture and Equipment	7,500	15%	▼		
Infrastructure Assets - Roads	(973,803)	(38%)	▲	S	Timing of construction works
Infrastructure Assets - Drainage	0				
Infrastructure Assets - Footpaths	0				
Infrastructure Assets - Public Facilities	0				
Infrastructure Assets - Other	(264,300)	(43%)	▲	S	Surf Beach stabilisation works
Financing Actvities					
Proceeds from New Debentures	(40,000)	(2%)	▼		
Repayment of Debentures	49,465	13%	▼	S	No principal repayment to be made this financial year
Repayment of Lease Financing	0	0%			
Advances to Community Groups	40,000	10%	▼	S	Self-supporting loan for the Golf Club did not go ahead
Proceeds from Advances	0				
Self-Supporting Loan Principal	(17,844)	(69%)	▼	S	No principal repayment to be made this financial year
Transfer to Restricted Cash - Other	0				
Transfer from Restricted Cash - Other	0				
Transfer from Reserves	110,000	93%	▲	S	Additional transfer from Coastal Management Reserve for Surf Beach dune remediation and Plant Replacement Reserve for net vehicle/plant changeovers.
Transfer to Reserves	(402,300)	(2874%)	▲	S	Transfer proceeds of sale of 4A & 4B Kennedy Heights to Asset Management Reserve

SHIRE OF IRWIN

FORECAST STATEMENT OF RESERVE MOVEMENTS FOR THE PERIOD ENDED

30 June 2021

	Account Number	Reserve								
		Leave	Plant Replacement	Asset Management	Sanitation	Coastal Management	Tourism and Area Promotion	Recreation Centre Equipment	Port Denison Foreshore Development	Total Reserves
Opening Balance - 01 July 2020		**123,184**	**108,736**	**584,401**	**21,161**	**138,669**	**24,469**	**52,183**	**239,960**	**1,292,763**
Additions To Reserves										
Reserve Interest Received Allocated to Reserves	**9222**	600	600	3,000	100	600	100	300	1,000	**6,300**
Transfer to Leave Reserve - General Allocation	**9223**									**0**
Transfer to Plant Replacement Reserve - General Allocation	**9223**		0							**0**
Transfer to Port Denison Foreshore Development Reserve - General Allocation	**9223**									**0**
Transfer to Asset Management Reserve, - Proceeds of sale of 4A & 4B Kennedy Heights	**9223**			410,000						**410,000**
Total Additions to Reserves		**600**	**600**	**413,000**	**100**	**600**	**100**	**300**	**1,000**	**416,300**
Reserves Utilised										
Container Deposit Scheme	**9225**				20,000					**20,000**
Plant Reserve utilised	**9225**		60,000			38,135				**98,135**
Tourism and Area Promotion Reserve utilised	**9225**									**0**
Port Denison Foreshore Development Reserve utilised	**9225**									**0**
Surf Beach dune remediation works	**9225**					70,000				**70,000**
Net plant / vehicle changeovers	**9225**		40,000							**40,000**
Total Reserves Utilised		**0**	**100,000**	**0**	**20,000**	**108,135**	**0**	**0**	**0**	**228,135**
Closing Balance - 30 June 2021		**123,784**	**9,336**	**997,401**	**1,261**	**31,134**	**24,569**	**52,483**	**240,960**	**1,480,928**
Total Reserves - 30 June 2021										**1,480,928**

ATTACHMENT: CEO03

Compliance Audit Return (CAR) 2020

Attachment 1
Compliance Audit Return (CAR) 2020

Department of
Local Government, Sport
and Cultural Industries
GOVERNMENT OF
WESTERN AUSTRALIA

Irwin - Compliance Audit Return 2020

Certified Copy of Return

Please submit a signed copy to the Director General of the Department of Local Government, Sport and Cultural Industries together with a copy of the relevant minutes.

Commercial Enterprises by Local Governments

No	Reference	Question	Response	Comments	Respondent
1	s3.59(2)(a) F&G Regs 7,9,10	Has the local government prepared a business plan for each major trading undertaking that was not exempt in 2020?	N/A	No major trading was undertaken in 2020.	Kirstyn Haug
2	s3.59(2)(b) F&G Regs 7,8,10	Has the local government prepared a business plan for each major land transaction that was not exempt in 2020?	Yes	The acquisition of the Dongara Medical Centre - Business Plan. Ref Altus# INT20/6BAB4D27	Kirstyn Haug
3	s3.59(2)(c) F&G Regs 7,8,10	Has the local government prepared a business plan before entering into each land transaction that was preparatory to entry into a major land transaction in 2020?	Yes	The acquisition of the Dongara Medical Centre Ref Altus# INT20/6BAB4D27	Kirstyn Haug
4	s3.59(4)	Has the local government complied with public notice and publishing requirements for each proposal to commence a major trading undertaking or enter into a major land transaction or a land transaction that is preparatory to a major land transaction for 2020?	Yes	Ref Altus# INT20/6BAB4D27	Kirstyn Haug
5	s3.59(5)	During 2020, did the council resolve to proceed with each major land transaction or trading undertaking by absolute majority?	Yes	Ref Altus# INT20/6BAB4D27, 5 March 2020 Special Council Meeting Minutes, Minute reference: 020320S	Kirstyn Haug

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Delegation of Power/Duty

No	Reference	Question	Response	Comments	Respondent
1	s5.16	Were all delegations to committees resolved by absolute majority?	N/A	There were no delegations to committees during 2020.	Kirstyn Haug
2	s5.16	Were all delegations to committees in writing?	N/A	There were no delegations to committees during 2020.	Kirstyn Haug
3	s5.17	Were all delegations to committees within the limits specified in section 5.17?	N/A	There were no delegations to committees during 2020.	Kirstyn Haug
4	s5.18	Were all delegations to committees recorded in a register of delegations?	N/A	There were no delegations to committees during 2020.	Kirstyn Haug
5	s5.18	Has council reviewed delegations to its committees in the 2019/2020 financial year?	N/A	There were no delegations to committees during 2020.	Kirstyn Haug
6	s5.42(1) & s5.43 Admin Reg 18G	Did the powers and duties delegated to the CEO exclude those listed in section 5.43 of the Act?	Yes		Kirstyn Haug
7	s5.42(1)	Were all delegations to the CEO resolved by an absolute majority?	Yes		Kirstyn Haug
8	s5.42(2)	Were all delegations to the CEO in writing?	Yes		Kirstyn Haug
9	s5.44(2)	Were all delegations by the CEO to any employee in writing?	Yes		Kirstyn Haug
10	s5.16(3)(b) & s5.45(1)(b)	Were all decisions by the council to amend or revoke a delegation made by absolute majority?	Yes		Kirstyn Haug
11	s5.46(1)	Has the CEO kept a register of all delegations made under Division 4 of the Act to the CEO and to employees?	Yes	CEO to Employee: Altus Ref INT20/6EB7C4A8 Council to CEO: Altus Ref INT20/457C673D	Kirstyn Haug
12	s5.46(2)	Were all delegations made under Division 4 of the Act reviewed by the delegator at least once during the 2019/2020 financial year?	Yes	CEO to Employee: INT20/6EB7C4A8 Council to CEO: 23 June 2020 Ordinary Council Meeting Minutes, Minute #080620.	Kirstyn Haug
13	s5.46(3) Admin Reg 19	Did all persons exercising a delegated power or duty under the Act keep, on all occasions, a written record in accordance with Admin Reg 19?	Yes		Danika Chandler

Disclosure of Interest

No	Reference	Question	Response	Comments	Respondent

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No	Reference	Question	Response	Comments	Respondent
1	s5.67	Where a council member disclosed an interest in a matter and did not have participation approval under sections 5.68 or 5.69, did the council member ensure that they did not remain present to participate in discussion or decision making relating to the matter?	N/A	There were no disclosures of interest that did not have participation approval in this reporting period.	Kirstyn Haug
2	s5.68(2) & s5.69 (5) Admin Reg 21A	Were all decisions regarding participation approval, including the extent of participation allowed and, where relevant, the information required by Admin Reg 21A, recorded in the minutes of the relevant council or committee meeting?	Yes		Kirstyn Haug
3	s5.73	Were disclosures under section sections 5.65, 5.70 or 5.71A(3) recorded in the minutes of the meeting at which the disclosures were made?	Yes		Kirstyn Haug
4	s5.75 Admin Reg 22, Form 2	Was a primary return in the prescribed form lodged by all relevant persons within three months of their start day?	No	Complaint of serious breach form lodged by CEO to DLGSC 15 May 2020. Refer OUT20/11E33F7F. Serious misconduct notification lodged by the CEO to the CCC on 15 May 2020. Refer OUT20/107C6882. Notification of outcome received from CCC 28 May 2020 stating that the Commission will take not further action and has closed the file. Refer IN20/3C58F3D7. Notification of outcome received from DLGSCI 20 November 2020 advising that no further action will be taken. Refer IN21/55D3223E.	Danika Chandler
5	s5.76 Admin Reg 23, Form 3	Was an annual return in the prescribed form lodged by all relevant persons by 31 August 2020?	Yes		Danika Chandler
6	s5.77	On receipt of a primary or annual return, did the CEO, or the mayor/president, give written acknowledgment of having received the return?	Yes		Kirstyn Haug
7	s5.88(1) & (2)(a)	Did the CEO keep a register of financial interests which contained the returns lodged under sections 5.75 and 5.76?	Yes		Kirstyn Haug
8	s5.88(1) & (2)(b) Admin Reg 28	Did the CEO keep a register of financial interests which contained a record of disclosures made under sections 5.65, 5.70, 5.71 and 5.71A, in the form prescribed in Admin Reg 28?	Yes		Kirstyn Haug

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No	Reference	Question	Response	Comments	Respondent
9	s5.88(3)	When a person ceased to be a person required to lodge a return under sections 5.75 and 5.76, did the CEO remove from the register all returns relating to that person?	Yes		Kirstyn Haug
10	s5.88(4)	Have all returns removed from the register in accordance with section 5.88(3) been kept for a period of at least five years after the person who lodged the return(s) ceased to be a person required to lodge a return?	Yes		Kirstyn Haug
11	s5.89A(1), (2) & (3) Admin Reg 28A	Did the CEO keep a register of gifts which contained a record of disclosures made under sections 5.87A and 5.87B, in the form prescribed in Admin Reg 28A?	Yes		Danika Chandler
12	s5.89A(5) & (5A)	Did the CEO publish an up-to-date version of the gift register on the local government's website?	Yes		Danika Chandler
13	s5.89A(6)	When a person ceases to be a person who is required to make a disclosure under section 5.87A or 5.87B, did the CEO remove from the register all records relating to that person?	Yes		Danika Chandler
14	s5.89A(7)	Have copies of all records removed from the register under section 5.89A (6) been kept for a period of at least five years after the person ceases to be a person required to make a disclosure?	Yes		Danika Chandler
15	Rules of Conduct Reg 11(1), (2) & (4)	Where a council member had an interest that could, or could reasonably be perceived to, adversely affect the impartiality of the person, did they disclose the interest in accordance with Rules of Conduct Reg 11(2)?	Yes		Danika Chandler
16	Rules of Conduct Reg 11(6)	Where a council member disclosed an interest under Rules of Conduct Reg 11 (2) was the nature of the interest recorded in the minutes?	Yes		Danika Chandler
17	s5.70(2) & (3)	Where an employee had an interest in any matter in respect of which the employee provided advice or a report directly to council or a committee, did that person disclose the nature and extent of that interest when giving the advice or report?	N/A	No disclosures of interest by employees were made during the reporting period.	Kirstyn Haug
18	s5.71A & s5.71B (5)	Where council applied to the Minister to allow the CEO to provide advice or a report to which a disclosure under s5.71A(1) relates, did the application include details of the nature of the interest disclosed and any other information required by the Minister for the purposes of the application?	N/A	There were no Ministerial applications made to allow the CEO to provide advice or a report to which a disclosure related during the reporting period.	Kirstyn Haug

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No	Reference	Question	Response	Comments	Respondent
19	s5.71B(6) & s5.71B(7)	Was any decision made by the Minister under subsection 5.71B(6) recorded in the minutes of the council meeting at which the decision was considered?	N/A	There were no Ministerial applications made to allow the CEO to provide advice or a report to which a disclosure related during the reporting period.	Kirstyn Haug
20	s5.103 Admin Regs 34B & 34C	Has the local government adopted a code of conduct in accordance with Admin Regs 34B and 34C to be observed by council members, committee members and employees?	Yes	Policy E11 Code of Conduct was adopted at the 12 December 2015 Ordinary Council Meeting (refer Minute #071215). The Codes of Conduct were most recently reviewed at the 20 August 2020 Ordinary Council Meeting with new Codes of Conduct adopted and Policy E11 removed (refer Minute #080820).	Kirstyn Haug
21	Admin Reg 34B(5)	Has the CEO kept a register of notifiable gifts in accordance with Admin Reg 34B(5)?	Yes		Kirstyn Haug

Disposal of Property

No	Reference	Question	Response	Comments	Respondent
1	s3.58(3)	Where the local government disposed of property other than by public auction or tender, did it dispose of the property in accordance with section 3.58(3) (unless section 3.58(5) applies)?	Yes		Kirstyn Haug
2	s3.58(4)	Where the local government disposed of property under section 3.58(3), did it provide details, as prescribed by section 3.58(4), in the required local public notice for each disposal of property?	Yes		Kirstyn Haug

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Elections

No	Reference	Question	Response	Comments	Respondent
1	Elect Regs 30G(1) & (2)	Did the CEO establish and maintain an electoral gift register and ensure that all disclosure of gifts forms completed by candidates and donors and received by the CEO were placed on the electoral gift register at the time of receipt by the CEO and in a manner that clearly identifies and distinguishes the forms relating to each candidate?	N/A	No disclosures of electoral gifts were received by the CEO.	Kirstyn Haug
2	Elect Regs 30G(3) & (4)	Did the CEO remove any disclosure of gifts forms relating to an unsuccessful candidate, or a successful candidate that completed their term of office, from the electoral gift register, and retain those forms separately for a period of at least two years?	N/A	No disclosures of electoral gifts were received by the CEO.	Kirstyn Haug
3	Elect Regs 30G(5) & (6)	Did the CEO publish an up-to-date version of the electoral gift register on the local government's official website in accordance with Elect Reg 30G(6)?	N/A	No disclosures of electoral gifts were received by the CEO.	Kirstyn Haug

Finance

No	Reference	Question	Response	Comments	Respondent
1	s7.1A	Has the local government established an audit committee and appointed members by absolute majority in accordance with section 7.1A of the Act?	Yes	Audit Committee Members appointed by absolute majority at the 26 November 2019 Ordinary Council Meeting (Minute #121119).	Kirstyn Haug
2	s7.1B	Where the council delegated to its audit committee any powers or duties under Part 7 of the Act, did it do so by absolute majority?	N/A	No powers delegated to the Audit Committee.	Kirstyn Haug
3	s7.3(1) & s7.6(3)	Was the person or persons appointed by the local government to be its auditor appointed by an absolute majority decision of council?	N/A	Office of the Auditor General conducted our 2019/20 audit.	Kirstyn Haug
4	s7.3(3)	Was the person(s) appointed by the local government under s7.3(1) to be its auditor a registered company auditor or an approved auditor?	Yes	Office of the Auditor General & Moore Australia.	Kirstyn Haug
5	s7.9(1)	Was the auditor's report for the financial year ended 30 June 2020 received by the local government by 31 December 2020?	No	Changes to FM regs regarding vested land, adopted in November has delayed the completion of the Annual Report. The auditor's report and audited financial statements were received on 4 February 2021.	Kirstyn Haug

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No	Reference	Question	Response	Comments	Respondent
6	s7.12A(3)	Where the local government determined that matters raised in the auditor's report prepared under s7.9 (1) of the Act required action to be taken, did the local government ensure that appropriate action was undertaken in respect of those matters?	Yes	Audited financials received 4 February 2021. Action to be taken on matters.	Kirstyn Haug
7	s7.12A(4)(a)	Where matters identified as significant were reported in the auditor's report, did the local government prepare a report that stated what action the local government had taken or intended to take with respect to each of those matters?	Yes	Audited financials received 4 February 2021. Report on significant matters will be presented to the Audit Committee on 16 March 2021, presented to Council on 23 March 2021 for adoption, then will be submitted to the Minister.	Danika Chandler
8	s7.12A(4)(b)	Where the local government was required to prepare a report under s.7.12A(4)(a), was a copy of the report given to the Minister within three months of the audit report being received by the local government?	Yes	Audit report received 4 February 2021, report will be provided to the Minister straight after adoption by Council on 23 March 2021.	Danika Chandler
9	s7.12A(5)	Within 14 days after the local government gave a report to the Minister under s7.12A(4)(b), did the CEO publish a copy of the report on the local government's official website?	Yes	Audit report received 4 February 2021, report will be provided to the Minister straight after adoption by Council on 23 March 2021 and then published on the Shire of Irwin website. This will be triggered through the Council Meeting Status Report.	Danika Chandler
10	Audit Reg 7	Did the agreement between the local government and its auditor include the objectives and scope of the audit, a plan for the audit, details of the remuneration and expenses paid to the auditor, and the method to be used by the local government to communicate with the auditor?	Yes	2020 Audit Strategy Memorandum received from Moore Stephens 5 March 2020. Refer: IN21/55382CC2.	Kirstyn Haug
11	Audit Reg 10(1)	Was the auditor's report for the financial year ending 30 June received by the local government within 30 days of completion of the audit?	Yes	Audit Exit Meeting was held Thursday 28 January 2021, audit report was received 4 February 2021.	Kirstyn Haug

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Integrated Planning and Reporting

No	Reference	Question	Response	Comments	Respondent
1	Admin Reg 19C	Has the local government adopted by absolute majority a strategic community plan? If Yes, please provide the adoption date or the date of the most recent review in the Comments section?	Yes	Strategic Community Plan 2017-2027, adopted by absolute majority at the 27 June 2017 Ordinary Council Meeting (Minute #110617). The Shire of Irwin has commenced review of the plan early 2021 using consultants.	Danika Chandler
2	Admin Reg 19DA (1) & (4)	Has the local government adopted by absolute majority a corporate business plan? If Yes, please provide the adoption date or the date of the most recent review in the Comments section?	Yes	Corporate Business Plan 2020-2024, adopted by absolute majority at the 8 December 2020 Ordinary Council Meeting (Minute # 041220). Any necessary revisions to the CBP will be made after the SCP review is finalised in 2021.	Kirstyn Haug
3	Admin Reg 19DA (2) & (3)	Does the corporate business plan comply with the requirements of Admin Reg 19DA(2) & (3)?	Yes		Kirstyn Haug

Local Government Employees

No	Reference	Question	Response	Comments	Respondent
1	Admin Reg 18C	Did the local government approve a process to be used for the selection and appointment of the CEO before the position of CEO was advertised?	N/A	The CEO position was not advertised in the reporting period.	Kirstyn Haug
2	s5.36(4) & s5.37 (3) Admin Reg 18A	Were all CEO and/or senior employee vacancies advertised in accordance with Admin Reg 18A?	N/A	There were no CEO or senior employee vacancies advertised in the reporting period.	Kirstyn Haug
3	Admin Reg 18E	Was all information provided in applications for the position of CEO true and accurate?	N/A	The CEO position was not advertised in the reporting period.	Kirstyn Haug
4	Admin Reg 18F	Was the remuneration and other benefits paid to a CEO on appointment the same remuneration and benefits advertised for the position under section 5.36(4)?	N/A	The CEO position was not advertised in the reporting period.	Kirstyn Haug
5	s5.37(2)	Did the CEO inform council of each proposal to employ or dismiss senior employee?	N/A	There were no senior employees employed or dismissed in the reporting period.	Kirstyn Haug
6	s5.37(2)	Where council rejected a CEO's recommendation to employ or dismiss a senior employee, did it inform the CEO of the reasons for doing so?	N/A	There were no senior employees employed or dismissed in the reporting period.	Kirstyn Haug

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Official Conduct

No	Reference	Question	Response	Comments	Respondent
1	s5.120	Has the local government designated a senior employee as defined by section 5.37 to be its complaints officer?	Yes	The CEO is the designated complaints officer for the Shire of Irwin.	Kirstyn Haug
2	s5.121(1)	Has the complaints officer for the local government maintained a register of complaints which records all complaints that resulted in a finding under section 5.110(2)(a)?	Yes		Kirstyn Haug
3	s5.121(2)	Does the complaints register include all information required by section 5.121 (2)?	Yes		Kirstyn Haug
4	s5.121(3)	Has the CEO published an up-to-date version of the register of the complaints on the local government's official website?	Yes		Danika Chandler

Optional Questions

No	Reference	Question	Response	Comments	Respondent
1	Financial Management Reg 5 (2)(c)	Did the CEO review the appropriateness and effectiveness of the local government's financial management systems and procedures in accordance with Financial Management Reg 5(2)(c) within the three years prior to 31 December 2020? If yes, please provide the date of council's resolution to accept the report.	Yes	30 April 2019 (Minute #050419).	Kirstyn Haug
2	Audit Reg 17	Did the CEO review the appropriateness and effectiveness of the local government's systems and procedures in relation to risk management, internal control and legislative compliance in accordance with Audit Reg 17 within the three years prior to 31 December 2020? If yes, please provide date of council's resolution to accept the report.	Yes	30 April 2019 (Minute #050419).	Kirstyn Haug
3	s5.87C(2)	Where a disclosure was made under sections 5.87A or 5.87B, was the disclosure made within 10 days after receipt of the gift?	N/A	No disclosures were made under sections 5.87A or 5.87B.	Kirstyn Haug
4	s5.87C	Where a disclosure was made under sections 5.87A or 5.87B, did the disclosure include the information required by section 5.87C?	N/A	No disclosures were made under sections 5.87A or 5.87B.	Kirstyn Haug

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No	Reference	Question	Response	Comments	Respondent
5	s5.90A(2)	Did the local government prepare and adopt by absolute majority a policy dealing with the attendance of council members and the CEO at events?	Yes	CP45 Attendance at Events (Council Members and CEO), adopted by absolute majority at the 25 August 2020 Ordinary Council Meeting (Minute #100820).	Kirstyn Haug
6	s.5.90A(5)	Did the CEO publish an up-to-date version of the attendance at events policy on the local government's official website?	Yes		Kirstyn Haug
7	s5.96A(1), (2), (3) & (4)	Did the CEO publish information on the local government's website in accordance with sections 5.96A(1), (2), (3), and (4)?	Yes		Kirstyn Haug
8	s5.128(1)	Did the local government prepare and adopt (by absolute majority) a policy in relation to the continuing professional development of council members?	Yes	CP44 Councillor Training and Continuing Professional Development, adopted by absolute majority at the 25 August 2020 Ordinary Council Meeting (Minute #090820).	Kirstyn Haug
9	s5.127	Did the local government prepare a report on the training completed by council members in the 2019/2020 financial year and publish it on the local government's official website by 31 July 2020?	Yes		Kirstyn Haug
10	s6.4(3)	By 30 September 2020, did the local government submit to its auditor the balanced accounts and annual financial report for the year ending 30 June 2020?	Yes	The balanced accounts and annual financial report was received by Moore Australia on 08/09/2020. (Ref to Altus record #OUT21/297AD82C)	Kirstyn Haug

Tenders for Providing Goods and Services

No	Reference	Question	Response	Comments	Respondent
1	F&G Reg 11A(1) & (3)	Does the local government have a current purchasing policy that complies with F&G Reg 11A(3) in relation to contracts for other persons to supply goods or services where the consideration under the contract is, or is expected to be, $250,000 or less or worth $250,000 or less?	Yes		Danika Chandler
2	F&G Reg 11A(1)	Did the local government comply with its current purchasing policy in relation to the supply of goods or services where the consideration under the contract was, or was expected to be, $250,000 or less or worth $250,000 or less?	Yes		Kirstyn Haug

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No	Reference	Question	Response	Comments	Respondent
3	s3.57 F&G Reg 11	Subject to F&G Reg 11(2), did the local government invite tenders for all contracts for the supply of goods or services where the consideration under the contract was, or was expected to be, worth more than the consideration stated in F&G Reg 11(1)?	Yes		Kirstyn Haug
4	F&G Regs 11(1), 12(2), 13, & 14(1), (3), and (4)	When regulations 11(1), 12(2) or 13 required tenders to be publicly invited, did the local government invite tenders via Statewide public notice in accordance with F&G Reg 14(3) and (4)?	Yes		Kirstyn Haug
5	F&G Reg 12	Did the local government comply with F&G Reg 12 when deciding to enter into multiple contracts rather than a single contract?	Yes		Kirstyn Haug
6	F&G Reg 14(5)	If the local government sought to vary the information supplied to tenderers, was every reasonable step taken to give each person who sought copies of the tender documents or each acceptable tenderer notice of the variation?	Yes		Kirstyn Haug
7	F&G Regs 15 & 16	Did the local government's procedure for receiving and opening tenders comply with the requirements of F&G Regs 15 and 16?	Yes		Kirstyn Haug
8	F&G Reg 17	Did the information recorded in the local government's tender register comply with the requirements of F&G Reg 17 and did the CEO make the tenders register available for public inspection and publish it on the local government's official website?	Yes		Kirstyn Haug
9	F&G Reg 18(1)	Did the local government reject any tenders that were not submitted at the place, and within the time, specified in the invitation to tender?	Yes		Kirstyn Haug
10	F&G Reg 18(4)	Were all tenders that were not rejected assessed by the local government via a written evaluation of the extent to which each tender satisfies the criteria for deciding which tender to accept?	Yes		Kirstyn Haug
11	F&G Reg 19	Did the CEO give each tenderer written notice containing particulars of the successful tender or advising that no tender was accepted?	Yes		Kirstyn Haug
12	F&G Regs 21 & 22	Did the local government's advertising and expression of interest processes comply with the requirements of F&G Regs 21 and 22?	N/A	The Shire of Irwin did not invite any Expression of Interest during 2020.	Kirstyn Haug
13	F&G Reg 23(1) & (2)	Did the local government reject any expressions of interest that were not submitted at the place, and within the time, specified in the notice or that failed to comply with any other requirement specified in the notice?	N/A	The Shire of Irwin did not invite any Expression of Interest during 2020.	Kirstyn Haug

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No	Reference	Question	Response	Comments	Respondent
14	F&G Reg 23(3)	Were all expressions of interest that were not rejected assessed by the local government?	N/A	The Shire of Irwin did not invite any Expression of Interest during 2020.	Kirstyn Haug
15	F&G Reg 23(4)	After the local government considered expressions of interest, did the CEO list each person considered capable of satisfactorily supplying goods or services as an acceptable tenderer?	N/A	The Shire of Irwin did not invite any Expression of Interest during 2020.	Kirstyn Haug
16	F&G Reg 24	Did the CEO give each person who submitted an expression of interest a notice in writing of the outcome in accordance with F&G Reg 24?	N/A	The Shire of Irwin did not invite any Expression of Interest during 2020.	Kirstyn Haug
17	F&G Regs 24AD(2) & (4) and 24AE	Did the local government invite applicants for a panel of pre-qualified suppliers via Statewide public notice in accordance with F&G Reg 24AD(4) and 24AE?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
18	F&G Reg 24AD(6)	If the local government sought to vary the information supplied to the panel, was every reasonable step taken to give each person who sought detailed information about the proposed panel or each person who submitted an application notice of the variation?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
19	F&G Reg 24AF	Did the local government's procedure for receiving and opening applications to join a panel of pre-qualified suppliers comply with the requirements of F&G Reg 16, as if the reference in that regulation to a tender were a reference to a pre-qualified supplier panel application?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
20	F&G Reg 24AG	Did the information recorded in the local government's tender register about panels of pre-qualified suppliers comply with the requirements of F&G Reg 24AG?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
21	F&G Reg 24AH(1)	Did the local government reject any applications to join a panel of pre-qualified suppliers that were not submitted at the place, and within the time, specified in the invitation for applications?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
22	F&G Reg 24AH(3)	Were all applications that were not rejected assessed by the local government via a written evaluation of the extent to which each application satisfies the criteria for deciding which application to accept?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
23	F&G Reg 24AI	Did the CEO send each applicant written notice advising them of the outcome of their application?	N/A	The Shire of Irwin did not invite a panel of pre-qualified suppliers during 2020.	Kirstyn Haug
24	F&G Regs 24E & 24F	Where the local government gave regional price preference, did the local government comply with the requirements of F&G Regs 24E and 24F?	Yes		Kirstyn Haug

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I certify this Compliance Audit Return has been adopted by council at its meeting on _____

_____ _____

Signed Mayor/President, Irwin

Signed CEO, Irwin

ATTACHMENT: ID01

Delegated and Authorised Actions for February 2021 - Development

Attachment 1
Table of Delegated Actions for February 2021

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

Records of exercise of delegated powers or duties - Development (Planning)

Reference	Function	Category	Officer	Date of decision	Decision	Description	Person or classes of persons	Address
P1084	Development Approval	CEO to Employees	Manager Development	05/02/2021	Granted	Dwelling	Plunkett Homes	43 Northshore Drive, Dongara
P1085	Development Approval	CEO to Employees	Manager Development	15/02/2021	Granted	Addition (Patio & Carport)	Shoreline Outdoor World	59 Damia Circle, Port Denison
P1090	Development Approval	CEO to Employees	Manager Development	15/02/2021	Granted	Outbuilding (Shed)	CR Constructions	Lot 53 Springfield Drive, Springfield

Records of exercise of authorised powers or duties – Building

Reference	Function	Category	Officer	Date of decision	Decision	Description	Person or classes of persons	Address
5408	Building Permit	CEO to Employees	Manager Development	08/02/2021	Refused	Addition (Patio)	L & G Hagger	260 Point Leander Drive, Port Denison
5507	Building Permit	CEO to Employees	Manager Development	22/02/2021	Issued	Additions (Patio & Carport)	Shoreline Outdoor World	275 Springfield Drive, Springfield
5516	Building Permit	CEO to Employees	Manager Development	02/02/2021	Issued	Single Dwelling	Nordic Builders Pty Ltd	5 Emily Way, Dongara
5517	Building Permit	CEO to Employees	Manager Development	02/02/2021	Issued	60m Guyed Mast Telco Facility & Ancillary Equipment	R Tilli	Lot 76 Illyarrie Road, Springfield
5518	Building Permit	CEO to Employees	Manager Development	11/02/2021	Issued	Outbuilding (Shed)	L Reynolds	8 Dodd Street, Dongara
5521	Building Permit	CEO to Employees	Manager Development	08/02/2021	Issued	Single Dwelling	B Smith	291 Steele Road, Bonniefield

5522	Building Permit	CEO to Employees	Manager Development	11/02/2021	Issued	Single Dwelling	Plunkett Homes Pty Ltd	Lot 46 Powder Bark Loop, Springfield
5524	Building Permit	CEO to Employees	Manager Development	17/02/2021	Issued	Single Dwelling & Retaining Wall	McAullay Builders	137 Point Leander Drive, Port Denison

Records of exercise of authorised powers or duties - Health

Reference	Function	Category	Officer	Date of decision	Decision	Description	Person or classes of persons	Address
01/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	11/02/2021	Issued	Food	Lions Club	Town Park Monthly Markets
03/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	18/02/2021	Issued	Food	DDHS P&C	2021 Surf Carnival
04/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	25/02/2021	Issued	Irwin River Mangoes	R Copeland	Town Park Monthly Markets
05/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	25/02/2021	Issued	Anna's Stall	C Phornphan	Town Park Monthly Markets
06/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	25/02/2021	Issued	Gail's Honey	G Syson	Town Park Monthly Markets
07/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	25/02/2021	Issued	Wicked Waffles	S Walker	Town Park Monthly Markets
08/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	26/02/2021	Issued	Drummonds View Olive Grove	P Lodge	Town Park Monthly Markets
09/2021	Stallholder Permit	Council to Employees	Environmental Health Consultant	26/02/2021	Issued	Joshua & Jo's Preserves and Cakes	J Hacon	Town Park Monthly Markets

ATTACHMENT: ID02

RFQ VP232405 Moreton Terrace Upgrade – Asphalting Works

Attachment 1
RFQ VP232405 Moreton Terrace Upgrade – Asphalting Works

Attachment 2
RFQ VP232405 Evaluation Matrix

REQUEST FOR QUOTATION

RFQ Title:	**Moreton Terrace Upgrade – Asphalting Works**

Deadline:	**18/03/2021**

Address for Delivery:	**Shire of Irwin** **via eQuotes Portal**
Attention:	**Silvio Brenzi**
Email address:	sbrenzi@irwin.wa.gov.au

RFQ No.	VP232405

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2 INTRODUCTION

The Shire of Irwin is resealing Moreton Terrace and renewing the kerbing and drainage as part of its asset management program funded by the Regional Road Group program. Due to some additional funding received, the Shire will also replace the existing street paving and lighting together with some improvements.

2.1 Briefing / site inspection

Attendance at a briefing/site inspection is	**Not Required**

To arrange a briefing/site inspection please contact:

Contact name		Title	
Email address		Phone	

3 CONDITIONS OF RESPONDING

3.1 Contact person

Respondents should not rely on any information provided by any person other than the person listed below:

Contact name	**Silvio Brenzi**	Title	**Supervisor Technical Service**
Email address	**sbrenzi@irwin.wa.gov.au**	Phone	**9927 0000**

3.2 Council Policies that may affect selection

The following policies may affect this selection;

Purchasing Policy

3.3 Acceptance / rejection of responses

Unless otherwise stated in this request, responses may be for all or part of the requirements and may be accepted by the Shire either wholly or in part. The Shire is not bound to accept the lowest response and may reject any or all responses submitted.

A Response will be rejected without consideration of its merits in the event that:

a) it is not submitted before the Deadline; or
b) it may be rejected if it fails to comply with any other requirements of the Request for Quote

3.4 Response validity period

All responses will remain valid and open for acceptance for a minimum period of ninety (90) days from the Deadline.

3.5 Precedence of documents

In the event of there being any conflict or inconsistency between the Terms and Conditions herein and those in the General Conditions of Contract, the Terms and Conditions appearing in this Request will have precedence.

3.6 Alterations

The Respondent must not alter or add to the Request documents unless required by these General Conditions of Responding.

The Principal will issue an addendum to all registered Respondents where matters of significance make it necessary to amend the issued Request for Quote documents before the Deadline.

3.7 Ownership of responses

All documents, materials, articles and information submitted by the Respondent as part of or in support of a Response shall become upon submission the absolute property of the Principal and will not be returned to the Respondent at the conclusion of the Response Process PROVIDED that the Respondent shall be entitled to retain copyright and other intellectual property rights therein, unless otherwise provided by the Contract.

3.8 Canvassing of officers

If a Respondent, whether personally or by agent, canvasses any of the Principal's Commissioners or Councillors (as the case may be) or Officers with a view to influencing the acceptance of any Respondent, then regardless of such canvassing having any influence on the acceptance of such Submission, the Principal may at its discretion omit the Respondent from consideration.

3.9 Identity of the respondent

The identity of the Respondent and Contractor is fundamental to the Principal. The Respondent shall be the person, persons, corporation or corporations named as the Respondent in Part 5 of this Request. Upon acceptance of the Response, the Respondent will become the Contractor.

3.10 Lodgement of responses and delivery method

The response is to be:

a) lodged by the Deadline, and

b) lodged **via eQuotes Portal**

4 SPECIFICATION

Refer to the separate contract and specification documents provided as part of this RFQ.

5 GENERAL CONDITIONS OF CONTRACT

Refer to the separate contract and specification documents provided as part of this RFQ.

6 RESPONDENTS OFFER

6.1 Offer Form

The Chief Executive Officer
Shire of Irwin
PMB 21
11-13 Waldeck Street
DONGARA WA 6525

I/We (Registered Entity Name):			
Of (Registered Street Address):			
ABN:		ACN (if applicable):	
Phone No:		Fax No:	
Email:			

In response to Request for Quotation (RFQ)

Moreton Terrace Upgrade – Asphalt Works

I/We agree that I am/We are bound by, and will comply with this Request and its associated schedules, attachments, all in accordance with the Conditions contained in this Request signed and completed.

The responded price is valid up to ninety (90) calendar days from the date of the RFQ closing.

I/We agree that there will be no cost payable by the Principal towards the preparation or submission of this Response irrespective of its outcome.

The consideration is as provided under the schedule of rates of prices in the prescribed format and submitted with this RFQ.

Name of authorised signatory:			
Position:			
Email:			
Phone:		Postal address:	
Signature of authorised signatory of Respondent:			
Dated:			

6.2 Selection criteria

The Contract may be awarded to a Respondent who best demonstrates the ability to provide quality products and or services at a competitive price. The quoted prices will be assessed together with the qualitative and compliance criteria to determine the most advantageous outcome to the principal.

A scoring system will be usual as part of the assessment of the Qualitative Criteria. Unless otherwise stated, a Response which provides all the information requested will be assessed as satisfactory.

6.2.1 COMPLIANCE CRITERIA

Please select with a "Yes" or "No" whether you have complied with the following compliance criteria:

a) Respondents are to provide acknowledgment that your organisation has submitted in accordance with the Conditions of this RFQ and your pricing is submitted in the format required by the Shire.	Yes / No
b) Licenses/Registration Respondents are to provide any licenses and registrations required i.e. builders registration, plumbing license, electrical contractors etc	Yes / No
c) Compliance with the Specification contained in the Request.	Yes / No
d) Compliance with the Delivery Date **Delivery Date: 30/06/2021**	Yes / No
e) Works Insurance Provide your Works Insurance details including, Insurer; Broker / Policy Number / Value ($) (Must be for the Contract Price as a minimum) / Expiry Date.	Yes / No
If you do not meet/currently hold Works Insurance or meet the minimum value (Contract Price) do you agree to obtain or amend your current policy as the case may be to meet these requirements at no additional cost to the Principal.	Yes / No

6.2.2 QUALITATIVE CRITERIA

Before responding to the following qualitative criteria please note the following:

a) All information relevant to your answers to each criterion are to be contained within your response;

b) Respondents are to assume that the Evaluation Panel has no previous knowledge of your organisation, its activities or experience;

c) Respondents are to provide full details for any claims, statements or examples used to address the qualitative criteria; and

d) Respondents are to address each issue outlined within a qualitative criterion.

Qualitative criteria	Weighting
A. Relevant Experience In a separate document, provide details of similar works, demonstrating competency and proven track record of achieving outcomes.	**10%**
B. Resources & Key Personnel Provide information of proposed personnel to be allocated to this project. Demonstrate your ability to supply and sustain plant, equipment and materials and any contingency measures or backup of resources	**30%**
C. Demonstrated Understanding Detail the process intended to achieve the requirement of the specification, include a project schedule/timeline.	**10%**
D. Price see 5.4 Price Basis and Schedule below for requirements.	**50%**

6.3 Price information

Respondents must complete the following "Price Schedule". Before completing the Price Schedule, Respondents should ensure they have read this entire Request for Quotation.

Quotes, inclusive of GST are to be itemised. If a breakdown is provided in the specification then price must be based accordingly.

Unless otherwise indicated prices tendered must include delivery and any associated costs, and all applicable levies, duties, taxes and charges. Any charge not stated in the Response, as being additional will not be allowed as a charge for any transaction under any resultant Contract.

6.4 Price basis and schedule

Quotes are required as	**Schedule of Rates**

Option A Are you prepared to offer a fixed price?	**Yes / No**

Quotes that do not meet the above requirements will be considered non-compliant.

6.5 Price Schedule

Ref.	Description	Price (ex GST)
3.7.1	Stage 1 - Moreton Tce SLK 0.37 to SLK 0.65	$
	Stage 2 – Moreton Tce SLK 0.23 to SLK 0.37	$
3.8	Cemetery Car Park	$
3.9	Midlands Rd & Tabletop Rd Intersection	$
	Lump Sum Total (ex GST)	**$**
	Lump Sum Total (inc GST)	**$**
OPTIONAL		
3.10.1	Option - Moreton Terrace Renewal – Stage 3	
3.10.2	Option – Hunt/Waldeck Roundabout	
3.10.3	Option – Roundabout Moreton / Pt Leander	
3.10.4	Option – Hosken Street and On-Street Parking	
3.10.5	Option – Community Resource Centre Car Park	
3.10.6	Option – Dongara Hotel Precinct – Car Park Upgrade	
	Lump Sum Total (Optional) (ex GST)	**$**
	Lump Sum Total (Optional) (inc GST)	**$**

7 APPENDIX 1 – MINOR WORKS CONTRACT CONDITIONS

RFT VP232405

Moreton Terrace Upgrade
Asphalt Works

MINOR WORKS CONTRACT CONDITIONS

Shire of Irwin of 11-13 Waldeck Street, Dongara ABN:96 734 531 282
(**Principal**)

and

[*insert Contractor*] of [insert address] [insert ABN]

(**Contractor**)

(together, the **Parties**)

Date of Contract:

MINOR WORKS CONTRACT CONDITIONS		**1**
1	**Definitions and interpretation**	**3**
2	**Formation of contract and term**	**7**
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4	**Compliance with legal requirements, industrial awards and agreements**	**7**
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30	**EXECUTION**	**24**
Schedule 1 - Minor Works Contract Specifics and Specification		**25**

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BACKGROUND

(a) The Principal has engaged the Contractor to perform the Works.

(b) This Document sets out the terms and conditions upon which the Contractor shall perform the Works.

1 Definitions and interpretation

1.1 In this Document, except where the context indicates otherwise:

Affected Obligation has the meaning given in clause 29.1(a)(i).

Background Intellectual Property Rights means any Intellectual Property Rights owned by a Party prior to the commencement of the Contract or which did not come into existence by reason of the Contract, and which a Party is entitled to exercise and sub-license, which are embodied in, attached to or otherwise relate to the Contract.

Business Day means a day that is not a Saturday, Sunday, a public holiday in Western Australia or 27, 28, 29, 30 or 31 December.

Commencement Date means the date on which the Contract commences in accordance with clause 2.1 or 2.2, as applicable.

Completion means that stage of the execution of the Works where the Works are complete and meet the requirements of the Contract, except for Minor Defects, and all certificates, documents, warranties, guarantees and other information required for the use, operation and maintenance of the Works have been provided to the Principal.

Completion Certificate means a certificate issued by the Principal to the Contractor confirming that Completion has occurred.

Confidential Information means:

(a) the Contract;

(b) information relating to the Principal's past, existing or future business, strategic plans or operations, finances, or customers;

(c) any other information provided by a Party to the other Party which is identified by the disclosing Party as confidential;

(d) any report, opinion or advice prepared by the Contractor which the Principal advises is to be prepared on a confidential basis; and

(e) any copies, extracts or summaries of the information described in paragraphs (a) to (d) (inclusive) above,

but excluding information which has entered the public domain other than through a breach of a confidentiality obligation owed by a Party to the other Party or by any other person.

Consequential Loss means any loss of production, revenue, profit, business reputation, opportunities or anticipated savings, and loss arising from wasted overheads or business interruptions.

Construction Contracts Act means the *Construction Contracts Act 2004* (WA).

Contract means the agreement between the Parties regarding the performance of the Works containing the terms and conditions set out in this Document.

Contractor means the party who is engaged by the other party to perform the Minor Works under the Contract and whose details may be set out on the front page of this Document.

Contractor's Vehicles and Equipment has the meaning given in clause 25.4.

Contract Price means:

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(a) the prices or rates specified in an Order as the amount to be paid by the Principal to the Contractor for executing the Works the subject of that Order in accordance with the Contract; or

(b) the amount to be paid by the Principal to the Contractor for executing the Works, in accordance with the Contract, as otherwise set out in the Contract.

Date of Completion means the date specified in a Completion Certificate as the date upon which Completion occurred.

Date for Completion means the date for the completion of the Works specified in an Order or agreed by the Parties in writing. To avoid doubt, the Date for Completion may be set out in the Minor Works Contract Specifics.

Defect means any error, deficiency, omission, non-conformity, fault, failure, malfunction, irregularity or other defect in the Works, or any aspect of the Works, which is not in accordance with the requirements of the Contract.

Defects Liability Period means a period of 12 months from the Date of Completion, as extended as a result of any rectification works carried out during the Defects Liability Period.

Disbursement means reasonable out-of-pocket costs and expenses incurred by a Contractor in executing the Works which are:

(a) charged to the Principal at cost; and

(b) incidental to the execution of the Works.

Dispute means any dispute or difference between the Parties in connection with the Contract.

Dispute Notice has the meaning given in clause 23.1.

Document means this document called 'Minor Works Contract Conditions'.

Extension Request has the meaning given in clause 9.3.

Force Majeure Event means an event or cause beyond the reasonable control of the Party claiming force majeure comprising any of the following:

(a) act of God, lightning, storm, flood, fire, earthquake, explosion, cyclone or wind and wave conditions associated with a cyclone, tidal wave, landslide or adverse weather conditions;

(b) strike, lockout or other labour difficulty;

(c) act of public enemy, war, sabotage, blockade, revolution, riot, insurrection, civil commotion, epidemic or terrorism; or

(d) a change in any Law or any authority exercised by an authority or official by Law.

Force Majeure Event Termination Period means 120 consecutive days.

GST Law means *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any related Act imposing such tax.

Insolvency Event means:

(a) in relation to a corporation, where that corporation:

(i) goes into liquidation, except for the purpose of reconstruction or amalgamation of which the affected Party has given the other Party 5 Business Days' prior written notice of such reconstruction or amalgamation;

(ii) is otherwise dissolved;

(iii) has had appointed to it a receiver or receiver/manager of the whole or any part of the assets and undertaking of the Party;

(iv) enters into any composition or scheme of arrangement with its creditors;

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(v) has had appointed to it an inspector or like official to examine the affairs of the Party or the Party enters into voluntary or other external administration; or

(vi) is otherwise unable to pay all its debts as and when they fall due; and

(b) in relation to a natural person, where that natural person:

(i) commits an act of bankruptcy;

(ii) becomes subject to an order for the sequestration in bankruptcy of the estate of the Party;

(iii) assigns its estate or enters into a scheme of arrangement or composition for the benefit of its creditors; or

(iv) is otherwise unable to pay all its debts as and when they fall due.

Insurances means the insurances that the Contractor is required to obtain under clause 25.

Intellectual Property Right means all intellectual and industrial property rights and interests throughout the world, whether registered or unregistered, including trademarks, designs, patents, inventions, semiconductor, circuit and other eligible layouts, copyright (including future copyright), database rights and analogous rights, trade secrets, know how, processes, concepts, plant breeder's rights, confidential information and all other intellectual property rights as defined in Article 2 of the Convention establishing the World Intellectual Property Organisation on 14 July 1967, as amended from time to time, including any application or right to apply for any of these rights.

Law means statute, equity, the common law and the legally enforceable requirements of Authorities, including any regulation or law of the Principal.

Legal Requirement means a requirement under any Law or approval including a requirement to pay any fees and charges in connection with any Law or approval.

Letter of Award means an Order or other form of document provided by the Principal to the Contractor advising that the Contractor's Request Response was accepted by the Principal.

Loss means any liability, loss, damage, cost (including litigation costs on a full indemnity basis), claim, suit, charge, diminution in value, action, demand, expense or proceeding whether present or future, actual, contingent or prospective and whether known or unknown, and howsoever arising.

Minor Defects means Defects which do not prevent the Works from being reasonably capable of being used for their intended purpose and which can be rectified by the Contractor without prejudicing the convenient or effective use of the Works by the Principal.

Minor Works Contract Specifics means the contract information contained in Schedule 1 under the heading 'Minor Works Contract Specifics'.

OSH Laws means all workplace, health and safety related Law, codes of practice, other compliance codes, directions on safety or notices issued by any relevant authority and standards, where any part of the Contractor's obligations under the Contract are being performed. This includes the *Occupational Health and Safety Act 1984* (WA), in addition to any other relevant legislation or regulations.

Order means a purchase order or other written direction from the Principal to the Contractor which requires the execution of specified Works.

Parties means the Principal and the Contractor.

Payment Claim means a written claim for payment made by the Contractor to the Principal in accordance with the Contract.

Personnel means the personnel engaged by the Principal, the Contractor or a related body corporate of the Contractor, including directors, officers, employees and agents, contractors and Sub-contractors and any director, officer, employee or agent of any contractor or Sub-contractor, but when used in the context of the Principal's Personnel, does not include the Contractor or the Contractor's Personnel.

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Principal means the party engaging the other Party to perform the Works under the Contract and whose details may be set out on the front page of this Document.

Principal's Documents means any documents, including drafts or working versions, whether in hard copy or electronic format, in the possession of, or otherwise under the control of, the Principal.

Principal Request means the written request provided by the Principal to the Contractor to submit an offer and price to perform the Works.

Representative means a representative of a Party as described in clause 29.3.

Request Response means the offer submitted by the Contractor to execute the Works made in response to a Principal Request.

Retention Moneys means moneys withheld by the Principal from amounts otherwise due to the Contractor in accordance with the Contract.

Retention Percentage (if relevant) has the meaning given in clause 19.2.

Retention Sum means the amount (if any) specified as such in any Minor Works Contract Specifics.

Site means the site at which the Works shall be executed.

Specification means a specification or scope of works for the Works:

(a) provided by the Principal to the Contractor before the Contractor provides its Request Response; or

(b) developed after the Contractor provided its Request Response or after the Contract came into effect and agreed to by the Parties; or

(c) contained within Schedule 1.

Start Date means the date specified as such in the Principal Request, an Order, in any Minor Works Contract Specifics, or as otherwise agreed by the Parties in writing as the date upon which the Works shall commence.

Sub-contractor means any person or entity engaged by the Contractor in connection with the execution of the Works and includes consultants, subcontractors, suppliers and other contractors, but does not include the Contractor's employees.

Sustainability Objectives has the meaning given in clause 6.1.

Wilful Misconduct means any wrongful act or omission that was intentionally done or involved reckless disregard to the likely consequences, including an intentional breach of the Contract.

Works means the works to be executed by the Contractor as set out in an Order, any Specification or any Minor Works Contract Specifics.

Works Program means a written document setting out the Contractor's proposed activities and timeline for executing the Works.

Works Variation means a variation to the scope of the Works or the nature of the execution of the Works.

1.2 In this Document, unless the context suggests otherwise:

(a) a reference to the Contract means the Contract as varied from time to time;

(b) a reference to 'including' must be read as if it is followed by '(without limitation)';

(c) where a word or an expression is defined, any other part of speech or grammatical form of that word or expression has a corresponding meaning;

(d) words in the singular include the plural and vice-versa;

(e) a reference to any legislation or legislative provision includes any statutory modification or re-enactment of, or legislative provision substituted for, and any subordinate legislation issued under, that legislation or legislative provision;

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(f) a reference to any Party includes that Party's executors, administrators, substitutes, successors and permitted assigns;

(g) a reference to a clause is a reference to a clause of this Document;

(h) a reference to a 'day' or 'month' is a reference to a calendar day or calendar month;

(i) headings are for convenience only and do not affect interpretation of this Document; and

(j) no rule of construction applies to the disadvantage of a Party on the basis that the Party put forward the Contract or any part of it.

2 Formation of contract and term

2.1 Where this Document is executed by the Parties, the Contract shall be formed, and shall commence, on the date that the last Party executes this Document. To avoid doubt, any failure by the Parties to complete the Minor Works Contract Specifics does not affect the formation of the Contract.

2.2 Where this Document is not executed by the Parties:

(a) the Contract shall be formed, and shall commence, on the date of the Letter of Award;

(b) the Parties agree that the terms and conditions in this Document are incorporated within the Contract and the failure of either Party to execute this Document does not affect the incorporation of those terms and conditions within the Contract or the Contract's existence; and

(c) any failure by the Parties to complete the Minor Works Contract Specifics does not affect the formation of the Contract.

2.3 The Contract shall terminate:

(a) by written agreement of the Parties;

(b) in accordance with clauses 20.6(b), 20.7 or 20.8(k); or

(c) upon the expiry of the Defects Liability Period.

2.4 Termination of the Contract shall not affect the rights and liabilities of a Party accrued prior to termination.

2.5 Clauses 0 (Definitions and interpretation), 2.4 (regarding accrued rights and liabilities), 2.5 (regarding survival), 8.3 (regarding re-possession of the Site and Works), 16 (Defects Liability Period), 19.6(b) (regarding return of Retention Sum or security), 21 (Termination), 22 (Liability), 23 (Settlement of Disputes), 27 (Confidentiality), 28 (Intellectual Property Rights), 29.4 (Notice) and 29.6 (Governing Law) shall survive termination of the Contract.

3 Execution of the works

3.1 The Contractor must execute the Works in accordance with the Contract, including any Specification, and in accordance with the approved Works Program, to the Principal's reasonable satisfaction.

3.2 The Contractor warrants that it has the skills, experience, expertise and resources necessary to competently execute the Works.

4 Compliance with legal requirements, industrial awards and agreements

4.1 The Contractor must comply with all Legal Requirements affecting or applicable to the execution of the Works and shall ensure that its Personnel and Sub-contractors also comply with the same.

4.2 Without limiting clause 4.1, the Contractor shall:

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(a) comply with all industrial awards or agreements affecting or applicable to the persons employed by the Contractor for the purposes of executing the Works;

(b) ensure that the remuneration and terms of employment of all of its employed Personnel are consistent with such remuneration and terms reflecting the industry standard as expressed in industrial awards, agreements and any code of practice applicable to the Contractor's industry;

(c) to the extent practicable, use reasonable endeavours to ensure that its Sub-contractors satisfy the requirements of clauses 4.2(a) and 4.2(b); and

(d) comply with the terms of any agreements with its Sub-contractors in relation to the Works.

5 Safety obligations

5.1 The Contractor must:

(a) do all things reasonably necessary to ensure that the Works are executed in a manner that is safe and not likely to cause injury or illness to any person; and

(b) perform all relevant functions and fulfil all relevant duties under all relevant OSH Laws required of an employer or otherwise applicable to the role of the Contractor under the Contract including notification of incidents as may be required under OSH Laws.

5.2 Where any injury, property damage, accident or incident which is notifiable under any Legal Requirement occurs, the Contractor must:

(a) as soon as practicable, but in any event within 24 hours, notify the Principal in writing of that injury, property damage, accident or incident; and

(b) provide the Principal with any further information requested by the Principal.

5.3 The Contractor acknowledges that if, in performing its obligations under the Contract, its Personnel enter premises under the control of the Principal they must comply with the Principal's occupational health and safety policies and procedures.

5.4 Without limiting clause 20, the Principal may suspend the whole or part of the performance of the Parties' obligations under the Contract following any breach by the Contractor of OSH Laws or this clause which gives rise to circumstances which:

(a) present actual or potential risk of life or serious injury; or

(b) are otherwise required to be notified under OSH Laws.

6 SUSTAINABLE PROCUREMENT

6.1 The Contractor acknowledges that the Principal supports ethical and environmentally, socially and economically sustainable procurement practices, including the matters contemplated by clause 6.2 (**Sustainability Objectives**) and acknowledges that its support of the Sustainability Objectives assists the Member in meeting its own Sustainability Objectives.

6.2 The Contractor agrees to use reasonable endeavours to conduct its business and supply the Goods and/or Services in a manner which seeks to support the Sustainability Objectives, which endeavours may include:

(a) preparing and implementing policies to seek to support the Sustainability Objectives, including providing training to its Personnel regarding such policies;

(b) implementing practices which seek to reduce the environmental impact of the Contractor's activities, including:

(i) using recycled materials and products;

(ii) reducing emissions;

(iii) adopting greener energy solutions;

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(iv) adopting environmentally sustainable design; and

(v) reducing wastage;

(c) providing employment or training opportunities to individuals with a disability or experiencing disadvantage, and using the services of agencies or other businesses which provide employment or training opportunities to such individuals (such as WA Disability Enterprises and/or Aboriginal Enterprises);

(d) sponsoring and supporting local community groups and local community development initiatives;

(e) promoting fair workplace practices;

(f) promoting workplace health;

(g) using services and purchasing products from Western Australian and Australian suppliers and small and medium-sized businesses; and

(h) using services and purchasing products that are efficient to operate and have low operating and maintenance costs.

6.3 The Contractor agrees to provide the Principal with any reasonably requested information relating to the measures adopted by the Contractor in pursuit of the Sustainability Objectives.

6.4 The Contractor agrees to undertake reasonable due diligence and monitoring of its supply chain on an ongoing basis to ensure that materials and services required for the supply of the Goods and/or Services to the Principal are supplied from sustainable sources.

7 Works program

7.1 Within 10 Business Days of the Commencement Date, the Contractor must prepare and submit to the Principal a draft Works Program for approval by the Principal.

7.2 Unless otherwise advised in writing by the Principal, the Works Program must:

(a) be consistent with the Contract;

(b) show key dates and constraints;

(c) arrange activities and tasks on a week-by-week basis with each week starting on a Monday;

(d) arrange activities and tasks in sequential logical order and on a timeline accurately representing the Contractor's proposed timeline and method for executing the Works; and

(e) take into account any requirements and constraints set out in the Specification (if any).

7.3 If the Principal approves the Works Program without proposing any amendments, the Principal must give the Contractor written notice of such approval as soon as practicable.

7.4 If the Principal suggests amendments or provides other written comments on the draft Works Program, the Contractor must take such amendments or comments into account and, where applicable, provide a revised draft Works Program to the Principal for approval.

7.5 Following approval of the draft Works Program by the Principal, the Contractor must provide to the Principal:

(a) a final version of the Works Program; and

(b) a weekly written report regarding compliance with the Works Program.

8 Site possession

8.1 On and from the Start Date, the Principal shall give the Contractor sufficient possession of the Site for the commencement and execution of the Works. To avoid doubt, possession of the

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Site shall confer on the Contractor a right to use and control the Site only as necessary to enable the Contractor to carry out the Works and does not constitute a right of exclusive possession of the Site.

8.2 While the Contractor is in possession of the Site, the Contractor:

(a) is liable for the care of the Works, any temporary works, materials, plant and equipment on the Site until the Principal issues a Completion Certificate; and

(b) must promptly rectify any loss or damage to the Works, unless caused by the Wilful Misconduct or gross negligence of the Principal or the Principal's Personnel.

8.3 Upon issue of the Completion Certificate or termination of the Contract, whichever comes first, the Contractor shall give possession of the Site and the Works to the Principal, but the Principal is not liable for any items of Contractor's property or Sub-contractor's property remaining on the Site, and the Contractor must remove, or ensure the removal of, such items as soon as possible.

9 Commencement and completion of the works

9.1 Unless otherwise agreed in writing by the Parties, the Contractor must commence the Works on the Start Date and complete the Works before the Date for Completion.

9.2 The Contractor is entitled to an extension to the Start Date or Date for Completion if a delay in the commencement or execution of the Works is due to:

(a) a breach by the Principal of the Contract;

(b) delay or disruption caused by the Principal, except where such delay or disruption is caused by the Principal acting in accordance with the Contract;

(c) a Force Majeure Event occurring before the Start Date or Date for Completion, as applicable;

(d) suspension of the Contract under clause 20 where the suspension is the result of a breach by the Principal; or

(e) a Works Variation being agreed.

9.3 To obtain an extension to the Start Date or Date for Completion, the Contractor must make a written request to the Principal within 10 Business Days after the cause of delay has arisen, or within any other period agreed in writing by the Parties, setting out the facts on which the request is based (**Extension Request**).

9.4 The Principal, acting reasonably, must notify the Contractor in writing within 10 Business Days of receiving the Extension Request, or such other time agreed in writing by the Parties, whether the Extension Request is granted and any relevant period of extension.

9.5 The Contractor must give the Principal at least 15 Business Days' notice in writing of the date on which the Contractor anticipates that Completion shall occur.

9.6 When the Principal is satisfied that Completion has occurred, the Principal must issue a Completion Certificate to the Contractor.

9.7 As soon as possible after the Date of Completion, the Contractor must clear away and remove from the Site all plant, surplus material, rubbish and temporary works of any kind and fill and consolidate and level off all excavations (other than those forming part of the Works) made by the Contractor on the Site, and ensure that the Site is clean and tidy, to the Principal's satisfaction.

10 Latent conditions

10.1 The Contractor warrants that, before entering into the Contract, the Contractor had access to, and inspected, the Site, and has carried out its own enquiries to establish, understand and satisfy itself as to the state of the Site and all risks and contingencies associated with the Site existing as at the Commencement Date.

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10.2 If the Contractor discovers physical conditions on the Site or its surroundings, excluding weather conditions, which could not reasonably have been anticipated at the time of entering the Contract even where the Contractor had:

(a) examined all information made available in writing by the Principal to the Contractor for the purpose of preparing a Request Response in respect of the Works;

(b) examined all information relevant to the risks, contingencies and other circumstances having an effect on the Request Response and obtainable by the making of reasonable enquiries; and

(c) inspected the Site and its surroundings,

the Contractor shall immediately notify the Principal in writing and may request that a Works Variation be directed and/or may make an Extension Request, and the Principal must not unreasonably withhold its agreement to a Works Variation and/or Extension Request.

11 Liquidated damages

11.1 This clause 11 applies if the Parties have executed this Document and have stated that this clause 11 applies in the Minor Works Contract Specifics.

11.2 If the Contractor fails to achieve Completion by the Date for Completion, the Contractor must pay the Principal liquidated damages calculated in accordance with the Minor Works Contract Specifics for such default for every day by which Completion of the Works is delayed beyond the Date for Completion. To avoid doubt, the Principal may recover liquidated damages from the Contractor either on demand from the Contractor or by deducting such amount from any amount owed by the Principal to the Contractor.

11.3 To claim liquidated damages, the Principal must provide written notice to the Contractor stating the date on which the Contractor's liability to pay liquidated damages commenced as soon as practicable after the Contractor's liability to pay liquidated damages arose.

11.4 The Contractor acknowledges and agrees that all sums payable by the Contractor to the Principal as liquidated damages represent the Principal's genuine pre-estimate of the damages likely to be suffered if Completion is not achieved by the Date for Completion and such sums shall not be construed as a penalty.

11.5 If an Extension Request in relation to the Date for Completion is granted after the Contractor has paid, or the Principal has set-off, the liquidated damages payable under clause 11.2, the Principal must repay to the Contractor the amount of such liquidated damages as represents the length of the extension to the Date for Completion.

11.6 To avoid doubt, the payment of liquidated damages under this clause 11 does not relieve the Contractor from any of its obligations or liabilities under the Contract.

12 Plant and equipment

The Contractor must:

(a) provide all materials, labour, plant, equipment, tools and other resources necessary for executing the Works, unless otherwise agreed in writing by the Parties or set out in any Minor Works Contract Specifics; and

(b) ensure that all such items used or supplied in connection with the Works comply with Legal Requirements and are fit for their usual and intended purpose.

13 Materials

13.1 All materials used in the execution of the Works must be consistent with the nature and character of the Works, be of a kind that is suitable for their purpose, and be in compliance with the Contract and any relevant Australian standards, unless otherwise agreed by the Principal.

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13.2 The Contractor must give the Principal full particulars in writing of the mode, place of manufacture, source of supply and the performance capacities of materials, or other information, about the materials used in executing the Works, where the Principal makes a request in writing (acting reasonably) for such particulars or information.

13.3 At any time prior to the issue of the Completion Certificate, the Principal may reject any material that is not in compliance with clause 13.1 and may direct its replacement, correction or removal at the Contractor's cost.

14 Works variation

14.1 The Principal may direct a Works Variation by providing written notice of the Works Variation, including details of the Works Variation, to the Contractor and the Contractor must comply with such a direction.

14.2 Within 10 Business Days of receipt of the notice under clause 14.1, the Contractor must submit to the Principal in writing a detailed, itemised price for executing the Works Variation.

14.3 The Works Variation shall be valued by agreement of the Parties to be recorded in writing or, failing agreement within 10 Business Days (or such other time as is agreed in writing by the Parties) after receipt of the notice under clause 14.1, by the Principal, and the Contract Price shall be adjusted accordingly.

15 Testing

15.1 Prior to the Date of Completion, the materials and Works shall be subject to such tests as:

(a) set out in any Minor Works Contract Specifics; or

(b) may be reasonably directed in writing by the Principal,

to establish the compliance of materials, workmanship and the Works with the Contract.

15.2 Tests conducted under clause 15.1 shall be conducted at the Contractor's cost unless otherwise agreed in writing by the Parties.

16 Defects liability period

16.1 The Contractor must rectify any Defects notified to the Contractor by the Principal in writing during the Defects Liability Period within a reasonable time, but no later than 30 days from the date that notice of the Defect was given by the Principal, at the Contractor's expense.

16.2 If the Contractor fails to rectify a Defect in accordance with clause 16.1, the Principal may rectify the Defect and the costs of it doing so shall be a debt due from the Contractor to the Principal. To avoid doubt, the Principal may recover such amounts from the Contractor either on demand from the Contractor or by deducting such amount from any amount owed by the Principal to the Contractor.

17 Payment

17.1 As soon as reasonably practicable following the end of each month or at another time or frequency agreed in writing by the Parties, including as set out in any Minor Works Contract Specifics, the Contractor must give the Principal a detailed, itemised Payment Claim specifying:

(a) the amount due to the Contractor for any part of the Works carried out up to the date of the Payment Claim, including a breakdown of such amounts and description of the Works carried out;

(b) any other amounts owed by the Principal to the Contractor at the date of the Payment Claim; and

(c) any other information reasonably required by any Minor Works Contract Specifics or directed in writing by the Principal.

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17.2 Subject to the deduction of:

(a) any Retention Moneys; or

(b) other amount which the Principal may be entitled to deduct or which is due and payable by the Contractor to the Principal,

the Principal must pay the balance of a valid Payment Claim within 20 Business Days of the date of issue of the Payment Claim or the time for payment otherwise agreed in writing by the Parties, including as set out in any Minor Works Contract Specifics. To avoid doubt, nothing in the Contract obliges the Principal to pay for Works that are not in accordance with the Contract or for plant or materials not incorporated in the Works on Site.

17.3 If the moneys deducted by the Principal under clause 17.2(b) are insufficient to discharge the payment liability of the Contractor to the Principal, the Principal may have recourse to Retention Moneys or any security provided under the Contract.

17.4 The payment of moneys to the Contractor by the Principal shall not be evidence of the value of work done or an admission of liability or evidence that any Works have been executed satisfactorily but shall be a payment on account only. To avoid doubt, the Principal may correct an error in a previous payment in a later payment.

17.5 Unless otherwise agreed in writing by the Parties, the Contract Price shall not be subject to adjustment for rise and fall in costs.

17.6 The Contractor is not entitled to payment for any Disbursements not included in the Contract Price unless prior written notice of the Disbursement was provided to the Principal and the Principal approved the Disbursement in writing. To avoid doubt, the Principal must not unreasonably withhold its consent to any reasonable Disbursements.

18 Interest on overdue payments

18.1 This clause 18 applies if the Parties have executed this Document and have stated that this clause 18 applies in the Minor Works Contract Specifics.

18.2 Interest at the rate set out in the Minor Works Contract Specifics is payable on so much of an amount that is payable under the Contract by a Party to the other Party on or before a certain date but which is unpaid 20 Business Days after that date.

18.3 The interest is to be paid for the period beginning on the day after the date on which the amount is due and ending on and including the date on which the amount payable is paid.

18.4 To avoid doubt, if the Party who owes the other Party an amount under the Contract pays to the other Party that amount before the expiry of 20 Business Days from the date on which the amount fell due, no interest is payable.

19 Retention moneys and security

19.1 This clause 19 applies if the Parties have executed this Document and have stated that this clause 19 applies in the Minor Works Contract Specifics.

19.2 Subject to clause 19.3, the Principal may deduct as Retention Moneys a percentage set out in any Minor Works Contract Specifics of the balance of each Payment Claim (**Retention Percentage**) as security for the performance of the Contractor's obligations under the Contract.

19.3 The Principal may deduct Retention Moneys under clause 19.2 until the Principal has retained an amount equalling the Retention Sum.

19.4 If required by the Minor Works Contract Specifics, the Contractor must provide security equal to the value of the Contract Price or part thereof in lieu of Retention Moneys in the form of an unconditional and irrevocable bank undertaking in a form, and from a financial institution, approved by the Principal, or another form of security, as set out in the Minor Works Contract Specifics.

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19.5 The Principal may have recourse to any Retention Moneys or security at any time it may be entitled to recover from, or be paid by, the Contractor an amount under the Contract or otherwise.

19.6 The Principal must return to the Contractor the Retention Sum or any security provided under clause 19.4 after deduction of any amounts the Principal is owed under the Contract or otherwise:

(a) within the period of time specified in any Minor Works Contract Specifics following the Date of Completion; or

(b) where the Contract is terminated before the Date of Completion, within the period of time specified in any Minor Works Contract Specifics following termination.

20 Default, suspension and termination for breach

Default

20.1 Without limiting the Principal's rights under clause 20.8, if a Party breaches a provision of the Contract and that breach continues for a period of 5 Business Days, the other Party may provide a written notice to that Party:

(a) identifying the nature of the alleged breach;

(b) requiring the Party to comply with the relevant provision of the Contract; and

(c) requiring the Party to remedy the breach in any manner and within a reasonable timeframe specified in the notice;

20.2 If a Party breaches or repudiates the Contract, nothing in the Contract prejudices the right of the other Party to recover damages or exercise any other right under the Contract or under any applicable Legal Requirement.

Suspension

20.3 Without limiting the Principal's rights under clause 20.8, if a Party breaches a provision of the Contract and fails to comply with a written notice issued under clause 20.1, the non-defaulting Party may suspend the performance of its obligations (or any of them) and the defaulting Party's obligations (or any of them) by written notice to the defaulting Party until such time that the breach is remedied to the non-defaulting Party's reasonable satisfaction or the non-defaulting Party otherwise directs that the performance of the Contract is no longer suspended (in each case the non-defaulting Party shall give written notice to the defaulting Party of the cessation of the suspension) at which point the Parties must promptly recommence the performance of their obligations.

20.4 The Contractor must bear any cost it incurs as a result of a suspension under clauses 20.3 or 5.4 and any costs incurred by the Principal as a result of the suspension and any amounts payable by the Contractor to the Principal under this clause become a debt due to the Principal by the Contractor.

20.5 To avoid doubt, if a Party suspends the Contract or any part of it in accordance with clauses 20.3 or 5.4, the Date for Completion shall not be extended by the period of that suspension, except as otherwise agreed in writing by the Parties.

Termination for breach

20.6 Subject to clause 20.7, without limiting the other circumstances in which the Contract may be terminated, if a Party breaches a provision of the Contract and fails to comply with a notice issued under clause 20.1, then the other Party:

(a) may give a further notice to the defaulting Party of its intention to terminate the Contract if the breach is not remedied or rectified in accordance with any manner or timeframe specified in the notice; and

(b) by a further and final notice in writing to the defaulting Party, may immediately terminate the Contract if the breach is not remedied or rectified within the timeframe specified in the notice given under clause 20.6(a); and

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20.7 If a Party breaches a material provision of the Contract and that default is incapable of remedy or rectification, the non-defaulting Party may immediately terminate the Contract by written notice to the defaulting Party.

'Show cause' procedure

20.8 At any time, irrespective of whether the Principal has followed the steps in clauses 20.1 to 20.7 (inclusive), the Principal may by written notice to the Contractor require the Contractor to show cause, by a date specified in the notice, why the Principal should not terminate the Contract or suspend payment and take the Works remaining to be completed wholly or partly out of the hands of the Contractor without prejudice to any rights of the Principal under the Contract or at Law if the Contractor:

(a) fails to commence the Works by the Start Date;

(b) fails to proceed with the Works at a reasonable rate of progress;

(c) commits a material breach of the Contract;

(d) fails to comply with a Legal Requirement relating to the execution of the Works;

(e) fails to maintain the Insurances;

(f) assigns or sub-contracts the Contract or the Works or any part thereof without any prior written consent of the Principal required by the Contract; or

(g) commits an Insolvency Event,

and if the Principal does so take all or part of the Works out of the hands of the Contractor because the Contractor has failed to show sufficient cause:

(h) the Principal may complete the whole or any part of those Works itself or by means of other persons;

(i) the Principal may take possession of the Site, the Works and, except where the Contract is terminated, the plant and other things on or in the vicinity of the Site as are owned by the Contractor;

(j) if the costs incurred by the Principal in completing the Works is greater than the amount which would have been paid to the Contractor if the Contractor had completed the Works, the difference shall be a debt due from the Contractor to the Principal, otherwise any difference shall be a debt due from the Principal to the Contractor; and

(k) the Principal may terminate the Contract by written notice to the Contractor.

21 Termination

21.1 If the Contract is terminated, the Principal may engage or contract with any person other than the Contractor to execute all or part of the Works.

21.2 Where the Principal terminates the Contract under clauses 20.6(b), 20.7 or 20.8(k), the Principal shall ascertain the amount of all damages and expenses suffered or incurred by the Principal as a result of any of the matters referred to in those clauses and all such amounts may be deducted from amounts then owing to the Contractor or may be recovered by the Principal as a debt due by the Contractor to the Principal.

21.3 When the Contract is terminated, the Contractor must:

(a) promptly return to the Principal any of the Principal's property or Principal's Documents; and

(b) if requested by the Principal, co-operate with and assist the Principal to transition the execution of the Works to the Principal or to another person engaged by the Principal.

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22 Liability

22.1 Subject to clause 22.2, the Contractor shall indemnify the Principal and the Principal's Personnel against any Loss suffered or incurred in connection with any act or omission of the Contractor or the Contractor's Personnel in connection with the execution of the Works and the performance of the Contract, except to the extent that the Loss is caused by the Wilful Misconduct or gross negligence of the Principal or the Principal's Personnel.

22.2 Notwithstanding any other clause of the Contract, neither Party will be liable to the other Party for any Consequential Loss unless:

(a) the Law provides otherwise;

(b) the Parties agree in writing that a Party will be liable for that Consequential Loss; or

(c) the Consequential Loss is specified in or otherwise covered by an Insurance.

22.3 Each Party agrees that Part 1F of the *Civil Liability Act 2002* (WA), to the extent that the same may be lawfully excluded, is excluded from operation with respect to any Dispute, claim or action brought by one Party against the other Party arising out of or in connection with the Contract and any of the Contractor's Sub-contractors or such Sub-contractors' personnel.

23 Settlement of disputes

23.1 In the event of a Dispute, a Party may provide a written notice to the other Party identifying the nature of the Dispute and containing enough information to enable the other Party to reasonably understand the facts relevant to the Dispute (**Dispute Notice**).

23.2 Within 15 Business Days of receipt of the Dispute Notice, the Parties shall meet to seek to negotiate, in good faith, a resolution to the Dispute.

23.3 In the event that the Dispute remains unresolved after the time period referred to in clause 23.2, either Party may, at any time after giving notice to the other Party of its intention to do so, refer the Dispute for mediation in accordance with clause 23.4.

23.4 A mediation under this clause 23 shall:

(a) be conducted by a single mediator to be appointed, in the absence of agreement by the Parties within 5 Business Days after the giving of a notice of intention under clause 23.3, by the Chairperson (or his or her nominee) for the time being of the dispute resolution organisation known as the Resolution Institute;

(b) be conducted according to the rules proposed by the appointed mediator; and

(c) be conducted during a period of 10 Business Days (or such longer period as the Parties may agree in writing) from the acceptance by the mediator of his or her appointment.

23.5 The Parties shall each pay their own costs of the mediation and will each pay half of the mediator's fees and costs.

23.6 If the Parties are unable to resolve the Dispute within the mediation period stipulated in, or agreed under, clause 23.4(c), either Party may take whatever other action is available to it under the Contract or the Law, including initiating proceedings in a court of competent jurisdiction.

23.7 Nothing in this clause 23 precludes a Party from seeking interlocutory relief relative to the subject matter of a Dispute from a court of competent jurisdiction, including the right to seek injunctive relief.

23.8 To avoid doubt, nothing in this clause 23 affects or limits a Party's right to apply for an adjudication under the Construction Contracts Act.

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24 Construction contracts act

24.1 The Contractor must promptly and without delay give the Principal a copy of any notice, application or document filed or served on the Contractor or any of its Sub-contractors under the Construction Contracts Act relating to any sub-contract in respect of the Works.

24.2 If the Principal becomes aware that a Sub-contractor engaged by the Contractor is entitled to suspend or has suspended work pursuant to the Construction Contracts Act, the Principal may in its absolute discretion pay the Sub-contractor such money that may be owing to the Sub-contractor in respect of that work and any amount paid by the Principal will be a debt due from the Contractor to the Principal.

24.3 The Contractor must ensure that none of its sub-contracts contain terms prohibited by the Construction Contracts Act.

25 Insurance and risk management

25.1 The Contractor must:

(i) procure and maintain the Insurances with the minimum level of cover set out in this Document, or otherwise specified by the Principal in the Principal Request, from insurers having a financial performance rating of at least A- by Standard and Poor's (Australia) Pty Limited, or an equivalent rating from another internationally recognised rating agency, approved by the Principal, which either:

(i) carries on business in Australia and is authorised by the Australian Prudential Regulation Authority; or

(ii) if an overseas insurer, covers claims lodged and determined in the jurisdiction of Australia, with any limitations regarding this requirement to have been notified to, and approved, by the Principal;

(j) ensure that its Sub-contractors have appropriate and reasonable insurance (including as to amounts of insurance and type of insurance) for the work or services they may conduct or provide under a sub-contract relating to the performance of the Works;

(k) upon the Principal's written request, provide to the Principal copies of current and updated certificates of insurance for all Insurances, including those of a Sub-contractor;

(l) inform the Principal in writing immediately if it becomes aware of any actual, threatened or likely claims in connection with the Contract under any of the Insurances, except claims which the Principal may have against the Contractor;

(m) disclose to the Principal in writing any limitations under an Insurance or other factors relevant to any Insurance which may adversely impact on the performance of the Works by the Contractor or a claim in connection with the Contract;

(n) pay all premiums and deductibles applicable to any of the Insurances when due;

(o) promptly reinstate any Insurance required if it lapses or cover is exhausted;

(p) give the Principal at least 20 Business Days' prior written notice of any cancellation or non-renewal of, or a material alteration to, any of the Insurances; and

(q) not do any act or omission that would be grounds for an insurer to refuse to pay a claim made under any of the Insurances.

25.2 To the extent possible, at the times of placement or renewal of any Insurances, each Insurance must:

(a) state that it is governed by the laws of the Commonwealth of Australia and that courts of Australia shall have exclusive jurisdiction to deal with any dispute under the policy; and

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(b) where the Principal is entitled to cover under the Insurance:

(i) provide that the Insurance is primary with respect to the interests of the Principal and any other insurance maintained by the Principal is excess to and not contributory with the Insurance;

(ii) provide that a notice of claim given to the insurer by an insured under the Insurance must be accepted by the insurer as a notice of claim given by the Principal;

(iii) except for compulsory workers' compensation insurance, compulsory third party motor liability insurance and professional indemnity insurance, include a cross-liability provision extending the policy to operate in the same manner as if there was a separate policy of insurance covering each party insured (without increasing the deductibles or reducing the overall limit of indemnity);

(iv) provide that, where the Principal is not a named insured, the insurer must waive rights of subrogation against the Principal; and

(v) provide that any breach of the conditions of that Insurance by an insured other than a Principal must not in any way prejudice or diminish any rights which the Principal has under that Insurance.

25.3 The Contractor must procure and maintain **public liability insurance** and **product liability insurance** which:

(a) is for an amount not less than **$20 million**, or such other amount as specified in the Principal Request, in respect of any one claim, is unlimited in the amount of occurrences and not less than the amount set out in the Principal Request (if any is so specified) in the aggregate during any one 12 month period of insurance;

(b) covers the liability of the Contractor, its Personnel and the Principal in respect of:

(i) loss of, damage to, or loss of use of, any real or personal property; and

(ii) the bodily injury of, disease or illness (including mental illness) to, or death of, any person (other than liability which is required by any Legal Requirement to be insured under a workers' compensation policy),

ARISING OUT OF OR IN CONNECTION WITH THE CONTRACTOR'S PERFORMANCE OF THE CONTRACT; AND

(c) covers the use of unregistered motor vehicles or unregistered mobile plant and equipment used in connection with the Contract and sudden and accidental pollution.

25.4 Where the Contractor shall be using its own vehicles, plant and equipment in performing the Works, the Contractor must procure and maintain reasonable **vehicle and equipment insurance** for such vehicles, plant and equipment (Contractor's Vehicles and Equipment) (in addition to any compulsory third party motor vehicle insurance), which must:

(a) cover all loss and/or damage to the Contractor's Vehicles and Equipment;

(b) cover third party personal injury or death (to the extent not covered by any public and product liability insurance taken out by the Contractor and any compulsory third party motor vehicle insurance) and third party property damage liability involving the Contractor's Vehicles and Equipment;

(c) be unlimited in the number of occurrences; and

(d) to the extent available from the insurance market from time to time, contain a principal's indemnity extension in favour of the Principal.

25.5 Unless otherwise agreed in writing by the Principal, the Contractor must procure and maintain **workers' compensation insurance** as follows:

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(a) the Contractor must insure against liability for death of or injury to persons employed by or deemed by a Legal Requirement to be employed by the Contractor including liability under statute and at common law with a level of cover not less than **$50 million** or such amount as is specified in a Principal Request in respect of any one event; or

(b) where the Contractor is a sole trader and has no workers' compensation policy in place, the Contractor must insure against the loss of income and illness by the purchase of an income protection or salary continuance policy.

25.6 Where specified in a Principal Request or otherwise reasonably requested by the Principal, the Contractor must procure and maintain **professional indemnity insurance**, which must:

(a) be for not less than **$5 million** or such other amount as is specified in the Principal Request or otherwise reasonably requested by the Principal in respect of any one claim;

(b) be for an amount not less than the amount specified in the Principal Request in the aggregate for all claims arising in any one 12 month period of insurance (if any is so specified);

(c) include one full automatic reinstatement of the limit of liability;

(d) cover liability arising from any act or omission in connection with or arising out of the Contractor's professional activities and duties under the Contract; and

(e) cover claims under the *Competition and Consumer Act 2010* (Cth), the *Fair Trading Act 2010* (WA) and any similar legislation in any other state or territory, insofar as they relate to the provision of professional advice.

25.7 Notwithstanding any other provision of this clause 25, if agreed in writing by the Principal, the Contractor may self-insure in respect of any or all of the Insurances provided that:

(a) it is lawful for the Contractor to do so;

(b) the Contractor identifies in writing to the Principal which of the risks required to be insured are being self-insured; and

(c) if required by the Principal from time to time, the Contractor will provide to the Principal a copy of the Contractor's latest annual report and accounts and/or demonstrate to the Principal's reasonable satisfaction that the Contractor maintains sufficient financial reserves to discharge any liability accruing in respect of such insurance risks.

25.8 The Parties acknowledge and agree that:

(a) the effecting and maintaining of the Insurances by the Contractor does not, in any way, affect or limit the liabilities or obligations of the Contractor under the Contract;

(b) the Insurances are primary, and not secondary, to the indemnities referred to in this Document and the Principal is not obliged to make a claim or institute proceedings against any insurer under the Insurance before enforcing any of its rights or remedies under such indemnities;

(c) whenever a claim is made under any of the Insurances, the Contractor is liable for any excess or deductible payable as a consequence;

(d) the Contractor must not do or omit to do any act that would be grounds for an insurer to refuse to pay a claim made under any of the Insurance;

(e) nothing in this clause 25 fixes the Principal with notice of the contents of any Insurance policy and must not be raised as a defence to any claim by the Principal against the Contractor; and

(f) where relevant, the Contractor must provide reasonably requested assistance to the Principal in the preparation and negotiation of insurance claims.

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25.9 The Contractor, at the discretion of the Principal, may be required to provide the Principal with a risk management plan relating to the Contract in accordance with AS/NZS 4360-2009 Risk Management.

26 Assignment and sub-contracting

26.1 The Contractor must not:

(a) assign any of its rights and obligations under the Contract, or sub-contract any aspect of the Works, without the Principal's prior written approval; or

(b) allow a Sub-contractor to further sub-contract any aspect of sub-contracted Works without the Principal's prior written approval.

26.2 To avoid doubt, the Principal must not unreasonably withhold its approval under clause 26.1.

27 Confidentiality

27.1 In this clause 27, the following terms have the following meanings:

(a) '**Disclosing Party**' means the Party which has disclosed Confidential Information that is confidential to that Party; and

(b) '**Receiving Party**' means the Party to whom Confidential Information is disclosed by the Disclosing Party.

27.2 Subject to clause 27.3, the Parties must not:

(a) disclose Confidential Information to any other person; or

(b) use Confidential Information except to the extent necessary to fulfil their obligations under the Contract.

27.3 Subject to clause 27.4, a Party may disclose Confidential Information to a third party:

(a) with the prior consent of the Disclosing Party;

(b) to the extent required by any Law or applicable securities regulation or rule;

(c) in connection with any dispute or litigation concerning the Contract or its subject matter;

(d) to the extent required by any authority having jurisdiction over the Receiving Party; or

(e) who is an employee, officer, financier, joint venture partner, related body corporate, contractor, financial adviser, legal adviser or insurer of the Receiving Party, where the disclosure is necessary for the purpose of the Receiving Party performing its obligations, or enforcing its rights, under the Contract.

27.4 Before making a disclosure to a person under clause 27.3, the Receiving Party must:

(a) inform the entity or person to whom the Confidential Information is being disclosed of the Receiving Party's obligations under the Contract, except where clause 27.3(b) applies;

(b) notify the Disclosing Party and give the Disclosing Party a reasonable opportunity to take any steps that the Disclosing Party considers necessary to protect the confidentiality of that information; and

(c) where clause 27.3(e) applies, but with the exception of employees or officers of the Receiving Party, procure that the person or entity executes a deed in favour of the Disclosing Party in a form acceptable to the Disclosing Party, acting reasonably, imposing on the person or entity an undertaking of confidentiality having substantially similar effect as the Contract.

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28 Intellectual property rights

28.1 The Contractor warrants that its execution of the Works and any designs, documents or methods of working provided by it to the Principal in doing so does not infringe any Intellectual Property Right.

28.2 The Contractor shall indemnify the Principal against any Loss resulting from any alleged or actual infringement of any Intellectual Property Right arising from or in connection with the execution of the Works or from any designs, documents or methods of working provided by it to the Principal.

28.3 Ownership of a Party's Background Intellectual Property Rights vests in and shall remain vested in that Party.

28.4 The Contractor grants to the Principal a royalty-free, perpetual, irrevocable, express, non-exclusive, world-wide licence to use, exercise and sub-license the Contractor's Background Intellectual Property Rights only for the intended purpose of the Contract.

28.5 The Principal grants the Contractor a revocable, royalty-free and non-transferable licence to use any Principal's Background Intellectual Property Rights to the extent necessary for the Contractor to execute the Works.

28.6 All Intellectual Property Rights (other than the Contractor's Background Intellectual Property Rights) in the designs, documents, materials, equipment or methods of working provided by the Contractor under the Contract will vest in the Principal. The Contractor must do everything necessary to perfect such vesting at the Contractor's cost or as otherwise agreed by the Parties.

28.7 The Contractor must ensure that:

(a) copyright and any other ownership interests or rights in the designs, documents, materials, equipment or methods of working provided by the Contractor under the Contract do not vest in any Sub-contractor of the Contractor or any other third party; and

(b) no third party is in a position to successfully assert any moral rights or other proprietary interests in relation to the Works or the Contract contrary to the interests of the Principal.

28.8 A Party must not:

(a) grant any third party access to the other Party's Intellectual Property Rights without that other Party's prior written consent, which may be given in that other Party's discretion; or

(b) do or allow to be done, or fail to do, any act that may infringe the other Party's Intellectual Property Rights.

28.9 All payments and royalties payable in respect of any Intellectual Property Rights required in respect of performance of the Contract shall be included in the Contract Price and shall be paid by the Contractor to the person, persons, or body to whom they may be due or payable.

29 General

29.1 **Force Majeure Event**

(a) A Party must:

(i) immediately give notice to the other Party of any Force Majeure Event that precludes that Party from partially or wholly complying with any of its obligations under the Contract (**Affected Obligations**); and

(ii) if it gives such a notice, either:

(A) to the extent practicable, specify in the notice the length of delay that will result from the Force Majeure Event; or

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(B) where it is impracticable to specify the length of delay at the time the notice is delivered, provide the other Party with periodic supplementary notices during the period over which the Force Majeure Event continues.

(b) The Party's obligation to perform the Affected Obligations is suspended for the duration of the actual delay arising out of the Force Majeure Event.

(c) The Party whose performance is affected by the Force Majeure Event must use its reasonable endeavours to remove or relieve the Force Majeure Event and to minimise the delay so caused.

(d) If a Force Majeure Event continues to affect the performance of the Works for the duration of the Force Majeure Event Termination Period, the Principal may terminate the Contract by serving written notice on the Contractor.

29.2 **Relationship of the Parties**

The Contractor acknowledges and agrees that it is an independent contractor and not an agent of the Principal and that it has no authority to bind the Principal by contract or otherwise. Nothing in the Contract creates a partnership, trust or agency between the Parties or imposes any fiduciary duties on either Party in relation to the other, unless expressly agreed otherwise.

29.3 **Representatives**

(a) Each Party may appoint a Representative, and give them authority, to act on its behalf for the purpose of the Contract within delegation limits advised in writing to the other Party.

(b) If the Parties execute this Document and specify the details of the Parties' Representatives in the Minor Works Contract Specifics, the Parties' Representatives are those persons set out in the Minor Works Contract Specifics as at the date of executing this Document.

29.4 **Notice**

(a) Any notice under the Contract shall be in English, in legible writing and signed by hand or by electronic signature, and shall be given or served by:

(i) hand delivery or prepaid post to the address of the receiving Party specified in the Request Response, Letter of Award or the Minor Works Contract Specifics, or at such other address as may from time to time be notified in writing to the notifying Party by the receiving Party, but in any event to the last notified address; or

(ii) email to the email address of the receiving Party specified in the Request Response, Letter of Award or the Minor Works Contract Specifics, or at such other email address as may from time to time be notified in writing to the notifying Party by the receiving Party, but in any event to the last notified email address.

(b) Any notice is regarded as being given by the notifying Party and received by the receiving Party:

(i) if by delivery in person, when delivered to the address of the recipient;

(ii) if by post, 5 Business Days from and including the date of postage; and

(iii) if sent by email, in accordance with section 14 of the *Electronic Transactions Act 2011* (WA),

but if the delivery or receipt is on a day which is not a Business Day or is after 5.00pm (recipient's time), it is regarded as received at 9.00am on the following Business Day.

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29.5 **GST**

(a) Words capitalised in this clause 29.5 and not otherwise defined have the meaning given in the GST Law.

(b) Where an amount of Consideration is payable for a Taxable Supply made under the Contract (whether that amount is specified or can be calculated in accordance with the Contract), it does not include GST and must be increased by the GST Rate.

(c) The Party making a Taxable Supply under the Contract must issue a Tax Invoice or Adjustment Note to the Recipient in accordance with the GST Law.

(d) If any Party has a right to be reimbursed or indemnified for any cost or expense incurred under the Contract, that right does not include the right to be reimbursed or indemnified for that component of a cost or expense for which the indemnified Party can claim an Input Tax Credit.

29.6 **Governing law**

The Contract and any Dispute shall be governed by the Laws of the State of Western Australia and the Parties agree that the courts of that State shall have exclusive jurisdiction to deal with any Dispute.

29.7 **Waiver**

A Party may only waive a right or power it has under the Contract by written notice to the other Party. No forbearance, delay or indulgence by a Party in enforcing a provision of the Contract shall prejudice, restrict or limit the rights of, or the exercise of the powers of, that Party, nor shall any waiver of those rights operate as a waiver of any subsequent breach or of that right or power in the future.

29.8 **Variation**

Without limiting clause 14, the terms of the Contract shall not be varied except by the written agreement of the Parties.

29.9 **Entire agreement**

The Contract embodies the entire agreement between the Parties and supersedes all prior conduct, arrangements, agreements, understandings, quotation requests, representations, warranties, promises, statements or negotiations, express or implied, in respect of the subject matter of the Contract.

29.10 **Rights are cumulative**

Subject to any express provision in the Contract to the contrary, the rights of a Party under the Contract are cumulative and are in addition to any other rights of that Party.

29.11 **Severability**

Should any part of the Contract be invalid or unenforceable, that part shall be:

(a) read down, if possible, so as to be valid and enforceable; and

(b) if it cannot be read down, severed from the Contract to the extent of the invalidity or unenforceability,

and the remainder of the Contract shall not be affected by such invalidity of unenforceability.

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30 EXECUTION

Principal – where executing in accordance with a Council resolution

Signed by an authorised person(s) on behalf of the Shire of Irwin in accordance with a resolution of the Council passed on [*insert date*]:

sign here ►

Chief Executive Officer

print name

Contractor – where the Contractor is a company

EXECUTED by **[insert name]** ACN [insert ACN] in accordance with section 127(1) of the *Corporations Act 2001* (Cth):)
)
)

← ←

Director/Secretary/Sole Director-Secretary (signature)

(Delete whichever is not applicable)

Director/Secretary (signature)

(Delete whichever is not applicable)

Director/Secretary/Sole Director-Secretary (print full name)

(Delete whichever is not applicable)

Director/Secretary (print full name)

(Delete whichever is not applicable)

Contractor – where the Contractor is an individual

SIGNED by **[*insert name*]** in the presence of:)
)
)

Signature of Contractor

Signature of Witness

Date

Full name of Witness (print)

Address of Witness

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Schedule 1 - Minor Works Contract Specifics and Specification

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Part A - Minor Works Contract Specifics

ITEM	CONTRACT SPECIFIC	DESCRIPTION
1.	**Works** **(clause 1.1)**	*As set out in the Specification*
2.	**Start Date** **(clauses 1.1 and 9.1)**	*May 2021*
3.	**Date for Completion** **(clauses 1.1 and 9.1)**	*30 June 2021*
4.	**Application of clause 10 regarding liquidated damages** **(clause 11)**	*To be confirmed*
5.	**Liquidated damages formula or calculation** **(clause 11)**	*To be confirmed*
6.	**Payment Claim – frequency** **(clause 17.1)**	*Monthly*
7.	**Payment Claim – information required** **(clause 17.1(c))**	*N/A*
8.	**Payment Claim – time for payment** **(clause 17.2)**	*N/A*
9.	**Application of clause 18 regarding interest** **(clause 18.1)**	*No*
10.	**Interest rate on overdue payments** **(clause 18.2)**	*N/A*
11.	**Application of clause 19 regarding Retention Moneys and security** **(clause 19.1)**	*To be confirmed*
12.	**Retention Percentage** **(clauses 1.1 and 19.2)**	*To be confirmed*
13.	**Retention Sum** **(clauses 1.1 and 19.3)**	*To be confirmed*
14.	**Security requirements** **(clause 19.4)**	*To be confirmed*
15.	**Time for return of Retention Moneys or security following Date of Completion** **(clause 19.6(a))**	*To be confirmed*

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ITEM	CONTRACT SPECIFIC	DESCRIPTION
16.	**Time for return of Retention Moneys or security following termination (clause 19.6(b))**	*To be confirmed*
17.	**Plant and equipment that the Contractor does not need to provide (clause 12(a))**	*N/A*
18.	**Tests (clause 15.1)**	As set out in any Minor Works Contract Specifics
19.	**Representatives – Contractor's Representative (clause 29.3)**	Name: Title: Postal address: Phone: Email:
20.	**Representatives – Principal's Representative (clause 29.3)**	Name: Shane Ivers Title: Chief Executive Officer Postal address: PMB 21, Dongara WA 6525 Phone: 9927 0000 Email: ceo@irwin.wa.gov.au
21.	**Notice – Principal (clause 29.4)**	Postal address: PMB 21, Dongara WA 6525 Email: ceo@irwin.wa.gov.au Contact person: Shane Ivers, Chief Executive Officer
22.	**Notice – Contractor (clause 29.4)**	Postal address: Email: Contact person:

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Part B – Contract Price

Ref.	Description	Price (ex GST)
3.7.1	Stage 1 - Moreton Tce SLK 0.37 to SLK 0.65	$
	Stage 2 – Moreton Tce SLK 0.23 to SLK 0.37	$
3.8	Cemetery Car Park	$
3.9	Midlands Rd & Tabletop Rd Intersection	$
	Lump Sum Total (ex GST)	**$**
	Lump Sum Total (inc GST)	**$**
OPTIONAL		
3.10.1	Option - Moreton Terrace Renewal – Stage 3	
3.10.2	Option – Hunt/Waldeck Roundabout	
3.10.3	Option – Roundabout Moreton / Pt Leander	
3.10.4	Option – Hosken Street and On-Street Parking	
3.10.5	Option – Community Resource Centre Car Park	
3.10.6	Option – Dongara Hotel Precinct – Car Park Upgrade	
	Lump Sum Total (Optional) (ex GST)	**$**
	Lump Sum Total (Optional) (inc GST)	**$**

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Part D – Specification

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SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

RFQ VP232405

Moreton Terrace Upgrade
Asphalt Works

SPECIFICATION FOR MINOR WORKS CONTRACT

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2 Introduction

The Shire of Irwin is resealing Moreton Terrace and renewing the kerbing and drainage as part of its asset management program funded by the Regional Road Group program. Due to some additional funding received, the Shire will also replace the existing street paving and lighting together with some improvements.

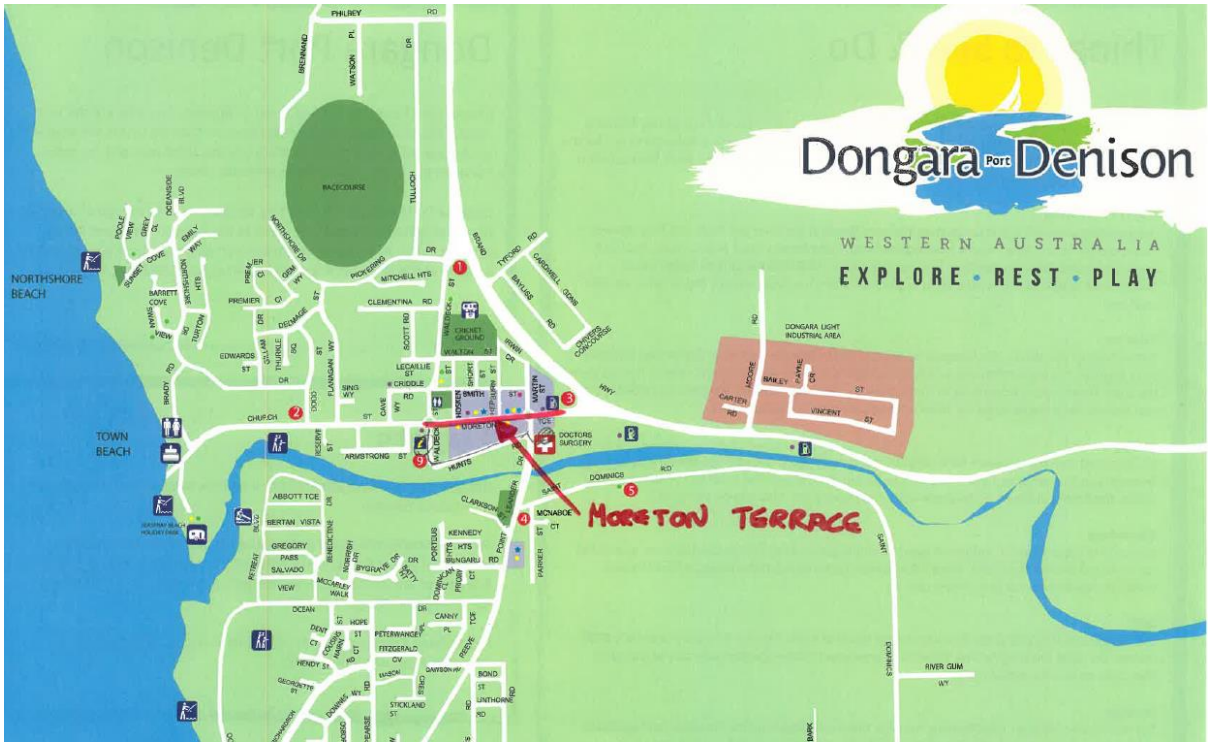

Figure 1 – Site Plan

3 Scope of Works

The Scope of Works for this project is for the asphalting of Moreton Terrace and with the option to asphalt Hosken Street, Town Park Car Park, Community Resources Centre Car Park and the Dongara Hotel Precinct.

Notwithstanding the details as shown on the Drawings provided with the tender package and described within the Specification and this Scope of Works, the Contractor shall carry out all the incidental works which are necessary or inferred, whether detailed or described or not, to achieve the intent of this Scope of Works. The Contractor shall provide all labour, supervision, materials, tools, equipment and plant necessary to undertake works mentioned above which are detailed under the sections below. Should existing Shire infrastructure be damages, the works to include restoration and reinstatement of the existing Shire infrastructure in accordance with the attached IPWEA Restoration and Reinstatement Specification.

Referring to the specifications and drawings provided, the scope is broken into the following core packages which will form the main contract:

- Moreton Terrace Renewal:
    - Stage 1
    - Stage 2
- Cemetery carpark
- Midlands Rd/Tabletop Rd Intersection

The following optional packages are to be included in this tender submission where the estimate accuracies and assumptions are to be stated clearly. The Principal reserves the right to execute in part or in full the following packages as part of this contract:

- Moreton Terrace Renewal:
    - Stage 3
- Hunt/Waldeck Roundabout
- Moreton/Pt Leander Roundabout
- Hosken Street
- CRC carpark
- Dongara Hotel carpark

3.1 Documentation

- IPWEA-AAPA Asphalt Specification
- IPWEA Restoration Specification
- P6258 E-01 Moreton Terrace Dongara Street Scape Upgrade – Electrical Layouts
- P6258 E-02 Moreton Terrace Dongara Street Scape Upgrade – Electrical Layouts
- P6258 E-03 Moreton Terrace Dongara Street Scape Upgrade – Electrical Details
- 12533215-G001 Cover page and drawing list
- 12533215-G002 General notes
- 12533215-C001 Proposed works - Overall plan
- 12533215-C002 Proposed works - Detail plan
- 12533215-C003 Proposed works - Detail plan
- 12533215-C004 Proposed works - Detail plan
- 12533215-C005 Proposed works - Detail plan
- 12533215-C006 Proposed works - Detail plan
- 12533215-C007 Proposed works - Detail plan
- 12533215-C008 Proposed works - Detail plan
- 12533215-C009 Proposed works - Detail plan
- 12533215-C010 Proposed works - Detail plan
- 12533215-C011 Proposed works - Detail plan
- 12533215-C012 Proposed works - Detail plan
- 12533215-C013 Proposed works - Detail plan
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- 12533215-C101 Plan and longitudinal section - Stage 1 Moreton Terrace
- 12533215-C102 Plan and longitudinal section - Stage 1 Hosken Street
- 12533215-C103 Plan and longitudinal section - Stage 2 Moreton Terrace
- 12533215-C104 Plan and longitudinal section -Stage 2 Community Resources Centre Carpark
- 12533215-C105 Plan and longitudinal section - Stage 3 - Moreton Terrace
- 12533215-C201 Typical cross section - Moreton Terrace
- 12533215-C202 Typical cross section - Hosken Street
- 12533215-C203 Typical cross section - Car park
- 12533215-C204 Typical cross section - Stage 2 Moreton Terrace
- 12533215-C205 Typical cross section - Hotel car park
- 12533215-C206 Typical cross section - Stage 3 - Moreton Terrace
- 12533215-C207 Typical cross section - Stage 3 - Moreton Terrace
- 12533215-C208 Roundabout cross sections
- 12533215-C301 Details - Kerbs and Pathways
- 12533215-S101 Ramp and retaining wall - Layout & details
- 12533215-S102 Ramp and retaining wall - General notes
- 12533215-BOQ-A SoI Moreton Tce and Car Park Upgrade-Final Design Stage – Bill Of Qty.
- 12542256-Dongara Cemetery Concept Masterplan D
- SOI - Cemetery Bill of Quantity

3.2 Works Site Details

The Works sites are located in the Dongara Town Centre, WA 6525. The specific location of the Works Sites are shown in the below:



Figure 1: Hosken Street



Figure 2: Town Park Car Park



Figure 3: Community Resources Centre Car Park



Figure 4: Dongara Hotel Car Park



Figure 5: Moreton Terrace Upgrade



Figure 6: Cemetery Carpark



Figure 7: Midland Rd & Tabletop Rd Intersection

3.3 Work Excluded

- Removal of existing kerbing
- Installation or reinstatement of subgrade outside of existing sealed surface
- Modification of drainage and other services
- Road and car park line marking
- Surveying works
- Traffic Management plans including all traffic management, barricading, signage, warning lights, etc necessary to provide a safe working area for both the Contractor's workers and the public. The Traffic Management Plan will be provided upon Contract award.
- Service location including site survey and service location marking
- Transfer station fees associated with the disposal costs for this project

3.4 General

The Works required under the Contract is for the supply of all materials, plant and labour, for the execution of the asphalting and kerbing works as specified and shown on the Drawings, and generally comprising the following, but not limited to:

- All job planning and risk assessments to include protection of the Heritage listed Moreton Bay Fig trees.
- Prepare the documentation as required.
- Mobilisation of personnel, plant and equipment to site.
- Clear and prepare site prior to undertaking works.
- Construction in accordance with plans, this Specification and relevant standard

3.5 Moreton Terrace Renewal

3.5.1 Scope Overview

Stage 1- Moreton Tce SLK 0.37 to 0.65

- Includes all traffic islands east of the Hunt/Waldeck Roundabout
- Excludes Hunt/Waldeck Roundabout and the north, west & south roundabout traffic islands
- Ref Drg's 12533215-C002, C003, C004, C005, C101, C201, C301 & S001

Stage 2 - Moreton Tce SLK 0.23 to 0.37

- Includes all traffic islands west of the Moreton/Pt Leander Roundabout
- Includes the left turn traffic island from Moreton Terrace to Martin Street
- Excludes Moreton/Pt Leander Roundabout and the north, south & east roundabout traffic islands
- Ref Drg's 12533215-C005, C006, C103, C201, C204, C301 & S001
- **Note:** Stage 2 finishes at the Give Way line marking on the west side of the Moreton/Pt Leander Roundabout and **not as shown on the drawing**

3.5.2 Asphalting & Kerbing Scope

- Profiling of the entire road surface
- Compact existing basecourse to 98% MMDD where profiling exposes the basecourse
- Supply and install primer seal.
- Supply and lay asphalt corrector layer where required.
- Supply & Lay - 40mm thickness AC10 Asphalt (black) - road.
- Supply & Lay - 40mm thickness AC10 Asphalt (red gravel pave) – on street parking.
- Supply material and install semi-mountable kerbing.
- Supply and construct new median islands at lighting post locations with barrier kerbing
- Reconstruct traffic island semi-mountable kerbing

3.6 Cemetery Carpark

- Location - Dodd Street, Dongara WA
- Area – approximately 1200m2
- Supply and install primer seal.
- Supply & Lay - 40mm thickness AC10 Asphalt (black) - road.
- Supply material and install semi-mountable kerbing.

3.7 Midlands Rd & Tabletop Rd Intersection

- Area – approximately 420m2
- Supply and install primer seal.
- Supply & Lay - 40mm thickness AC10 Asphalt (black) - road.

3.8 Optional Packages

The following optional packages may progress in part or in full where estimates are required and the estimate accuracy is to be stated clearly.

3.8.1 Option – Moreton Terrace Renewal – Stage 3

3.8.1.1 Scope Overview

Stage 3 - Moreton Tce SLK 0.06 to 0.19

- Excludes the proposed boardwalk around the Moreton Bay tree though it or a similar option may be considered by the Principal as a variation during the project
- Ref Drg's 12533215-C006, C007, C008, C105, C201, C206, C207, C301 & S001
- **Note:** Stage 3 **is as shown on the drawing**

3.8.1.2 Asphalting & Kerbing Scope

- Profiling of the entire road surface
- Compact existing basecourse to 98% MMDD where profiling exposes the basecourse
- Supply and install primer seal.
- Supply and lay asphalt corrector layer where required.
- Supply & Lay - 40mm thickness AC10 Asphalt (black) - road.
- Supply & Lay - 40mm thickness AC10 Asphalt (red gravel pave) – on street parking.
- Supply material and install semi-mountable kerbing.
- Supply and construct new median islands at lighting post locations.

3.8.2 Option - Hunt/Waldeck Roundabout

- Scope Overview:
    - Includes Hunt/Waldeck Roundabout and the north, west & south roundabout traffic islands
    - Excludes all traffic islands east of the Hunt/Waldeck Roundabout
    - Ref Drg's 12533215-C002, C208, C301 & S001
- Asphalting & Kerbing Scope:
    - Trim and compact existing basecourse to 98% MMDD.
    - Supply and install primer seal.
    - Supply and lay asphalt corrector layer where required.
    - Supply and lay 40 mm thickness AC10 asphalt (black) – road.
    - Supply material and install semi-mountable kerbing.
    - Supply and construct new median island at roundabout lighting post location
    - Reconstruct traffic island kerbing

3.8.3 Option - Roundabout Moreton/Pt Leander

- Scope Overview:
    - Includes Moreton/Pt Leander Roundabout and the north, south & east roundabout traffic islands
    - Excludes all traffic islands west of the Moreton/Pt Leander Roundabout
    - Excludes the left turn traffic island from Moreton Terrace to Martin Street
    - Ref Drg's 12533215-C006, C208, C301 & S001
    - **Note:** Stage 2 finishes at the Give Way line marking on the west side of the Moreton/Pt Leander Roundabout and **not as shown on the drawing**
- Asphalting & Kerbing Overview:
    - Profiling of the entire road surface

- Compact existing basecourse to 98% MMDD where profiling exposes the basecourse
- Supply and lay asphalt corrector layer where required.
- Supply and install primer seal.
- Supply and lay 40 mm thickness AC10 asphalt (black) – road.
- Supply material and install semi-mountable kerbing.
- Supply and construct new median island at roundabout lighting post location
- Reconstruct traffic island kerbing

3.8.4 Option - Hosken Street and on-street Parking

Referring to drawings 12533215-C003, C010, C011, C102, C202, C301 & S001:

- Profiling of the entire road surface
- Compact existing basecourse to 98% MMDD where profiling exposes the basecourse
- Supply and install primer seal.
- Supply and lay asphalt corrector layer where required.
- Supply and lay 40 mm thickness AC10 asphalt (black) – road.
- Supply material and install semi-mountable kerbing.

3.8.5 Option - Community Resources Centre Car park

Referring to drawings 12533215-C003, C010, C104, C203, C301 & S001:

- Supply and install primer seal.
- Supply and lay 25 mm thick AC10 asphalt (red gravel pave) – parking area.
- Supply and lay 25 mm thickness AC10 Asphalt (black) – road
- Supply material and install semi-mountable kerbing.

3.8.6 Option - Dongara Hotel Precinct – Car Park Upgrade

Referring to drawings 12533215-C005, C013, C205, C301 & S001:

- Profiling of the entire road surface where required
- Compact existing basecourse to 98% MMDD where profiling exposes the basecourse
- Supply and lay asphalt corrector layer where required.
- Supply and install primer seal.
- Supply and lay 25 mm thickness AC10 Asphalt (black) – road
- Supply and lay 25 mm thick AC10 asphalt (red gravel pave) – parking area.
- Supply material and install semi-mountable kerbing.

3.9 Indicative Timetable of Works

The following Table outlines the indicative timing of works.

- RFQ Close 18/03/2021
- Formal Contract Award 24/03/2021
- Commence Site Works (Others) 19/04/2021
- Asphalting 10/05/2021
- Complete Site Works 30/06/2021

3.10 Laying of Mix

All aspects application shall comply with all current requirements of the attached IPWEA/AAPA Asphalt Specification. Equipment will not stand on pavement areas unless the correct measures have been put in place to stop dripping or spillage. Cleaning and disposing of waste materials will be carried out in approved areas.

3.11 Mix Design

All aspects of the Mix Design shall comply with attached IPWEA/AAPA Asphalt Specification. The mix design submission shall identify sufficient information to allow for checking against this specification.

The following Table is for information only and it will be the Contractor's responsibility to confirm its accuracy data when undertaking the design:

Road Name	Length (metres)	Design ADT	Design Comment	Receiving Surface	Depth* (mm) *Indicative. To be assessed on site	Average Width* (metres) Excl. car parks
Moreton Terrrace	650	ADT ~ 4000	95% residential	Various – site inspect	25 - 30mm	9.0

3.12 Pre-Conditions to Commencing Works

The Contractor shall not commence the works until the Principal has notified the Contractor that the Principal has approved:

- the Contractor's Mix Design;
- the Insurances required under the Contract;
- the Contractor's Construction/Works Program;
- the Contractor's Traffic Management Plan;
- the Contractor's Safety Plan; and
- the Contractor's Project Quality Plan.

This approval is conditional on the Contractor complying with any subsequent instructions from the Principal to amend the plans, within a time limit specified by the Principal.

3.13 Safety Induction

Inductions – it is a fundamental requirement of this Contract that the Contractor and all of its employees and sub-contractors, are inducted under the Contractor's Induction policy prior to commencing work on site.

3.14 Hours of Operation

Hours of Operations - The Contractor shall as a normal procedure confine its operation to daylight hours between the hours of 7am and 6pm Monday to Saturday unless otherwise advised.

3.15 Completion of Work

All portions of the movement area which have been affected by construction and/or trafficked by construction vehicles shall be cleaned and swept so that they are free from loose stones and debris to the satisfaction of the Shire. The Contractor shall retain the necessary plant and personnel at the work site, until the required cleanliness is achieved.

3.16 Programme of Work

The Contractor shall submit to the Principal's Representative for approval a diagrammatic or other approved form of time schedule for the carrying out of the various parts or stages of the works. The programme shall list starting and completion dates for each part or stage of the works.

The Works are located within the Shire of Irwin and the current technical standards for civil work issued by the local authority applies to this contract. Any discrepancy between the contract drawings and the current local authority standards shall be notified to the Principal's Representative as soon as is practicable.

The order of precedence of the Contract documentation shall be:

1. The Conditions of Contract;
2. The Contract Drawings;
3. The Technical Specification (this document);
4. State Government or Industry Standards/Guidelines relevant to work item being undertaken; and
5. Australian Standards relevant to the work item being undertaken.

Part E - Technical Documentation

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Western Australia
IPWEA
INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA

AAPA
AUSTRALIAN ASPHALT PAVEMENT ASSOCIATION

INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA WESTERN AUSTRALIA INCORPORATED

AUSTRALIAN ASPHALT PAVEMENT ASSOCIATION (WA BRANCH)

TECHNICAL SPECIFICATION, TENDER FORM AND SCHEDULE
FOR SUPPLY AND LAYING OF ASPHALT ROAD SURFACING

Revision No 4
Date: April 2016

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TECHNICAL SPECIFICATION, TENDER FORM AND SCHEDULE
FOR SUPPLY AND LAYING OF ASPHALT ROAD SURFACING

FOREWORD

This specification has been produced jointly by the Institute of Public Works Engineering Australasia Western Australia Incorporated (IPWEA) and the Australian Asphalt Pavement Association WA Branch (AAPA) to complement Australian Standards AS 2150 – Hot Mix Asphalt – A Guide to Good Practice and, AAPA Stone Mastic Asphalt Design & Application Guide – 2000

This document is the third revision of the original IPWEA Asphalt Specification produced in December 1995 and based on the very original AAPA specification which had been in use by both Local Government and private for some 20 years previous. This revision has been undertaken jointly by IPWEA and AAPA.

This Specification is a stand-alone document and no part should be altered . Any user wishing to make variations must nominate all variances in the Table of **Variations to Specification** in Appendix 1.

The issue of penalty deductions for pavements not meeting the required conformance criteria is an important issue. Most Contractors involved in the industry are highly professional organisations committed to providing a high standard of service to their Customers. Penalty deductions should be given careful consideration before application, and it is recommended that Superintendents apply penalties prudently, specifically in cases where Contractors are continuously failing to meet the specification requirements and are not making any effort to overcome the problem. It would not be recommended that penalty deductions be made for isolated occurrences of conditional conformance or when there is obvious effort by the Contractor to determine the cause of a problem and work towards a solution.

While every care has been exercised to present accurate data throughout the content of this specification, no responsibility is implied or accepted for claims arising from the use of the information contained herein.

RECORD OF REVISIONS

REVISION No.	DATE	DETAILS
0	December 1995	Original Version.
1	May 1998	Testing requirements modified; several minor amendments.
2	April 2002	Amended clauses and tables throughout.
3	March 2012	Major re write
4	September 2015	Major rewrite and inclusion of warm mix asphalt

TECHNICAL SPECIFICATION, TENDER FORM AND SCHEDULE FOR SUPPLY AND LAYING OF HOT ASPHALT ROAD SURFACING

1. SCOPE OF SPECIFICATION

1.1 Specification Documents

This Specification is to be read in conjunction with Australian Standards AS 2150 - Hot Mix Asphalt – A guide to Good Practice, AS 2008 - Residual Bitumen for Pavements, AAPA Stone Mastic Asphalt Design & Application Guide – 2000.

Where conflict exists, the requirements of this specification will be met.

1.2 Interpretation of Terms

“Australian Standard (AS)” refers to, the quoted Australian Standard document, current at March 2008.

“All tonnages” - Where all tonnages is included in the schedule of rates, the Contractor will charge these rates when the Council presents the contractor with a programme of works, not including hand work, that totals more than 650 tonne. The contractor shall have the sole discretion to submit a tender in such form.

”Contract” - shall mean and include the Tender, Contract, General Conditions, Schedule of Quantities, Schedule of Rates, Specifications and all plans, drawings and other schedules.

“Contractor” - shall mean the person or persons, corporation or corporations whose tender is accepted by the Council, and shall include the executors or administrators, successors and assigns of such person or persons, corporation or corporations.

“Council” - shall mean Council specified in the General Conditions of Tender and/or Contract.

“Job Mix” - The job mix is the mix design produced within the broad targets of the specification, and subject to tolerance given in Table 11 of AS 2150 except in the case of laterite mixes where AS2150 does not apply

“Job Size” – shall mean the number of asphalt tonnes laid at one location. If it is possible to lay asphalt at a number of locations in one day and mobilization of machinery is not required, the day’s production shall be considered in total. If however, plant and machinery must be mobilized, the sites shall be considered individually.

“MRWA Test Methods” are the Main Roads WA test method, current at time of tender.

“Mobilization” shall be defined as the requirement for machinery to be transported by truck.

“Pay factor” means the calculated proportion of the whole payment to be paid to the Contractor subject to conformance with this document.

"Payment penalty" means the actual reduction in payment resulting from the pay factor.
"Superintending Officer" - shall mean any person who from time to time shall be entrusted to superintend the works on behalf of the Council.

"Test Lot" – refers to any area subjected to conformance testing and the extent of the test lot shall be defined by the Superintending Officer. The test lot may be a days work on a large job, a single street, or two or more small jobs or streets providing that the mix used is homogeneous within the lot. It may also consist of a subsection of a section of pavement surfacing as determined by the Superintending Officer.

"Works" or "Work" - shall mean the work to be done by the Contractor under the Contract.

1.3 Extent Of Works

As specified in Appendix 2- Table of special requirements

1.4 Tender Prices, Mix Designs and Rise and Fall

Tender prices shall be submitted as being fixed for the initial twelve month period, except for the rise and fall in the cost of bitumen which will constitute an adjustment at any time in the contract period.

At the end of each 12 month period of the contract, an increase in the tender price based on CPI (Perth) shall be applied based on the initial tender price**.** All increases must be submitted for approval within 60 days of occurrence and contract anniversary date in the case of CPI.

Adjustments for the cost of bitumen will only be allowed for each $20/t increment in the price of bitumen, and will not be considered until the price has moved by more than $20/t from the tender price and subsequent already varied prices thereafter.

At each request for a price increase due to the rise and fall in the price of bitumen, the contractor shall supply supporting documentation for the nominated bitumen supplier.

Should it be discovered that the Contractor has not passed on to the Council any price reduction due to a fall in the price of bitumen, then the Council may immediately terminate the contract, and the contractor shall, whether the contract is terminated or not, pay to the Council the sum determined as being overpaid to the Contractor.

The calculation for the new contract prices for bitumen variation shall be as follows: -

$$P = A + (B_c \times B_v)$$

The annual calculation for the new contract prices for CPI shall be as follows: -

$$P = A + (I \times CPI)$$

Where:

P = adjusted or new price.
I = initial tender price or adjusted tender price for CPI only from previous years adjustment/s at end of each year.
A = tender price or existing price from previous adjustment.
B_c = the percentage bitumen content by mass of mix as ascertained in Clause 3.2 Job Mixes.
B_v = the variance in the cost of bitumen from tender price or previous varied price.
CPI = variation in Consumer Price Index for Perth as published by Australian Bureau of Statistics for the previous 12 month period.

As there may not be a correspondence between tender anniversary date and CPI publications the previous known 12 month figures shall be used for the calculation.

Tender prices for each mix design shall be submitted on the Form of Tender in Appendix 4. Tenderers should give prices for each of the mixes designed to this specification. The tenderer shall provide prices for any additional mix types specified in the Table of Special Requirements in Appendix 2 and shall include any additional costs that may be applicable resulting from Variations to Specification in Appendix 1. Any additional information required by the Table of Special Requirements should be appended to the Tender Form.

Contracts may be awarded for a period of up to 5 years.

Where the contractor elects, a uniform price for all tonnages may be submitted, and the Council may elect to accept the tender on the basis of “All Tonnages” OR “Job Size” but once the tender is accepted, the method shall remain binding. The contractor must submit prices based on the Job Size listed in the schedule of rates, but is not required to submit a price for all tonnages.

1.5 General Conditions of Tender / Contract

Where applicable this specification should be read in conjunction with the Council’s General Conditions of Tender and/or Contract.

2. MATERIALS

2.1 Aggregate

All aggregates used with the exception of laterite will meet the requirements of AS 2758.5 – Asphalt Aggregates. The aggregate shall be produced from a source rock designated in the table of special requirements (Appendix 2).

2.2 Reclaimed Asphalt Pavement

Processed Reclaimed Asphalt Pavement (RAP) may be added to the mix in proportions of up to 10% by mass with no changes to the job mix. Where RAP at greater than 10% is used, a specific job mix shall be registered with the Council.

RAP shall not be used in SMA asphalt.

2.3 Bitumen

Bitumen will be Class 170 or 320 (as specified for the mix types in Appendix 3) unless otherwise directed by the Superintending Officer and will meet the requirements of AS 2008 – Residual Bitumen for Pavements. Where Class 170 is specified, Class 320 may be substituted in lieu of Class 170, but Class 170 may not be substituted for Class 320.

Polymer modified binders (plastomers or elastomers) shall meet the requirements of Austroads AGPT – T190 unless specified otherwise by the Superintending Officer.

3. MIX DESIGNS

3.1 General

All mix supplied for this contract will generally be as detailed in Appendix 3, though other mix types may be used at the direction of the Superintending Officer.

Other than the requirements in Clauses 1.2, 2.1 and 3.2, Laterite mixes, in general, shall conform to the same requirements as the dense graded mix in Appendix 3. Where the mix is being designed to conform with heavy duty applications in accordance with 3.1, up to 30% by mass of combined course and fine granite may be incorporated in the mix design.

3.2 Job Mixes

Prior to the commencement of the Contract, the Contractor will submit 'Job Mixes' for each mix type which conform to the properties listed in Appendix 4.'Job Mixes' shall be resubmitted prior to any subsequent changes due to mix re-designs.

The grading curve of the aggregate shall not vary from the low limit on one size of sieve to the high limit on adjacent sieves, or vice versa. The particle size distribution of the aggregates when plotted, shall give a smooth curve throughout the whole range of sieve sizes.

On written acceptance of a 'Job Mix', the permissible variation of aggregate grading and bitumen content shall not exceed Table 11 of AS 2150. The minimum calculated bitumen film thickness shall be 7.5 micron using the Austroads test method AGPT/T237.

In the case of laterite mixes, the bitumen tolerance of the job mix shall be ±1% of the target.

The calculated bitumen film thickness is a required design property of the job mix, but is not be used as a conformance requirement of the mix. However it may be used to accept a mix where other properties such as particle size distribution or bitumen content fall out of the specified range.

3.3 Alternative Mixes

Should Tenderers wish to submit alternative mix designs which are outside of the specifications, details of the mix designs and tender prices shall be included. Mixes with properties other than those listed in Appendix 3 may be specified and these shall be listed in the Table of Special Requirements (Appendix 2)

All tenders will be evaluated based on conforming prices as listed in Appendix 4. However Council may consider alternatives during the course of the contract after full evaluation of an alternative and accordingly alternative submissions are encouraged.

4. SAMPLING AND TESTING

The contractor shall be responsible for sampling and testing of the asphalt supplied to the council. The contractor shall organise testing by a laboratory accredited by the National Association of Testing Authorities of Australia (NATA). The laboratory must have included in its Scope of accreditation the current test methods requested by this specification.

For the purpose of testing the production mix, the contractor shall sample production lots at the minimum frequencies set out in the Quality Plan and Inspection Test Plan supplied by the Contractor. If during the duration of the Contract, the Contractor makes changes to the quality plan, these changes shall be referred to the Superintending Officer, who shall have the right to reject the changes if it is considered the changes will result in greater risk to the client.

The testing frequency requirement shall apply to each asphalt mix type. The test results shall be related to production intervals with samples representing the full lot of production of the specific mix.

The costs associated with the lot sampling and testing of the production mix shall be borne by the contractor.

Where the Contractor is directed to undertake compliance testing, and this testing is not part of the Contractor's Quality Assurance System, the cost of the compliance testing shall be paid by the Council.

When the Council requires audit testing, the cost of testing shall be paid by the Council.

5. DISPUTE RESOLUTION

This specification covers the basic requirements of the technical aspect of the manufacture and laying of asphalt. The acceptance criteria place significant reliance on the contractors

quality plans. Under the Contractors quality plan, not every project will necessarily be tested. In the event that within a period of nine months after completion of any project unacceptable performance by way of shoving, flushing, stripping or ravelling of aggregate, Council reserves the right to treat this in accordance with the following procedure.

If a payment penalty or rejection of work or requirement for warrantee is in dispute, the Contractor may apply to have a retest carried out at the Contractor's cost. The retest shall consist of removal of a random sample of the compacted asphaltic mat (1m x 1m). This shall be divided into two samples, one sample to be tested by a laboratory of the Contractor's choice, and the other sample tested by a laboratory of Council's choice. These tests are to be carried out in accordance with the current Australian and/or Main Roads WA standard. The mean result of the two tests shall be the definitive result.

The Superintending Officer and or the Contractor may witness any testing that is part of dispute procedures.

The costs of retesting shall remain the responsibility of the Contractor should the rejection of work be confirmed, otherwise they shall be borne by Council.

Where the Contractor considers that failure to achieve the specified quality of the asphaltic mat is due to deficiencies in the base preparation, the Contractor shall arrange independent testing of the base compaction by a NATA registered laboratory. In the event that the base work is found to be deficient, the cost of the additional testing and any remedial measures shall be borne by the Council.

Alternatively, either party may request the pavement and test results be referred to an independent specialist Consultant who shall be agreed by both parties to examine and report on the suitability of the asphalt surface or underlying pavement if that is in dispute.

The findings of the specialist Consultant shall be binding.

6. MANAGEMENT SYSTEMS

At the tender submission the Contractor shall supply all the documentation listed below in relation to its managements systems for quality, safety and environment.

Any new Company who wishes to submit a tender may do so by submitting documentary evidence of its management systems currently in place and an undertaking that it will complete its third party accreditation within the first year of contract.

6.1 Quality management

The Contractor shall supply to the Superintending Officer a copy of the Contactors third party certification to AS/NZS ISO 9001 (current version) and Quality Management Plan.

The Contractor's Quality Assurance System shall include a Process Control System conforming to the requirements of ISO 9001 - Quality Systems for Production and Installation and the AAPA publication Asphalt Plant Process Control Guide.

The Contractor's process control records may be made available to the Council and in all cases the control intervention levels should be within the limits of the specification.

The Contractor's Quality Assurance System shall be used to identify areas/lots of suspect mix where audit testing shows that the mix does not meet the specification.

6.2 Safety Management

The Contractor shall supply to the Superintending Officer a copy of the Contractors third party certification to AS/NZS 4801 (current version) including:

- Health and Safety Management Plan.
- Cyclone Contingency Plan in the case where the Council is in a designated cyclone region.

6.3 Environmental Management

The Contractor shall supply to the Superintending Officer a copy of the Contractors third party certification to AS/NZS ISO 14001 (current version) including the Environmental Management Plan

7. MANUFACTURE

7.1 Applicable Standards

7.1.1 Hot mix asphalt

All mixes shall be manufactured according to the requirements of AS 2150, except in the case of Stone Mastic Asphalt, which shall be manufactured in accordance with the table 3.3 shown in Appendix 3 of this specification.

7.1.2 Warm Mix Asphalt

Warm Mix Asphalt (WMA) is asphalt which contains an additive, or uses a manufacturing process, that allows the asphalt mix to be produced and placed at lower temperatures than Hot Mix Asphalt (HMA). The maximum moisture content of the mix shall not exceed 0.5% by mass.

Where warm mix asphalt used, all the requirements for hot mix asphalt shall apply, with the exception of the temperature requirements.

7.1.3 Polymer Modified Bitumen Asphalts

Polymer modified bitumen asphalts generally fall into one of two categories:

- Plastomeric types (such as EVA) which increase modulus, improve rut resistance and resistance to shear forces from turning traffic
- Elastomeric types (such as SBS) which decrease modulus, but improve fatigue life, rut resistance and resistance to shear forces from turning traffic

Care must be taken to ensure that the modified bitumen is well blended, and it shall be the responsibility of the Contractor to ensure the correct grade of polymer and blending is achieved.

Where there is evidence of separation of the polymer from the bitumen such that the desired properties are not achieved, the mix shall be removed and replaced at the contractor at no cost to the Principal.

8. PREPARATION

8.1 Programming

Prior to commencement of any works in this Contract a “pre start” meeting will be held to determine procedure and protocol for programming and allocating work together with the regularity, if any of ongoing programming meetings.

Prior to the commencement of each project throughout the Contact period, a pre start meeting shall be held with the Superintending Officer to determine specific requirements.

The works within the contract need not be continuous but the Contractor shall have the approval of the Superintending Officer prior to stopping work. The point of cessation shall be approved and in no circumstances shall it be in a location considered to be detrimental to the completed job.

8.2 Site Inspection and base condition

The quality of the base, either new or old will have an effect on the level of compaction and ride quality of the finished asphalt mat.

The Superintending Officer accepts full responsibility for the quality of the surface to be overlaid. Where the Superintending Officer is aware of any deficiencies in the surface, these will be brought to the attention of the Contractor and confirmed in writing or by email.

The Contractor will inspect every paving job with the Superintending Officer prior to paving commencing. Should the Contractor be concerned with any aspect of the surface preparation, base construction or irregularities in the base prior to or during paving operations, such concerns shall be brought to the attention of the Superintending Officer. This shall be confirmed in writing or by email

Where the Superintending Officer directs that the works be halted to allow for the remediation of the base, the Contractor shall be compensated for any costs of establishment and loss of time.

8.3 Keying In

The Council will be responsible for keying in work at each end of the job and at any intersections where overlay of the intersecting street is not to be included in the work. This may be done by burning and 'chasing' or milling, and removing the existing asphalt. The method used will be that agreed with the Superintending Officer. Alternative methods may also be negotiated between the Contractor and the Superintending Officer.

The responsibility for keying in may also be passed on to the Contractor and the cost will be paid by the Council at pre determined rates.

8.4 Sweeping

The Council shall be responsible for the sweeping of pavements within 24 hours of asphalt laying. Where some areas may have incurred unsuspected entry of debris and they can easily be swept by hand, this work shall be undertaken by the contractor without further charge to Council.

8.5 Tack Coat

Tack Coat shall be sprayed in accordance with AS 2150 - Hot-mix Asphalt – A Guide to Good Practice, Section 11.

Material shall be a bitumen emulsion and shall be in accordance with AS 1160 – Bituminous Emulsions for the Construction and Maintenance of Pavements.

The application rate shall generally be sufficient to fully coat the surface with a residual binder content of 0.10 litres per square metre, except between structural layers where the rate shall be 0.15 litres per square metre. However, the application rate may be varied or even omitted to suit particular conditions when approved or instructed by the Superintending Officer.

Contractors are encouraged to adopt this technology during the period of the Contact, if not already adopted.

8.6 Corrector Course

When directed by the Superintending Officer, preparatory to resurfacing, a separate regulating course shall be placed for correction of both longitudinal and transverse pavement shape. Unless directed otherwise, the maximum compacted thickness of any one layer of corrector course shall not exceed five times the size of the largest aggregate in the asphalt used.

In the case that the Council instructs the contractor to supply and lay a corrector course due to ride quality inconsistency in the original surface, then the ride quality of the surface shall become the responsibility of the Contractor

The "pre start" meeting can also include as part of the agenda discussions and agreement on corrector course asphalt and ride quality improvement in general. On reaching agreement on methods of ride quality improvement the contractor will apply those methods to applicable roads.

9. LAYING OF MIX

9.1 Undue Delays

Should the Contractor be unable to carry out the required works within 14 days of request in situations where a road is under construction, or within 28 days for routine maintenance overlays, Council reserves the right to obtain the services of another Contractor after consultation with the Contractor. Alternatively the Contractor may supply the service by using any other Contractor approved by the Superintending Officer and additional costs incurred shall be the responsibility of the Contractor.

In an emergency situation, where un-scheduled works arise that are beyond the control of the superintending officer to foresee, the Council may obtain the services of another contractor, at its own expense, should the Contractor be unable to supply in any period that is determined by the Superintending Officer.

9.2 Delivery

All mix shall be delivered according to the requirements of AS 2150 - Hot Mix Asphalt, Guide to Good Practice, Section 8, unless otherwise directed by the Superintending Officer.

Delivery shall be made during the hours approved by the Superintending Officer.

9.3 Weather Conditions

The surface on which asphalt is to be laid shall be free from ponding water. The Superintending Officer reserves the right to stop paving operations under adverse weather conditions. Mix that has been produced prior to the Superintending Officers directive to cease work may still be laid, but the risk shall remain with the contractor.

9.4 Protection of Drains & Removal of Debris

During the progress of the work the Contractor shall cover all drainage gullies and at the completion of the days work, remove all sweepings, spoil and excess or rejected material from the site to the satisfaction of the Superintending Officer. The disposal of such materials shall be in accordance with any requirements of Council and at the Contractors expense.

9.5 Traffic Management/Control

Traffic management can be a significant cost on any project but can vary in extremes depending on road layout and importance, and cannot be included in the tender price.

The Superintending Officer shall be responsible to provide traffic management to the requirements of the current version of the MRWA Traffic Management for Works on Roads Code of Practice. The Contractor and the Council have a duty of care to ensure safety of workers and public, and therefore the Contractor must bring any concerns regarding traffic management to the attention of the Superintending Officer. Works should not proceed until both parties have agreed on traffic management and site safety.

9.6 Joints

Unless otherwise directed by the Superintending Officer, longitudinal joints shall be:

- continuous and parallel;
- within 150mm of line of change in crossfall;
- offset by at least 150mm from joints in underlying layers;
- located away from traffic wheel paths; and
- located beneath proposed traffic line markings where feasible, in the case of a wearing course.

Where practical, adjacent paving runs will be completed to within 5 metres of each other daily. However where the paving thickness is equal to or less than 40mm longitudinal joints which are greater than 5 metres in length may be ramped down and milled out prior to continuing. This can also be done when the Contractor has been caught in the rain and is unable to square off the paving runs.

The Council will be responsible for the preparation of longitudinal joints where new work abuts old work such as that encountered in road widenings.

9.7 Survey Control

Where the Council has provided survey control, it shall be the Contractor's responsibility to ensure that the levels are maintained to within $\pm$ 10mm of the survey control points provided also that two consecutive survey points do not go from positive to negative or vice versa. Inability to maintain the required level may result in rejection of this section. The requirement of achieving level control may constitute a variation in rates.

9.8 Spreading and Compaction

Spreading and compaction of the asphalt shall be carried out in a manner such that the finished pavement meets this specification.

9.9 Precautions with Stone Mastic Asphalt (SMA)

SMA has high binder contents requiring manufacture to very high tolerances and non-standard compaction methods. In warmer weather SMA requires time to allow the mix to cool before opening to traffic. If the mix is not allowed to cool, traffic can cause excess bitumen to migrate to the surface of the matt and flushing can occur.

The Contractor shall ensure that sufficient time is left to allow the mix to cool to less than 60°C prior to opening to traffic. The contractor together with Council should also consider: -

- Avoiding laying during very hot weather or consider laying at night.
- Heavy gritting if the pavement needs to be trafficked prior to cooling.
- Consider the use of PMB in extreme conditions such as roundabouts, heavily trafficked intersections and intersection approaches.

9.10 Delivery Dockets

A delivery docket showing the empty and loaded masses of the vehicle shall be handed to the Superintending Officer at the point of delivery by the Contractor's representative. In addition, the following written information shall be supplied:

- the date and time of loading;
- the name of the supplier;
- the identification number of the vehicle;
- the size and Marshall blows of the asphalt and the location reference of the plant at which the asphalt was manufactured
- the temperature of the asphalt.

10. ACCEPTANCE OF ASPHALT PAVEMENT

10.1 Grading And Bitumen Content

When the results of an individual test undertaken by the Council or the Contractor show that the mix does not meet the specification and where the Contractor has in place a Process Control System as part of an accredited Quality Assurance System, the Superintending Officer shall take into consideration the Process Control Records before deciding on a course of action.

If minor non-conformances are detected by either the Council's or the Contractor's testing, the Council may request that the Contractor produce evidence that corrective and/or preventative action, in accordance with their management systems have been taken in order to achieve specified requirements.

Table 9.1 provides a guideline for the treatment of more significant non-conformances of mix properties.

TABLE 9.1 – SUGGESTED ACTIONS FOR DEVIATIONS IN MIX PROPERTIES

Property	Deviation from Specified Limits in job mix	Action
Bitumen Content	>0.3% below minimum	A penalty equal to 4.8 x (%age below) x bitumen price per tonne is to be applied.
	> 0.5% below minimum	Negotiated settlement using dispute resolution or specialist technical advice at contractors cost. A penalty equal to 4.8 x (%age below) x bitumen price per tonne is to be applied should the mix be accepted.
	>0.3% above maximum	If air voids not are conforming, 5 yr written guarantee against flushing or shoving for all mixes.
Particle Size Distribution	Single Sieve: >5% on 2.36mm or greater >3% on 1.18mm or under	Seek 5yr written guarantee if air voids are conforming and bitumen film thickness < 7.5µm min.
	>10% Cumulative	
	Single Sieve: >8% on 2.36mm or greater >5% on 1.18mm or under	Negotiated settlement using dispute resolution or specialist technical advice at contactors cost
	>15% Cumulative	
Filler Content (75 micron)	>1.0% below minimum	Seek 5yr written guarantee if air voids are non-conforming.

	> 1.0% above maximum	Seek 5yr written guarantee if air voids are non-conforming and bitumen film thickness < 6.5µm min.

For conformance conditions that are not covered in the above table, a negotiated agreement may be reached which may necessitate the obtaining of expert advice from a mutually agreed source. The cost of providing expert advice shall be the responsibility of the Contractor.

Where a 5 year guarantee is applied, the terms of the guarantee shall be to the satisfaction of the Superintending Officer.

10.2 Marshall Characteristics

The Marshall characteristics of voids, stability, flow and quotient of a test lot when tested in accordance with the current Australian and/or Main Roads WA Standard, shall form part of the determination for quality level of the asphalt.

The Marshall quotient is the calculated ratio of stability to flow which represents an approximation of the ratio of load to deformation and may be used as a measure of the asphalt's resistance to permanent deformation under load.

10.3 Asphaltic Mat Voids

There are two considerations with voids in an asphalt mix, Marshall Voids and insitu voids. Marshall Voids are the voids in laboratory compacted asphalt samples, and the mix is designed to have specified air voids after 35,50 or 75 blows of a Marshall hammer on each face of a cylindrical sample. **Marshall voids are a property of the mix**. Insitu voids are the air voids determined by determining the difference between the maximum and filed density of the mix generally based on cores or non-destructive density testing. **Insitu voids are a property of the finished asphalt layer**. The results of air voids determined from cores taken from the field cannot be related to Marshall voids.
It should also be noted that excessively low insitu voids result in a risk of early deformation and/or flushing, however high insitu voids in an overlay, as distinct from structural layers, may have little bearing on the life of the surface.

10.3.1 Determination of characteristic insitu voids

The characteristic asphaltic mat voids is taken as the average insitu voids of a sample test lot. A test lot shall be a minimum of a 6 core sample set or a minimum of 6 determinations of density and voids determined by non destructive test methods. Where non destructive test methods are used, the method shall be approved by the Superintending Officer

Contractors, in collaboration with Councils are encouraged to work towards non-destructive density and in situ air void testing.

10.3.2 Outlying Core

Where the insitu voids of one (1) individual core only exceeds the average by more than a factor of 1.3 times the mean, it is likely that the core has been damaged and may not be representative of the voids at that location and may be deemed a suspect core.

At the discretion of the Superintending Officer the suspect core may be disregarded, and the average of the 5 core test lot used to determine the characteristic insitu voids.

Alternatively, the Superintending Officer may direct that two additional cores be cut 1m either side of the suspect core, and the mean density of these two cores be used in place of the suspect core density.

Where the additional cores confirm that the core is representative, it shall be included in the determination of mean density.

10.3.3 Conformance

The determination of Conformance, Conditional Conformance and Non-Conformance will be in accordance with Table 10.2.

TABLE 10.2 PAYMENT FACTORS FOR NON-CONFORMANCE IN ASPHALT MAT VOIDS

Mix specification	Conformance	Conditional conformance		
DGA 35 blow Marshall wearing course	2.5% - 8.0%	>8.0% - 10.0%	>10.0%	<2.5%
DGA 50 blow Marshall wearing course	3.5% - 11.0%	>11.0% - 12.0%	>12.0%	<3.5%
DGA 50 blow Marshall wearing course	3.0% - 10.0%	>10.0% - 11.0%	>11.0%	<3.0%
DGA 75 blow Marshall wearing course	3.5% - 11.0%	>11.0% - 12.0%	>12.0%	<3.5%
SMA 50 blow Marshall wearing course	3.5% - 11.0%	>11.0% - 12.0%	>12.0%	<3.5%
DGA 75 blow Marshall intermediate course	3.0% - 7.0%	>7.0% - 8.0%	>8.0%	<3.0%
DGA 35 blow Marshall fatigue layer	1.5% - 7.0%	>7.0% - 8.0%	>8.0%	<1.5%
Pay factor	1.0	0.95	0.9	1.0 with 5 year warranty

No penalties shall be applied to Lateritic mixes for conditional conformance, and for non conformance the penalty shall be 0.95

10.4 Thickness

10.4.1 Recommended layer thickness

The recommended layer thickness for dense graded asphalt is a minimum of 3 to a maximum of 5 times the maximum nominal aggregate size.

The recommended layer thickness for open graded asphalt or stone mastic asphalt is a minimum of 4 to a maximum of 6 times the maximum nominal aggregate size.

In order to account for rapid temperature drop when thin layers are proposed, the minimum recommended layer thickness is 30mm. Where the Superintending Officer specifies a layer thickness of less than 30mm, the ability to achieve compaction is compromised and the accuracy of any core testing is suspect. For layers less than 30mm, conformance and conditional conformance shall be increased by 1%.

10.4.2 Determination of layer thickness

The nominal thickness (NT) of asphalt to be laid shall be specified by the Superintending Officer. It should be noted that the nominal thickness will be greater than the minimum desired thickness, and the Superintending Officer should specify a nominal thickness greater than the required minimum thickness taking into account the roughness of the surface to be overlaid.

On any specific occasion the Superintending officer may request the Contractor to try and achieve a required spread rate. After consultation and agreement between the Superintending Officer and Contractor's representative, the contractor shall make its best endeavour to achieve the required spread rate. Where the Superintending Officer has requested a specific spread rate, the Council shall take responsibility for the performance of such works.
Where the average thickness exceeds the nominal thickness by more than 15% excluding corrector, and the Contractor has not raised concerns regarding the existing pavement levels, the Council shall only be required to pay for that portion of the mix as determined by the following equation:

Area x 1.15Nt/1000 x 2.4 x tender rate for mix .

Where the average thickness is less than the nominal thickness by more than 10%, or an individual core is less than 20% of the nominal thickness , the Superintending Officer shall direct the Contractor to undertake one of the following actions:

1. Additional cores shall be taken to identify the extent of any thin lots, and the thin lot shall be overlaid or milled and replaced to the specified thickness
2. An overlay of the same mix type shall be laid, and the Contractor paid for the portion of the asphalt that raises the mean asphalt thickness to the nominal thickness plus 10%.
3. The Superintending Officer may agree a negotiated penalty withy the Contractor

In the case of non destructive testing, there is no method of determining the asphalt thickness at any specific location. Where non destructive testing is undertaken, the mean matt thickness shall be determined from the calculated volume and the measured area of the lot.

The mean density (tonnes/m³) shall be determined from the non destructive test data. The nominal thickness (NT) shall be determined by the following formula:

$$NT = \frac{Tonnes\ laid\ /mean\ density}{Area\ of\ lot} \times 1000$$

10.5 Shape

Provided that the base pavement conforms with the requirements for the intermediate course as defined in Table 15 of AS 2150, the shape of the asphalt wearing course shall conform to the values as detailed in Table 15 of AS 2150.

11. PAYMENT

Payment shall be made on the basis of the actual mass of asphalt used unless the pavement is considered a conditional conformance or non-conformance pavement where a proportional factor shall apply. The final payment factor shall be the worst individual or lowest of all payment factors.

Payment shall be paid at the rate applicable for the job size as tendered in the Form of Tender plus price variations applicable at the time of laying the asphalt.

Where a job requires different asphalt mixes across the road surface, such as the case with red laterite cycle lanes and or medians, with granite running lanes, or bus bays, etc., each type of asphalt shall be considered as a separate job and payment shall be made at the rate applicable for tonnes of that mix laid. (eg if 270T of granite asphalt is laid, and 55T of laterite asphalt is laid, then the payment for the granite asphalt will be paid at the 200T-300T rate and the laterite asphalt at the 50T-100T rate)

12. GUIDE TO TENDER EVALUATION

Tenders will be evaluated such that the Council is most likely to receive best value for money from its Contractor. It is considered that the best value for money is derived from more than just the lowest price. Accordingly in the tender evaluation process Council will take the following into consideration: -

- Price
- Company experience
- Experience of key personnel
- Financial Stability
- Innovation
- Commitment to research and development
- Management Systems including
  - Quality
  - Safety
  - Environment

Appendix 1 – Variation to specification

Any changes to clauses, mix designs or any other special requirements are to be listed here

Appendix 2 – Table of Special Requirements

Clause	Description	Requirement
1.3	Extent of Work	
2.1	Aggregate Type – Granite, Diorite, or Basalt	
3.3	Alternative Mixes	

Appendix 3 – Asphalt mixes

3.1. DENSE GRADED: Highways, Arterial, Industrial and Distributor Roads

Property	Mix Designation		
	AC10	AC14	AC20
Grading Limits % passing AS Sieve			
26.5mm			100
19.0mm		100	90-100
13.2mm	100	85-100	75-90
9.5mm	90-100	70-85	60-80
6.7mm	70-90	62-75	50-70
4.75mm	58-76	53-70	40-60
2.36mm	40-58	35-52	25-43
1.18mm	27-44	24-40	18-35
600μm	17-35	15-30	14-27
300μm	11-24	10-24	9-21
150μm	7-16	7-16	6-15
75μm	4-7	4-7	3-7
Bitumen Content	5.0-7.0	4.5-6.5	4.0-6.0
Marshall Voids (%)	4.0-6.0	4.0-6.0	4.0-6.0
Voids in Mineral Aggregates (Min)	15	14	14
Refusal voids (350 cycles gyropac) 75 blow Marshal mixes only	2.5	2.5	2.5
Minimum Marshall 50 blow Stability 75 blow	6.5kN 8.0kN	6.5kN 8.0kN	6.5kN 8.0kN
Marshall Flow (mm)	2.0-4.0	2.0-4.0	2.0-4.0
Marshall Quotient (min) 50 blow (kN/mm) 75 blow	1.7 2.0	1.7 2.0	1.7 2.0

Recommendations for 20 year design traffic

Range/Type	Mix	Bitumen Type
Heavy truck traffic	75 blow	Class 320
Less than 2,000,000 ESA	50 blow	Class 170
Greater than 2,000,000 ESA	75 blow	Class 320
Maintenance	50 blow	Class 170
Intersections	75 blow	Class 320

3.2. DENSE GRADED: Residential Streets/Cul-de-sacs/Recreational areas

Property		Mix Designation			
		AC5	AC7	RAC10	RAC14
Grading Limits % passing AS Sieve					
19.0mm					100
13.2mm				100	90-100
9.5mm			100	95-100	70-90
6.7mm		100	80-100	80-95	62-75
4.75mm		85-100	70-90	65-80	47-67
2.36mm		55-75	45-60	45-60	34-52
1.18mm		38-57	35-50	35-50	25-41
600μm		26-43	22-35	25-40	16-32
300μm		15-28	14-25	15-25	9-21
150μm		8-18	8-16	7-15	5-13
75μm		4-11	5-8	4-7	4-7
Bitumen Content		5.0-7.0	5.0-7.0	5.0-7.0	4.5-6.5
Marshall Voids (%)	35 blow 50 blow	2.5-4.5 3.0-5.0	2.5-4.5 3.0-5.0	2.5-4.5 3.0-5.0	2.5-4.5 3.0-5.0
Voids in Mineral Aggregate (VMA) (%)	35 blow 50 blow	-	17	16	15
Minimum Marshall Stability	35 blow 50 blow	4.0kN 5.0kN	4.0kN 5.5kN	4.0kN 6.5kN	5.5kN 6.5kN
Marshall Flow (mm)	35 blow 50 blow	2.0-5.0 2.0-4.0	2.0-5.0 2.0-4.0	2.0-5.0 2.0-4.0	2.0-5.0 2.0-4.0
Marshall Quotient(min) (kN/mm)	35 blow 50 blow	1.0 1.7	1.0 1.7	1.0 1.7	1.0 1.7

Recommendations for 20 year design traffic

Range/Type	Mix	Bitumen Type
Greater than 500,000 ESA	Use distributor road mix	
Greater than 50,000 ESA	50 blow	Class 170
Less than 50,000 ESA	35 blow	Class 170
Maintenance	50 blow	Class 170

3.3. STONE MASTIC : Special applications

Property	Mix Designation			
	SMA 5	**SMA 7**	**SMA 10**	**SMA 14**
Grading Limits % passing AS Sieve				
26.5mm				
19.0mm				100
13.2mm			100	90-100
9.5mm		100	90-100	30-40
6.7mm	100	90-100	25-40	20-30
4.75mm	90-100	25-45	18-30	18-30
2.36mm	25-40	15-28	15-28	15-28
1.18mm	13-24	13-24	13-24	13-24
600μm	12-21	12-21	12-21	12-21
300μm	10-18	10-18	10-18	10-18
150μm	9-14	9-14	9-14	9-14
75μm	8-12	8-12	8-12	8-12
Bitumen Content	6.0-8.0	6.0-8.0	6.0-8.0	5.5-7.5
Marshall Voids (%) 50 blow	3.0-5.5	3.0-5.5	3.0-5.5	3.0-5.5
Voids at 80 Cycles of the Gyratory Compactor (%) (Mix Design Process only)	3.0-5.5	3.0-5.5	3.0-5.5	3.0-5.5
VMA (min) (%)	19	19	18	17
Binder Draindown (max) (%)	0.3	0.3	0.3	0.3
Cantabro Abrasion Unconditioned Loss (Max) (%) Conditioned	25 35	25 35	25 35	25 35

Recommendations:

Range/Type	Mix	Bitumen Type
Special applications requiring good, rut resistance and fatigue performance	50 blow	Class 320

3.4. DEEP LIFT: Special applications involving structural layers

Property	Mix Designation			
	AC14 Base Course	**AC20 Base Course**	**AC20 Intermediate Course**	**AC28 Base Course**
Grading Limits % passing AS Sieve				
37.5mm				100
26.5mm		100	100	90-100
19.0mm	100	90-100	90-100	73-88
13.2mm	85-100	71-86	71-86	58-76
9.5mm	70-85	58-75	58-75	47-67
6.7mm	62-75	46-64	46-64	37-58
4.75mm	53-70	37-55	37-55	30-50
2.36mm	35-52	24-42	24-42	20-37
1.18mm	24-40	15-32	15-32	13-28
600μm	15-30	10-24	10-24	9-22
300μm	10-24	7-17	7-17	6-16
150μm	7-16	4-12	4-12	4-10
75μm	4-7	3-6	3-6	3-6
Bitumen Content (%)	4-6	4.8-5.4	3.8-5.8	3-5
Marshall Voids (%) 75 blow	2.5-4.5	2.5-4.5	2.5-4.5	2.5-4.5
Voids at 350 Cycles of the Gyratory Compactor (%) (Mix Design Process only)	2.5	2.5	2.5	2.5
VMA (min) (%)	14	13	13	12
Minimum Marshall 75 blow Stability	8kN	8.0kN	8.0kN	8kN
Marshall Flow (mm) 75 blow	2.0-4.0	2.0-4.0	2.0-4.0 .0	2.0-4.0
Marshall Quotient(min) 75 blow (kN/mm)	2	2	2	2

Appendix 4 – Form of Tender

INSERT COUNCIL NAME AND LOGO

TENDER FORM FOR TENDER NO

for the SUPPLY and LAYING of HOT ASPHALT ROAD SURFACING

COUNCIL NAME **ADDRESS**

I/We _____, the undersigned, offer, undertake and agree, to supply and deliver in accordance and conformity in all respects with the Technical Specification all such quantities as may be ordered by the Council, of those items for which a price has been tendered on the attached Schedule of Rates.

This offer shall be deemed a separate offer in respect to each price endorsed by me/us on the aforesaid Schedule and may be accepted in respect to any or all of the items for which a price has been tendered.

I/We acknowledge that no tender may be deemed to be accepted until the tenderer is so advised in writing. However, in the event of acceptance of any tender offered on attached Schedule, I/We, the undersigned, agree to attend at a time mutually agreed, but within 1 month of the Council's acceptance of tender, at the Council offices, for the purpose of signature to a Memorandum of Agreement to incorporate such tender as a binding contract.

SIGNATURE OF TENDERER: _____ DATE: _____

PRINT NAME: _____

ADDRESS: _____

_____ POST CODE _____

TELEPHONE: _____

Schedule of Rates

		JOB SIZE (TONNES)							
Mix Type	**Marshall Blow**	**0-10**	**10-20**	**20-50**	**50-100**	**100-200**	**200-300**	**300-400**	**400+**
AC20	50								
AC20	75								
AC14	50								
AC14	75								
RAC14	35								
RAC14	50								
AC10	50								
AC10	75								
RAC10	35								
RAC10	50								
AC7	35								
AC7	50								
AC5	35 (Handwork)								
AC5	50 (Handwork)								
SMA14	50								
SMA10	50								
SMA7	50								

Schedule of rates

WEEKEND OPENING FEE

Where the Superintending Officer has specifically programmed the works, the weekend and public holiday surcharge shall be a lump sum of:

$ _____

Where the Superintending Officer has specifically programmed the works, the night works surcharge shall be a lump sum of:

$ _____

SUPPLY ON COUNCIL TRUCKS EX-PLANT

Mix Type	Marshall Blow	Tender Price ($ / tonne)
AC14mm	35	
AC14mm	50	
AC14mm	75	
RAC14mm	35	
RAC14mm	50	
AC10mm	35	
AC10mm	50	
AC10mm	75	
RAC10mm	35	
RAC10mm	50	
AC7mm	35	
AC7mm	50	
AC5mm	50	
AC5mm	35	

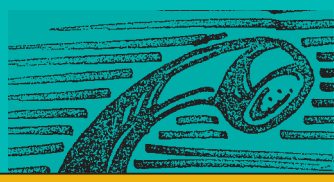
SIGNATURE OF TENDERER _____

FOR _____

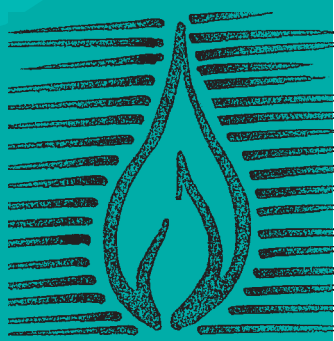
RESTORATION AND REINSTATEMENT

RESTORATION AND REINSTATEMENT SPECIFICATION

FOR LOCAL GOVERNMENTS IN WESTERN AUSTRALIA





Institute of Public Works
Engineering Australia
WA Division Inc.

RESTORATION AND REINSTATEMENT SPECIFICATION FOR LOCAL GOVERNMENTS

This Specification has been endorsed by the Utility Providers Services Committee (Western Australia)

Institute of Public Works
Engineering Australia
WA Division Inc.

Produced by the Institute of Public Works Engineering, Australia (WA Division)

Applicable from October 2002

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1. RESTORATION OF NON-TRAFFICABLE AREAS (PRIVATE PROPERTIES, ROAD VERGES AND PUBLIC OPEN SPACES)

1.1 GENERAL REQUIREMENTS

The Contractor shall engage the services of a qualified horticulturist in an advisory capacity for the duration of the Contract.

The Contractor shall obtain onsite guidance regarding restoration from the horticulturist both as necessary and to the satisfaction of the Superintendent.

Sheds, lawns gardens, street trees, street furniture, fences, walls, pavements and other property improvements which have been affected by construction work shall be restored to the pre-construction condition and/or as specified herein using new materials, plants and turf as necessary.

All trenches left open shall be securely barricaded, sign posted and illuminated in accordance with statutory and regulatory requirements.

Restoration work shall be managed so as to comply with specific conditions including the sequence and completion time constraints for various work components as specified in the respective Sections of the Specification or as detailed on Drawings.

1.2 DEFINITIONS

"Restoration" in this section is the work undertaken to reinstate a disturbed non-trafficable area of the road reserve, private property or public open space.

1.3 DETAILED RESTORATION REQUIREMENTS

1.3.1

Structures and Paving (Private Properties)

In private properties all structures (eg. fences, walls, sheds, garden beds) paving (eg. brick, concrete) concrete slabs and footpaths shall be restored at least to previous condition and dimensions by competent and experienced specialist tradesmen (and/or subcontractors), using compacted bedding new imported materials as necessary and work practices to recognised manufacturer's requirements and Australian Standards for these works.

1.3.2

Footpaths

The trench backfill shall be as specified to within 200mm of the surface over the width of the footpath crossing (and 0.1m beyond each edge) and then sand bedding of minimum 95% MOD 100mm compacted thickness shall be provided.

Sawcuts shall be made at existing panel joints each side of the damaged section. The panel shall be replaced with a 100mm thick concrete slab (poured insitu) with broomed finish and isolation expansion joints of suitable full depth bitumen impregnated fibre board (or equivalent) at both ends of the restored footpath section. Transverse contraction joints of minimum depth of 20mm shall be spread at intervals not exceeding 2.0m along the path and expansion joints shall be spaced at a maximum of 6.0 metre. Concrete shall be a suitable mix of 25MPa compressive strength at 28 days as specified for kerbing in Clause 2.6.3. Curing shall be carried out as specified in Clause 2.6.6.

1.3.3

Shrubs, Trees, Plants and Garden Beds

Advice from the Local Government and Superintendent shall be sought by the Contractor

regarding trees and shrubs requiring removal or trimming prior to this work commencing on site.

Trees, shrubs, plants and garden beds that are damaged or removed shall be replaced using advanced trees (of the same species as those removed) matured to at least three years and shrubs and plants to the property owner's satisfaction. The surface is to be restored using the stockpiled topsoil for the top 200mm compacted to a density of the surrounding soil. The areas shall be mulched as necessary to match surroundings or previous condition.

All damaged borders/walls surrounding garden beds shall be fully restored using new materials as necessary.

1.3.4

Ungrassed/Sparsely Grassed Surfaces

The surface of ungrassed/sparsely grassed surfaces shall be reinstated using the stockpiled topsoil raked to a smooth level finish. The areas shall be top dressed lightly with suitable sand and raked as necessary to remove all ruts and depressions.

1.3.5

Grassed/Lawn Areas (unable to be turfed)

The stockpiled topsoil of grassed/lawn areas (unable to be turfed) shall be re-spread, raked smooth and watered. If necessary, it shall be rotary hoed to break up lumps and lightly top dressed with a suitable sand to create a surface equal in appearance to the surrounding area. Shredded lawn or grass runners shall be planted and established. The planting shall be suitably fertilised and watered in.

1.3.6

Established Lawns (able to be turfed)

The underlying layers of topsoil previously stockpiled shall be replaced and raked smooth. If necessary, the area shall be rotary hoed to break up lumps.

The previously stripped and stacked turf shall then be re-laid and lightly compacted. A light top dressing of suitable sand shall then be applied, the surface raked to a smooth, neat appearance and the area watered.

In the event of the turf dying or deteriorating before the formal acceptance of this work, as specified in Clause 1.3, the Contractor shall replace the turf using new turf of the same species obtained from a reputable commercial nursery. The turf shall be suitably fertilised before watering in.

1.3.7

Contaminated Topsoil

If the stockpiled topsoil has been contaminated during construction, the Contractor shall provide clean loam fill for the top 200mm compacted to the density of the surrounding top soil.

1.3.8

Sprinklers and Reticulation Systems

Sprinkler and Reticulation systems shall be restored, using new parts as necessary, to achieve a standard of working order as previously agreed with the property owner by the Contractor.

Failure to agree any reduced standard in writing with the property owners/occupier previous to the disturbance of reticulation shall render the Contractor liable to return the system to full working order, despite it's previous condition.

1.4 ACCEPTANCE REQUIREMENTS

1.4.1

Maintenance until Acceptance

The Contractor shall be responsible for, and maintain restoration, for each property and adjacent verge until it has been formally accepted.

Alternative arrangements by the Contractor with any of the respective owners/occupier shall not diminish the responsibility of the Contractor in this regard.

1.4.2

Final Acceptance of Restoration Works (Non-Trafficable Areas)

Acceptance of restoration work will include acceptance of restoration of private properties as confirmed in writing by the respective property owners. The acceptance of the verges by the local authority must be endorsed by the Superintendent, after inspection by the local authority, in order for the Contractor to have reached full compliance under this Clause.

Acceptance of restoration work standards by the owners of properties affected by the work shall be in the format of a signing off of the previously issued Notice of Entry by the property owner.

In the event of disagreement between the Contractor and an owner regarding disturbed services, plant or property, the standard of restoration work for the purpose of acceptance shall be determined by the Superintendent. In the further event of the owner not being available, the Contractor should obtain the signature of bonafide agent of the owner on the acceptance form.

The above notwithstanding, any subsidence of an area of restoration shall be remedied by the Contractor within two (2) working days of the occurrence and/or notification of such defect. These repairs shall be carried out by the Contractor as necessary to maintain the safety of the Site to the satisfaction of the Superintendent otherwise the Local Government will be authorised to carry out the remedial work at the Contractor's cost.

2. RESTORATION OF TRAFFICABLE AREAS (ROAD PAVEMENTS)

2.1 SCOPE AND DEFINITIONS

2.1.1

General

This section of the Specification shall apply to the reinstatement of pavements, (including driveway crossovers) kerbing and stormwater drainage works disturbed during the construction of utility infrastructure.

2.1.2

Workmanship

The Contractor shall ensure that all works are completed to the minimum requirements as specified. The works are to be carried out using skilled employees and/or sub-contractors with proven expertise and experience in this field of work; to the satisfaction of the Superintendent.

2.1.3

Definitions

"Local Government" shall mean the Local Government in whom the affected roads, right of ways, public access ways and reserves are vested, and shall include any duly authorised officer of that Local Government.

"Pavement" shall include any road, footpath or driveway pavement: with spray sealed flexible pavements, asphaltic concrete paving, brick paving, concrete slabs or other.

"Restoration" in this section is the work undertaken to reinstate a disturbed trafficable area (or road pavement) of the road reserve.

2.1.4

Authority to Inspect Works by Others

The Contractor shall permit the Local Government's Inspector to enter upon the Works at any time for the purpose of inspecting and assessing the reinstatement of trenches and pavements and verges.

2.1.5

Authority to Give Instructions

All instructions to the Contractor shall be given by the **Superintendent** or its representative.

2.2 PLANNING REQUIREMENTS

The Contractor shall within 14 days of being awarded the Contract submit proposals for approval by the Superintendent (and the Local Government) for:

- discharge of dewatering into the existing stormwater drainage;
- location for storage/spoil sites/site compounds;
- sub-base and basecourse materials - tests of bulk samples;
- spray sealing, including spray rates and aggregate applications for bituminous seals;
- job mixes for asphaltic concrete (if applicable).

For any **traffic diversion** the Contractor shall refer to the traffic management requirements of the Utility Providers Code of Practice (2002).

The Contractor shall present a traffic management plan to the Local Government, advertise road closures in the local community newspaper and implement traffic management requirements of the Utility Providers Code of Practice (2002).

The Contractor shall also:

a) obtain and conform with Local Government standard stormwater drainage pit drawings, drainage pit reconstruction requirements, kerb-type requirements and stormwater construction specification; and

b) advertise commencement of the Works to the Local Government's requirements in the local community newspaper;

c) give a minimum of ten working days notice prior to commencement of excavation work on Site and:

- arrange an initial condition inspection of the Local Government's improvements/roadways with the Local Government and the Superintendent.
- record the level of the deterioration of the Local Government's improvements and agree such recording with the Superintendent before any disturbance of the roadways occurs on Site. (Photographs and video recordings shall be included as necessary);
- provide the Superintendent for approval the intended program of road restoration works including the elected pavement restoration proposals in accordance with the specification (pavement layer/wearing surface thickness and materials) for each street \roadway, to the Superintendent for approval. The Contractor shall hand excavate the existing pavements sufficiently to confirm the existing pavement material types and thicknesses in determining the restoration requirements for each street/test lot.
- complete an As Constructed survey (and submit the 1:10 natural scale drawings) of the existing sealed roads with cross-sections at 10m intervals and levels of low points along the entire extent of the roadways to be affected by the utility infrastructure works, unless otherwise approved by the Superintendent.
- report all unauthorised disturbance/damage to the Local Government's improvements to the Superintendent within one (1) day of occurrence of the event.

2.3 PAVEMENT CONSTRUCTION

2.3.1

Pavement Layers

The pavement shall consist of:

a) subgrade;

b) flexible pavement including

- sub-base;
- base course;
- sub-base and combined base course; and
- thick lift asphalt basecourse

c) wearing course including

- prime (or Primer seal) and Bituminous Spray Seal;
- prime (or Primer seal) and Asphaltic concrete;
- two Coat Seal; and
- concrete.

2.3.2

Subgrade

Materials used for backfilling of trenches shall be clean sand free of clay and compacted in layers with a maximum depth of 300mm.

The Contractor shall allow to reinstate the pavement to pre-existing As-Constructed levels as surveyed previously. Notwithstanding this requirement, the Contractor shall adjust the finished pavement levels locally to ensure the road is free draining and there are no undrained areas isolated from main drainage points.

The subgrade shall be compacted to a minimum of 95% Modified Dry Density Ratio in accordance with either AS 1289.5.4.1 or AS 1289.5.4.2. Where assigned values are used under AS 1289.5.4.2, the validity of the assigned Maximum Dry Density and Optimum Moisture Content shall be verified for conformance with the standard on a continual basis. Where the materials tested are too variable to produce an assigned value complying with the limits specified in AS 1289.5.4.2, testing shall be carried out to AS 1289.5.4.1 This standard requires the laboratory Dry Density/Moisture Content Relationship to be determined at each site tested for field density determination.

The laboratory Dry Density/Moisture Content Relationship shall be determined in accordance with AS 1289.5.2.1 with the value adjusted for the presence of any oversize materials as required by AS 1289.5.4.1.

The subgrade shall be graded smooth, free of any loose foreign materials across its width and level, and uniformly compacted.

The Contractor shall ensure that the completed subgrade is free of contaminants prior to and during the placement of pavement materials.

2.3.3

Flexible Pavement (sub-base, basecourse)

a) General

- The flexible pavement restoration shall be constructed of crushed limestone, lateritic gravel or crushed rock to match the types of materials in the existing pavement layers.
- The **classification** of the various roads on the Works shall be as determined by the relevant local authority.
- In all cases, the compacted thickness of the restored flexible pavements (sub-base and/or base course) over the sewer trench/excavation shall not be less than that of the existing pavement.
- where the existing basecourse is emulsion or cement stabilised material the Contractor shall restore the pavement using such stabilised material in lieu of crushed limestone in accordance with the local authority's specification for stabilisation.

b) Flexible Pavement Structure

The requirements of Clause 2.3.3(a) above, notwithstanding, where the trench is excavated in an existing roadway the Contractor shall choose between the following alternatives unless pavement structures have been specified by the Local Government.

i) For Main Roads/Industrial Roads/District Distributor Roads

- 330mm minimum thickness lateritic gravel (or granite road base); or
- 200mm minimum thickness limestone sub-base and 130mm minimum thickness lateritic gravel (or crushed granite) base course.

ii) For Local Distributor Roads

- 300mm minimum thickness lateritic granite or gravel road base; or
- 200mm minimum thickness limestone sub-base and 100mm minimum thickness lateritic crushed granite or gravel base course; or
- 175mm + 75mm asphalt.

iii) For Access Roads

- 200mm minimum thickness limestone; or
- 150mm minimum thickness limestone sub-base plus 100mm minimum thickness base course. (Lateritic gravel or crushed granite); or
- 175mm + 75mm asphalt

iv) For All Existing Unsealed Gravel Pavements

The restoration shall consist of a gravel pavement to match the existing material type (with a minimum thickness of 200mm) compacted to 98% modified dry density ratio in accordance with AS 1289.5.4.1.

c) Pavement Material Placement and Finishing

Before placement of any pavement material and as part of the subgrade preparation works, the sides of the remaining trench prepared for receiving the pavement material shall be cut clean to achieve a uniform plane surface, free of any loose or foreign material (including pavement materials, such as sand.)

Flexible pavement shall be made up of sub-base and base course. The base course shall be constructed of crushed rock (road base) or natural gravel. The sub-base shall be limestone, natural gravel or crushed rock according to the existing pavement.

The flexible pavement material shall be laid in layers not greater than 150mm (200mm for limestone) or less than 100mm compacted thickness, with light scarification between layers to ensure bonding.

Appropriate construction mixing methods shall be applied to ensure uniformity of the material qualities when laid and without segregation along the trench length.

The pavement shall be compacted using mechanical compactors. Hand operation to be used in confined areas, however, self propelled driven mechanical plant shall be used where trench area allows.

Sub-base pavements shall be compacted to a minimum of 95% Modified Dry Density Ratio and basecourse pavements to a minimum of 98% Dry Density Ratio in accordance with either AS 1289.5.4.1 or AS 1289.5.4.2. Where assigned values are used under AS 1289.5.4.2, the validity of the assigned Maximum Dry Density and Optimum Moisture Content shall be verified for conformance with the standard on a continual basis. Where the materials are tested are too variable to produce an assigned value complying with the limits specified

in AS 1289.5.4.2, testing shall be carried out to AS 1289.5.4.1. This standard requires the laboratory Dry Density/Moisture Content Relationship to be determined at each site tested for field density determination.

The laboratory Dry Density/Moisture Content Relationship shall be determined in accordance with AS 1289.5.2.1 with the value adjusted for the presence of any oversize materials as required by AS 1289.5.4.1.

The surface shall be in a tight and uniformly bound condition with no evidence of layering, cracking or disintegrating, and free of loose, dusty, stony or slurried areas with texture like a mosaic tile finish.

The surface shall be true to level and at any point shall not deviate by more than 10mm from a 3m straight edge.

d) Materials

i) Crushed Rock (Road Base)

Crushed rock shall be manufactured from hard, durable stone free of clay lumps, organic matter and other deleterious substances. The material may be crusher run or screened and recombined and be freshly blended prior to delivery.

When tested in accordance with AS 1289 C6.1 the particle size distribution shall comply with the limits prescribed in the following table:

AS SIEVE SIZE (MM)	PERCENTAGE PASSING BY MASS
26.5	100
19.0	95-100
13.2	70-90
9.5	60-80
4.75	40-60
2.36	30-45
1.18	20-35
0.60	13-27
0.425	11-23
0.075	5-11

The ratio of the portion passing 0.075mm sieve to the portion passing 0.425mm sieve shall fall within the range of 40-60%.

Crushed rock passing the 0.425mm sieve shall have the following properties:

• Liquid limit shall not exceed	25%
• Plasticity index shall not exceed	3
• Linear shrinkage shall not exceed	2%
• If non-plastic, the material shall have a maximum dry compressive strength of not less than	1700 kPa
• The Los Angeles abrasion loss shall not exceed	35
• The wet/dry strength variation shall not exceed	40%
• Flakiness index shall not exceed	35
• The soluble sulphate salt content, expressed as percentage sulphate by mass of crushed rock shall not exceed	0.1%

ii) **Laterite Gravel Base Course**

Laterite gravel shall consist of durable laterite pebble in soil mortar. The material shall be quarried from sources approved by the Superintendent, shall not contain any roots, organic matter or other deleterious material, and shall conform to the following requirements.

a) Particle size distribution

The grading of the portion passing a 37.5mm AS sieve shall conform to the following.

AS SIEVE SIZE (MM)	PERCENTAGE PASSING BY MASS
37.5	100
19.0	71-100
9.5	50-81
4.75	36-66
2.36	25-53
1.18	18-43
0.425	11-32
0.075	4-19

b) Soil constraints

The portion of the sample passing the 0.425mm sieve shall conform to the following:

i) Liquid Limit - not greater than 25%;
ii) Plasticity Index shall not exceed 3;
iii) Linear Shrinkage - not greater than 3%;
iv) Maximum Dry Compressive Strength (MDCS) - not less than 1700 kPa; and
v) California Bearing Ratio (CBR) - not less than 80%

Where required by the Superintendent, the material shall have a 4 day soaked CBR value of not less than 80% for a specimen compacted to 98% modified dry density ratio in accordance with AS 1289.5.4.1 at or near its optimum moisture content.

iii) **Crushed Limestone Rubble Sub-base Material**

The crushed limestone rubble shall be obtained from an approved source, and shall be free from sand, roots and other foreign material, and shall not contain either oversize spalls or capstone or an excessive proportion of fine grained material.

The percentage of wear of the crushed limestone, determined by the Los Angeles test, shall not exceed 60% or be less than 20%.

The calcium carbonate content of the crushed limestone shall not be less than 70% nor in excess of 85% by mass when chemically tested with hydrochloric acid.

The maximum dry compression strength of the limestone shall not be less than 1700 kPa.

The crushed limestone for sub-base shall comply with the following grading requirements when tested in accordance with AS 1289 C6.1:

SIEVE SIZE (SQUARE OPENING AS SIEVE)	PERCENTAGE PASSING BY MASS
75mm	100%
19mm	60-80%
2.36mm and less	20-40%

Sampling and testing of crushed limestone rubble shall be in accordance with AS 1141.

A sample shall be taken and tested by the Contractor for calcium carbonate content, percentage of wear, grading and determination of the maximum dry density of the material.

If the material varies in quality or is obtained from various quarries, each variation in quality, or, material from each quarry used shall have this test performed by an approved NATA Testing Authority and a record shall be maintained by the Contractor as to where the various materials have been placed.

e) Sampling and Testing Sub-Base and Base Course Material

At the commencement of production or supply of sub-base and base course material the Contractor shall take two representative bulk-samples from the first 50 tonne of each material. During placement, the Contractor shall take at least one representative bulk-sample of the material from each successive 200 tonne of material from each source and intended for delivery to the Site.

The bulk-samples shall be taken in accordance with the requirements of AS 1141.3.

For the material in each bulk-sample of material obtained in accordance with the requirements specified, the Contractor shall determine each of the properties detailed in the preceding paragraphs for the sub-base and base course material. Test results shall be submitted to the Superintendent for approval.

Any material which would break down with ageing or weathering to such an extent that it would then fall outside the limits of the Specification, shall be rejected.

2.4 WEARING COURSE

2.4.1

General

All priming and binder application operations shall be undertaken by use of approved truck mounted spray equipment.

The application of primer and binder by hand lance will be limited to areas considered impracticable to be treated by truck mounted sprayers.

All works adjacent to the spraying operations (including concrete kerbs, brick paving etc). shall be protected by appropriate covers. All entries to drainage structures shall be blocked to prevent entry of bitumen. Drip trays shall be placed under spray bars when sprayer is stationary.

Records of all spray application rates shall be forwarded to the Superintendent within seven (7) days of application.

2.4.2

Wearing Course Structure

The surface wearing course shall be one of the following alternatives:

- gravel (for gravel pavement);
- prime (or primer seal) and bituminous spray seal;
- prime (or primer seal) and asphaltic concrete seal;
- emulsion tack coat and thicklift asphaltic concrete;
- two coat seal; or
- concrete.

a) Existing Wearing Course - Gravel

The restored gravel surface shall match the existing surface material.

b) Existing Wearing Course - Spray Seal

The new surface-spray seal shall match the pre-existing seal type for each road.

c) Existing Wearing Course - Asphaltic Concrete

Where the existing surface is asphaltic concrete seal, the minimum wearing course for restoration shall be as follows:

i) For Main Roads/Industrial Roads/District Distributor Roads

- Straights;

  Prime plus 30mm minimum thickness, 10G, 75 blow asphaltic concrete.
- Major Intersections;

  Prime plus 40mm minimum thickness, 14G, 75 blow asphaltic concrete.

ii) For Local Distributor Roads

- Prime plus 30mm minimum thickness, 10G, 50 blow asphaltic concrete.

iii) For Access Roads

- On limestone pavement -

  50mm minimum compacted thickness 14G, 50 blow asphaltic concrete.
- On roadbase base course -

  Prime plus 25mm compacted thickness 7G, 50 blow asphaltic concrete.

  Road surface remedial works, shall be carried out by the Contractor in addition to the wearing courses specified above, in accordance with the technical specification as published by the IPWEA and AAPA.

  Driveway crossings damaged by the excavation works shall be reinstated to Clause 2.7 requirements.

2.4.3

Priming

a) Authority to commence priming

Priming shall not be undertaken until the pavement has been inspected by the Superintendent (in the company of the Local Government inspector).

b) Application

Priming shall not be carried out during inclement weather conditions and the prepared base course shall be sufficiently dry.

Before priming, the edges of the existing wearing course shall be uniformly and vertically cut (sawn) on both sides over the entire length of the trench. Wherever practical the sawn cut shall be parallel to the trench being prepared for pavement restoration. The asphaltic concrete edges shall be profiled. All areas of intrusion/overlap into the adjoining pavement shall be cut to a rectangular shape.

The sections of undamaged existing road-way surface, between the areas of trench intrusion into the existing surface, which are less than 2.0m in length, shall be removed to allow continuous rectangular sections of primed surfaces.

The edges of existing sprayed seal shall be prepared in accordance with the requirements for the sprayed seal specification. The resultant edges shall adhere properly and uniformly with the underlying pavement and be uniform in line, with deviations along a 3m straight edge of no more than 40mm.

The pavement and adjacent existing seal to 500mm width shall be broomed free of all loose material and dust, and any defects are to be made good. The prime shall be applied to a slightly dampened flexible pavement.

The primer shall be applied at a rate of 1.2 litres/m^2 to the approved surface course for its full width with a overlap to the adjacent existing seals of 25mm.

The primer shall be a cutback primer consisting of 50% residual bitumen and 50% power kerosene or, should weather conditions preclude the use of cutback primer, the Superintendent may approve a 60/40 cationic bitumen emulsion applied at a rate of 1.5 litres per square metre, measured at a temperature of 15 degrees Celsius. The cutback primer shall be applied at a temperature of 60 degrees Celsius. Emulsion primer may be heated to a maximum temperature of 50 degrees Celsius if conditions warrant.

c) Blinding

For cutback primer apply sand or 1.5mm aggregate after penetration of the primer but while sufficient bitumen is on the surface to allow adhesion. Sand or aggregate shall be applied at a sufficient rate to prevent lifting of the primed surface by vehicles.

For emulsion primer the blinding shall be a nominal 7mm aggregate applied immediately after spraying at a rate not less than 1 cubic metre per 150 square metres and sufficient to prevent lifting of the primed surface by vehicles.

The surface is to be multi-tyre rolled until the aggregate is firmly embedded in the primer.

The surplus aggregate shall be swept up and removed from Site not less than seven days after the completion of the rolling.

d) Protection of primed surface

The Contractor shall suitably protect the primed surface from excessive wear prior to the application of the surface seal. All damaged areas of prime shall be repaired without loss of integrity of the surrounding prime.

2.4.4

Bituminous Spray Seal (Single Coat)

The sprayed seal shall be a single coat hot bitumen seal Binder class 170 bitumen with the following properties:

PROPERTY	14MM AGGREGATE SEAL	10MM AGGREGATE SEAL
Binder Mix (Bitumen: Cutter)	98:2	98:2
Anti-Stripping Agent	0.2%	0.2%
Bitumen Minimum Application rate hot	1.6 litresL/m^2	1.4 litres/m^2
Aggregate Size	14mm	10mm

The aggregate size shall match that of the existing road surface seal (as closely as possible).

The bitumen application rate and properties shown above are a guide only. The actual spray rates are subject to the average least dimension characteristics of the aggregate, the type of surface to be sprayed and traffic volumes for the street section. Details of the physical properties of aggregate to be used shall be submitted by the Contractor at least 10 days prior to spraying.

Spraying shall not take place during rain or when rain appears imminent. Bitumen shall be applied by spray bar or hand lance by a skilled experienced operator only when it is impractical to utilise a spray bar.

Precoated cover aggregate shall be applied uniformly immediately following spraying, and one pass with steel roller first and then rolled with rubber rollers to ensure full embedment and adhesion. Any stripping, flushing etc shall be remedied by the Contractor, at the discretion of the Superintendent in consultation with the local authority.

Care shall be taken to ensure a smooth, neat finish.

The new sprayed seal shall overlap the existing seal by 300mm.

All excess aggregate shall be swept up and removed from Site not less than seven days after the completion of the rolling.

2.4.5

Two Coat Seal

The seal shall consist of a two coat emulsion seal, as specified below. The bitumen application rate and properties shown above are a guide only. The actual spray rates are subject to the average least dimension characteristics of the aggregate, the type of surface to be sprayed and traffic volumes for the street section.

Details of the physical properties of aggregate to be used shall be submitted by the Contractor to the Superintendent at least 10 days prior to spraying.

a) Materials

i) Binder

Binder shall consist of cationic bitumen emulsion conforming with the relevant Australian Standard.

ii) Aggregate

14mm and 7mm aggregates shall be crushed granite free of dust, clay, excessive moisture and other deleterious substances.

Aggregate shall be crushed from hard, sound durable rock. The percentage loss as measured by the Los Angeles Abrasion Test shall not exceed 30.

Particle size distribution shall be within the limits prescribed in the following table for the nominal size specified.

AS SIEVE SIZE (MM)	PERCENTAGE PASSING BY MASS 14MM	7MM
19.0	100	-
13.2	95-100	-
9.5	0-30	100
6.7	0-5	85-100
4.75	-	0-40
2.36	-	0-10
0.600	0-2	0-2

Average least dimension of aggregates shall comply with the requirements of the following table for the nominal size specified.

SEAL - COAT	NOMINAL SIZE (MM)	ALD (MIN) (MM)
First Coat	14	6.4
Second Coat	7	3.5

All aggregates shall be free of excess dust, and the Superintendent may order the washing and/or precoating of dusty aggregate.

b) Plant

i) Spraying equipment

Spraying equipment shall comply with the requirements of the AUSTROADS 'Specification for Performance Requirements for Mechanical Sprayers of Bituminous Materials'.

Unless otherwise permitted, the sprayer shall have a minimum tank capacity of 2000 litres.

When requested by the Superintendent, provide a current certificate and calibration chart issued by the Main Roads, Western Australia before commencing spraying operations.

ii) Rollers

A self-propelled static pneumatic rubber tyred roller of approximately 15 tonnes mass shall be used.

Steel rollers, vibrating rollers and drawn rollers of any type shall not be used for sealing work.

iii) Trucks

The tipper trucks shall be fitted with approved tail-gate mounted metal spreaders.

c) First Coat

The emulsion application rate shall be confirmed by the Contractor 7 days prior to commencement. Unless otherwise directed by the Superintendent an application rate of 1.4 litres/m2 (measured at 15 degrees Celsius) and 80m2/m3 of 14mm nominal size aggregate shall be adopted by the

Contractor. The Contractor shall confirm the application rate with the Superintendent a minimum of seven (7) days before proceeding with this work.

When the flexible pavement has been compacted, trimmed and approved, the Contractor shall sweep the surface with a suitable rotary broom to remove dust and debris and until a mosaic of well embedded stone is showing on the surface. Areas inaccessible to the mechanical broom shall be swept by hand.

No traffic shall be allowed on the broomed surface.

The Contractor shall notify the Superintendent at least 24 hours in advance of intention to spray.

Before work commences weather conditions shall be dry and reasonably calm. The pavement temperature shall be not less than 15 degrees Celsius.

The pavement shall be lightly watered so that the surface is damp, but not wet. In the event of excess water being applied, bitumen spraying shall not proceed until the surface has dried and been recompacted to the satisfaction of the Superintendent.

The Contractor shall protect all works in the vicinity of spraying operations. Concrete kerbs, brick paving, etc, shall be covered with sand, building paper or bags. The Contractor shall place drip trays under spray bars when sprayer is stationary.

Immediately after the emulsion has 'broken', the Contractor shall spread 14mm aggregate on the binder. The aggregate shall be adequately rolled with a rubber tyred roller. Any areas of binder not covered with aggregate from the metal spreaders shall immediately be covered manually. During the rolling process, the drag broom shall be used to ensure an even spread of aggregate.

d) Second Coat

The second coat may, unless specified otherwise, be placed immediately after the first.

Emulsion application rates shall be confirmed by the Contractor prior to commencement. Unless otherwise directed by the Superintendent an application rate of 2.0 L/m2 (measured at 15 degrees Celsius) and 120 m2/m3 of 7mm nominal size aggregate shall be adopted by the Contractor. The Contractor shall confirm such application rate with the Superintendent a minimum of seven (7) days before proceeding with this work.

Prepare the surface by sweeping with the drag broom to ensure an even spread of the aggregate placed in the first coat.

Protect all works in the vicinity of spraying operations. Concrete kerbs, etc, shall be covered with sand, building paper or bags. The entries to drains and sumps shall be closed.. Drip trays shall be placed under spray bars when sprayer is stationery. (Kraft paper shall be used to ensure that all joins are neat and straight.)

The Contractor shall not commence sealing until the road surface temperature has reached 15 degrees Celsius.

Immediately after the emulsion has 'broken' the Contractor shall cover the binder with 7mm aggregate. Binder which is not covered by aggregate from the metal spreader shall be covered manually.

The area shall be rolled with pneumatic tyred roller with tyre pressures adjustable in the range 550 kPa to 700 kPa.

The minimum amount of rolling shall be at a rate of 4 roller hours per 4,500 litres of bitumen sprayed and the following conditions shall apply:

i) the whole of the area shall have received at least one roller pass within 2 minutes of covering;

ii) after the initial slow pass by the pneumatic tyred roller the speed of rolling shall be increased to the minimum practicable for the area being sealed;

iii) at least 25% of the rolling shall be applied within 2 hours of covering;

iv) at least 50% of the rolling shall be applied within 4 hours of covering;

v) the whole of the rolling shall be completed within 3 days of covering;

vi) the rolling shall be carried out between the hours of sunrise and sunset; and

vii) at the time of rolling, excess aggregate shall be removed and/or additional aggregate applied as required. The surface shall be drag broomed until it is uniformly covered with aggregate thoroughly embedded in the binder.

When the aggregate has been evenly spread and embedded in the binder, any remaining loose particles from the pavement shall be removed.

e) Acceptance

i) General

Acceptance of sealed surfaces shall be subject to the availability of certified test results and quality certificates for the work carried out.

ii) Tolerances

Actual rate of application of binder shall be in the range of 95% to 105% of the ordered rate.

iii) Defective Work

If the actual rate of application of binder is less than 95% or more than 105% of that ordered, the surface shall be resealed as directed by Superintendent (after removal of the previously sprayed seal as necessary, at the discretion of the Superintendent).

In any case, all unravelled, stripped slick or fatty surfaces shall be repaired as directed by the Superintendent.

2.4.6

Asphaltic Concrete

Asphaltic concrete works are to be carried out as per Technical Specification "Tender Form and Schedule for Supply and Laying of Asphalt Road Surfacing" published by the Institute of Public Works Engineering, Australia.

2.4.7

Concrete

Unless otherwise specified, concrete pavements shall be reinstated using class N25 concrete to minimum 100mm thickness, or the original concrete pavement thickness, whichever is the greater, on approved subgrade.

The surface finish of the concrete shall be as close as practical to the existing, in both colour and texture.

Additional concrete beyond the damaged area shall be removed and replaced back to the nearest existing joint even if undisturbed by the sewer trench works.

Concrete shall be cured for 72 hours using PVC sheeting weighted with wet sand. All sand and plastic shall be removed from Site on completion of curing.

2.4.8

Remedial Works for Damaged Road Surfaces

a) When Existing Wearing Course is less than Ten Years Old

i) 75% Lane Disturbance

If the width of the trench and trench intrusions into existing pavements (including the adjacent seal overlaps) is greater than 75% of road lane width then the whole of the road lane width shall be resurfaced to match the existing road surface. A road lane refers to half of unmarked roadways or the width of marked lanes.

ii) Greater than 50% Roadway Disturbance

Where the trench disturbance is greater than half the total road width then the whole road shall be seal/resealed in accordance with

Clause 2.4.4 after the appropriate wearing course restoration over the trench.

b) All Existing Road Surfaces (irrespective of age)

i) Reseal of Undamaged Seal Against Kerbs

In the case of trenching in the roadway, where an existing section of roadway of maximum 1.0m width remains undamaged against kerbs, resealing shall occur over both the trench and this undamaged section of roadway using a spray seal in accordance with Clause 2.4.4, after the appropriate wearing course restoration over the trench.

ii) Damage To Existing Adjacent Road and Driveway Crossing Surfaces

The adjacent road surfaces shall be appropriately protected from damage from the likes of construction vehicles, placement of manhole sections, excavated rock indentations etc.

Where damage occurs to the existing road/driveway surface, ie. gouges, scrapes or potholes; the contractor shall repair the surface to previous condition.

The repair may involve the spraying of a reseal (in accordance with sealing requirements of Clause 2.4) of the entire road pavement (lane) or resurfacing of the entire driveway crossing area as appropriate and at the discretion of the Superintendent in consultation with the Local Government.

Only Asphalt Hotmix (minimum compacted thickness of 25mm) will be accepted as a suitable patching material, (where a pre-patching material and sprayed reseal and sprayed reseal is required).

iii) Parallel Cracking

Where parallel cracking of the existing road surface occurs along the edge of a trench then the reinstatement shall be widened both to a line 200mm beyond the extremity of the cracking and so as to produce a consistent width of restoration.

c) Finished Pavement Grades

Unless otherwise approved by the Superintendent, the Contractor shall complete an As Constructed survey of the existing wearing surface at 10m intervals and low points along the entire extent of road affected by the utility infrastructure trenching. This shall be forwarded to the Superintendent for information. The Contractor shall reinstate to the As Constructed levels. Notwithstanding this requirement the Contractor shall adjust finished pavement levels locally to ensure the road is free draining as there may be locations in flat roads where previous consolidation has created undrained areas isolated from the main drainage points.

d) Damaged Concrete Pavements

If excavation damages existing concrete pavements including paths and crossovers the damaged concrete shall be removed back to the nearest control joint and replaced to match the existing pavement in accordance with Clause 2.4.7 of the specification.

2.4.9

Reinstatement of Road Markings and Signs

a) When a Stop/Holding line is removed the Contractor shall immediately inform the Main Roads WA Faultline on 1800 800 009 in the Metropolitan or South West Regions of the details and location of the lines removed. The Contractor shall inform the Main Roads Regional Office if the works are in other Regional areas (refer to the Utility Providers

Code of Practice (2002) Appendix A for contact details). Stop signs shall not be removed unless approved by the Superintendent.

b) Immediately upon completion of road pavement restoration the Contractor shall install temporary Stop and Holding lines in the location of the lines they have removed. 3M temporary tape (or similar) is to be used for the lines. The width of the temporary line is to be a minimum of 150mm wide, and it is to be placed in accordance with Main Roads WA standard.

c) Immediately upon restoration of the road pavement wearing course the Contractor shall reinstate all road line markings that have been removed by the works under the Contract, by arrangement with Main Roads WA. Any signs damaged or removed in carrying out the works shall be replaced immediately by the Contractor.

2.5 PAVEMENT TESTING AND INSPECTIONS

2.5.1

General

The Contractor shall supply copies of all test certificates to the Superintendent and the Local Government within seven (7) days of testing on Site.

All testing for subgrade, sub-base, basecourse and wearing course layers shall be carried out by a NATA registered testing laboratory as approved by the Superintendent.

The Contractor's NATA registered testing authority shall be a completely independent firm and/or entity to that of the firm involved in the laying of the pavement and/or wearing course layers.

Payment for NATA registered testing of pavements and wearing courses as specified (not including penetrometer testing) shall be made only for the successful tests in the accepted final group of tests certifying a completed Test Lot of works.

The Contractor shall advise the Superintendent and the Local Government that a section of reinstatement work area is ready for inspection with a minimum of one (1) working days notice at the following key times:

- on completion of trench backfill, (prepared subgrade) prior to placing pavement;
- on completion of pavement prior to primer application and;
- on completion of primer application, and prior to application of seal/wearing course.

2.5.2

Compaction Testing Equipment

The Perth Sand Penetrometer calibrated to correlate with the required density shall be used for testing subgrade compaction.

For flexible pavement layers, nuclear density meters shall be used for compaction testing, with a maximum modified dry density test completed for each test point. For gravel basecourse material an assigned value for the Modified Dry Density Ratio may be used provided the material is uniform in a nature and complies with AS 1289 Clause 5.4.2.

a) Trench/Excavation Backfill Compaction

Compaction of backfill in trenches/excavations and around new and existing structures:

Compaction testing of backfill material shall be done along the length of the trench or excavation for a maximum of 15m. Compaction testing around junction pits and access chambers shall be done at least one on each side.

b) Subgrade Compaction

Subgrade shall be compaction tested at a minimum rate of one test per 30 linear metres and one test for each section between structures less than 30m apart under pavements. Particular emphasis on testing will be made to ensure that adequate compaction has been achieved around structures.

The above notwithstanding, a minimum number of 3 tests shall be carried out for each Test Lot.

c) Base Course/Sub-base Course Compaction

The base course and sub-base shall be compaction tested at the minimum rate of one test per 50 linear metres and one test for each section between structures less than 50m apart.

The above notwithstanding, a minimum number of 3 tests shall be carried out for each Test Lot.

d) Asphaltic Concrete

Audit core tests of the asphaltic concrete wearing course may be undertaken by the Superintendent to determine Marshall density/stability, thickness of asphalt course, bitumen content and percentage air voids.

Samples may be taken as required and tests carried out by a NATA registered laboratory, on behalf of the Superintendent.

2.5.4

Reporting of Test Results

Copies of test result certificates (both failed and successful) for each appropriate test lot, shall be submitted to both the Superintendent and the Road Authority by the Contractor within seven (7) days of testing of each Test Lot. Satisfactory completed submissions in this regard shall be pre-requisites to the works being deemed complete and due for payment. Test results for each penetrometer testing shall include the number of blows per 300mm penetration in that specific material equivalent to the relevant specified modified maximum density ratio compaction requirement in each case.

2.5.5

Acceptance of Pavements - Remedial Works

Should any Contractor's testing and re-testing or Superintendent's audit testing of pavement Test Lots reveal a single test that fails then further working (including scarifying, remixing and/or compaction as necessary) shall be carried over of the entire Test Lot and retests carried out, all at the Contractor's cost. Re-testing shall be carried out at the same frequency as the original testing.

2.5.6

Acceptance of Asphaltic Concrete Wearing Course – As per specification of IPWEA/AAPA

Areas of asphaltic concrete assessed as defective with respect to the requirements specified herein for mix quality, density, percentage voids, surface finish, surface smoothness, or thickness, shall be removed and replaced by the Contractor, at the discretion of the Superintendent.

The Contractor shall remove and replace areas of asphaltic concrete which show signs of either ravelling, fretting, cracking, deflection, subsidence, scabbing or instability, for any reason, at the discretion of the Superintendent.

Any bituminous mix that has become damaged or contaminated with foreign material shall be removed and replaced.

The extent of the defective area shall include all the asphaltic concrete works in that Test Lot containing the failed test(s) unless defective areas can be suitably isolated to the Superintendent's satisfaction by additional testing (where necessary) by the Contractor.

Any subsidence of restored areas shall be repaired by the Contractor within two (2) days of the occurrence and/or notification of the defect. Immediate repairs shall be carried by the Contractor out as necessary to maintain the safety of the Site to the satisfaction of the Superintendent otherwise the Local Government shall be authorised to carry out remedial works at the Contractor's cost.

Skin patching of an area that has been rolled shall not be permitted.

Defective areas shall be removed and replaced with fresh materials. Patches shall be prepared by cutting and removing the defective asphaltic concrete to the full depth of the course such that the sides of the area are at right angles or parallel to the direction of traffic and the edges are vertical. The internal edges and surfaces of the area to be patched shall be cleaned of all cutting residue by flushing with water, and all free water removed. The surfaces shall be tack coated with bituminous emulsion prior to placing of fresh material which shall be spread, compacted and finished in accordance with the Specification. Surface reseal (sprayed seal) shall also be carried out as necessary to match the existing surface.

2.6 EXTRUDED KERBING

2.6.1

Scope

Where existing kerbing is demolished or damaged during the course of the work under the Contract, the supply and laying of replacement extruded concrete kerbing shall be carried out using a kerb section to the Local Government's standards.

2.6.2

Experienced Personnel

All works under this Section shall be carried out by personnel experienced in the laying of extruded concrete kerbing.

2.6.3

Concrete

Concrete for use in extruded kerbing shall be ready mixed concrete complying with all requirements of AS 1379.

The aggregate size shall be 10mm nominal. The concrete cylinder compressive strength at 28 days shall be not less than 25MPa.

A kerbing machine shall be used. Concrete shall have a maximum slump of 50mm.

2.6.4

Line and Level of Work

The kerbing shall be relayed to match pre-existing alignment level and grades.

The construction tolerance shall be such that when a 3 metre long straight edge is laid on the top or face of the kerb, the surface shall not vary more than 3mm from the edge of the straight edge, except at grade changes or curves. Kerbs shall be equal distance from the road centreline (± 10mm).

2.6.5

Construction Details

The surface to receive the kerb shall be a fully compacted and sealed base course.

The Contractor shall prepare the surface by removing all loose material to the satisfaction of the Superintendent immediately prior to the placing of the kerb.

The Contractor shall give the Superintendent 24 hours prior notice of the start of the kerb laying operations in order that the Superintendent may have the opportunity of inspecting the work.

The extruded kerb shall be finished with the use of an overall steel trowel whilst the concrete is still comparatively wet to give a smooth finish free of surface pits and depressions.

Expansion joints shall be provided at every second contraction joint and shall be sawn vertically at right angles to the longitudinal line of the kerb, to give a 12mm to 10mm wide cut for the full section of the kerb, after the concrete has cured.

Expansion joints shall be provided at all tangent points adjacent to inlet structures and when abutting new works to existing kerb.

The expansion joints shall be spaced at maximum 6.0m intervals, sealed with a closed cell polymer backing rod to a depth of 25mm to act as a backing and elastomeric silicon sealant. The seal shall finish 3mm below the face of the kerb.

Contraction joints shall be inserted immediately after the final finishing and shall be located at 1.5mm intervals and shall be formed with a grooving tool, not fully fitted through the section of the kerb. Alternatively, the joint may be formed by cutting a 5mm gap at least 2/3 the depth of the kerb section.

All joints where cutting is required, shall be cut not less than 24 hours following the laying of that section of kerb.

2.6.6

Curing

Curing compounds shall meet ASTM C309 requirements.

Kerbing shall be treated with a sprayed application of "Calcure D" membrane curing compound applied at a minimum rate of one litre per 6 square metres, within two hours of surface finishing of the concrete. The compound shall be applied by means of a low pressure mechanical spray. An approved equivalent curing compound may be used.

In hot weather, after the application of the curing compound, the kerb shall be covered with an approved Polythene membrane for a minimum period of 4 days prior to any road materials being placed adjacent to the kerb.

The membrane shall be replaced on completion of cutting and jointing operations.

2.6.7

Continuation of Roadworks

No further work shall be done on the roadworks or backfilling adjacent to kerb laid until a minimum of four (4) days following laying of kerb. Any damage to the kerb by the Contractor shall be made good by complete replacement of the damaged section between joints.

2.6.8

Protection of Works

The Contractor shall be held solely responsible for the replacement as necessary of any defective or damaged kerbing during the course of the works and for the maintenance period as specified.

2.6.9

Buttressing of Kerb

Fill shall be placed not sooner than four (4) days after kerbing construction and thoroughly compacted by a plate compactor for the full length of the kerb and for a width of 600mm from back of kerb to give final verge level to the top of the kerb.

2.7 DRIVEWAY CROSSINGS AND CONCRETE/BRICK PAVING

2.7.1

Asphaltic Concrete/Sprayed Seal/Gravel Surfaces

The driveway crossings shall be restored as for road pavement restoration (classification: Access Ways) in the case of existing asphaltic concrete, sprayed seal and gravel surfaces. When the excavation damages any part of the existing driveway crossover the full width of the damaged section parallel to the roadway shall be reconstructed in the accordance with Clause 2.7 of the Specification. Where the damage is greater than 50% of the driveway area then the whole driveway shall be resurfaced to match the existing driveway surface levels and material type. (The existing wearing course shall be removed as necessary). Sprayed seal shall be a two (2) coat seal in accordance with Clause 2.4.5.

Where a strip of undisturbed driveway remains which has a width of less than 700mm at any position along its length then the wearing course

strip shall removed and the area incorporated in the new wearing course restoration works.

2.7.2

Insitu Concrete Surface

Refer to the requirements of Clause 2.4.7 of the Specification.

2.7.3

Clay Brick/Concrete Block Paving on Roadways and Driveway Crossings

For paved driveway crossings and roadways the pavement layers should be adjusted to provide a 200mm compacted thickness of base course below a 30mm (+5mm)thick compacted sand bedding layer plus the pavers (as per existing) to match the levels of the existing undamaged surrounding surfaces.

The base course layer shall be compacted to 98% modified dry density ratio in accordance with AS 1289.5.4.1.

The bedding sand shall be a well-graded sand passing a 4.75mm sieve and suited to concrete manufacture.

The grading limits are:

AS SIEVE SIZE	PERCENTAGE PASSING
9.52mm	100
4.75mm	90-100
2.36mm	75-100
1.18mm	55-90
600um	35-59
300um	8-30
150um	0-10

The bedding shall be free of deleterious soluble salts or other contaminants likely to cause efflorescence or lead to reduced skid resistance. Bricklayers sand and single sized dune sands are not suitable.

The paving units shall be compacted after laying to achieve consolidation of the sand bedding and brought to appropriate finished levels and profiles by not less than three (3) passes of a suitable plate compactor.

Compaction should proceed as closely as possible following laying and prior to use by traffic. Paving work shall be carried out by proven specialised and skilled tradesman in this field of work.

2.8 STORMWATER DAMAGE

2.8.1

General

Should disturbance or demolition of existing drainage lines and structures occur due to the trench works they shall be reinstated in accordance with the specification to be obtained by the Contractor from the Local Government.

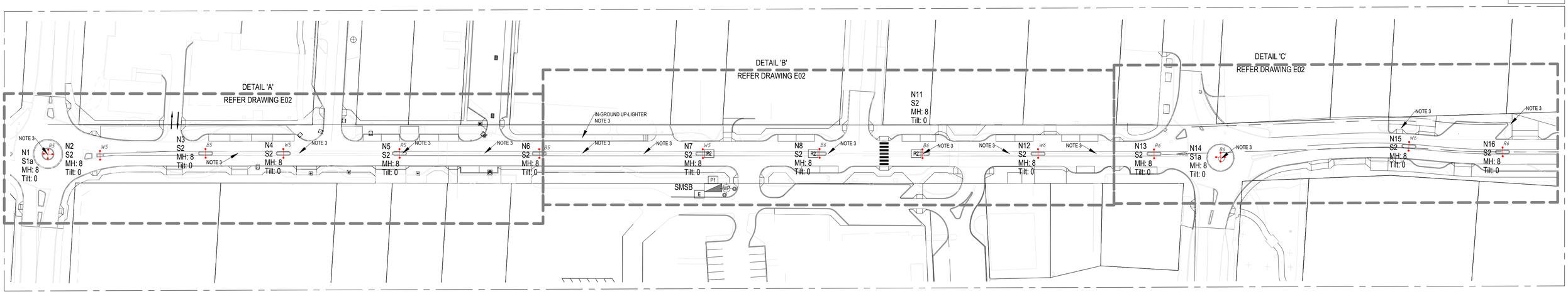
The Contractor shall also comply with construction drawings for precast concrete pits obtained from the Local Government.

Where existing grated pit concrete surrounds are cracked prior to commencement of work and further damage results to the pit surround as a result of the Contractor's work, the Contractor shall replace the entire concrete surround.

2.8.2

Pipes and Precast Components

All pipes and precast components incorporated in the restoration works shall be in first class condition and free of cracks, chips and deformities. Any items damaged by the Contractor shall be rejected, removed from the Site and replaced with new materials.



MORETON TERRACE LIGHTING EQUIPMENT LOCATIONS

NOT TO SCALE

Moreton Tce Street Scape Lighting					
Fixture Number	**Location**	**Pole Type**	**Pole Height / mount**	**Proposed Light Source**	**Comments**
N1	Roundabout Moreton Tce / Waldeck St	A.D Coote & Co, Meadow Springs	8m/Quad arm, 1500mm outreach	4 x 48w LED, S60 beam, side entry, 40mm spigot - WE-EF ASP530	Provide all proprietary mountings, adapters, fixings, drivers & surge protective devices as required to complete the project. All light fittings shall be supplied with a minimum 12m cable tail pre-fitted. Remote drivers and surge protective devices shall be accessible from the pole equipment hatch.
N2	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N3	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N4	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N5	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N6	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N7	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N8	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N9	Spare				
N10	Spare				
N11	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N12	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N13	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N14	Moreton Tce / Point Leander	A.D Coote & Co, Meadow Springs	8m/Quad arm	4 x 48w LED, S60 beam, side entry, 40mm spigot - WE-EF ASP530	
N15	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	
N16	Moreton Tce	A.D Coote & Co, Meadow Springs	8m/Twin arm, 1500mm outreach & banner arms	2 x 28w LED, S70 beam, 3000K, side entry, 40mm spigot - WE-EF ASP530 & 2 x 24W LED flood light, symmetrical medium beam, 3000K, column fitter mounted - WE-EF FLC131	



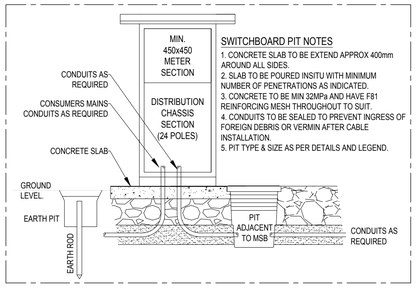
EXISTING QUAD OUTREACH FOR REMOVAL



EXISTING CENTRAL STREET LIGHTS FOR REMOVAL



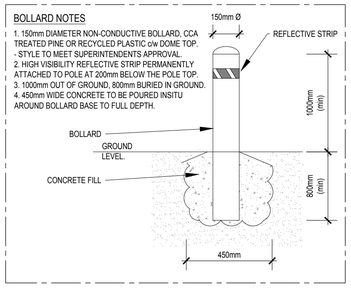
EXISTING IN-GROUND UP LIGHTER FOR REMOVAL



SWITCHBOARD PIT NOTES

1. CONCRETE SLAB TO BE EXTEND APPROX 400mm AROUND ALL SIDES.
2. SLAB TO BE POURED INSITU WITH MINIMUM NUMBER OF PENETRATIONS AS INDICATED.
3. CONCRETE TO BE MIN 32MPa AND HAVE F81 REINFORCING MESH THROUGHOUT TO SUIT.
4. CONDUITS TO BE SEALED TO PREVENT INGRESS OF FOREIGN DEBRIS OR VERMIN AFTER CABLE INSTALLATION.
5. PIT TYPE & SIZE AS PER DETAILS AND LEGEND.

MSB AND PIT UNDER (TYPICAL) ELEVATIONS



BOLLARD NOTES

1. 150mm DIAMETER NON-CONDUCTIVE BOLLARD, CCA TREATED PINE OR RECYCLED PLASTIC c/w DOME TOP.
- STYLE TO MEET SUPERINTENDENTS APPROVAL.
2. HIGH VISIBILITY REFLECTIVE STRIP PERMANENTLY ATTACHED TO POLE AT 200mm BELOW THE POLE TOP.
3. 1000mm OUT OF GROUND, 800mm BURIED IN GROUND.
4. 450mm WIDE CONCRETE TO BE POURED INSITU AROUND BOLLARD BASE TO FULL DEPTH.

NON-CONDUCTIVE PROTECTION BOLLARD DETAIL

PROJECT NOTES

1. ALL EQUIPMENT SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL LIAISE WITH WESTERN POWER AND SUPERINTENDENT TO ENSURE ALL EXISTING LIGHTING FOR REMOVAL SHALL BE DISCONNECTED AND MADE SAFE BY WESTERN POWER.
3. EXISTING STREET LIGHT POLES & IN-GROUND UP-LIGHTER TO BE REMOVED IN ENTIRETY, REMOVE ALL CABLING MADE REDUNDANT BY THESE WORKS. HAND BACK ALL EXISTING EQUIPMENT TO OWNER.

SITE, CONDUITS, PITS

- NON-CONDUCTIVE BOLLARD - REFER E02
- WP — WESTERN POWER PILLAR
- ELECTRICAL DISTRIBUTION BOARD
- P1 — ELECTRICAL PIT - iDS ezySTACK SATURN 600 x 900 c/w DUCTILE IRON COVER
- P2 — ELECTRICAL PIT - iDS P5 c/w 300mm RISER & iDSG C6045DS DUCTILE IRON COVER
- E — EARTH PIT

ALL PIT LIDS SHALL HAVE BRASS OR STAINLESS STEEL 'SERVICE' TAG ATTACHED.

- CONDUIT ROUTE
- CONDUIT ACCESS
- CONDUIT NUMBERING SYSTEM
  - CONDUIT DIAMETER
  - SERVICE P=ELECTRICAL
  - QUANTITY OFF

LIGHT

- CONTRACTOR TO CONFIRM ALL PART NUMBERS WITH LIGHTING MANUFACTURERS
- ALL PRODUCTS LISTED SHALL BE OF *'EQUAL OR A SIMILAR PRODUCT EQUIVALENT IN FUNCTION, QUALITY, ETC TO THE APPROVAL OF THE SUPERINTENDENT'*

TWIN ARM POLE c/w 2 x 28W LED STREETLIGHT, 2 x 24W LED FLOOD LIGHT - REFER LIGHTING SCHEDULE ON THIS DRAWING FOR DETAILS

QUAD ARM POLE c/w 4 x 28W LED STREETLIGHT - REFER LIGHTING SCHEDULE ON THIS DRAWING FOR DETAILS

GENERAL NOTES

- ALL WORKS SHALL BE COMPLETED IN CONJUNCTION WITH THE PROJECT SPECIFICATION AND CONTRACT DRAWINGS.
- ALL WORK TO BE OF TRADESMAN QUALITY, NEW AND SHALL BE IN COMPLIANCE WITH THE LATEST REVISIONS OF AS3000, AS3008, AS2053.8, SUPPLY AUTHORITY, W.A.E.R., NCC, A.C.M.A. AND TELSTRA/NBN REQUIREMENTS.
- CONTRACTOR SHALL SUPPLY AND INSTALL ALL EQUIPMENT INCLUDING SWITCHBOARDS, ALL CABLING AND ALL LIGHT AND POWER DISTRIBUTION & CONTROL EQUIPMENT, FITTINGS AND FIXINGS TO ELECTRICALLY COMPLETE THE PROJECT.
- REMOVE ALL ELECTRICAL CABLING & EQUIPMENT MADE REDUNDANT BY THE WORKS. ALL GENERAL AND LIGHTING CIRCUITS SHOWN ON DRAWING(S) SHALL BE NEW.
- ALL EXTERNAL FIXINGS SHALL BE GRADE 316 STAINLESS STEEL.
- CONTRACTOR TO COLLECT AND INSTALL METERS AND ASSOCIATED EQUIPMENT.
- S.M.S.B. TO BE MANUFACTURED FROM 2.5mm ALUMINUM AND RATED IP65. ALL CABLE/CONDUIT ENTRIES SHALL BE SEALED TO MAINTAIN IP RATING. PROVIDE SEPARATE DOOR & WESTERN POWER SECTION FITTED WITH EMKA 316SS PADLOCKABLE SWING HANDLE & WESTERN POWER APPROVED PADLOCK. PROVIDE SEPARATE DOOR & DISTRIBUTION SECTION FITTED WITH EMKA 316SS PADLOCKABLE SWING HANDLE, CLIENT TO PROVIDE PADLOCK TO SUIT.
- P.E. CELL SHALL BE LOCATED ON TOP OF M.S.B. ENCLOSED IN AN ALUMINUM ENCLOSURE SUCH THAT IT IS ABLE TO OPERATE PROTECTED FROM VANDALS. REMOVAL OF PROTECTIVE ENCLOSURE SHALL ONLY BE EFFECTED FROM INSIDE OF S.M.S.B.
- USE ONLY RIGID CONDUITS WITH LARGE RADIUS BENDS. INSTALL 2.5mm sq DRAW WIRE IN SPARE CONDUITS. NO FLEXIBLE CONDUIT UNLESS OTHERWISE SHOWN.
- LABEL ALL CABLES AT BOTH ENDS WITH CRITCHELY 'Z' TYPE CABLE MARKERS.
- FINAL LOCATION OF ALL EQUIPMENT AND UNDERGROUND SERVICES TO BE DETERMINED ON SITE WITH SUPERINTENDENT.
- PROVIDE ALL TRENCHING, BACKFILL AND COMPACTION. MAKING GOOD OF ALL ROADWAY & PAVING SURFACES SHALL BE BY OTHERS.
- ALL PITS SHALL BE SUITABLE FOR VEHICLE WEIGHTS - CLASS D, FLUSH TO SURROUNDING SURFACES WITH LID MARKED 'ELECTRICAL', INSTALL AS PER MANUFACTURERS SPECIFICATION.
- ALL CONDUIT ENTRIES INTO PITS TO BE SEALED TO PREVENT INGRESS OF DEBRIS.
- CONTRACTOR TO LIAISE WITH WESTERN POWER TO ESTABLISH A NEW POWER SUPPLY FOR SITE.
- ALL CABLE SIZES SHOWN ON THESE DRAWINGS SHOULD BE CONSIDERED AS MINIMUM SIZES. INSTALLATION TYPE, METHOD, GROUPING AND OTHER DE-RATING FACTORS MAY NEED TO BE CONSIDERED DEPENDANT UPON INSTALLATION METHODOLOGY.
- FINAL SUB-CIRCUIT CABLING IN CONDUITS SHALL BE ORANGE CIRCULAR TYPE.
- GENERAL EQUIPMENT LAYOUT ONLY SHOWN ON ALL DRAWINGS.
- CONTRACTOR SHALL VISIT SITE TO DETERMINE ALL EXISTING EQUIPMENT TYPES AND LOCATIONS.
- ALL PRODUCTS LISTED SHALL BE OF *'EQUAL OR A SIMILAR PRODUCT EQUIVALENT IN FUNCTION, QUALITY, ETC TO THE APPROVAL OF THE SUPERINTENDENT'*

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WARNING
BEWARE OF UNDERGROUND SERVICES

- The location of underground cables are approximate and their exact position should be checked on site. No guarantee is given that all existing cables and services are shown. Locate all underground cables and services before commencement of work.
- Refer to Worksafe Regulation 3.21.
- If working in the vicinity of existing overhead distribution or transmission lines, contractor to comply with 'worksafe' clearances during construction.

ELECTRICAL CONTRACTOR TO LIAISE WITH WESTERN POWER FOR THE COORDINATION & INSTALLATION OF ALL REQUIRED WESTERN POWER SERVICES, PITS, CONDUITS & OTHER EQUIPMENT REQUIRED.

WESTERN POWER REF # : NP030406

PHONE : 13 10 87 - EMAIL : works.admin.general@westernpower.com.au

Rev.No.	Date	Revision
0	14/1/2021	ISSUED FOR TENDER

A.B.N. 53995310352
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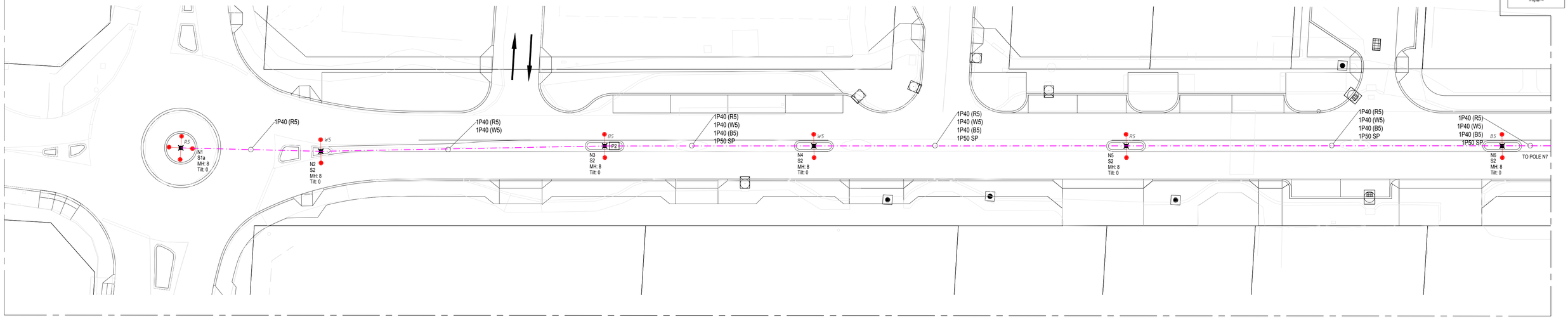
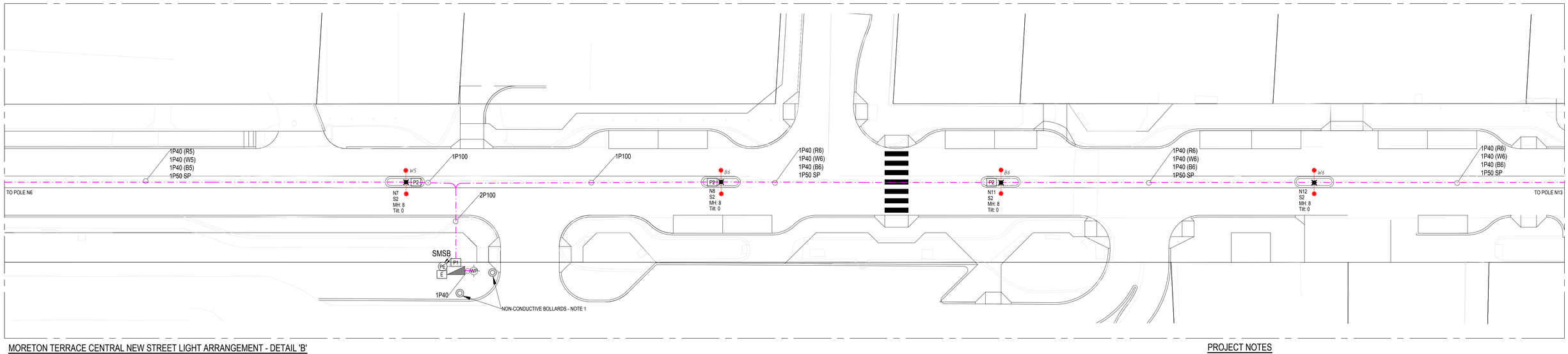
PROJECT
SHIRE OF IRWIN
MORETON Tce DONGARA
STREET SCAPE UPGRADE
ELECTRICAL LAYOUTS

DRAWING: STREET LIGHTING
JOB No.: P6258
DRAFT.: HS
APPRV.: MR
DATE: MARCH 2020
SCALE: AS SHOWN
DWG No.: E-01
REV.: 0



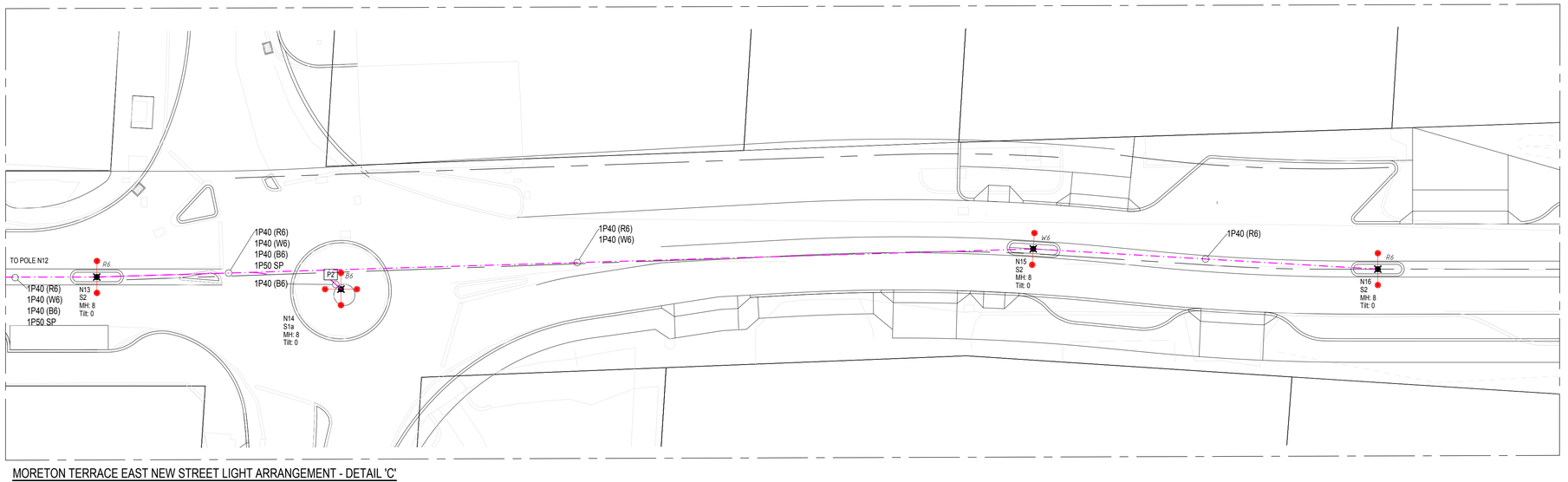
MORETON TERRACE WEST NEW STREET LIGHT ARRANGEMENT - DETAIL 'A'

SCALE: 1:250



MORETON TERRACE CENTRAL NEW STREET LIGHT ARRANGEMENT - DETAIL 'B'

SCALE: 1:250



MORETON TERRACE EAST NEW STREET LIGHT ARRANGEMENT - DETAIL 'C'

SCALE: 1:250

PROJECT NOTES

1. PROVIDE NON-CONDUCTIVE BOLLARDS TO SATISFY CUSTOMER SCOPE OF WORKS ITEM 'G' IN WESTERN POWER DESIGN NP030406 & W.A.D.C.M. CLAUSE 12.5.3. REFER DETAIL ON DRAWING E01.

LIGHT

- CONTRACTOR TO CONFIRM ALL PART NUMBERS WITH LIGHTING MANUFACTURERS
- ALL PRODUCTS LISTED SHALL BE OF *'EQUAL OR A SIMILAR PRODUCT EQUIVALENT IN FUNCTION, QUALITY, ETC TO THE APPROVAL OF THE SUPERINTENDENT'*

TWIN ARM POLE c/w 2 x 28W LED STREETLIGHT, 2 x 24W LED FLOOD LIGHT - REFER LIGHTING SCHEDULE ON E01 FOR DETAILS

QUAD ARM POLE c/w 4 x 28W LED STREETLIGHT - REFER LIGHTING SCHEDULE ON E01 FOR DETAILS

SINGLE ARM POLE c/w 1 x 108W LED STREETLIGHT - REFER LIGHTING SCHEDULE ON E01 FOR DETAILS

PE — PHOTO ELECTRIC CELL FOR LIGHTING CONTROL

SITE, CONDUITS, PITS

WP — WESTERN POWER PILLAR

NON-CONDUCTIVE BOLLARD - NOTE 1

ELECTRICAL DISTRIBUTION BOARD

P1 — ELECTRICAL PIT - iDS ezySTACK SATURN 600 x 900 c/w DUCTILE IRON COVER

P2 — ELECTRICAL PIT - iDS P5 c/w 300mm RISER & iDSG C6045DS DUCTILE IRON COVER

E — EARTH PIT

ALL PIT LIDS SHALL HAVE BRASS OR STAINLESS STEEL 'SERVICE' TAG ATTACHED.

CONDUIT ROUTE

CONDUIT ACCESS

CONDUIT NUMBERING SYSTEM

- CONDUIT DIAMETER
- SERVICE P=ELECTRICAL SP=SPARE
- QUANTITY OFF

Rev.No.	Date	Revision
0	14/01/2021	ISSUED FOR TENDER

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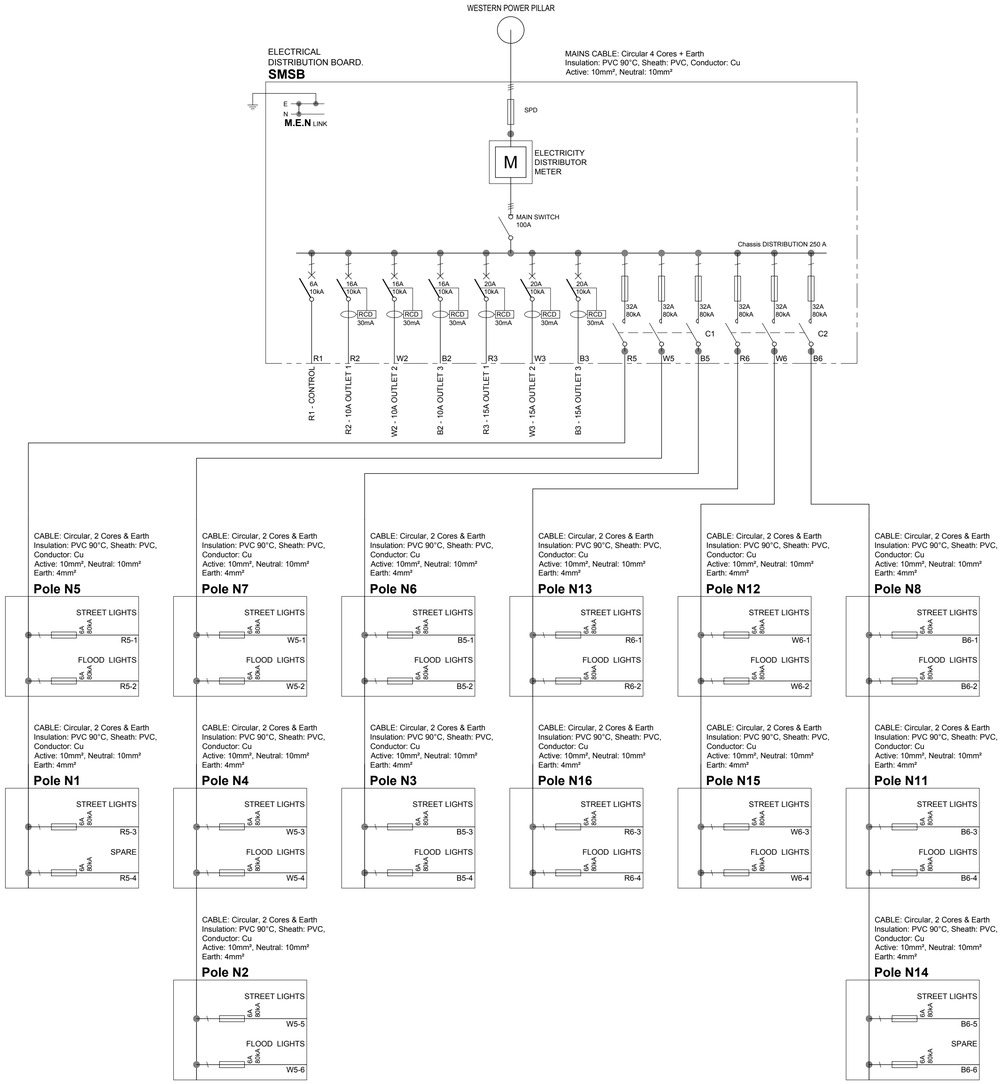
PROJECT

SHIRE OF IRWIN
MORETON Tce DONGARA
STREET SCAPE UPGRADE
ELECTRICAL LAYOUTS

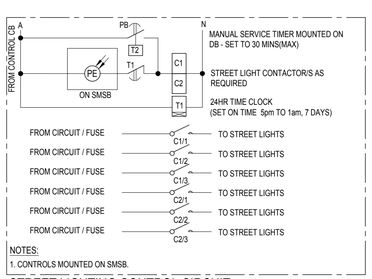
DRAWING	JOB No.
STREET LIGHTING	P6258

DRAFT.	APPRV.	DWG No.	REV.
HS	MR	E-02	0
DATE: MARCH 2020	SCALE: 1:250@A1		



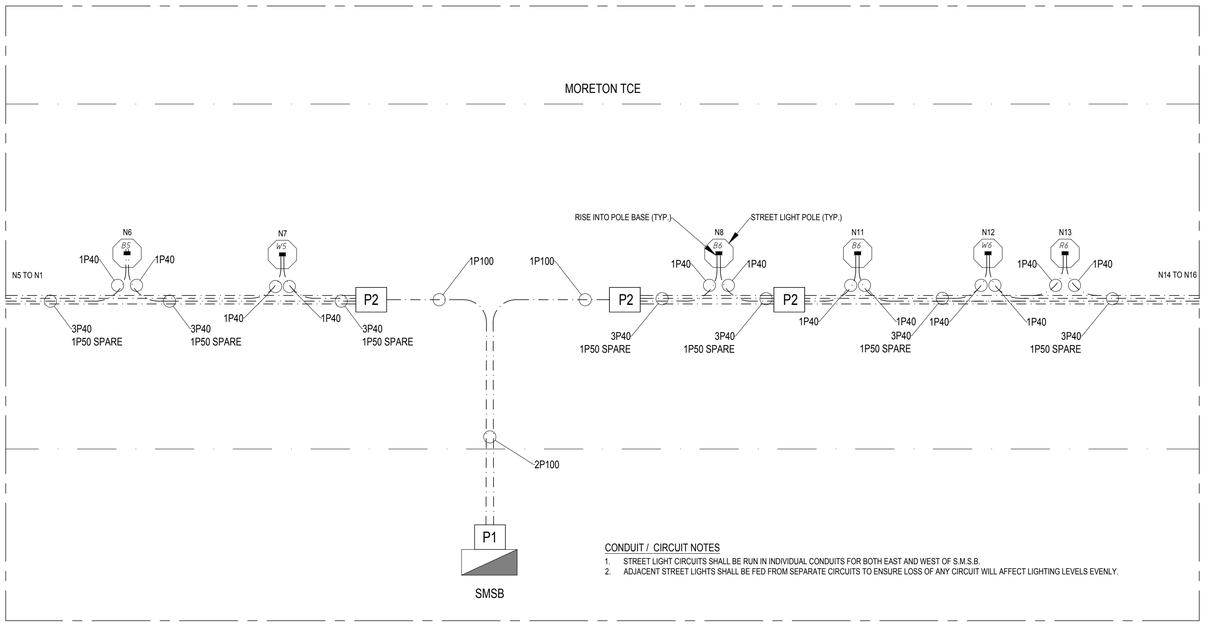
BOARD REF:		**SMSB**												
CIRCUIT No.	PHASE	LOAD DESCRIPTION	PROTECTIVE DEVICE					CABLE						COMMENTS
			TYPE	MODEL	RATING	BREAKING CAPACITY	TRIP	SIZE	INSUL	SHEATH	CONDUCTOR	TYPE		
	BUS:	**DISTRIBUTION**												24 Poles
R1	R	R1 - CONTROL	MCB	iC60N	6A	10kA		2.5mm²	PVC 90°C	PVC	Cu	S.D.I		-
	W	SPARE												
	B	SPARE												
R2	R	R2 - 10A OUTLET 1	RCD	iC60N RCBO Type A	16A	10kA	30mA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
W2	W	W2 - 10A OUTLET 2	RCD	iC60N RCBO Type A	16A	10kA	30mA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
B2	B	B2 - 10A OUTLET 3	RCD	iC60N RCBO Type A	16A	10kA	30mA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
R3	R	R3 - 15A OUTLET 1	RCD	iC60N RCBO Type A	20A	10kA	30mA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
W3	W	W3 - 15A OUTLET 2	RCD	iC60N RCBO Type A	20A	10kA	30mA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
B3	B	B3 - 15A OUTLET 3	RCD	iC60N RCBO Type A	20A	10kA	30mA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
	R	SPARE												
	W	SPARE												
	B	SPARE												
R5	R	R5 - STREET LIGHTS 1	FUSE	FUSE	32A	80kA		10mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		Earth: 4mm²
W5	W	W5 - STREET LIGHTS 2	FUSE	FUSE	32A	80kA		10mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		Earth: 4mm²
B5	B	B5 - STREET LIGHTS 3	FUSE	FUSE	32A	80kA		10mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		Earth: 4mm²
R6	R	R6 - STREET LIGHTS 4	FUSE	FUSE	32A	80kA		10mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		Earth: 4mm²
W6	W	W6 - STREET LIGHTS 5	FUSE	FUSE	32A	80kA		10mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		Earth: 4mm²
B6	B	B6 - STREET LIGHTS 6	FUSE	FUSE	32A	80kA		10mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		Earth: 4mm²

BOARD REF:		**ALL POLES - LOOP THROUGH AT FUSE PROTECTION UNIT (TYPICAL)**										
CIRCUIT No.	PHASE	LOAD DESCRIPTION	PROTECTIVE DEVICE			CABLE						COMMENTS
			TYPE	RATING	BREAKING CAPACITY	SIZE	INSUL	SHEATH	CONDUCTOR	TYPE		
1	R	STREET LIGHTS	FUSE	6A	80kA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-
2	R	PROJECTOR LIGHTS (SPARE IN POLES N1 & N14)	FUSE	6A	80kA	2.5mm²	PVC 90°C	PVC	Cu	Circ, 2C&E		-



NOTES:
1. CONTROLS MOUNTED ON SMSB.

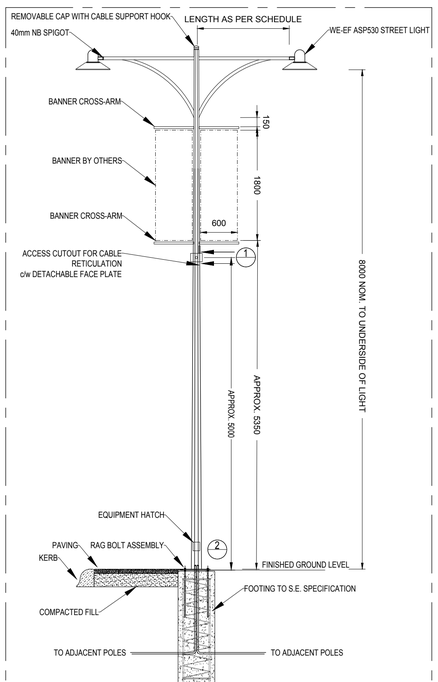
STREET LIGHTING CONTROL CIRCUIT



CONDUIT / CIRCUIT NOTES
1. STREET LIGHT CIRCUITS SHALL BE RUN IN INDIVIDUAL CONDUITS FOR BOTH EAST AND WEST OF S.M.S.B.
2. ADJACENT STREET LIGHTS SHALL BE FED FROM SEPARATE CIRCUITS TO ENSURE LOSS OF ANY CIRCUIT WILL AFFECT LIGHTING LEVELS EVENLY.

CONDUIT LAYOUT DIAGRAM

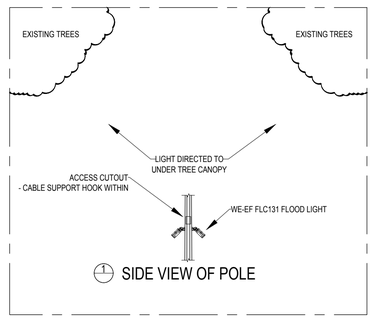
NOT TO SCALE:



POLE NOTES
1. BANNERS,CROSS ARMS & FLOOD LIGHTS ONLY FITTED TO TWIN OUTREACH POLES.
2. MINIMUM 12m CABLE TAIL PRE FITTED REQUIRED TO ALL LIGHTING.

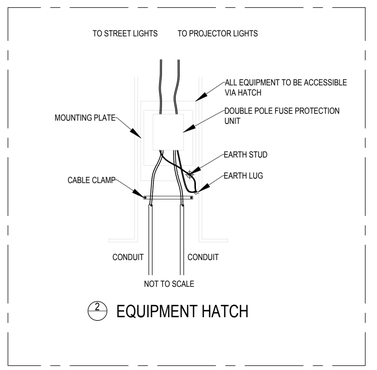
LIGHT POLE DETAIL

SCALE 1:50



PROJECTOR LIGHT DETAIL

SCALE: 1:50



EQUIPMENT HATCH DETAIL

SCALE: 1:50

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0	14/01/2021	ISSUED FOR TENDER

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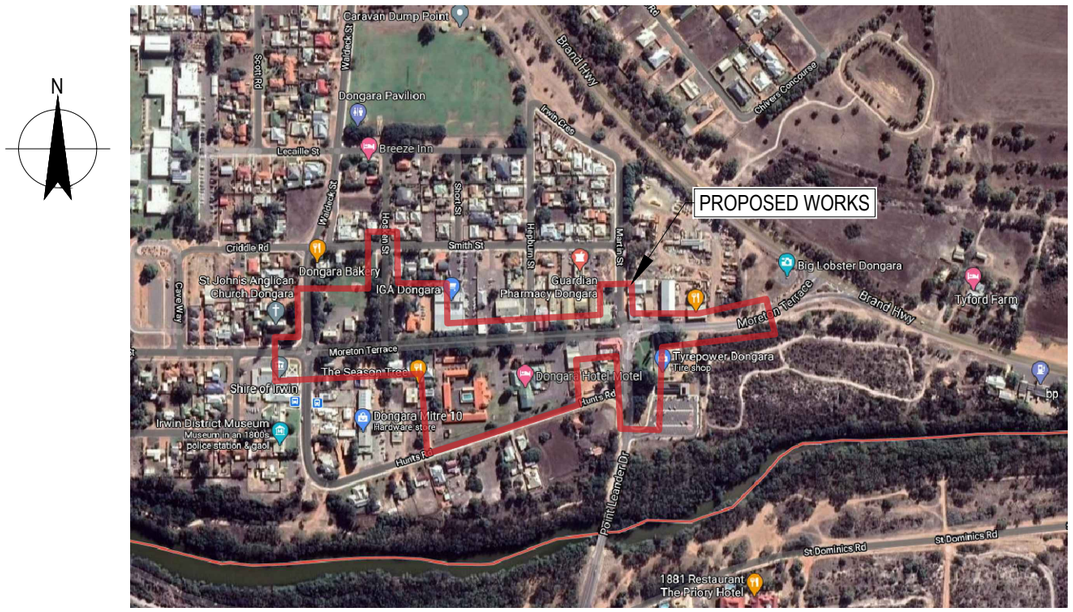
PROJECT
SHIRE OF IRWIN
MORETON Tce DONGARA
STREET SCAPE UPGRADE
ELECTRICAL DETAILS

DRAWING: STREET LIGHTING
JOB No.: P6258
DRAFT.: HS
APPRV.: MR
DATE: MARCH 2020
SCALE: 1:1000@A1
DWG No.: E-03
REV.: 0

SHIRE OF IRWIN
MORETON TERRACE
DONGARA TOWN CENTRE UPGRADE
PROJECT NUMBER 12533215



LOCALITY PLAN
NOT TO SCALE

DRAWING LIST		DRAWING LIST	
DRG No.	DRAWING TITLE	DRG No.	DRAWING TITLE
12533215-G001	COVER PAGE AND DRAWING LIST	12533215-C201	TYPICAL CROSS SECTION - MORETON TERRACE
12533215-G002	GENERAL NOTES	12533215-C202	TYPICAL CROSS SECTION - HOSKEN STREET
12533215-C001	PROPOSED WORKS - OVERALL PLAN	12533215-C203	TYPICAL CROSS SECTION - CAR PARK
12533215-C002	PROPOSED WORKS - DETAIL PLAN	12533215-C204	TYPICAL CROSS SECTION - STAGE 2 - MORETON TERRACE
12533215-C003	PROPOSED WORKS - DETAIL PLAN	12533215-C205	TYPICAL CROSS SECTION - HOTEL CAR PARK
12533215-C004	PROPOSED WORKS - DETAIL PLAN	12533215-C206	TYPICAL CROSS SECTION - STAGE 3 - MORETON TERRACE
12533215-C005	PROPOSED WORKS - DETAIL PLAN	12533215-C207	TYPICAL CROSS SECTION - STAGE 3 - MORETON TERRACE
12533215-C006	PROPOSED WORKS - DETAIL PLAN	12533215-C208	ROUNDABOUT CROSS SECTIONS
12533215-C007	PROPOSED WORKS - DETAIL PLAN	12533215-C301	DETAILS - KERBS AND PATHWAYS
12533215-C008	PROPOSED WORKS - DETAIL PLAN	12533215-S101	RAMP AND RETAINING WALL - LAYOUT & DETAILS
12533215-C009	PROPOSED WORKS - DETAIL PLAN	12533215-S102	RAMP AND RETAINING WALL - GENERAL NOTES
12533215-C010	PROPOSED WORKS - DETAIL PLAN		
12533215-C011	PROPOSED WORKS - DETAIL PLAN		
12533215-C012	PROPOSED WORKS - DETAIL PLAN		
12533215-C013	PROPOSED WORKS - DETAIL PLAN		
12533215-C014	PROPOSED WORKS - DETAIL PLAN		
12533215-C015	PROPOSED WORKS - DETAIL PLAN		
12533215-C101	PLAN AND LONGITUDINAL SECTION - STAGE 1 - MORETON TERRACE		
12533215-C102	PLAN AND LONGITUDINAL SECTION - STAGE 1 - HOSKEN STREET		
12533215-C103	PLAN AND LONGITUDINAL SECTION - STAGE 2 - MORETON TERRACE		
12533215-C104	PLAN AND LONGITUDINAL SECTION - STAGE 2 - COMMUNITY RESOURCES CENTRE CAR PARK		
12533215-C105	PLAN AND LONGITUDINAL SECTION - STAGE 3 - MORETON TERRACE		

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW		AS	EA	AK	14.12.20
A	PRELIMINARY - ISSUED FOR REVIEW		AS			13.11.20

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title COVER PAGE

Original Size A1
Drawing No: 12533215-G001
Rev: B

Plot Date: 14 December 2020 - 6:03 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-G001.dwg

GENERAL

G1. ALL LEVELS SHOWN ON THE DRAWING ARE REFERRED TO AHD (AUSTRALIAN HEIGHTS DATUM DERIVED)
G2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE
G3. SURVEY SUPPLIED BY SHIRE OF IRWIN
G4. WARNING - THE POSITION OF ALL UTILITIES (WATER, SANITATION, STORMWATER, ELECTRICITY, GAS, TELECOMMUNICATIONS, ETC.) SHOWN ON THIS DRAWING ARE APPROXIMATE AND MUST BE VERIFIED ON SITE, CONTRACTOR TO ALSO OBTAIN ALL RELATED INFORMATION FROM "DIAL BEFORE YOU DIG" AND ANY DISCREPANCIES FROM INFORMATION SHOWN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO COMMENCEMENT OF ANY WORK.
G5. WARNING - ALL PROPERTY SERVICES ARE NOT SHOWN ON THE DBYD INFORMATION AND THESE PLANS. A SUITABLE QUALIFIED AND EXPERIENCED SERVICE LOCATOR SHALL BE ENGAGED TO LOCATE ALL SERVICES BEFORE COMMENCING WORKS.
G6. ALL SET OUT FOR THE CIVIL WORKS AND ASSOCIATED LINE MARKING IS TO BE IN ACCORDANCE WITH THESE DRAWINGS.
G7. DO NOT SCALE OR MAKE AMENDMENTS TO THE DRAWING - IF IN DOUBT OR CHANGES ARE REQUIRE CONTACT INFRASTRUCTURE SERVICES - ENGINEERING SERVICES DESIGN TEAM.
G8. ALL WORK TO COMPLY WITH SHIRE OF IRWIN GUIDELINES, STANDARDS AND STANDARD DRAWINGS AND DETAILS UNLESS OTHERWISE SHOWN.
G9. CONTRACTOR TO LOCATE ALL LEVELS FROM ESTABLISHED BENCH MARKS
G10. THE CONTRACTOR SHALL CHECK, CONFIRM AND SATISFY THEMSELVES THAT ALL DIMENSIONS AND LEVELS ALONG WITH EXISTING SERVICE LOCATIONS ARE CORRECT PRIOR TO CONSTRUCTION WORKS COMMENCING ON SITE.
G11. THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENT IMMEDIATELY OF ANY DISCREPANCIES OR ERRORS THAT MAY BE PRESENT WITHIN THESE PLANS.
G12. THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF LEVELS AND LOCATIONS OF SERVICES TO FULLY COMPLY WITH LOCAL AUTHORITY 'AS CONSTRUCTED' INFORMATION REQUIREMENTS
G13. A MINIMUM OF 24 HRS NOTICE MUST BE PROVIDED TO THE LOCAL AUTHORITY OR THE SUPERINTENDENT WHEN ARRANGING FOR INSPECTIONS.
G14. THE CONTRACTOR SHALL ARRANGE FOR A PRE-START MEETING TO BE HELD ON SITE BETWEEN ALL NECESSARY PARTIES PRIOR TO CONSTRUCTION COMMENCING ON SITE.

SAFETY IN DESIGN

SID1. THE SAFETY RISK MITIGATION ITEMS BELOW ARE BASED ON GHD'S DESIGN OFFICE EXPERIENCE AND DO NOT NECESSARILY ACCOUNT FOR ALL CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION SAFETY RISKS. BASED ON INFORMATION AVAILABLE WHEN THIS DRAWING WAS MADE, IN ITS CAPACITY AS DESIGNER ONLY, GHD HAS TRIED TO IDENTIFY SAFETY RISKS PERTAINING TO CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION PHASES OF THE ASSET. INCLUSION (OR NOT) OF ANY ITEM DOES NOT REDUCE OR LIMIT OBLIGATIONS OF CONSTRUCTOR, USER, MAINTAINER AND DEMOLISHER TO UNDERTAKE APPROPRIATE RISK MANAGEMENT ACTIVITIES TO REDUCE RISK AND IS NOT AN ADMISSION BY GHD THAT INCLUSION OF ANY ITEM IS DESIGNER'S RESPONSIBILITY.
SID2. REFER SAFETY IN DESIGN RISK REGISTER

PROJECT DOCUMENTATION

PD1. THESE PLANS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTATION RELEVANT TO THIS PROJECT INCLUDING (BUT NOT LIMITED TO) THE FOLLOWING:

- ALL RELEVANT ROADWORKS LAYOUT PLANS, LONGITUDINAL SECTIONS AND CROSS SECTIONS ALONG WITH SETOUT PLANS.
- ALL RELEVANT STORMWATER DRAINAGE PLANS AND SPECIFICATIONS.
- TECHNICAL SPECIFICATION
- SAFETY IN DESIGN

ENVIRONMENTAL CARE

EC1. IN THE EVENT OF ROOT DAMAGE TO MATURE 'TREES TO REMAIN,' MAKE A CLEAN CUT ABOVE THE SEVERED ROOT AND TREAT THE ROOT WITH A SUITABLE FUNGICIDE.
EC2. LIMIT CONSTRUCTION ACTIVITY OVER AREAS WHICH ARE NOT TO BE DISTURBED BY FENCING OF WITH REGULARLY SPACED POSTS AND COLOURED PLASTIC TAPE.
EC3. CARE FOR STOCKPILES SO AS TO PREVENT EROSION AND SOIL LOSS. AVOID ENTRY OF SEDIMENTS INTO STORMWATER SYSTEM.
EC4. TOPSOIL AND SEED DISTURBED AREAS ON COMPLETION, ENSURE DISTURBED AREAS REMAIN STABLE THROUGHOUT THE ESTABLISHMENT. TURF AREAS SO DESIGNATED.
EC5. SEDIMENT AND EROSION CONTROL MEASURES TO BE PLACE PRIOR TO BEGINNING OF EARTHWORKS OPERATIONS.
EC6. OBTAIN APPROVAL FROM SUPERINTENDENT TO PROCEED WITH CLEARING OPERATIONS.

TRAFFIC MANAGEMENT

TM1. TRAFFIC MANAGEMENT PLAN TO BE PREPARED AND CHECKED BY SHIRE OF IRWIN COMPLIANCE/TRAFFIC CONTROL OFFICER IN ADVANCE OF WORKS BEING CONDUCTED.
TM2. PEDESTRIAN MANAGEMENT PLAN TO BE PREPARED AND CHECKED BY SHIRE OF IRWIN COMPLIANCE/TRAFFIC CONTROL OFFICER IN ADVANCE OF WORKS BEING CONDUCTED.

DEMOLITION

D1. ANY ITEMS OR ADJACENT PAVEMENT AREAS DAMAGED AS A RESULT OF DEMOLITION ACTIVITIES SHALL BE REPAIRED OR REPLACED, AS REQUIRED, AT CONTRACTORS SOLE EXPENSE.
D2. ANY SERVICE WHICH IS DISRUPTED BY THE DEMOLITION WORKS SHALL BE RE-INSTALLED BY THE CONTRACTOR IMMEDIATELY AND AT HIS EXPENSE.
D3. ON COMPLETION OF DEMOLITION WORKS, DISTURBED AREAS ARE TO BE BACK AND FILLED AND COMPACTED TO NATURAL SURFACE LEVEL AS PER SPECIFICATION.
D4. PRIOR TO CLEARING AND DEMOLITION OPERATIONS, REMOVE WITHOUT MANAGING ALL EXISTING INFRASTRUCTURE TO BE REUSED OR STORED, AS NOTED AND DIRECTED BY THE SUPERINTENDENT.
D5. CLEARING AND DEMOLITION OPERATIONS SHALL BE CARRIED OUT ONLY WITHIN THOSE AREAS AFFECTED BY THE PROPOSED WORKS UNLESS NOTED OTHERWISE.
D6. DEMOLISH EXISTING REDUNDANT INFRASTRUCTURE SUCH AS KERBS, PAVEMENT SEALS, CONCRETE FOOTPATHS, ABANDONED SERVICE STRUCTURES ETC. DISPOSE OF ALL SUCH MATERIAL OFF SITE.

EARTHWORKS

E1. ALL EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3798.
E2. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THE SITE AND SURROUNDING AREAS FROM DAMAGE RESULTING FROM STORMWATER RUNOFF. TEMPORARY DIVERSION DRAINS AND OR OTHER DAMAGE CONTROL DEVICES ARE TO BE IMPLEMENTED BY THE CONTRACTOR DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER.
E3. EXCESS SPOIL MATERIAL GENERATED DURING CONSTRUCTION IS TO BE REMOVED FROM THE SITE BY THE CONTRACTOR OR SPREAD ON SITE AS DIRECTED BY THE SUPERINTENDENT.
E4. ALL FILL MATERIAL PLACE ON THE SITE SHALL COMPRISE ONLY OF NATURAL EARTH AND ROCK IS TO BE FREE OF CONTAMINANTS (AS DEFINED BY SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT 1994), NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS. SUITABLE FILL MATERIAL IS DEEMED TO COMPLY WITH THE REQUIREMENTS OF CLAUSE 4.3, AS3798.
E5. ALL EARTHWORKS BELOW RL5.0M AHD MUST BE CARRIED OUT IN ACCORDANCE WITH AN ACID SULPHATE SOILS MANAGEMENT PLAN UNLESS NOTED OTHERWISE ON PLANS WHICH IS TO BE PREPARED BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL AUTHORITIES GUIDELINES.

ROADWORKS

RD1. ALL SETOUT AND LEVEL INFORMATION PROVIDED IN THE 3D MODEL
RD2. REFER TYPICAL CROSS SECTIONS, INTERSECTION DETAIL PLANS, ROAD LAYOUT PLANS, LONGITUDINAL SECTIONS FOR SETOUT DETAILS
RD3. NEW ROAD SURFACE, PAVEMENT FORMATION AND KERB TO MATCH SMOOTHLY AND NEATLY TO EXISTING SURFACES, LEVELS AND ALIGNMENT MAY BE VARIED WHERE NECESSARY TO GET A SMOOTH FINISH AS DIRECTED BY THE SUPERINTENDENT.
RD4. PAVEMENT DESIGN AND MATERIALS TO BE CONFIRMED WITH THE SUPERINTENDENT PRIOR TO CONSTRUCTION.
RD5. TESTING TO BE UNDERTAKEN IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.

STORMWATER DRAINAGE

SD1. FOR CONNECTIONS TO EXISTING STORMWATER DRAINAGE NETWORKS, LEVELS AND GRADIENTS OF STORMWATER DRAINAGE PIPES MAY BE VARIED TO ACHIEVE A SATISFACTORY CONNECTION. WRITTEN APPROVAL FROM THE SUPERINTENDENT AND LOCAL AUTHORITY SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF WORKS
SD2. ALL NEW AND EXISTING STORMWATER DRAINAGE NETWORKS INCLUDING CREEKS SHALL BE KEPT FREE OF SEDIMENT AND DEBRIS. ALL NEW STORMWATER LINES SHALL BE CLEANED OF ALL SEDIMENT AND DEBRIS PRIOR TO 'ON-MAINTENANCE' INSPECTION.
SD3. STORMWATER LAYOUT PLANS TO BE READ IN CONJUNCTION WITH THE STORMWATER DRAINAGE LONGITUDINAL SECTIONS AND STRUCTURE DETAILS.
SD4. ALL STORMWATER DRAINAGE PIPES SHALL BE CLASS 2 RCP UNLESS NOTED OTHERWISE ON PLANS OR LONGITUDINAL SECTIONS.
SD5. ALL PIPES <600mm DIAMETER SHALL BE RUBBER RING JOINTED AND ALL PIPES >600mm DIAMETER SHALL BE FLUSH JOINTED UNLESS NOTED OTHERWISE ON PLANS OR LONGITUDINAL SECTIONS.
SD6. ALL STORMWATER PIPE LENGTHS SHOWN ON LONGITUDINAL SECTIONS ARE FROM CENTRE OF STRUCTURE TO CENTRE OF STRUCTURE UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATING THE ACTUAL PIPE LENGTHS REQUIRED.
SD7. STORMWATER DRAINAGE PIPES, MANHOLES, INLETS AND SOAK WELLS SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION.
SD8. THICK STEEL PLATES SHALL BE PLACED OVER ALL MANHOLES DURING THE CONSTRUCTION PROCESS UNTIL FRAMES AND LIDS ARE PUT IN PLACE TO TAKE EXPECTED TRAFFIC.
SD9. ALL GULLY INLET SHAFTS SHALL BE CLASS 3 UNLESS NOTED OTHERWISE ON STRUCTURE DETAILS SHEETS.
SD10. ENSURE JOINTS BETWEEN FLUSH JOINTED PIPES ARE FULLY SEALED USING AN APPROVED JOINT SEALANT TO MANUFACTURERS REQUIREMENTS AND SPECIFICATIONS.
SD11. PIPE OPENINGS ARE TO BE LOCATED WITHIN A SINGLE WALL OF SQUARE/RECTANGULAR PITS (IE. PIPES SHALL NOT BE PERMITTED TO ENTER THROUGH THE CORNER OF THE PIT STRUCTURE).
SD12. PROVIDE MIN. 1m LONG CONCRETE KERB TRANSITIONS EITHER SIDE OF GULLY PITS LOCATED IN KERB AND CHANNEL. END PROFILES OF TRANSITION TO MATCH KERB AND CHANNEL AND GULLY INLET PROFILES.

FOOTPATH

F1. ALL CONCRETE TO BE 100mm THICK REINFORCED AS PER THE DESIGN DOCUMENTATION AND TECHNICAL SPECIFICATION, UNLESS SHOWN OTHERWISE.
F2. CONCRETE TO HAVE A NON-SLIP SURFACE THAT MEETS AS1428 MINIMUM SPECIFICATIONS.
F3. PRAM RAMP TO BE IN ACCORDANCE WITH AS 1428.1.
F4. CONTROL JOINTS SHOWN AT CRITICAL LOCATIONS ONLY. ALL OTHER JOINTS TO BE SPACED AS PER THE STANDARD JOINT DETAILS.
F5. CROSSFALL HAS BEEN DESIGNED TO BE PEDESTRIAN AND WHEELCHAIR USER FRIENDLY AS PER AS1428.
F6. PATHWAY LONGITUDINAL GRADES SHOULD MEET AS1428 MINIMUM SPECIFICATIONS.
F7. PRAM RAMPS TO BE FLUSH TO ROAD SURFACE WITH A SLOPE OF 1 IN 8 MAXIMUM, MAKING THEM ACCESSIBLE FOR PEDESTRIANS AND WHEELCHAIRS USERS AS PER AS1428.
F8. SMOOTH TRANSITIONS FROM CROSSOVERS, INTERSECTIONS AND EXISTING PATHWAY TO NEW PATHWAY TO ELIMINATE TRIP HAZARDS.
F9. ALL BRICK PAVING WORKS TO BE AS PER AS4455.

SITE FINISH

SF1. BATTER SLOPES ARE TO BE GRADED / VARIED UNIFORMLY BETWEEN CROSS SECTIONS.
SF2. LOCALISED EARTHWORKS SHALL BE UNDERTAKEN AS REQUIRED TO ENSURE SITE IS FREE DRAINING
SF3. FOLLOWING COMPLETION OF WORKS, BATTERS AND DISTURBED AREAS ARE TO BE COVERED WITH 50mm OF TOPSOIL AND GRASS ESTABLISHED ON THE SURFACE. ORGANIC FERTILISER SHALL BE SPREAD UNDER THE TOPSOIL.
SF4. ALL PAVEMENT SURFACING AND CONCRETE WORKS SHALL BE HANDED OVER IN A CLEAN AND TIDY STATE

LEGEND:

- EXISTING WATER
- EXISTING SEWER
- EXISTING STORM WATER
- EXISTING MANHOLE
- EXISTING FITTING/ VALVES
- EXISTING SERVICES PIT
- EXISTING POWER POLES
- EXISTING STREET LIGHT POLES
- EXISTING ELECTRICITY DOME
- EXISTING TREE/ VEGETATION
- PROPOSED GRATED GULLY PIT
- PROPOSED CATCHPIT
- PROPOSED MANHOLE
- PROPOSED COMBINATION SIDE ENTRY PIT
- PROPOSED SIDE ENTRY PIT
- PROPOSED SOAKWELL
- EXISTING HEADWALL
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BRICK PAVING
- LIGHTING POST - 4 POLE PENDANT
- LIGHTING POST - 2 POLE PENDANT
- LIGHTING POST - POLE PENDANT
- SIGN POST

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CAUTION

SERVICES SHOWN ARE TO BE USED AS A GUIDE ONLY. SERVICES SHALL BE MANUALLY LOCATED BY HAND PRIOR TO MECHANICAL EXCAVATION. RELEVANT PERMITS SHALL BE OBTAINED PRIOR TO SITE WORKS AND A DBYD ENQUIRY SHALL BE UNDERTAKEN NO EARLIER THAN 30 DAYS BEFORE CONSTRUCTION. A FULL SET OF THE DBYD DOCUMENTS ARE TO BE KEPT ON SITE AT ALL TIMES. CONFLICTING SERVICES ARE TO BE RELOCATED/PROTECTED TO THE SATISFACTION OF THE SERVICE AUTHORITY PRIOR TO WORKS.

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
C	ROADWORKS NOTE ADDED		AS	EA	AK	16.02.21
B	FINAL DESIGN - ISSUED FOR REVIEW		AS	EA	AK	14.12.20
A	PRELIMINARY - ISSUED FOR REVIEW		AS			13.11.20

SHIRE OF IRWIN DONGARA-PORT DENISON A BRILLIANT BLEND

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
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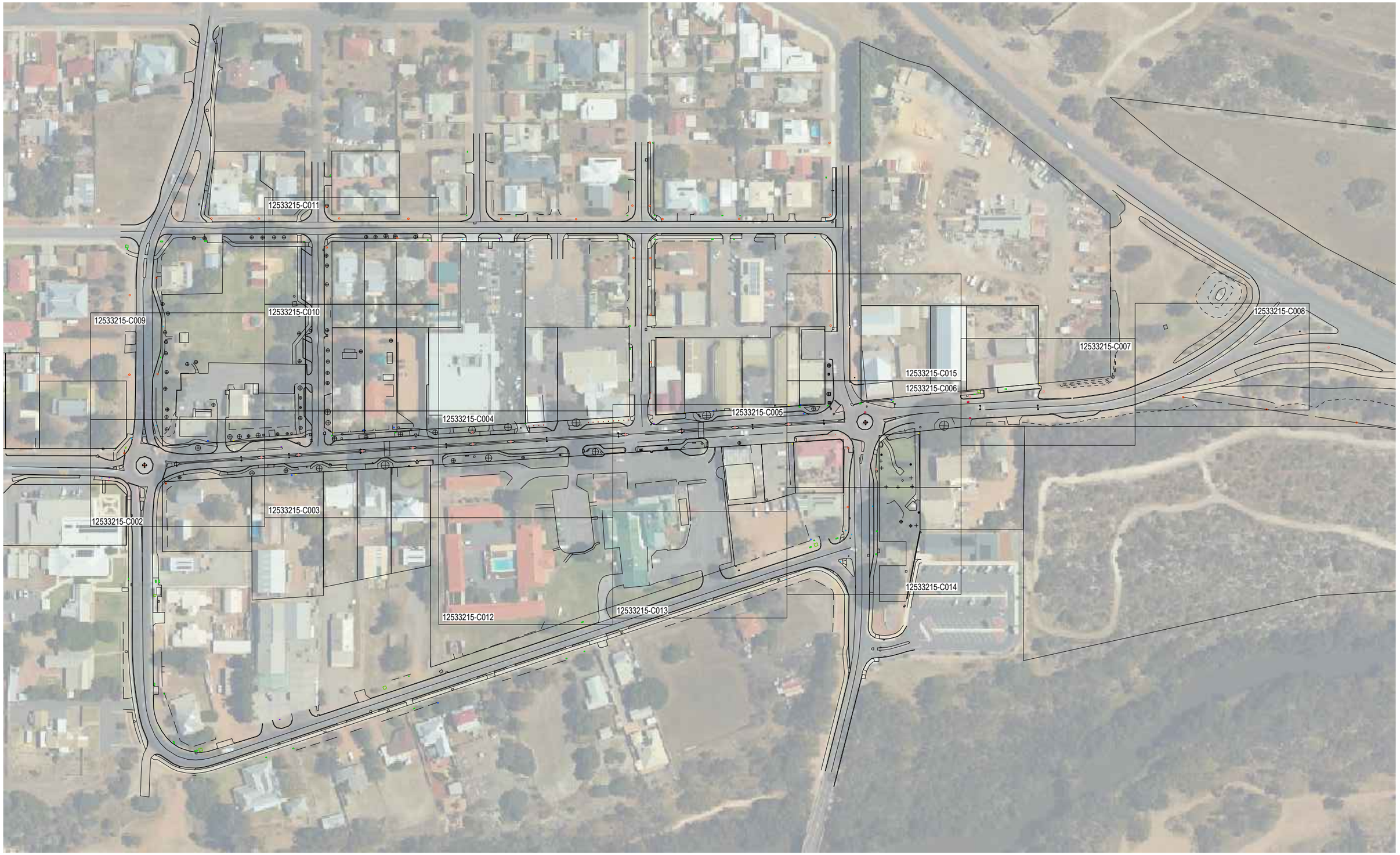
Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: GENERAL NOTES

Original Size: A1
Drawing No: 12533215-G002
Rev: C

Plot Date: 16 February 2021 - 9:59 AM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-G002.dwg



GENERAL ARRANGEMENT PLAN

SCALE 1:1000

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
E	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
D	UPDATED GENERAL ARRANGEMENT	SD			01.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			12.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 10 20 30 40 50m

SCALE 1:1000 AT ORIGINAL SIZE

N

SHIRE OF IRWIN
DONGARA-PORT DENISON
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Approved (Project Director)			
Date			
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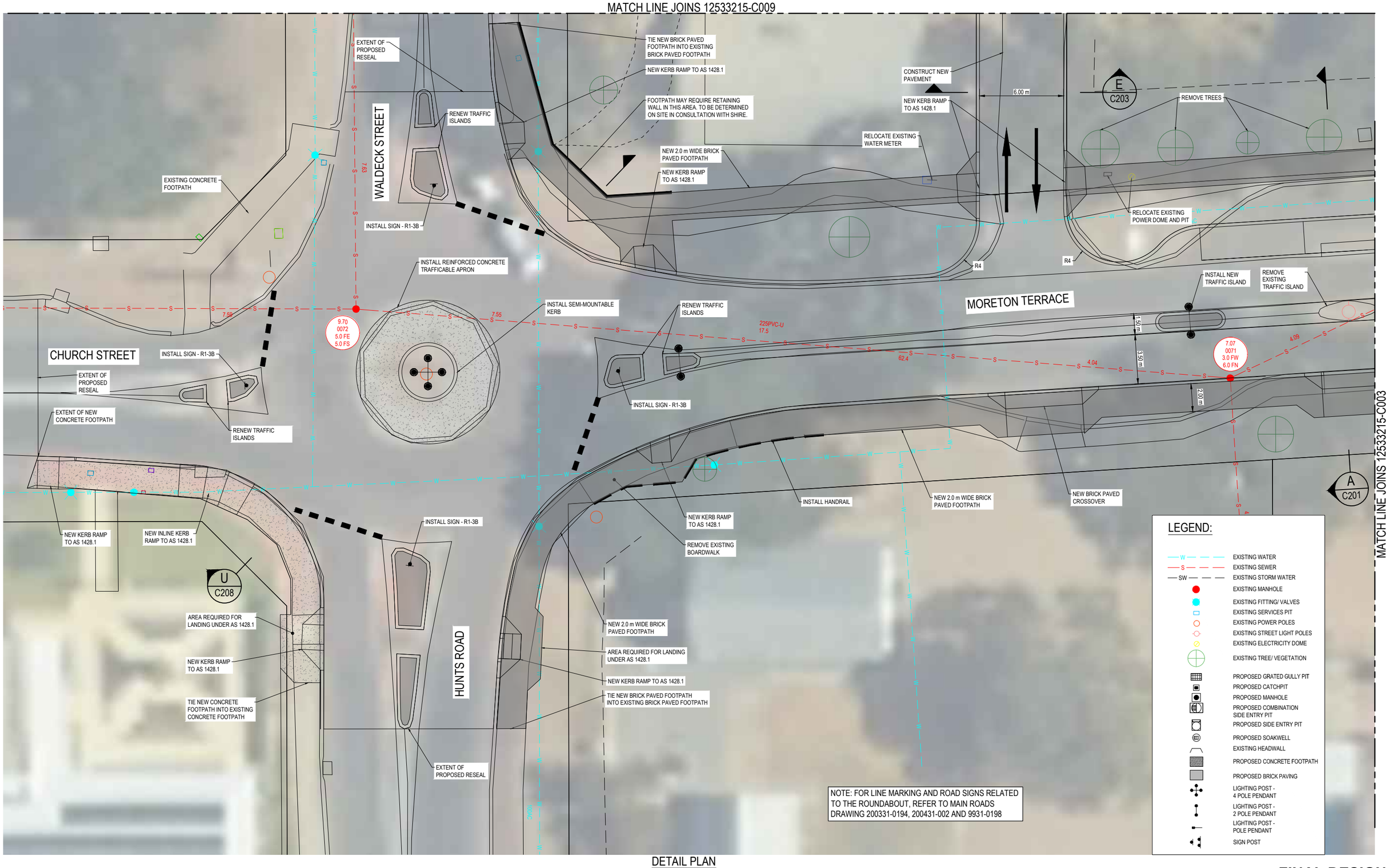
Client **SHIRE OF IRWIN**
Project **MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE**
Title **GENERAL ARRANGEMENT PLAN**

Original Size **A1**
Drawing No: 12533215-C001
Rev: E

Plot Date: 14 December 2020 - 7:00 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C001.dwg

MATCH LINE JOINS 12533215-C009



MATCH LINE JOINS 12533215-C003

DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
E	ROUNDABOUT HATCH AND LEADER EDITED		SD	EA	AK	15.02.21
D	FINAL DESIGN - ISSUED FOR REVIEW		SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW		SD			12.11.20
B	ISSUED FOR COMMENT		SD			24.09.20
A	ISSUED FOR PRELIMINARY		RP			

0 1.25 2.5 3.75 5 6.25m
SCALE 1:125 AT ORIGINAL SIZE

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Drafting Check	A. KARUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: DETAIL PLAN

Original Size: A1
Drawing No: 12533215-C002
Rev: E

Plot Date: 15 February 2021 - 12:28 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C002.dwg

MATCH LINE JOINS 12533215-C010

MATCH LINE JOINS 12533215-C003

MATCH LINE JOINS 12533215-C004

HOSKEN STREET

MORETON TERRACE

COMMUNITY RESOURCES CENTRE CAR PARK

NOTE: ALL LINE MARKING AND REGULATORY SIGNS RELATED TO COMMUNITY RESOURCES CENTRE CAR PARK SHALL BE AS PER AS 2890.6

CHANGE EXISTING ANGLE PARKING BAYS TO 30°

NEW KERB RAMP TO AS 1428.1

REMOVE TREES

REPLACE EXISTING SIDE ENTRY PIT COVER AND APRON SLAB

7.10
0076
1.0 FN
3.5 FE

6.00 m

R5

R4.5

NEW KERB RAMP TO AS 1428.1

RELOCATE EXISTING POWER DOME

NEW 2.0 m WIDE BRICK PAVED FOOTPATH

REPLACE EXISTING SIDE ENTRY PIT COVER AND APRON SLAB

NEW 2.0 m WIDE BRICK PAVED FOOTPATH

0.5m WIDE RAIN GARDEN OUTLET

0.5m WIDE RAIN GARDEN INLET

REPLACE EXISTING MANHOLE COVER

PIT 4

INSTALL NEW BUBBLE UP PIT

CH 0.000

0.5m WIDE RAIN GARDEN INLET

0.5m WIDE RAIN GARDEN OUTLET

R6

R6

NEW KERB RAMPS TO AS 1428.1

REMOVE EXISTING GRATED GULLY AND CONVERT EXISTING SIDE ENTRY PIT TO GRATED GULLY

2.30 m

3.50 m

1.50 m

INSTALL NEW TRAFFIC ISLANDS

REMOVE EXISTING TRAFFIC ISLANDS AND LIGHTING

EXISTING SPEED HUMP TO BE REMOVED

NEW BRICK PAVED CROSSOVER

REMOVE EXISTING SIDE ENTRY PIT AND GRATED GULLY INSTALL NEW COMBINATION SIDE ENTRY PIT

NEW BRICK PAVED CROSSOVER

REPLACE EXISTING DRAINAGE STRUCTURE WITH NEW SIDE ENTRY PIT

NEW BRICK PAVED CROSSOVER

CONVERT EXISTING SIDE ENTRY PIT TO CLASS D MANHOLE

INSTALL NEW COMBINATION SIDE ENTRY PIT

NEW BRICK PAVED CROSSOVER

2.00 m

2.00 m

7.21m

7.25m

7.03m

7.06m

7.05m

7.04m

6.94m

6.95m

6.98m

7.03m

7.07m

7.13m

6.91m

6.99m

INSTALL SIGN - W2-7

CONVERT EXISTING SIDE ENTRY PIT TO CLASS D MANHOLE

REPLACE EXISTING GRATED GULLY WITH CLASS D WAVE GRATE

B
C201

NEW BRICK PAVED FOOTPATH

NEW BRICK PAVED CROSSOVER

150PVC-U 185

LEGEND:

- EXISTING WATER
- EXISTING SEWER
- EXISTING STORM WATER
- EXISTING MANHOLE
- EXISTING FITTING/ VALVES
- EXISTING SERVICES PIT
- EXISTING POWER POLES
- EXISTING STREET LIGHT POLES
- EXISTING ELECTRICITY DOME
- EXISTING TREE/ VEGETATION
- PROPOSED GRATED GULLY PIT
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- PROPOSED SIDE ENTRY PIT
- PROPOSED SOAKWELL
- EXISTING HEADWALL
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BRICK PAVING
- LIGHTING POST - 4 POLE PENDANT
- LIGHTING POST - 2 POLE PENDANT
- LIGHTING POST - POLE PENDANT
- SIGN POST

DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
E	ADDED RAIN GARDEN INLET/OUTLET		SD	EA	AK	16.02.21
D	FINAL DESIGN - ISSUED FOR REVIEW		SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW		SD			12.11.20
B	ISSUED FOR COMMENT		SD			24.09.20
A	ISSUED FOR PRELIMINARY		RP			

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

GHD

Level 1, 209 Foreshore Drive Geraldton WA 6530 Australia
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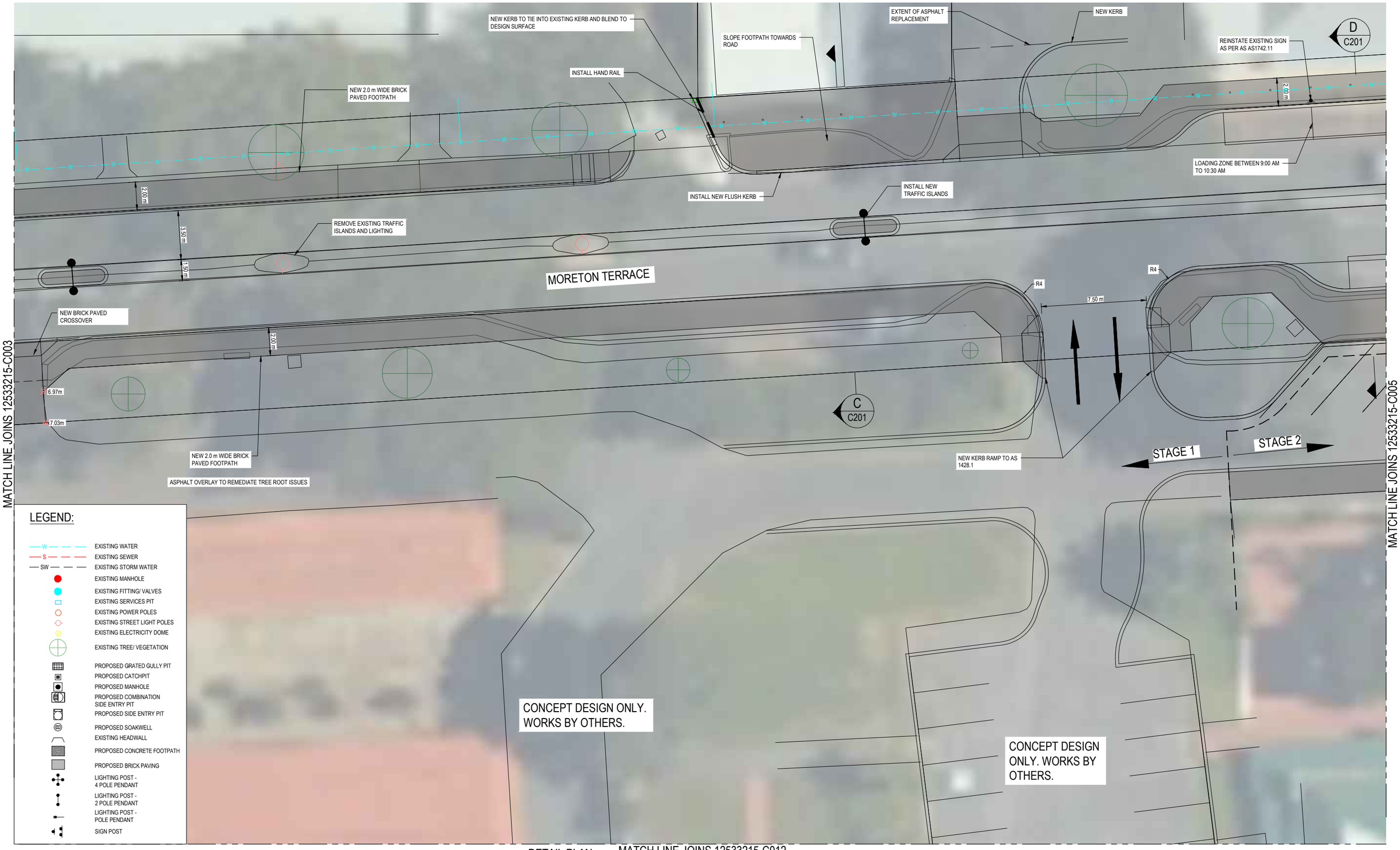
Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client **SHIRE OF IRWIN**
Project **MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE**
Title **DETAIL PLAN**

Original Size **A1** Drawing No: **12533215-C003** Rev: **E**

Plot Date: 16 February 2021 - 3:27 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C003.dwg



LEGEND:

- EXISTING WATER
- EXISTING SEWER
- EXISTING STORM WATER
- EXISTING MANHOLE
- EXISTING FITTING/ VALVES
- EXISTING SERVICES PIT
- EXISTING POWER POLES
- EXISTING STREET LIGHT POLES
- EXISTING ELECTRICITY DOME
- EXISTING TREE/ VEGETATION
- PROPOSED GRATED GULLY PIT
- PROPOSED CATCHPIT
- PROPOSED MANHOLE
- PROPOSED COMBINATION SIDE ENTRY PIT
- PROPOSED SIDE ENTRY PIT
- PROPOSED SOAKWELL
- EXISTING HEADWALL
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BRICK PAVING
- LIGHTING POST - 4 POLE PENDANT
- LIGHTING POST - 2 POLE PENDANT
- LIGHTING POST - POLE PENDANT
- SIGN POST

DETAIL PLAN
SCALE 1:125

MATCH LINE JOINS 12533215-C012

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			12.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m
SCALE 1:125 AT ORIGINAL SIZE

N

SHIRE OF IRWIN
DONGARA-PORT DENISON
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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: DETAIL PLAN

Original Size: A1
Drawing No: 12533215-C004
Rev: D

Plot Date: 14 December 2020 - 7:29 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C004.dwg



DETAIL PLAN
SCALE 1:125

MATCH LINE JOINS 12533215-C013

FINAL DESIGN

E	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
D	PRELIMINARY DESIGN - ISSUED FOR REVIEW - STAGE 2	SD			24.11.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW - STAGE 1	SD			12.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
F	PEDESTRIAN CROSSWALK REMOVED	SD	EA	AK	15.02.21
No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date

0 1.25 2.5 3.75 5 6.25m
SCALE 1:125 AT ORIGINAL SIZE

N

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DONGARA-PORT DENISON
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Drafting Check	A. KRAUSE	Design Check	A. KRASUE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title DETAIL PLAN

Original Size A1
Drawing No: 12533215-C005
Rev: F

Plot Date: 16 February 2021 - 3:28 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C005.dwg

MATCH LINE JOINS 12533215-C015

MATCH LINE JOINS 12533215-C005

MATCH LINE JOINS 12533215-C007

REMOVE EXISTING COVER AND INSTALL CLASS D WAVE GRATE OR APPROVED EQUIVALENT

REALIGN KERB TO PROVIDE LEFT TURN FOR SEMI TRAILER FROM MARTIN STREET TO MORETON TERRACE

STAGE 2

STAGE 3

ADJUST EXISTING TRAFFIC ISLAND TO PROVIDE FOR LEFT TURN BY 8.8m SERVICE VEHICLE FROM MORETON TERRACE TO MARTIN STREET

MARTIN STREET

FLUSH KERB

TIE INTO EXISTING PAVEMENT

RELOCATE VERANDAH ENTRY TO THIS POSITION

REMOVE TREE

RENEW EXISTING TRAFFIC ISLANDS

150PVC-U 118

NEW KERB RAMP TO AS 1428.1

INSTALL SIGN - R1-2

INSTALL SIGN - R1-3B

8.05 0201 1.6 AE 6.5 FS

INSTALL REINFORCED CONCRETE TRAFFICABLE APRON

RENEW EXISTING TRAFFIC ISLAND

MORETON TERRACE

8.35 0204 4.5 AE 5.9 FS

REMOVE EXISTING COVER AND INSTALL CLASS D WAVE GRATE OR APPROVED EQUIVALENT

INSTALL NEW FLUSH KERB

TRANSITION FROM SEMI-MOUNTABLE KERB TO FLUSH KERB OVER 1.5m

RENEW EXISTING TRAFFIC ISLAND

INSTALL NEW TRAFFIC ISLAND

RENEW EXISTING TRAFFIC ISLAND

RENEW EXISTING TRAFFIC ISLAND

MORETON TERRACE

Q C206

NEW ASPHALT CROSSOVER

NEW ASPHALT CROSSOVER

NEW 2.0 m WIDE BRICK PAVED FOOTPATH

PROPOSED BOARDWALK TO AS 1428.1 OVER TREE ROOTS. POSITIONING OF FOOTINGS TO BE CONFIRMED ON SITE IN THE PRESENCE OF AN ARBORIST.

INSTALL SIGN - R1-3B

REALIGN KERB TO PROVIDE LEFT TURN FOR SEMI TRAILER FROM MORETON TERRACE TO POINT LEANDER DRIVE

M C204

V C208

REALIGN KERB TO PROVIDE RIGHT TURN FOR SEMI TRAILER FROM POINT LEANDER DRIVE TO MORETON TERRACE

NEW KERB RAMP TO AS 1428.1

NEW KERB RAMP TO AS 1428.1

RELOCATE PARK ENTRANCE

REMOVE EXISTING FOOTPATH

V-SHAPED PATH TO ALLOW DRAINAGE AT KERB RAMP

REMOVE TREE

NEW 2.0 m WIDE BRICK PAVED FOOTPATH

EXTENT OF PROPOSED RESEAL

POINT LEANDER DRIVE

STAGE 2

STAGE 3

NOTE: FOR LINE MARKING AND ROAD SIGNS RELATED TO THE ROUNDABOUT, REFER TO MAIN ROADS DRAWING 200331-0194, 200431-002 AND 9931-0198

LEGEND:

- EXISTING WATER
- EXISTING SEWER
- EXISTING STORM WATER
- EXISTING MANHOLE
- EXISTING FITTING/ VALVES
- EXISTING SERVICES PIT
- EXISTING POWER POLES
- EXISTING STREET LIGHT POLES
- EXISTING ELECTRICITY DOME
- EXISTING TREE/ VEGETATION
- PROPOSED GRATED GULLY PIT
- PROPOSED CATCHPIT
- PROPOSED MANHOLE
- PROPOSED COMBINATION SIDE ENTRY PIT
- PROPOSED SIDE ENTRY PIT
- PROPOSED SOAKWELL
- EXISTING HEADWALL
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BRICK PAVING
- LIGHTING POST - 4 POLE PENDANT
- LIGHTING POST - 2 POLE PENDANT
- LIGHTING POST - POLE PENDANT
- SIGN POST

DETAIL PLAN

SCALE 1:125

MATCH LINE JOINS 12533215-C014

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
E	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
D	PRELIMINARY DESIGN - ISSUED FOR REVIEW - STAGE 3	SD			26.11.20
C	KERB RAMPS RELOCATED, ROUNDABOUT KERBS REALIGNED	SD			24.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
F	ROUNDABOUT HATCH AND LEADER EDITED	SD	EA	AK	15.02.21

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

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Drafting Check	A. KRAUSE	Design Check	A. KRASUE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN

Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE

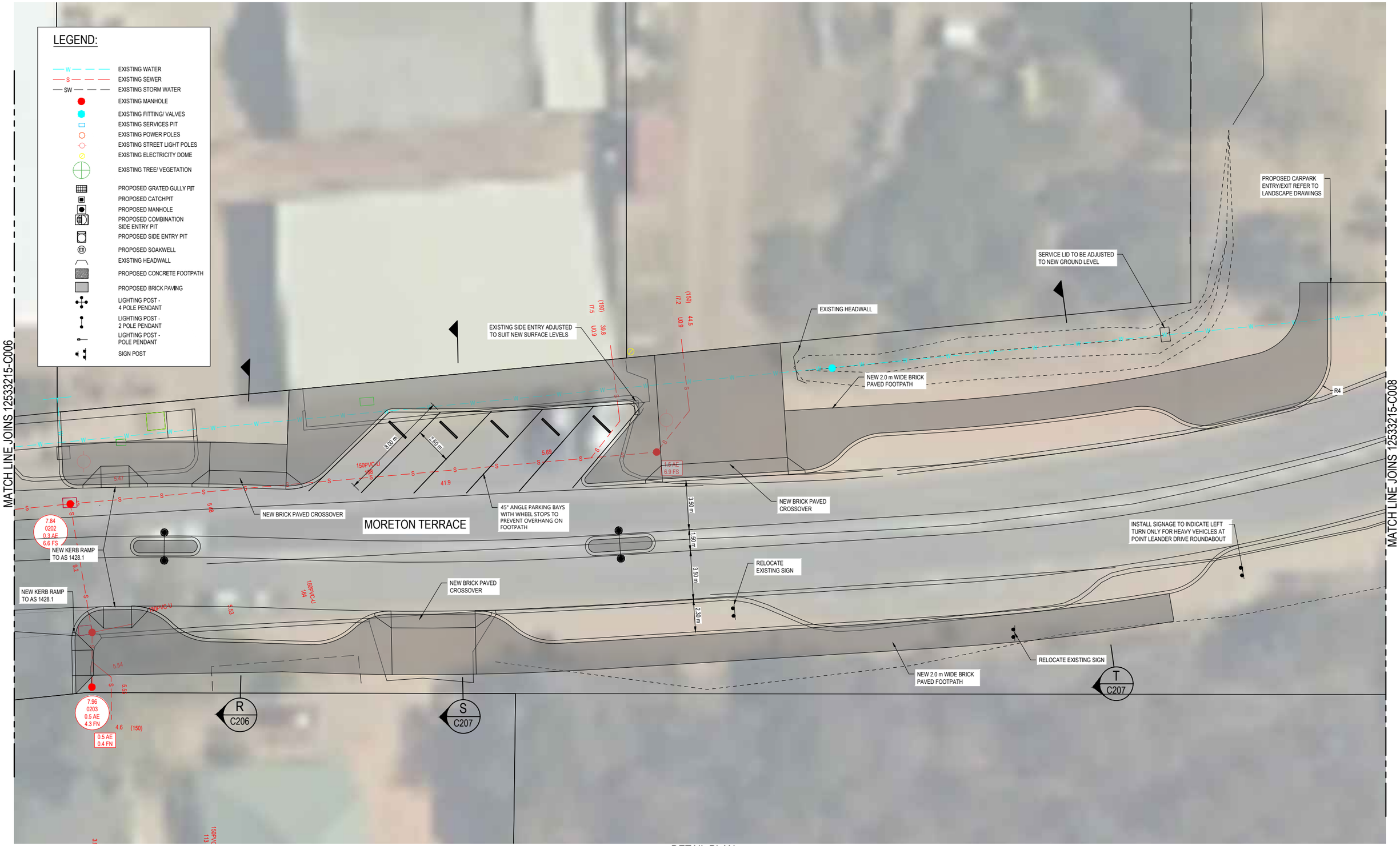
Title: DETAIL PLAN

Original Size: A1

Drawing No: 12533215-C006

Rev: F

Plot Date: 16 February 2021 - 3:29 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C006.dwg



DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
E	ADDED WHEEL STOP AND LEADER	SD	EA	AK	16.02.21
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	CARPARK ENTRANCE ADDED	SD			26.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

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DONGARA-PORT DENISON
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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client **SHIRE OF IRWIN**
Project **MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE**
Title **DETAIL PLAN**

Original Size **A1**
Drawing No: **12533215-C007**
Rev: **E**

Plot Date: 16 February 2021 - 4:12 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C007.dwg



DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	CARPARK ENTRANCE ADDED	SD			26.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

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DONGARA-PORT DENISON
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Drafting Check	A. KRAUSE	Design Check	A. KRASUE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN

Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE

Title DETAIL PLAN

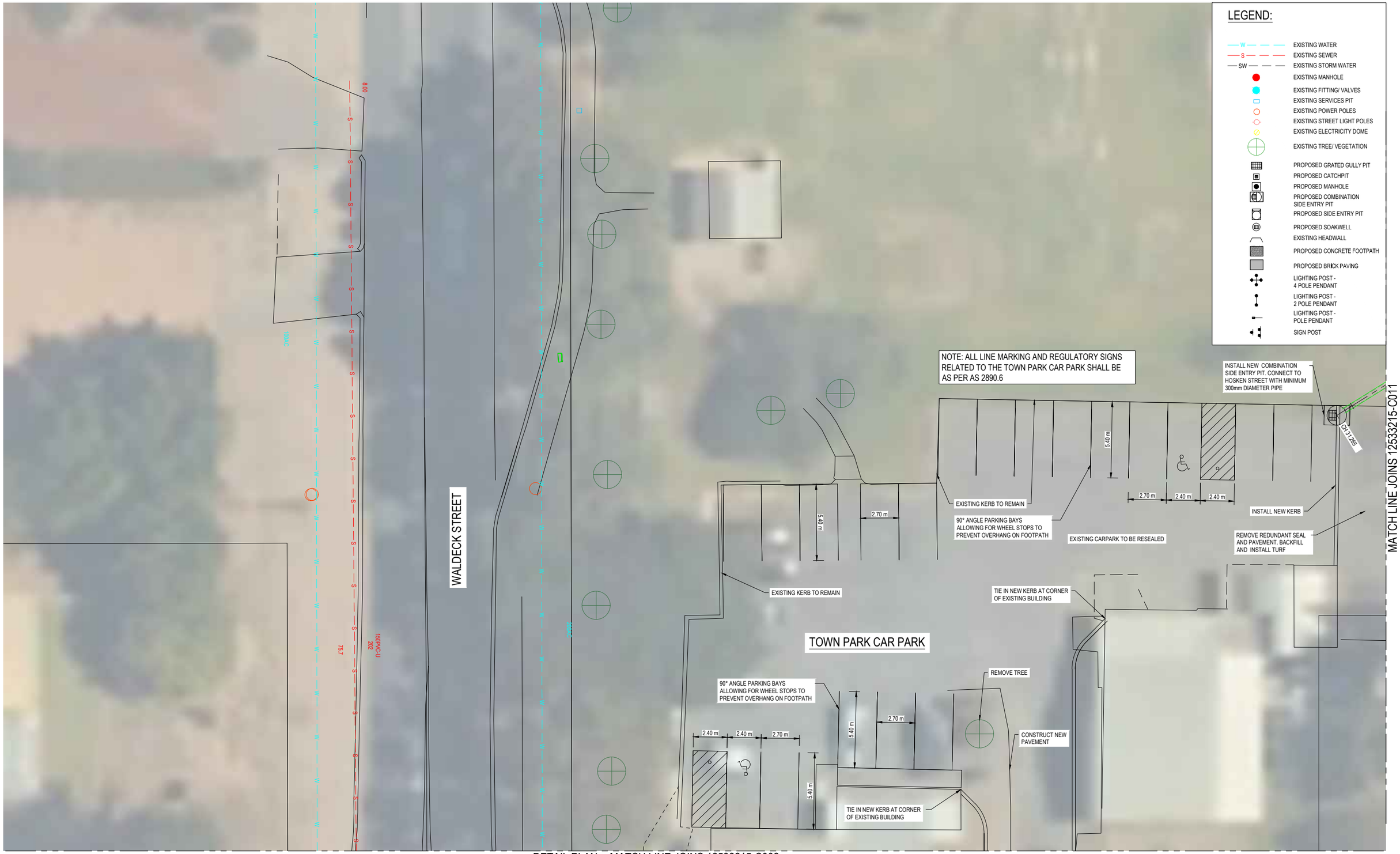
Original Size A1

Drawing No: 12533215-C008

Rev: D

Plot Date: 14 December 2020 - 10:28 AM Plotted by: Abhishek Subba

Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C008.dwg



DETAIL PLAN MATCH LINE JOINS 12533215-C002

SCALE 1:125

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			12.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

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DONGARA-PORT DENISON
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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: DETAIL PLAN

Original Size: A1
Drawing No: 12533215-C009
Rev: D

Plot Date: 14 December 2020 - 5:42 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C009.dwg

MATCH LINE JOINS 12533215-C011

MATCH LINE JOINS 12533215-C009

G C202

F C202

J C203

I C203

13.28m
GRADE: 1.00% (1:100.00)
IL5.89 m
IL 5.76m
DN300 RCP RRJ

17.84m
GRADE: 1.00% (1:100.00)
IL6.07 m
IL 5.89m
DN300 RCP RRJ

31.27m
GRADE: 2.65% (1:37.67)
IL6.61 m
IL 5.78m
DN300 RCP RRJ

7.02 D
0077
3.5 FE
1.0 FS

PIT 1
PIT 2
PIT 3
CH 0.000
CH 31.122
IP: 13.282

INSTALL NEW GRATED GULLY PITS

REMOVE TREE

REMOVE EXISTING KERB AND INSTALL NEW SEMI-MOUNTABLE KERB

EXISTING CONCRETE FOOTPATH

REMOVE EXISTING KERB

INSTALL NEW CONCRETE FOOTPATH CONNECTION

REMOVE REDUNDANT SEAL AND PAVEMENT. BACKFILL AND INSTALL TURF

CHANGE EXISTING ANGLE PARKING BAYS TO 30° WITH ALLOWANCE FOR 600 mm OVERHANG

HOSKEN STREET

150PVC-U 191

150PVC-U 201

R4 R6 R3.7

LONG BAY PARKING

COMMUNITY RESOURCES CENTRE CAR PARK

PIT 6 PIT 5

CH 38.143

INSTALL NEW GRATED GULLY PITS

IP: 20.117

18.03m
GRADE: 1.00% (1:100.00)
IL6.07 m
IL 5.89m
DN300 RCP RRJ

20.12m
GRADE: 1.00% (1:100.00)
IL5.89 m
IL 5.69m
DN300 RCP RRJ

60° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

LEGEND:

- EXISTING WATER
- EXISTING SEWER
- EXISTING STORM WATER
- EXISTING MANHOLE
- EXISTING FITTING/ VALVES
- EXISTING SERVICES PIT
- EXISTING POWER POLES
- EXISTING STREET LIGHT POLES
- EXISTING ELECTRICITY DOME
- EXISTING TREE/ VEGETATION
- PROPOSED GRATED GULLY PIT
- PROPOSED CATCHPIT
- PROPOSED MANHOLE
- PROPOSED COMBINATION SIDE ENTRY PIT
- PROPOSED SIDE ENTRY PIT
- PROPOSED SOAKWELL
- EXISTING HEADWALL
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BRICK PAVING
- LIGHTING POST - 4 POLE PENDANT
- LIGHTING POST - 2 POLE PENDANT
- LIGHTING POST - POLE PENDANT
- SIGN POST

DETAIL PLAN MATCH LINE JOINS 12533215-C003
SCALE 1:125

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
E	ADDED PIT NUMBER AND REMOVED PIT SCHEDULE		SD	EA	AK	16.02.21
D	FINAL DESIGN - ISSUED FOR REVIEW		SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW		SD			12.11.20
B	ISSUED FOR COMMENT		SD			24.09.20
A	ISSUED FOR PRELIMINARY		RP			

0 1.25 2.5 3.75 5 6.25m
SCALE 1:125 AT ORIGINAL SIZE

N

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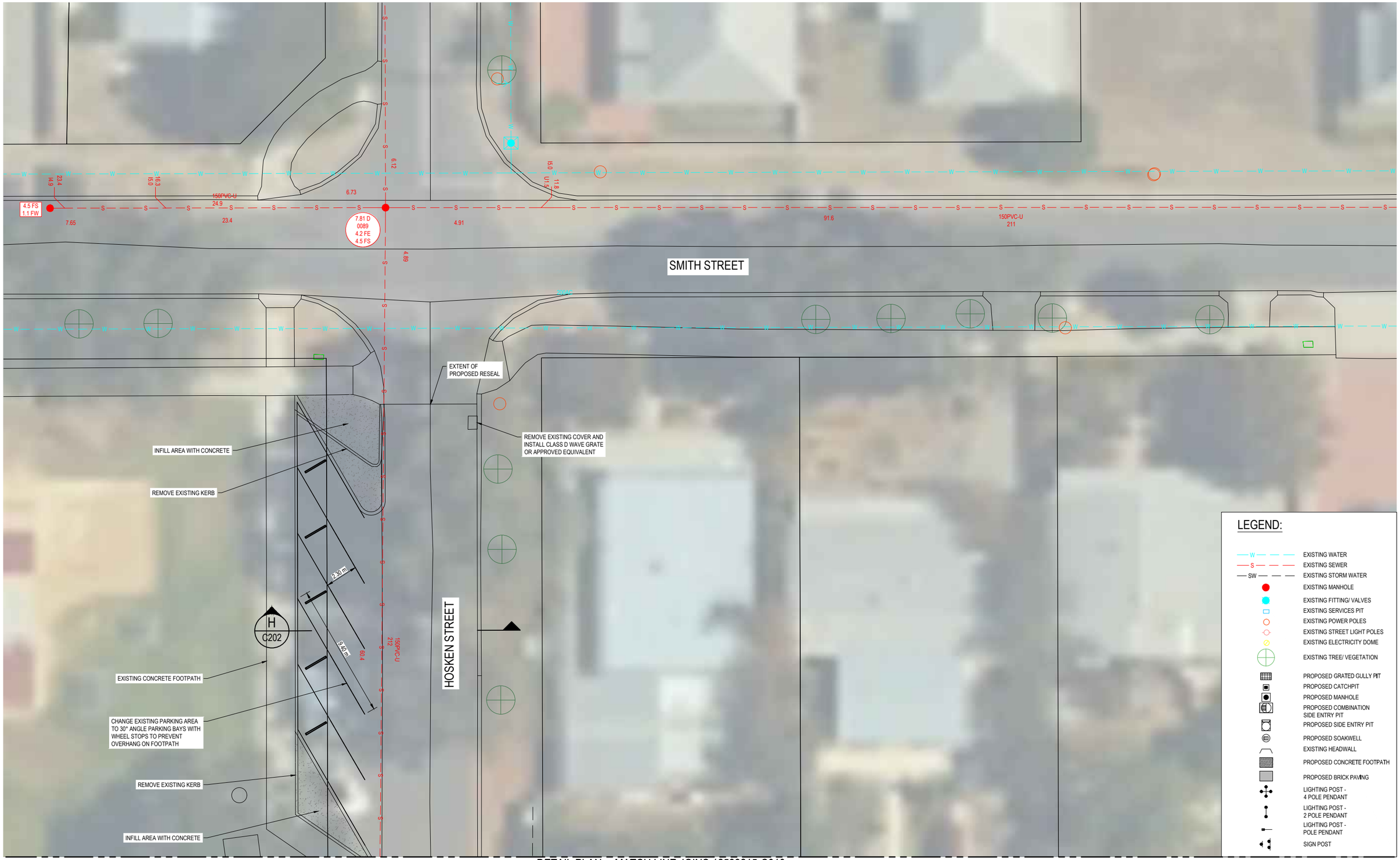
Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)		Date	
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title DETAIL PLAN

Original Size A1
Drawing No: 12533215-C010
Rev: E

Plot Date: 16 February 2021 - 2:13 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C010.dwg



DETAIL PLAN MATCH LINE JOINS 12533215-C010

SCALE 1:125

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
E	SPELL CORRECTION	SD	EA	AK	16.02.21
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			12.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

SHIRE OF IRWIN
DONGARA-PORT DENISON
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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client **SHIRE OF IRWIN**
Project **MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE**
Title **DETAIL PLAN**

Original Size **A1**
Drawing No: **12533215-C011**
Rev: **E**

Plot Date: 16 February 2021 - 1:31 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C011.dwg

MATCH LINE JOINS 12533215-C004

CAR PARK GRADED TO CREATE OVERLAND FLOOD ROUTE DIRECTED TOWARDS MORTON TERRACE

90° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

60° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

NEW SEAL LEVELS TO FALL TOWARDS EXISTING GRATED GULLIES. COVER LEVELS TO BE ADJUSTED AS REQUIRED

EXISTING WALKWAY TO HAVE LOW POINT FOR OVERLAND FLOOD ROUTE

CONCEPT DESIGN ONLY. WORKS BY OTHERS.

NEW SEAL LEVELS TO FALL TOWARDS EXISTING GRATED GULLIES. COVER LEVELS TO BE ADJUSTED AS REQUIRED

90° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

90° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

NEW SEAL LEVELS TO FALL TOWARDS EXISTING GRATED GULLIES. COVER LEVELS TO BE ADJUSTED AS REQUIRED

60° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

90° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO BE INSTALLED IN THE FUTURE TO PREVENT OVERHANG ON FOOTPATH

90° ANGLE PARKING BAYS ALLOWING FOR WHEEL STOPS TO PREVENT OVERHANG ON FOOTPATH

CONCEPT DESIGN ONLY. WORKS BY OTHERS.

CONCEPT DESIGN ONLY. WORKS BY OTHERS.

HUNTS ROAD

MATCH LINE JOINS 12533215-C013

LEGEND:

- EXISTING WATER
- EXISTING SEWER
- EXISTING STORM WATER
- EXISTING MANHOLE
- EXISTING FITTING/ VALVES
- EXISTING SERVICES PIT
- EXISTING POWER POLES
- EXISTING STREET LIGHT POLES
- EXISTING ELECTRICITY DOME
- EXISTING TREE/ VEGETATION
- PROPOSED GRATED GULLY PIT
- PROPOSED CATCHPIT
- PROPOSED MANHOLE
- PROPOSED COMBINATION SIDE ENTRY PIT
- PROPOSED SIDE ENTRY PIT
- PROPOSED SOAKWELL
- EXISTING HEADWALL
- PROPOSED CONCRETE FOOTPATH
- PROPOSED BRICK PAVING
- LIGHTING POST - 4 POLE PENDANT
- LIGHTING POST - 2 POLE PENDANT
- LIGHTING POST - POLE PENDANT
- SIGN POST

DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			24.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

GHD
Level 1, 209 Foreshore Drive Geraldton WA 6530 Australia
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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: DETAIL PLAN

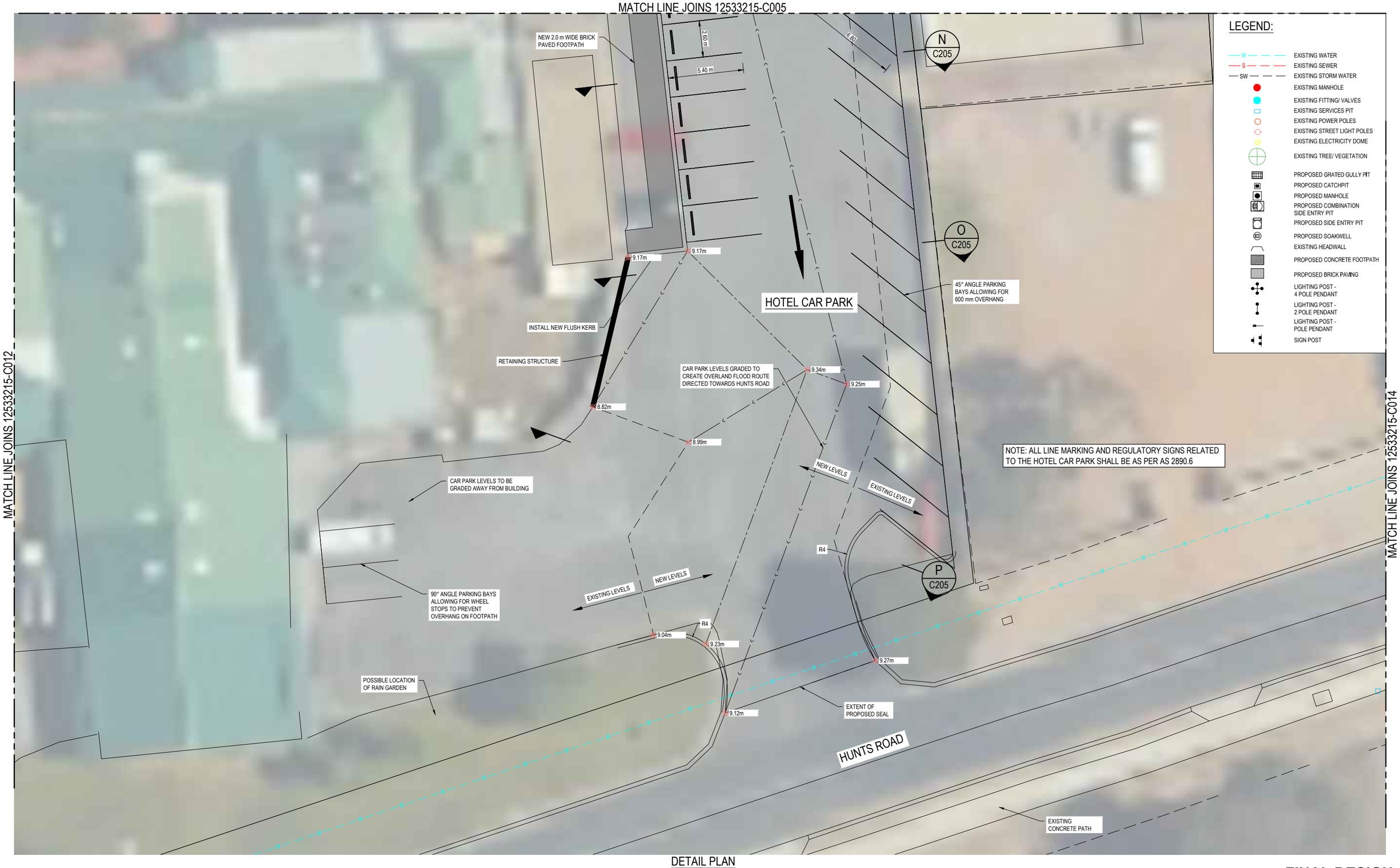
Original Size: A1
Drawing No: 12533215-C012
Rev: D

Plot Date: 14 December 2020 - 11:00 AM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C012.dwg

MATCH LINE JOINS 12533215-C005

MATCH LINE JOINS 12533215-C012

MATCH LINE JOINS 12533215-C014



DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
E	ADDITIONAL COMMENT		SD	EA	AK	16.02.21
D	FINAL DESIGN - ISSUED FOR REVIEW		SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW		SD			24.11.20
B	ISSUED FOR COMMENT		SD			24.09.20
A	ISSUED FOR PRELIMINARY		RP			

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client **SHIRE OF IRWIN**

Project **MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE**

Title **DETAIL PLAN**

Original Size **A1**

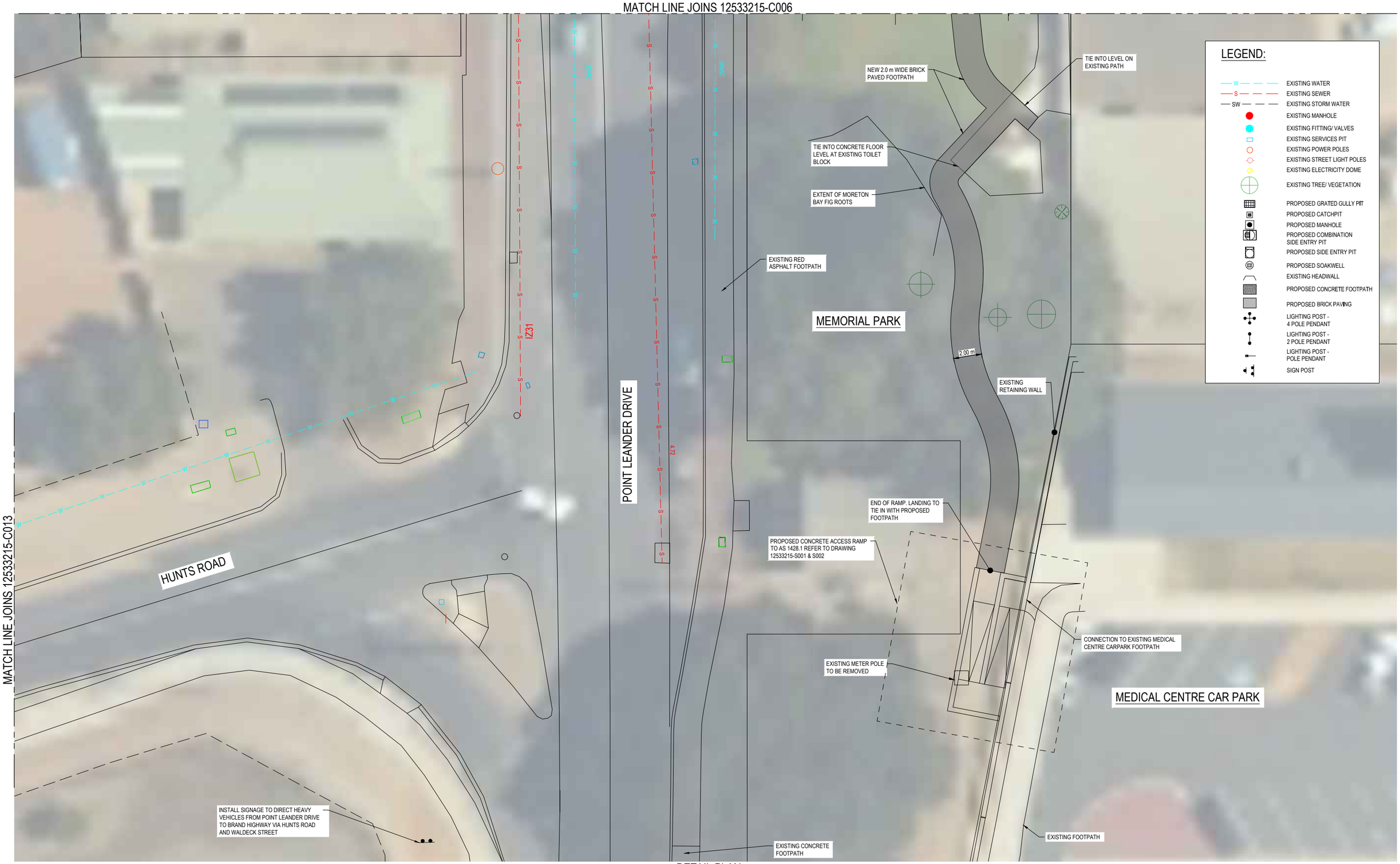
Drawing No: **12533215-C013**

Rev: **E**

Plot Date: 16 February 2021 - 3:35 PM Plotted by: Abhishek Subba

Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C013.dwg

MATCH LINE JOINS 12533215-C006



MATCH LINE JOINS 12533215-C013

DETAIL PLAN

SCALE 1:125

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
D	FINAL DESIGN - ISSUED FOR REVIEW		SD	EA	AK	14.12.20
C	PRELIMINARY DESIGN - ISSUED FOR REVIEW		SD			26.11.20
B	ISSUED FOR COMMENT		SD			24.09.20
A	ISSUED FOR PRELIMINARY		RP			

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

SHIRE OF IRWIN
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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title DETAIL PLAN

Original Size A1
Drawing No: 12533215-C014
Rev: D

Plot Date: 14 December 2020 - 7:42 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C014.dwg



DETAIL PLAN MATCH LINE JOINS 12533215-C006

SCALE 1:125

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
D	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
C	KERB RAMPS REMOVED AT MARTIN ST, KERB REALIGNMENT	SD			24.11.20
B	ISSUED FOR COMMENT	SD			24.09.20
A	ISSUED FOR PRELIMINARY	RP			

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1.25 2.5 3.75 5 6.25m

SCALE 1:125 AT ORIGINAL SIZE

N

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Drawn	R. PASTORIN	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:125		

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Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title DETAIL PLAN

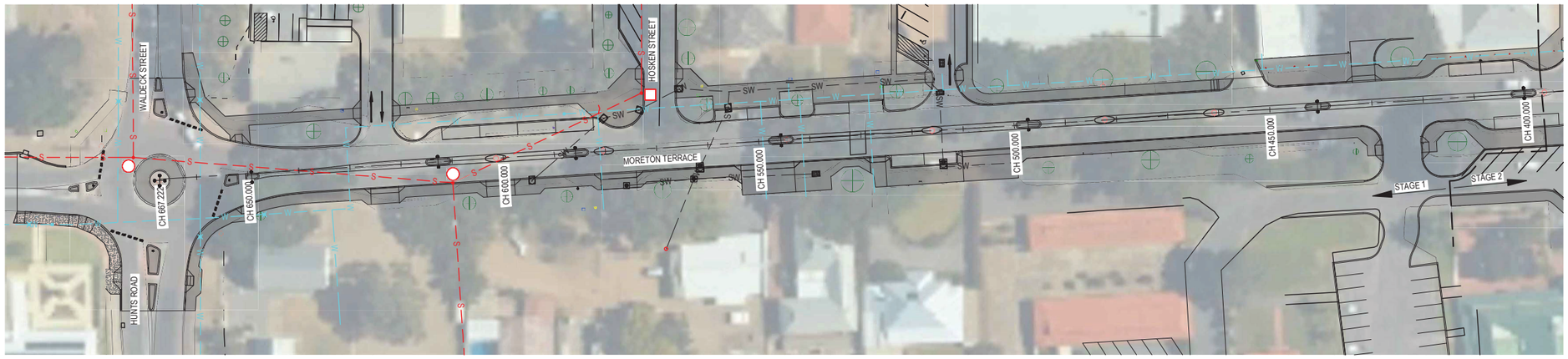
Original Size A1

Drawing No: 12533215-C015

Rev: D

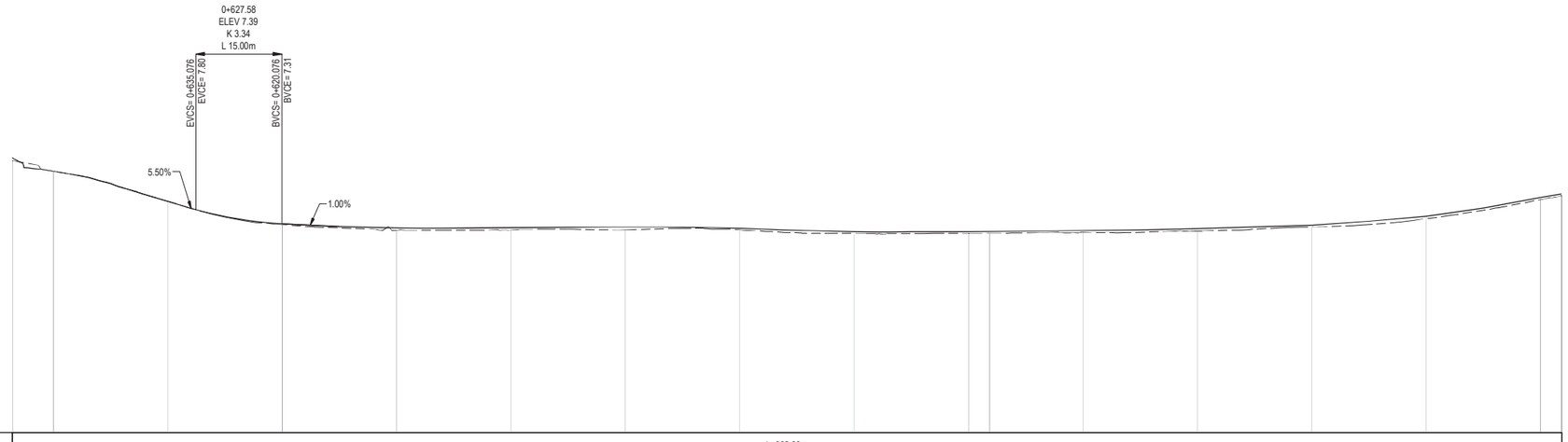
Plot Date: 14 December 2020 - 7:12 PM Plotted by: Abhishek Subba

Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C015.dwg



PLAN

SCALE 1:500



DATUM 0.000

HORIZONTAL ALIGNMENT			L=392.36m B=266° 24' 28"																			
LEVEL DIFFERENCE CUT - / FILL +				0.037	0.085	0.091	0.101	0.054	0.061	0.061	0.061	0.056	0.090	0.064	0.090	0.070						
DESIGN SURFACE LEVEL				7.310	7.159	7.175	7.193	7.146	7.033	7.031	7.036	7.068	7.135	7.259	7.573	8.225						
EXISTING SURFACE LEVEL	9.510	9.139	8.089	7.272	7.074	7.084	7.092	7.092	6.972	6.971	6.975	7.012	7.045	7.195	7.483	8.155	8.292					
CHAINAGE	667.146	660.000	640.000	620.000	600.000	580.000	560.000	540.000	520.000	500.000	496.326	480.000	460.000	440.000	420.000	400.000	396.326					

LONGITUDINAL SECTION

SCALE: HORIZONTAL 1:500 VERTICAL 1:100

FINAL DESIGN

No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SM			13.11.20

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE
0 2.5 5 7.5 10 12.5m
SCALE 1:250 AT ORIGINAL SIZE

N

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION STAGE 1 - MORETON TERRACE

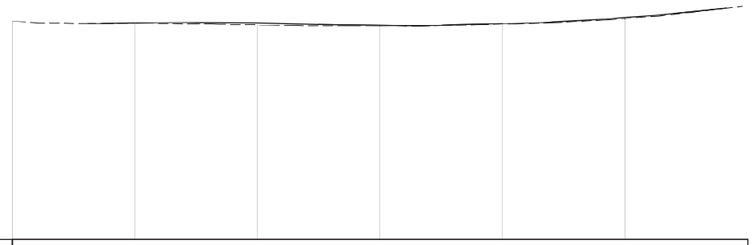
Original Size A1 **Drawing No: 12533215-C101** **Rev: B**

Plot Date: 14 December 2020 - 6:27 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C101.dwg



PLAN

SCALE 1:500



DATUM 0.000

HORIZONTAL ALIGNMENT	L=126.78m B=359° 50' 35"													
LEVEL DIFFERENCE CUT - / FILL +			0.010		0.067		0.018		0.020		0.026			
DESIGN SURFACE LEVEL		7.038		7.059		7.059		6.982		7.042		7.231		7.533
EXISTING SURFACE LEVEL 7.112		7.037		7.049		6.992		6.964		7.021		7.205		7.533
CHAINAGE 0.000		12.397		20.000		40.000		60.000		80.000		100.000		116.089	120.000

LONGITUDINAL SECTION

SCALE: HORIZONTAL 1:500 VERTICAL 1:100

FINAL DESIGN

No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	SD	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SM			13.11.20

0 1 2 3 4 5m
SCALE 1:100 AT ORIGINAL SIZE
0 5 10 15 20 25m
SCALE 1:500 AT ORIGINAL SIZE

N

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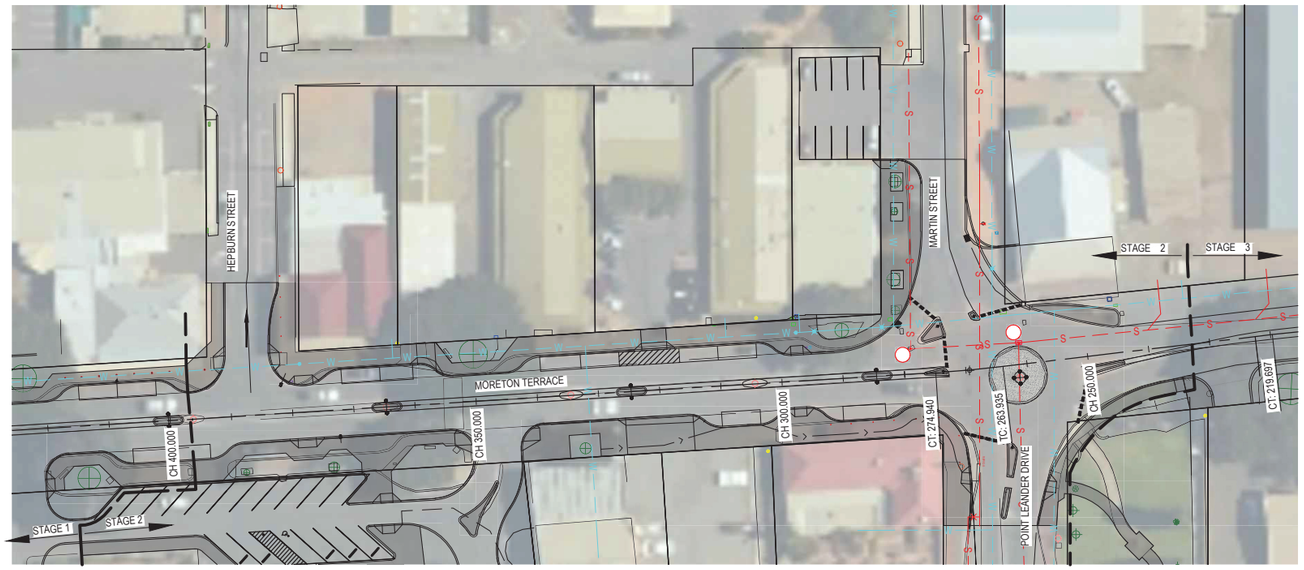
Drawn	S.MOWBRAY	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION
STAGE 1 - HOSKEN STREET

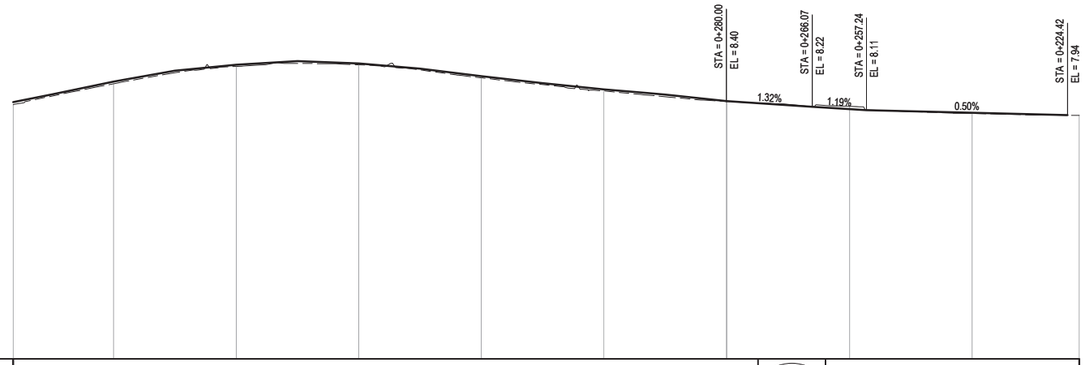
Original Size A1 **Drawing No: 12533215-C102** **Rev: B**

Plot Date: 14 December 2020 - 6:27 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C102.dwg



PLAN

SCALE 1:500



DATUM 0.000

HORIZONTAL ALIGNMENT	L=392.36m B=266° 24' 28"						L=11.01m R=200.00m		L=44.24m B=263° 15' 18"	
LEVEL DIFFERENCE CUT - / FILL +	0.081	0.072	0.059	0.043	0.055	0.055	0.010	-0.089	0.022	
DESIGN SURFACE LEVEL	8.369	9.039	9.590	9.627	9.215	8.786	8.399	8.143	8.023	
EXISTING SURFACE LEVEL	8.287	8.967	9.530	9.584	9.160	8.731	8.390	8.232	8.002	7.934
CHAINAGE	396.402	380.000	360.000	340.000	320.000	300.000	280.000	260.000	240.000	222.499

LONGITUDINAL SECTION

SCALE: HORIZONTAL 1:500 VERTICAL 1:100

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
C	REMOVED PEDESTRIAN CROSSING	AS	EA	AK	16.02.21
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			24.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1 2 3 4 5m
SCALE 1:100 AT ORIGINAL SIZE
0 5 10 15 20 25m
SCALE 1:500 AT ORIGINAL SIZE

N

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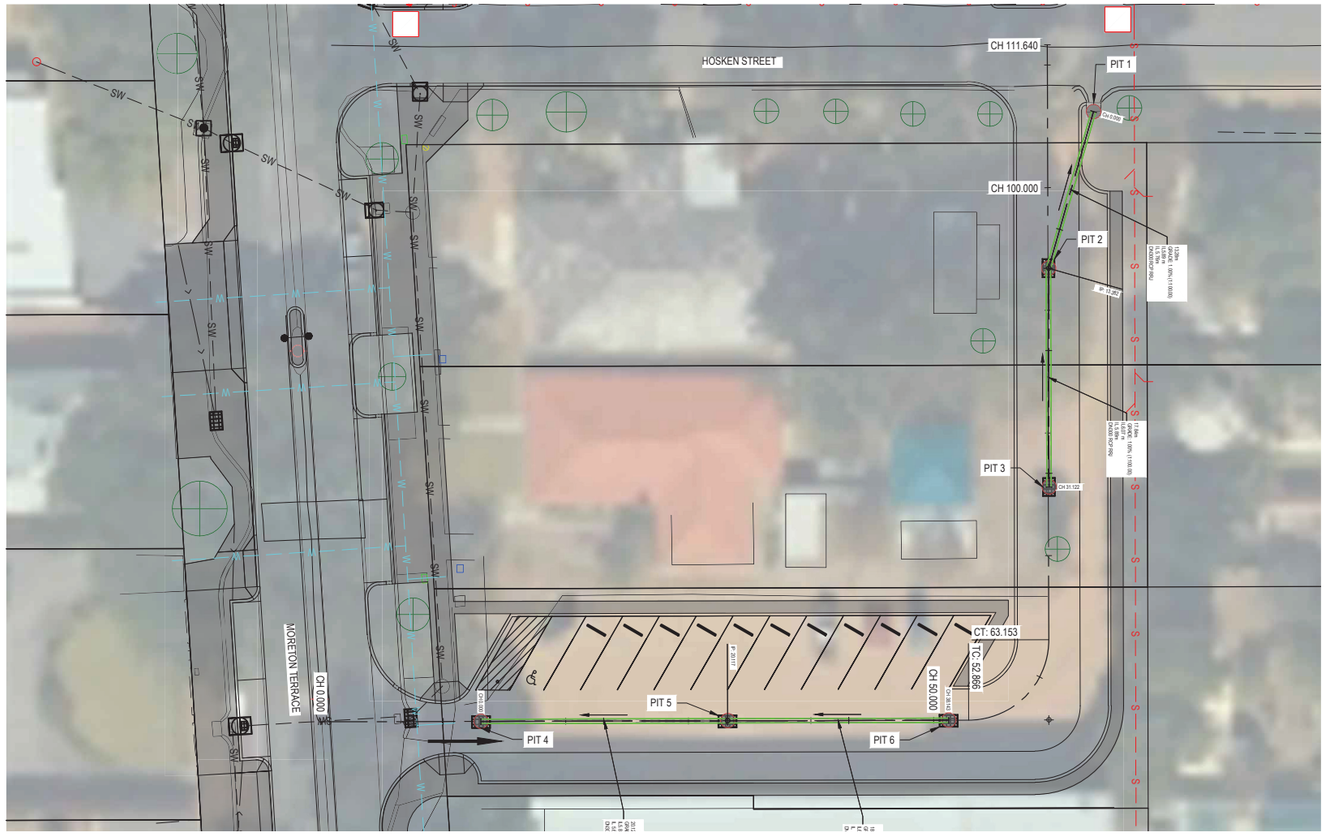
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: PLAN AND LONGITUDINAL SECTION STAGE 2 - MORETON TERRACE

Original Size: A1
Drawing No: 12533215-C103
Rev: C

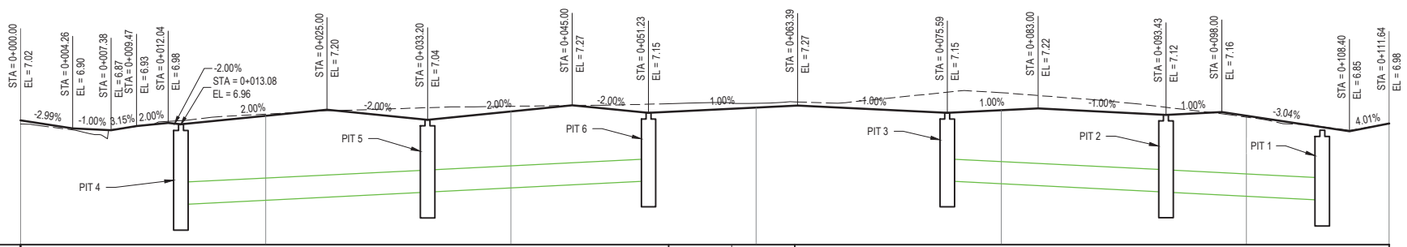
Plot Date: 16 February 2021 - 3:40 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C103.dwg



PLAN

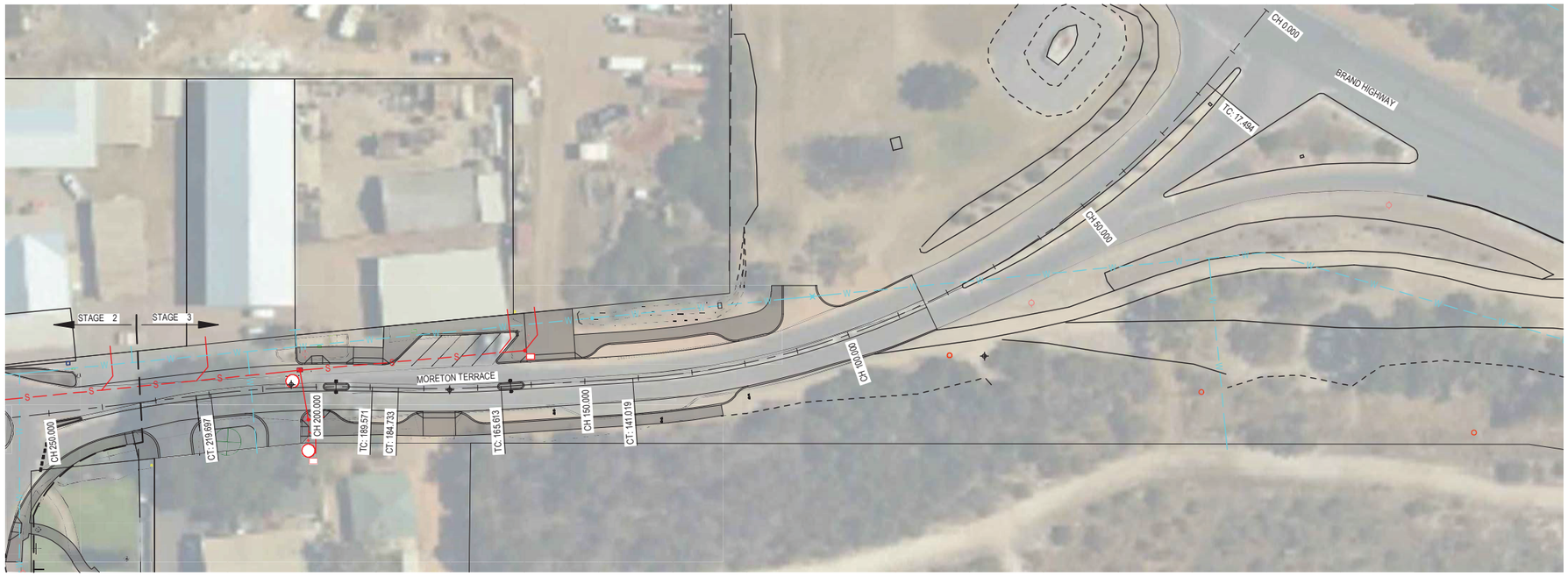
SCALE 1:500

PIT SCHEDULE FOR: COMMUNITY RESOURCES CENTRE CAR PARK DRAINAGE			
PIT NUMBER	PIT TYPE	SETOUT COORDS	PIT TOP RL (m)
1	EXISTING SIDE ENTRY PIT	E: 45009.706 N: 312918.970	6.863
2	1800Ø x 1800 DEEP GRATED SOAK WELL	E: 45022.469 N: 312915.297	7.118
3	1800Ø x 1800 DEEP GRATED SOAK WELL	E: 45040.309 N: 312915.339	7.148
4	1800Ø x 1800 DEEP GRATED SOAK WELL	E: 45059.417 N: 312869.001	6.962
5	1800Ø x 1800 DEEP GRATED SOAK WELL	E: 45059.366 N: 312889.118	7.036
6	1800Ø x 1800 DEEP GRATED SOAK WELL	E: 45059.320 N: 312907.145	7.148
7	EXISTING SIDE ENTRY PIT	E: 44997.386 N: 312918.989	6.956
8	1050Ø COMBINATION SIDE ENTRY PIT	E: 44970.831 N: 312902.486	7.692



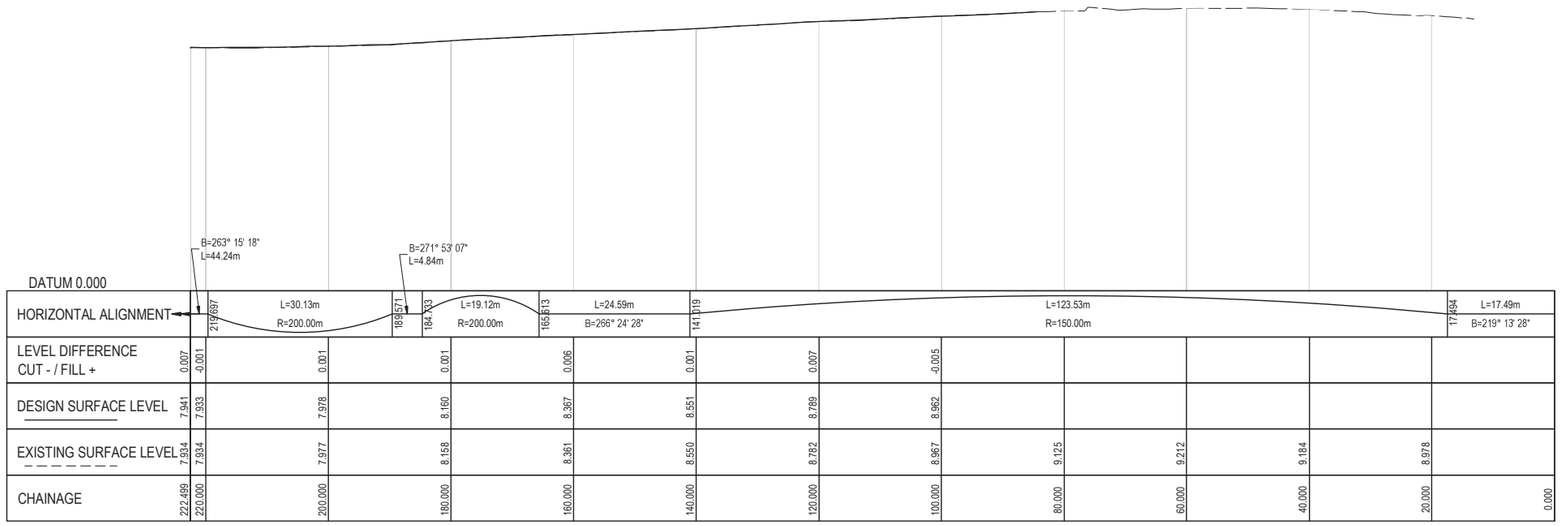
DATUM 5.000

| | | |



PLAN

SCALE 1:500



LONGITUDINAL SECTION

SCALE: HORIZONTAL 1:500 VERTICAL 1:100

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			26.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 1 2 3 4 5m
SCALE 1:100 AT ORIGINAL SIZE
0 5 10 15 20 25m
SCALE 1:500 AT ORIGINAL SIZE

N

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Drawn	A. SUBBA	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

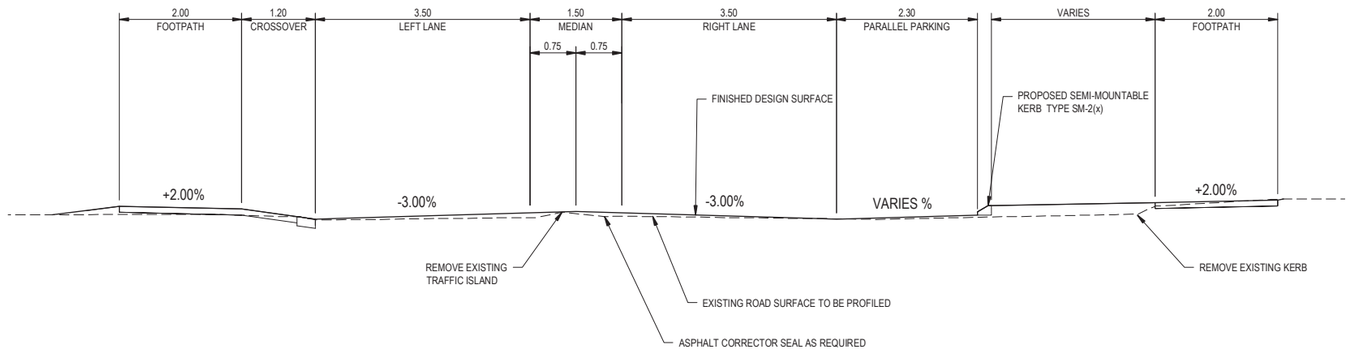
Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION STAGE 3 - MORETON TERRACE

Original Size A1
Drawing No: 12533215-C105
Rev: B

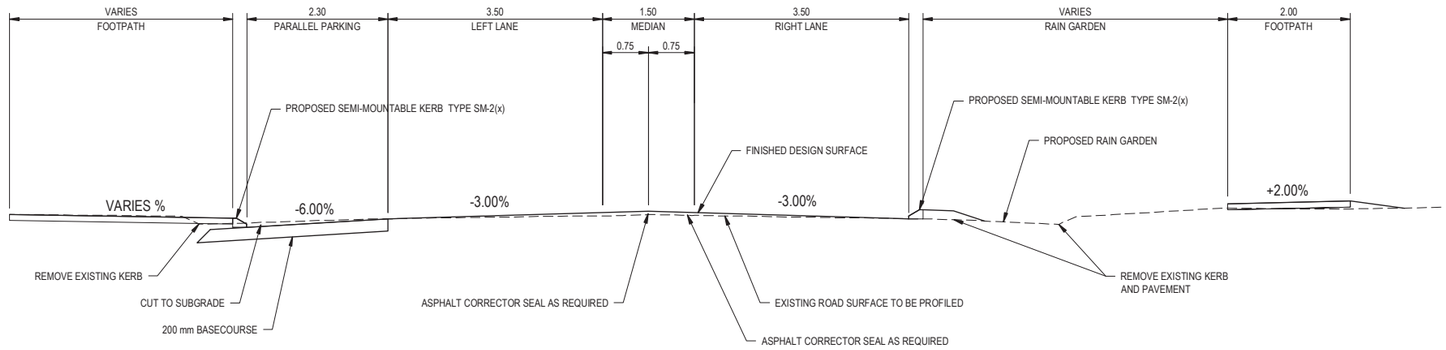
Plot Date: 14 December 2020 - 6:34 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C105.dwg

MORETON TERRACE SURFACING NOTES:

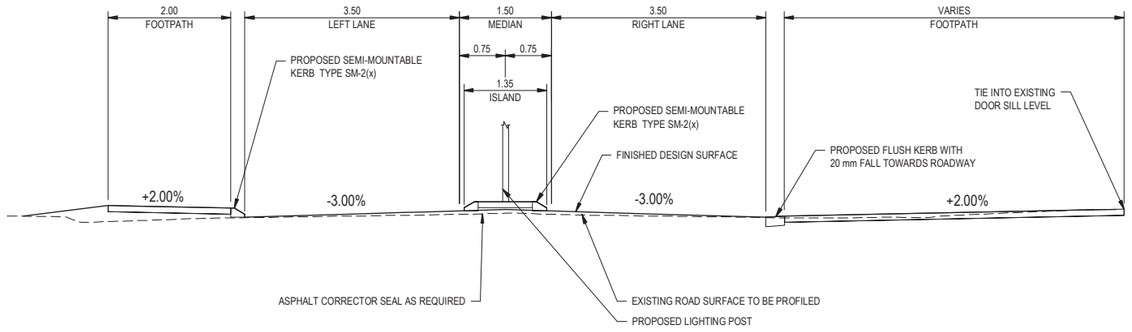
- ROAD - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- ON-STREET PARKING - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- MEDIAN - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



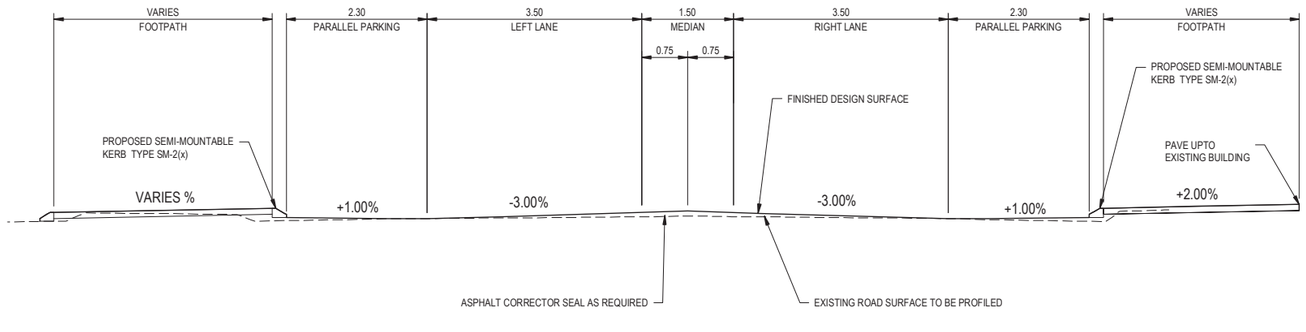
A SECTION
C002 SCALE 1 : 50



B SECTION
C003 SCALE 1 : 50



C SECTION
C004 SCALE 1 : 50



D SECTION
C004 SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	SM	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SM			13.11.20

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0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:50	This Drawing must not be used for Construction unless signed as Approved	

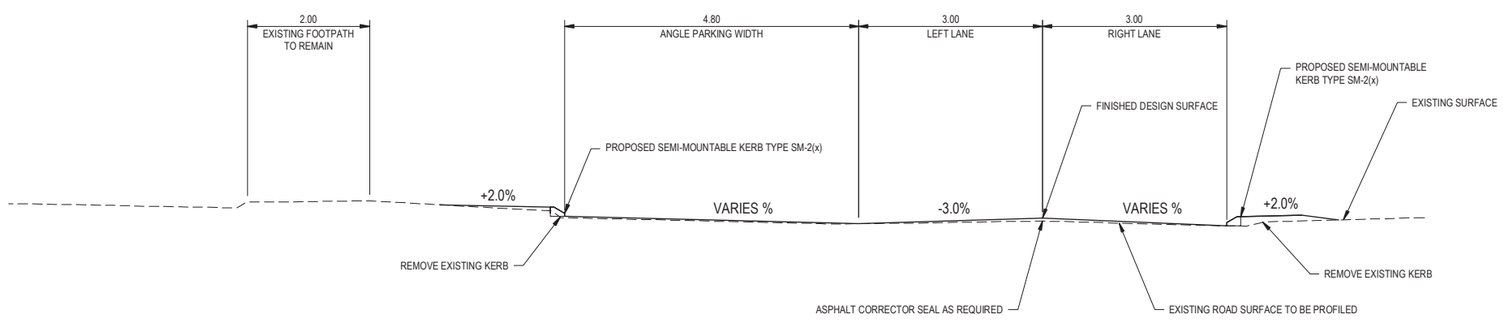
Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: PLAN AND LONGITUDINAL SECTION
TYPICAL CROSS SECTION - MORETON TERRACE

Original Size A1
Drawing No: 12533215-C201
Rev: B

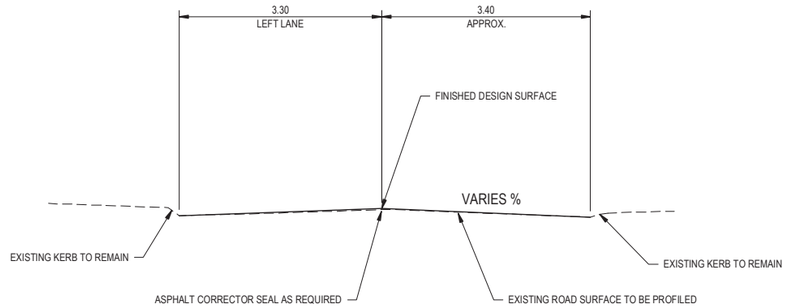
Plot Date: 14 December 2020 - 3:43 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C201.dwg

HOSKEN STREET SURFACING NOTES:

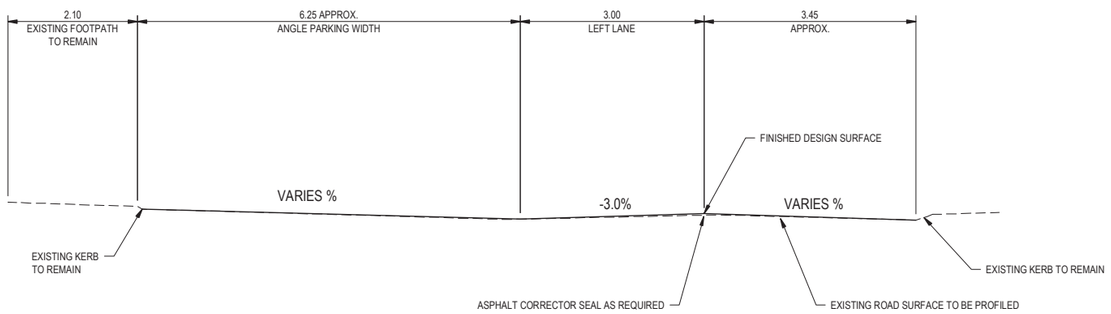
- ROAD - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- ON-STREET PARKING - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



F C010 SECTION
SCALE 1 : 50



G C010 SECTION
SCALE 1 : 50



H C011 SECTION
SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	SM	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SM			13.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:50	This Drawing must not be used for Construction unless signed as Approved	

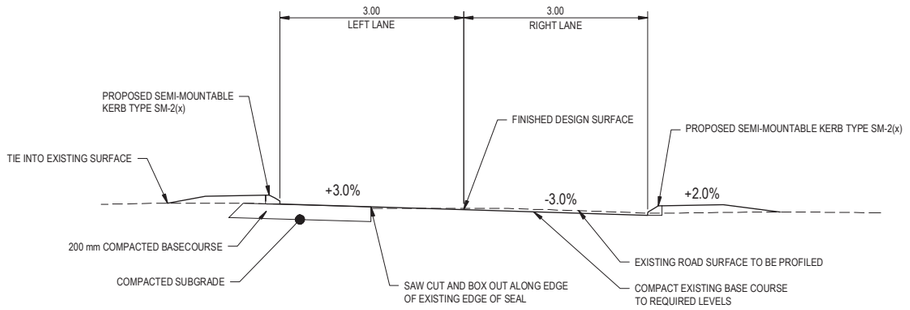
Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION
TYPICAL CROSS SECTION - HOSKEN STREET

Original Size **A1** Drawing No: **12533215-C202** Rev: **B**

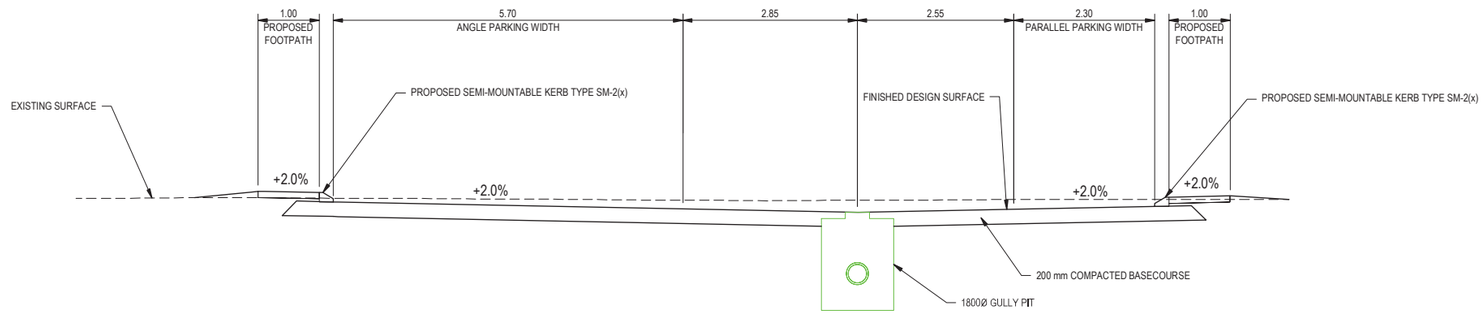
Plot Date: 14 December 2020 - 3:43 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C202.dwg

TOWN PARK CAR PARK AND COMMUNITY RESOURCES CENTRE CAR PARK SURFACING NOTES:

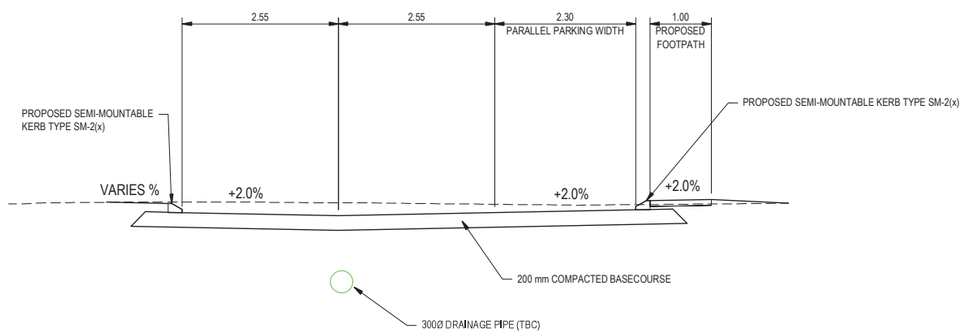
- ACCESS ROAD FROM MORETON TERRACE - SUPPLY AND LAY PRIMER SEAL, 30 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- PARKING AREAS - SUPPLY AND LAY PRIMER SEAL, 30 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



E C002 SECTION (TOWN PARK CAR PARK)
SCALE 1 : 50



I C010 SECTION (COMMUNITY RESOURCES CENTRE CAR PARK)
SCALE 1 : 50



J C010 SECTION (COMMUNITY RESOURCES CENTRE CAR PARK)
SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	SM	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SM			13.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing.

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Approved (Project Director)			
Date			
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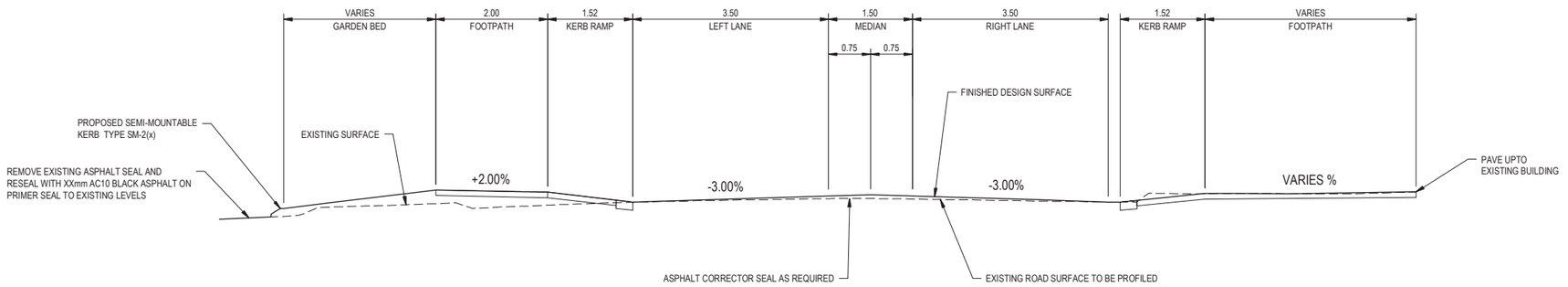
Client	SHIRE OF IRWIN
Project	MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title	PLAN AND LONGITUDINAL SECTION
	TYPICAL CROSS SECTIONS - COMMUNITY RESOURCES CENTRE CAR PARK
Original Size	A1
Drawing No:	12533215-C203
Rev:	B

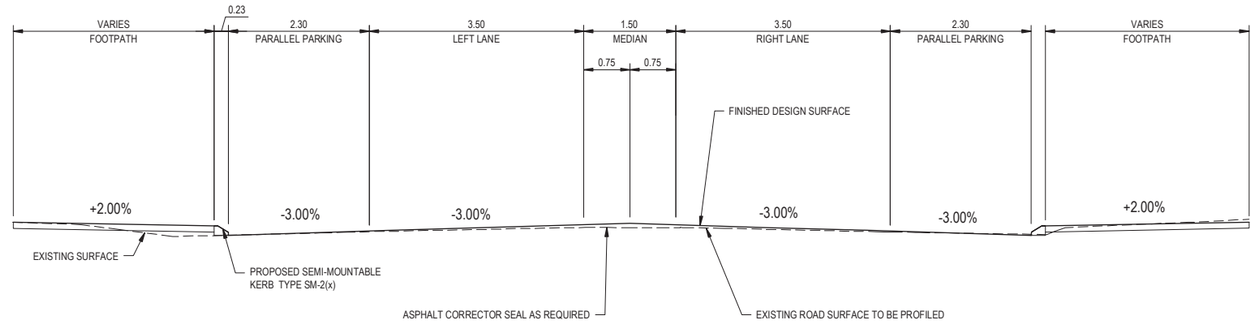
Plot Date: 14 December 2020 - 4:37 PM Plotted by: Abhishek Subba Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C203.dwg

MORETON TERRACE SURFACING NOTES:

- ROAD - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- ON-STREET PARKING - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- MEDIAN - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



K C005 SECTION PEDESTRIAN CROSSING
SCALE 1 : 50



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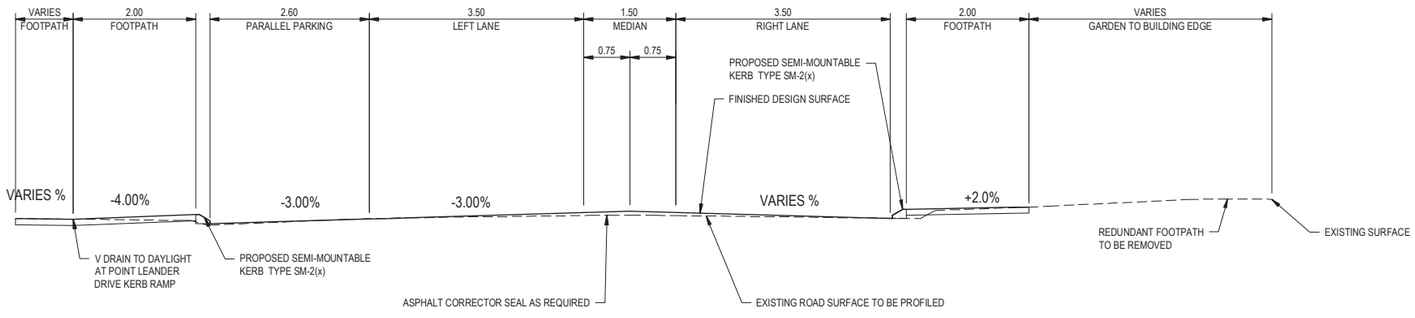
SCALE 1 : 50



M C006 SECTION
SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			24.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Drafting Check A. KRAUSE		Design Check A. KRAUSE	
Approved (Project Director)			
Date			
Scale 1:50	This Drawing must not be used for Construction unless signed as Approved		

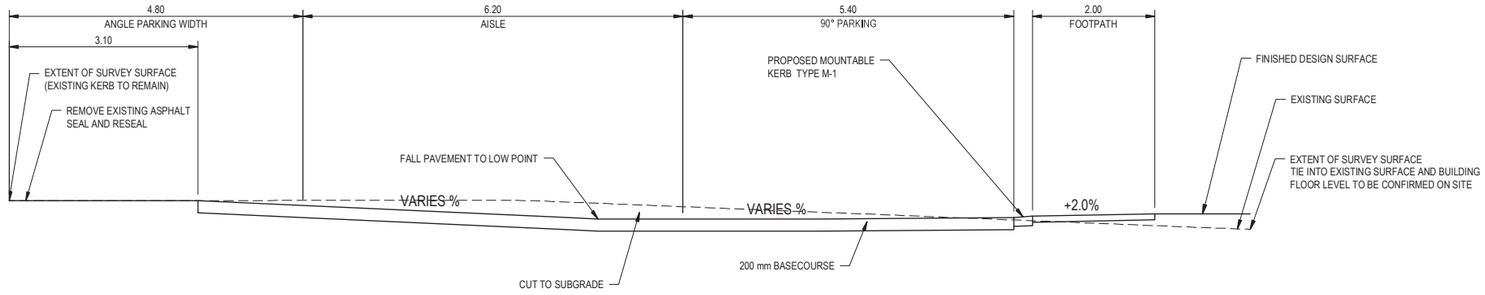
Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION
TYPICAL CROSS SECTIONS - STAGE 2 - MORETON TERRACE

Original Size A1
Drawing No: 12533215-C204
Rev: A

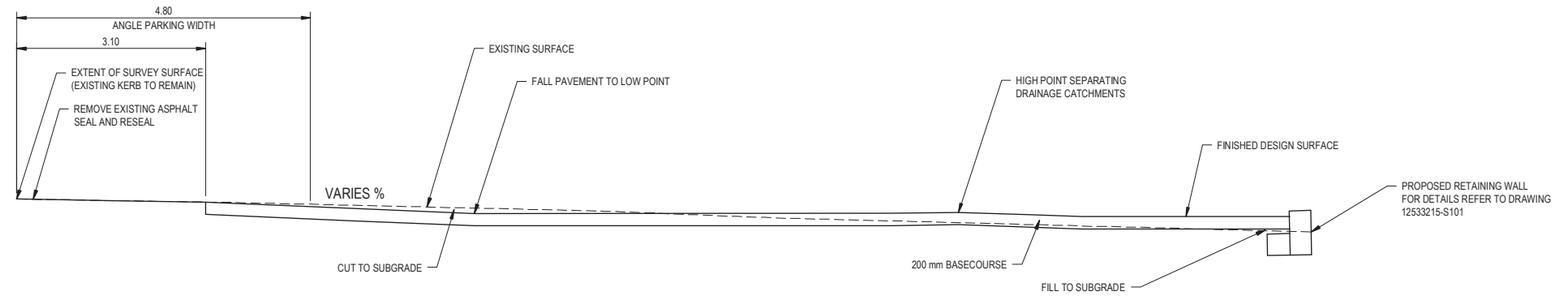
Plot Date: 14 December 2020 - 4:39 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C204.dwg

HOTEL CAR PARK SURFACING NOTES:

- ROAD WAYS - SUPPLY AND LAY PRIMER SEAL, 30 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- PARKING AREAS - SUPPLY AND LAY PRIMER SEAL, 30 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



N SECTION
C013 SCALE 1 : 50



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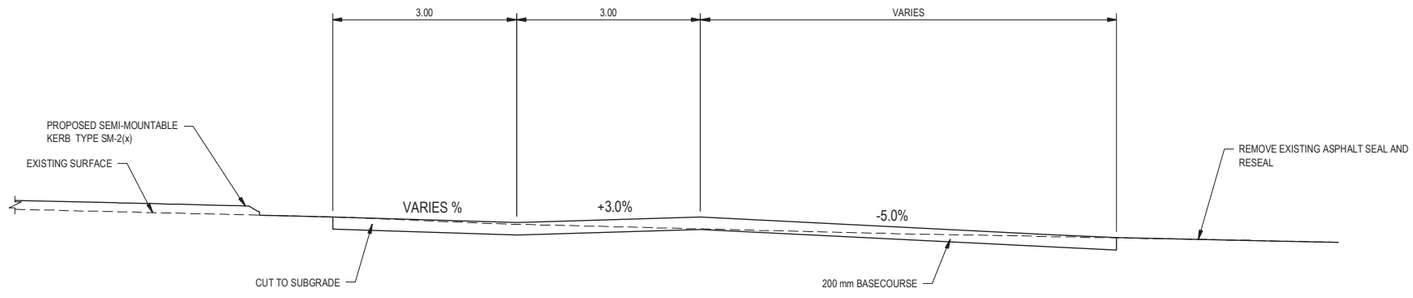
C013 SCALE 1 : 50



P SECTION
C013 SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			24.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:50	This Drawing must not be used for Construction unless signed as Approved	

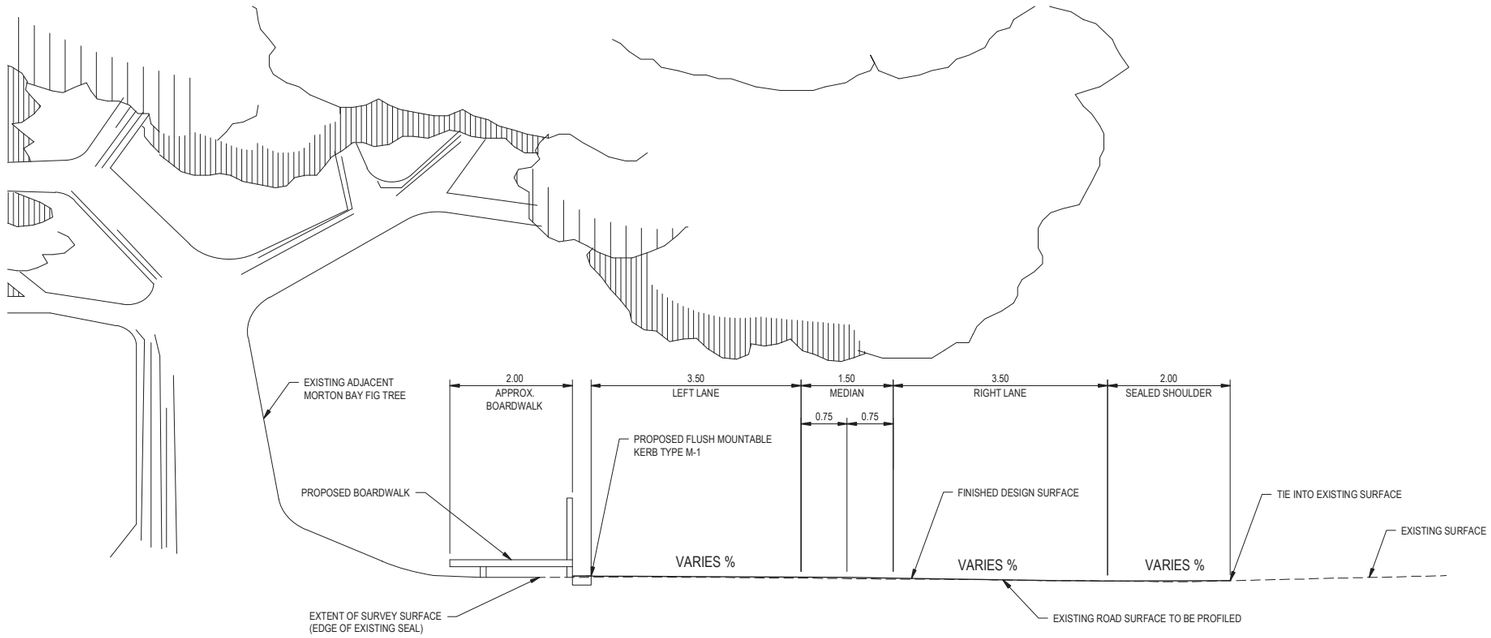
Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION
TYPICAL CROSS SECTIONS - HOTEL CAR PARK

Original Size A1
Drawing No: 12533215-C205
Rev: B

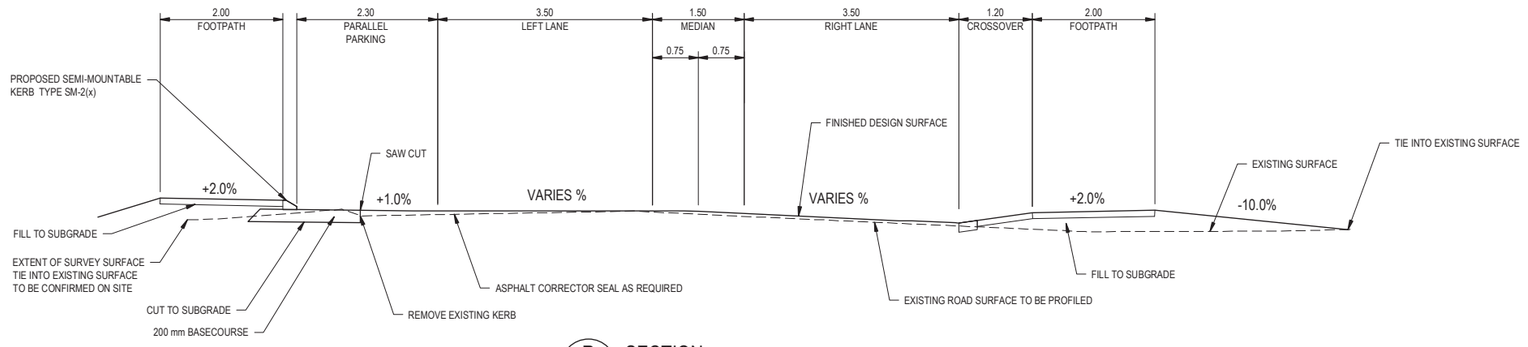
Plot Date: 14 December 2020 - 5:57 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C205.dwg

MORETON TERRACE SURFACING NOTES:

- ROAD - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- ON-STREET PARKING - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- MEDIAN - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



Q C006 SECTION
SCALE 1 : 50



R C007 SECTION
SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			26.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Drafting Check A. KRAUSE | Design Check A. KRAUSE
Approved (Project Director)
Date
Scale 1:50

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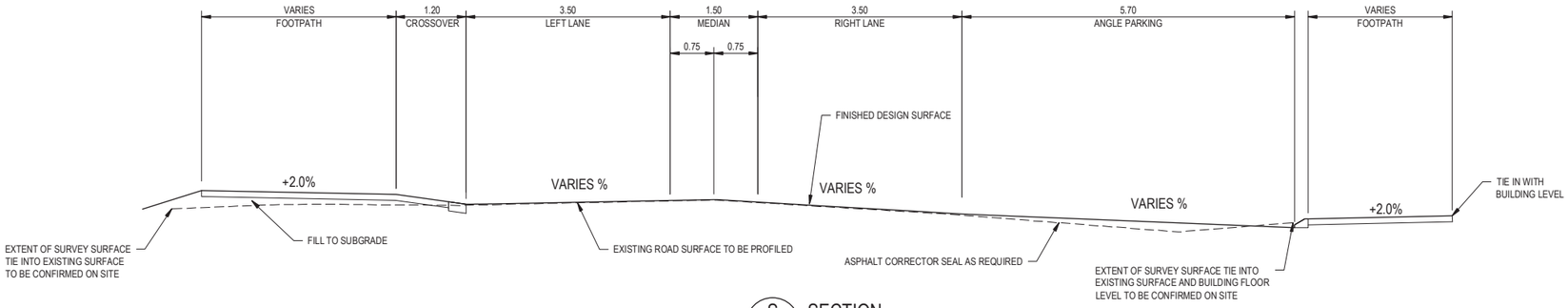
Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION
TYPICAL CROSS SECTIONS - STAGE 3 - MORETON TERRACE

Original Size A1
Drawing No: 12533215-C206
Rev: B

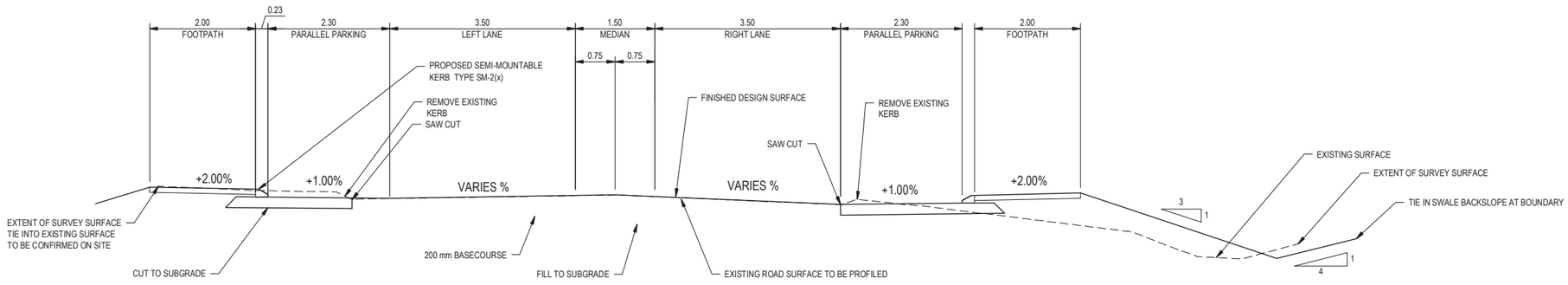
Plot Date: 14 December 2020 - 4:42 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C206.dwg

MORETON TERRACE SURFACING NOTES:

- ROAD - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- ON-STREET PARKING - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- MEDIAN - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.



S C007 SECTION
SCALE 1 : 50



T C007 SECTION
SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW	SD			26.11.20

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0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

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Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:50	This Drawing must not be used for Construction unless signed as Approved	

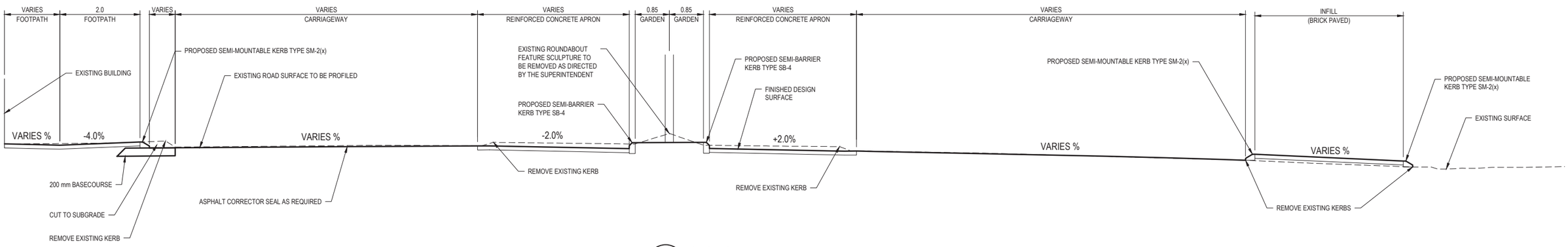
Client SHIRE OF IRWIN
Project MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title PLAN AND LONGITUDINAL SECTION
TYPICAL CROSS SECTIONS - STAGE 3 - MORETON TERRACE

Original Size A1
Drawing No: 12533215-C207
Rev: B

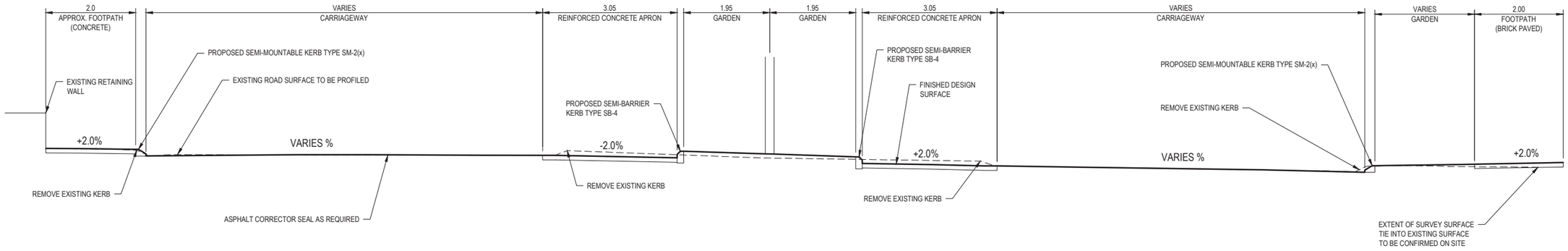
Plot Date: 14 December 2020 - 4:43 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C207.dwg

MORETON TERRACE SURFACING NOTES:

- ROAD - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC10 ASPHALT (BLACK) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- ON-STREET PARKING - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- MEDIAN - SUPPLY AND LAY PRIMER SEAL, 40 MM MINIMUM THICKNESS AC7 ASPHALT (RED) PLUS AN ASPHALT CORRECTOR LAYER AS REQUIRED.
- FOR CONCRETE APRON DETAILS, REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 4B: ROUNDABOUTS, FIGURE 4.11 TYPICAL ENCROACHMENT AREA DETAIL.



V C006 SECTION
SCALE 1 : 50



U C002 SECTION
SCALE 1 : 50

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	AMENDED ROUNDABOAUT DETAILS	AS	EA	AK	16.02.21
A	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

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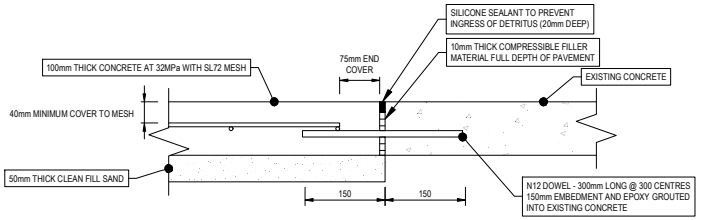
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:50	This Drawing must not be used for Construction unless signed as Approved	

Client **SHIRE OF IRWIN**
Project **MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE**
Title **ROUNDABOUT CROSS SECTIONS**

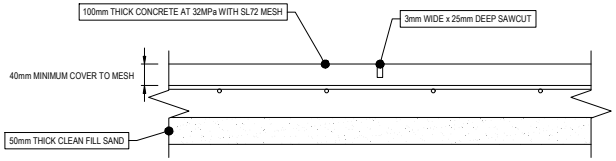
Original Size **A1** Drawing No: **12533215-C208** Rev: **B**

Plot Date: 16 February 2021 - 4:11 PM Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\12533215-C208.dwg



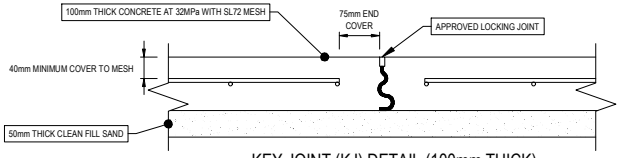
KEY CONSTRUCTION JOINT (KCJ) DETAIL (100mm THICK)

KEY CONSTRUCTION JOINT TO BE PROVIDED BETWEEN ALL ABUTTING NEW AND EXISTING CONCRETE WORKS
SCALE 1:5



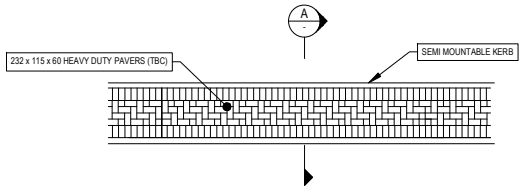
CONTRACTION JOINT (CJ) DETAIL (100mm THICK)

MAXIMUM 3.0m SPACING
SCALE 1:5



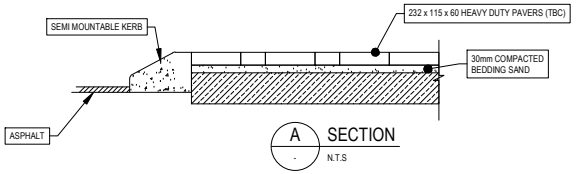
KEY JOINT (KJ) DETAIL (100mm THICK)

MAXIMUM 6.0m SPACING
SCALE 1:5



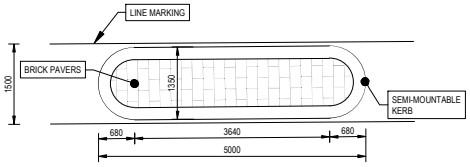
BRICK PAVED PATH DETAILS

N.T.S



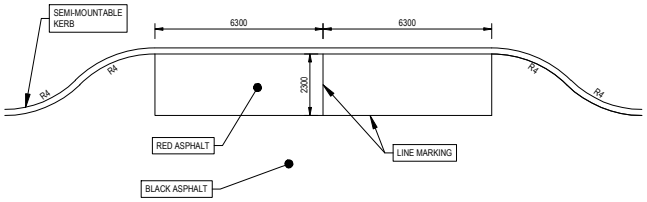
SECTION

N.T.S



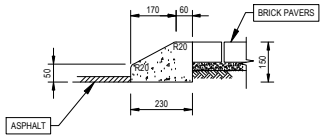
TYPICAL TRAFFIC ISLAND

SCALE 1:50



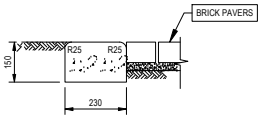
TYPICAL ON STREET PARKING

SCALE 1:100



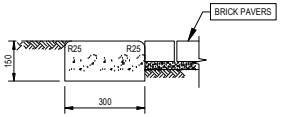
SEMI-MOUNTABLE KERB (SM - 2x)

SCALE 1:10



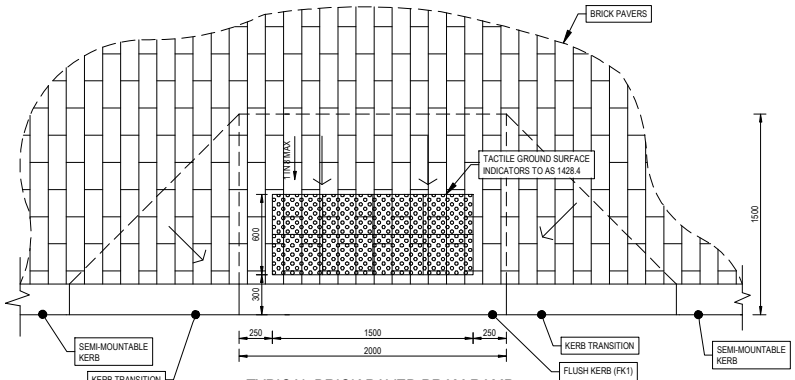
FLUSH KERB - FK1

TO BE INSTALLED AT PRAM RAMP CROSSING AND CROSSOVERS
SCALE 1:10



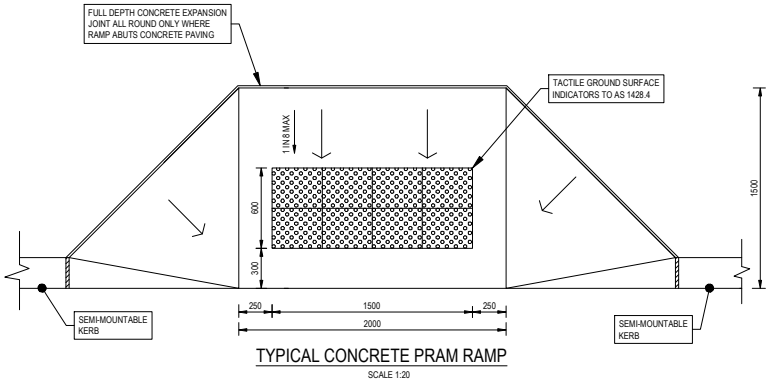
FLUSH KERB - FK2

TO BE INSTALLED AT ROUNDABOUTS
SCALE 1:10



TYPICAL BRICK PAVED PRAM RAMP

SCALE 1:20



TYPICAL CONCRETE PRAM RAMP

SCALE 1:20

REFERENCE DOCUMENTS	
DRAINAGE DETAILS (MAIN ROADS WA)	
200231-084	DRAINAGE STRUCTURE SELECTION GUIDE
200231-085	DRAINAGE TWT, SWT & SRT (MANHOLE UNDER TRAFFIC)
200231-088	DRAINAGE TWN, SWN & SRN (MANHOLE OFF THE ROAD)
200231-091	DRAINAGE TEN & SEN (SIDE ENTRY GULLY)
200231-094	DRAINAGE TGT & SGT (STREET GULLY)
201531-0045	DRAINAGE STRUCTURES WITH PERMEABLE BASE (SOAK WELLS)
KERB DETAILS (MAIN ROADS WA)	
9331-0377	KERB TREATMENTS (KERB TRANSITIONS)
9331-0376	KERB TYPES
LINE MARKING AND REGULATORY SIGN (AS STANDARDS)	
AS 1742.2	TRAFFIC CONTROL DEVICES FOR GENERAL USE
AS 1742.11	PARKING CONTROLS
AS 2890.6	OFF-STREET PARKING FOR PEOPLE WITH DISABILITIES

FINAL DESIGN

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW		AS	EA	AK	14.12.20
A	PRELIMINARY DESIGN - ISSUED FOR REVIEW		SD			01.12.20

0 0.05 0.1 0.15 0.2 0.25m
SCALE 1:5 AT ORIGINAL SIZE
0 0.2 0.4 0.6 0.8 1.0m
SCALE 1:20 AT ORIGINAL SIZE
0 0.5 1.0 1.5 2.0 2.5m
SCALE 1:50 AT ORIGINAL SIZE

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

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Drawn	A. SUBBA	Designer	S. DAVIES
Drafting Check	A. KRAUSE	Design Check	A. KRAUSE
Approved (Project Director)			
Date			
Scale	1:50	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: TYPICAL DETAILS (KERBS AND FOOTPATHS)

Original Size: A1
Drawing No: 12533215-C301
Rev: B

Plot Date: 14 December 2020 - 4:01 PM
Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\Typical Details\12533215-C301.dwg

GENERAL

1. READ THESE NOTES IN CONJUNCTION WITH OTHER WRITTEN INSTRUCTIONS ISSUED. IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS, THEN NOTES, THEN OTHER.
2. CARRY OUT WORK IN A SAFE MANNER IN ACCORDANCE WITH APPLICABLE LEGISLATION, STATUTORY REGULATIONS, BY-LAWS OR RULES. CONTRACTOR IS RESPONSIBLE FOR OCCUPATIONAL HEALTH AND SAFETY OF SITE PERSONNEL AND GENERAL PUBLIC IN ACCORDANCE WITH ALL CURRENT WORK HEALTH AND SAFETY ACTS, LEGISLATIVE REQUIREMENTS, ASSOCIATED REGULATIONS AND CODES OF PRACTICE, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.
3. SUBMIT DETAILS OF PROPOSED CHANGES TO SCOPE, WORK METHODS OR MATERIALS ETC FOR APPROVAL BEFORE PROCEEDING. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT
4. CHECK STRUCTURAL DRAWINGS AGAINST ARCHITECTURAL, COASTAL, AND OTHER DRAWINGS FOR REQUIREMENTS FOR PENETRATIONS, PIPES, ETC.
5. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE, BUT INDICATES REQUIRED PROPERTIES OF ITEM. SIMILAR ALTERNATIVES HAVING REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
6. OBTAIN NECESSARY PERMITS AND APPROVALS FROM RELEVANT AUTHORITIES BEFORE COMMENCING WORK ON SITE. NOTIFY RELEVANT SERVICE AUTHORITIES BEFORE COMMENCING WORK ON SITE.
7. INSPECTIONS AND REVIEWS UNDERTAKEN BY SUPERINTENDENT OR OTHERS DO NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.
8. DO NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWINGS.
9. DIMENSIONS ARE IN MILLIMETRES UNO.
10. HAVE SURVEY AND SETTING OUT UNDERTAKEN BY A REGISTERED SURVEYOR.
11. TAKE CARE OF HAZARDS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS AND UNDERTAKE EXPLORATION TO ESTABLISH LOCATION OF AND PROTECT EXISTING SERVICES AT SITE. SERVICES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE, AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF IN-GROUND SERVICES.
12. DISPOSE OF SURPLUS MATERIAL OFF SITE IN ACCORDANCE WITH LOCAL AUTHORITY WASTE REGULATIONS
13. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, WIND BLOWN SAND, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS.
14. WORKMANSHIP AND MATERIALS TO COMPLY WITH REQUIREMENTS OF AUSTRALIAN STANDARDS, NATIONAL CONSTRUCTION CODE (NCC) AND BY-LAWS AND ORDINANCES OF RELEVANT BUILDING AUTHORITIES. ALL STANDARDS REFERRED TO ARE THOSE CURRENT (AS AMENDED) AT COMMENCEMENT OF CONTRACT.
15. OBTAIN REQUIREMENTS FOR SERVICES, ADJOINING ELEMENTS ETC TO BE EMBEDDED IN, FIXED TO OR SUPPORTED ON WORK AND PROVIDE FOR REQUIRED FIXINGS. PROVIDE FOR TEMPORARY SUPPORT OF ADJOINING ELEMENTS DURING CONSTRUCTION. DRAWINGS DO NOT SHOW DETAILS OF ALL REQUIRED FIXTURES, INSERTS, SLEEVES, RECESSES OR OPENINGS ETC.
16. PROTECT EXISTING STRUCTURES FROM DAMAGE OR CRACKING. MAKE GOOD ANY DAMAGE TO EXISTING ELEMENTS AT COMPLETION OF WORKS OR AS DIRECTED BY SUPERINTENDENT.
17. WHERE NEW WORK ABUTS EXISTING, PROVIDE SMOOTH TRANSITION FREE OF ABRUPT CHANGES.
18. NEATLY CUT BACK CONCRETE TO BE REMOVED TO A CLEAN TRUE FACE USING A DIAMOND SAW.
19. EXTERNAL ELEMENTS ARE THOSE EXPOSED TO WEATHER, RAIN AND WATER PENETRATION IN COMPLETED WORKS.
20. FOR EXTERNAL HORIZONTAL SURFACES, PROVIDE ADEQUATE GRADIENT TO DRAIN WATER
21. SUPPLY RELEVANT NOTES, DRAWINGS AND SPECIFICATIONS ETC TO SUB-CONTRACTORS.
22. UNO=UNLESS NOTED OTHERWISE, SLS=SERVICEABILITY LIMIT STATE, ULS=ULTIMATE LIMIT STATE, NSL=NATURAL SURFACE LEVEL, FSL=FINISHED SURFACE LEVEL.
23. SUPERINTENDENT=SUPERINTENDENT NOMINATED IN CONTRACT.
24. BUILD, FABRICATE AND PROCURE ONLY FROM DRAWINGS 'ISSUED FOR CONSTRUCTION'.
25. KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS) AND SITE INSTRUCTIONS.

TEMPORARY WORKS

1. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE RESPONSIBILITY OF THE CONTRACTOR.
2. PROVIDE SCAFFOLDING, BARRIERS, FALL RESTRAINT, HAND-MID RAILS AND TOE BOARDS FOR WORK AT HEIGHT. ERECT ACCESS STAIRS AT EARLIEST OPPORTUNITY TO REDUCE OPEN SHAFT HAZARDS AND FACILITATE ACCESS. MAINTAIN SAFETY MESH AND BARRIERS TO ALL OPENINGS AND ELEVATED EDGES.
3. PROVIDE TEMPORARY BRACING WHERE REQUIRED FOR STRUCTURAL ELEMENTS OR FRAMES STABILIZED BY MASONRY, PRECAST CONCRETE OR OTHER ELEMENTS CONSTRUCTED AFTER ERECTION OF THE STRUCTURAL ELEMENT OR FRAME, AND SHOW ON SHOP DRAWINGS.

DESIGN ASSUMPTIONS

1. STRUCTURAL WORK HAS BEEN DESIGNED FOR FOLLOWING LOADS:
   - PERMANENT DEAD LOAD OF STRUCTURE AS SHOWN ON DRAWINGS
   - SURFACE LIVE LOADS = 5 KPA
   - COMPACTION LOADS (LATERAL PRESSURE): 20 KPA
   - SOIL DENSITY: 18 KN/M3
   - ACTIVE LATERAL EARTH PRESSURE COEFFICIENT K_a = 0.3
   - AT REST LATERAL EARTH PRESSURE COEFFICIENT K_o = 0.5
   - HYDROSTATIC PRESSURE: GROUND WATER TO BE AT LEAST 500mm BELOW BASE OF WALL
   - BUILDING DESIGN WORKING LIFE 50 YEARS
   - BUILDING IMPORTANCE LEVEL 2

EARTHWORKS

1. EARTHWORKS TO BE TO AS3798 AND AS2870.
2. REMOVE TOPSOIL, MATERIAL CONTAINING GRASS ROOTS OR OTHER ORGANIC MATTER, RUBBLE AND / OR DEBRIS AND ALL UNSUITABLE MATERIAL BELOW FOUNDATIONS AND WHERE SHOWN ON DRAWINGS.
3. DO NOT STOCKPILE MATERIAL AGAINST RETAINING WALLS, BUILDINGS, FENCES OR TREES ETC. DO NOT OBSTRUCT THE FREE FLOW OF WATER.
4. DESIGN IS BASED ON DATA FROM DISCRETE LOCATIONS AS RECORDED IN INVESTIGATION REPORT. SUBSURFACE CONDITIONS SHOWN ON DRAWINGS IS INFERRED FROM DATA IN INVESTIGATION REPORT AND IS GIVEN AS A GUIDE ONLY. ACTUAL GROUND CONDITIONS MAY VARY FROM THOSE SHOWN.
5. PROVIDE TEMPORARY SUPPORT TO FACES OF EXCAVATIONS AS REQUIRED.
6. HAVE SAFETY OF PROPOSED EXCAVATIONS INCLUDING ANY TEMPORARY WORKS ASSESSED BY SUITABLY QUALIFIED GEOTECHNICAL / STRUCTURAL ENGINEER
7. GENERAL FILL TO BE WELL GRADED MATERIAL, INORGANIC, LESS THAN 0.5% SULPHUR, MAXIMUM PARTICLE SIZE 75 MM, PLASTICITY INDEX < 55%.
8. SELECTED FILL MATERIAL SHALL BE SAND CUT FROM SITE. OTHERWISE IT MUST COMPLY WITH THE FOLLOWING:
   - INORGANIC, LESS THAN 0.5% SULPHUR
   - MAXIMUM PARTICLE SIZE 75 MM
   - PROPORTION PASSING 0.075 MM SIEVE: 25% MAXIMUM
   - PLASTICITY INDEX: >2%, <15%
   - PROPORTION EXCEEDING PARTICLE SIZE OF 50 MM: 75% MINIMUM
9. PLACE FILL MATERIAL UNDER BUILDINGS AND OTHER FOOTINGS IN LAYERS NOT EXCEEDING 150 MM THICK AND COMPACT TO AT LEAST 95% MAXIMUM DRY DENSITY (STANDARD COMPACTION) TO AS1289.
10. ADJUST MOISTURE CONTENT OF FILL AT TIME OF COMPACTION WITHIN THE RANGE OF 85-115% OF OPTIMUM MOISTURE CONTENT DETERMINED BY AS1289 TO ACHIEVE REQUIRED DENSITY
11. SAMPLE AND TEST COMPACTION TO MINIMUM 95% MMDD.

RETAINING WALL NOTES

1. INTERLOCKING BLOCK COURSING TO BE STAGGERED AS PER TYPICAL DETAIL.
2. ALL BLOCKS TO BE MINIMUM DENSITY OF 1800KG/M (DRY).
3. COMPLETED BLOCKWORK OF WALL TO BE OF THICKNESS NO LESS THAN MINIMUM PROFILE INDICATED.
4. GROUND FOR WALL FOOTING TO BE COMPACTED TO A MINIMUM OF 95% MODIFIED M.D.D. OR TO A MINIMUM OF 10 BLOWS PER 300MM WITH A STANDARD PERTH SAND PENETROMETER OR EQUIVALENT.
5. ALL BLOCK JOINTS TO BE VERTICAL OR HORIZONTAL (NOT SLOPED) 30MM (MAX) ROLLED JOINTS, MORTAR TO BE 1:1:6 FACE JOINTS TO BE MATCHING MORTAR.
6. NO FENCES TO BE BUILT INTO RETAINING WALL.
7. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RETAINING WALL LONG SECTION PLANS & RETAINING WALL LOCALITY PLAN.
8. ALL BACKFILL TO BE CONTROLLED FILL.
9. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

SLABS AND FOOTINGS

1. SLAB PANELS TO BE FOUNDED ON NATURAL SOIL WITH A CALIFORNIA BEARING RATIO (CBR) OF NOT LESS THAN 10%. REMOVE SOFT SPOTS AND REPLACE WITH COMPACTED GRANULAR FILL. WHERE SLAB PANELS AND INTERNAL BEAMS FOUNDED ON CONTROLLED FILL, CONTROLLED FILL MUST CONTINUE AT LEAST ONE METRE PAST BUILDING.
2. PROVIDE 0.2 MM HIGH IMPACT-RESISTANT VIRGIN POLYETHYLENE FILM DAMP PROOF MEMBRANE TO AS2870 ON 50 MM SAND BLINDING WHERE SHOWN ON DRAWINGS. LAP 200 MM AND SEAL DAMP PROOF MEMBRANES, TAPE AT PENETRATIONS, ETC TO ENSURE A COMPLETE VAPOUR BARRIER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS2870. PREVENT PUNCTURING OR DAMAGE BY PLACING A PLASTIC PLATE UNDER REINFORCEMENT SUPPORTS.
3. SLOPE SLAB SO THAT WATER WILL FLOW INTO THE DRAINAGE POINT.

CONCRETE

1. WORKMANSHIP AND MATERIALS TO COMPLY WITH AS3600, AS3610, AS1379, AS1478, AS3582, AS3799, AS2758.1, AND AS3972. FOR LIQUID RETAINING STRUCTURES ALSO COMPLY WITH AS3735.
2. WET CONCRETE TO BE UNIFORM, DENSE, HOMOGENEOUS, COHESIVE AND ABLE TO WORK READILY INTO CORNERS AND AROUND REINFORCEMENT COMPLETELY FILLING FORMWORK WITHOUT SEGREGATION OF AGGREGATES AND / OR FIBRES, EXCESS FREE WATER ON SURFACE, LOSS OF MATERIAL, CONTAMINATION OR OTHER VISIBLE DEFECTS.
3. CONCRETE TO HAVE GOOD DIMENSIONAL STABILITY AND ABLE TO RESIST PLASTIC SETTLEMENT CRACKING, THERMAL CRACKING AND SHRINKAGE CRACKING.
4. FINISHED CONCRETE TO BE A DURABLE, DENSE, HOMOGENEOUS MASS COMPLETELY FILLING FORMWORK, EMBEDDING FIBRES, REINFORCEMENT AND TENDONS, AND FREE OF STONE POCKETS OR HONEYCOMBS, OF UNIFORM COLOUR AND TEXTURE, WITH LOW PERMEABILITY AND ADEQUATE BUT NOT EXCESSIVE STRENGTH FOR GRADE.
5. CONCRETE BLEED TO BE LESS THAN 3% FOR FLOOR SLABS.
6. AIR ENTRAINMENT IS NOT PERMITTED.
7. REVIEW LOCATION OF EMBEDDED ITEMS TO MINIMIZE POSSIBLE ZONES OF POOR COMPACTION THAT MAY COMPROMISE STRUCTURAL INTEGRITY.
8. QUALITY OF CONCRETE ELEMENTS TO BE N40, MAX. 100MM SLUMP, MAX. 20MM AGGREGATE.
9. SUPPLEMENTARY CEMENTITIOUS MATERIALS INCLUDE AMORPHOUS SILICA FUME, FLY ASH, AND GROUND GRANULATED BLAST FURNACE SLAG (GGBFS OR SLAG) COMPLYING WITH AS3582.
10. RHEOLOGY, WORKABILITY AND SLUMP TO BE AS REQUIRED FOR PLACEMENT (EG PUMPING, CHUTE, SPRAYING ETC), COMPACTION AND FINISHING. USE SUPERPLASTICISERS AND HIGH RANGE WATER REDUCERS TO AS1478 TO ACHIEVE ADEQUATE WORKABILITY. DO NOT ADD WATER.
11. MAXIMUM ACID SOLUBLE CHLORIDE ION CONTENT OF CONCRETE IS 4 KG/M3. DO NOT USE STRONGLY IONIZED SALTS
12. MAXIMUM SULPHATE CONTENT OF CONCRETE TO BE LESS THAN 5% BY MASS OF ACID SOLUBLE SO3 AS A PERCENTAGE OF CEMENTITIOUS MATERIAL.
13. TOTAL REACTIVE ALKALI CONTENT IN CONCRETE TO BE LESS THAN 2.8 KG/M3 NA2OE (EQUIVALENT).
14. USE CEMENTITIOUS MATERIALS LESS THAN SIX MONTHS OLD. USE BAGGED CEMENT IN ORDER OF RECEIPT.
15. FOR GENERAL BLENDED CEMENT (GB) CONTAINING ORDINARY PORTLAND CEMENT PLUS AT LEAST 5% SUPPLEMENTARY CEMENTITIOUS MATERIALS:
   - SILICA FUME TO BE LESS THAN 10%, OR
   - FLYASH TO BE LESS THAN 25%, OR
   - GROUND GRANULATED BLAST FURNACE SLAG TO BE LESS THAN 40%.
   - FOR DOUBLE BLENDED CEMENT TOTAL SUPPLEMENTARY CEMENTITIOUS MATERIAL MUST BE LESS THAN SMALLER OF PERCENTAGES GIVEN ABOVE FOR CONSTITUENTS INCLUDED.
   - FOR TRIPLE BLENDED CEMENT TOTAL SUPPLEMENTARY CEMENTITIOUS MATERIAL MUST BE LESS THAN 40%.
16. SUPPLEMENTARY CEMENTITIOUS MATERIALS SPECIFIED IN NOTE 9 ARE IN ADDITION TO MATERIALS INCORPORATED IN GB CEMENT.
17. ADMIXTURES TO COMPLY WITH AS1478. ADMIXTURES MUST NOT REDUCE STRENGTH OF CONCRETE BELOW SPECIFIED VALUE IN SHORT OR LONG TERM. ADMIXTURES MUST NOT CONTAIN CALCIUM CHLORIDE. USE ADMIXTURES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CONCRETE ADMIXTURES SHALL NOT CAUSE OR ACCELERATE CORROSION OF REINFORCEMENT, NOR BE DETRIMENTAL TO CONCRETE OR STEEL DURING EXPECTED LIFE OF STRUCTURE. DO NOT USE CHEMICAL ADMIXTURES OR OTHER MATERIALS WITHOUT SUPERINTENDENT'S WRITTEN APPROVAL.
18. DO NOT ADD WATER TO CONCRETE AFTER TRUCK HAS LEFT BATCHING PLANT.
19. MIX CONCRETE TO ENSURE UNIFORM DISTRIBUTION OF CONSTITUENTS.

CONCRETE TESTING

1. TEST SLUMP OF EACH BATCH OF CONCRETE DELIVERED BEFORE PLACING CONCRETE FROM THAT DELIVERY. SLUMP MEASURED TO BE NO GREATER THAN TARGET SLUMP WITHIN TOLERANCES GIVEN IN AS1379 CLAUSE 5.2.3. CONCRETE OUTSIDE SLUMP TOLERANCE LIMITS IS LIABLE TO REJECTION.
2. CARRY OUT PROJECT ASSESSMENT OF CONCRETE TO AS1379 CLAUSE 6.4 AND 6.5. TAKE SAMPLES AT PROJECT SITE AT POINT OF DISCHARGE FROM AGITATOR. SPREAD SAMPLING EVENLY THROUGH POUR. SAMPLE CONCRETE FOR PROJECT ASSESSMENT CONCURRENTLY WITH EACH SAMPLE TAKEN FOR PRODUCTION ASSESSMENT AT PROJECT SITE. FOR EACH CONCRETE DESIGN MIX TAKE ONE SAMPLE FROM EACH 25 M3 OF CONCRETE DELIVERED PER DAY, NOT LESS THAN FIVE SAMPLES TOTAL FOR EACH MIX DESIGN. EACH SAMPLE TO COMPRISE FOUR CYLINDERS: TEST TWO AT 7 DAYS AND TWO AT 28 DAYS. TAKE ADDITIONAL SAMPLES OF SPRAYED CONCRETE FOR TESTING AT EARLIER AGE. NOTIFY SUPERINTENDENT WITHIN 2 WORKING DAYS IF 7-DAY CONCRETE TEST RESULTS INDICATE 28 DAY STRENGTHS ARE LIKELY TO BE BELOW SPECIFIED STRENGTH.
3. CONCRETE SAMPLING AND TESTING TO BE BY AN APPROVED INDEPENDENT NATA REGISTERED LABORATORY.

FORMWORK

1. RESPONSIBILITY FOR DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF FORMWORK AND FALSEWORK LIES WITH CONTRACTOR
2. DO NOT SUPPORT OR RESTRAIN FORMWORK ON PERMANENT WORKS WITHOUT SUPERINTENDENT'S WRITTEN APPROVAL.
3. CONSTRUCT FORMWORK TO COMPLY WITH AS3610 AND CLAUSE 17.6 OF AS3600 WHERE THIS IS MORE STRINGENT SO CONCRETE WILL HAVE DIMENSIONS, SHAPE, LOCATION AND FINISH SPECIFIED.
4. PROVIDE OPENINGS OR REMOVABLE PANELS IN FORMWORK FOR INSPECTION AND CLEANING.
5. APPLY RELEASE AGENT COMPATIBLE WITH CONTACT SURFACES TO INTERIOR OF FORMWORK (EXCEPT WHERE CONCRETE IS TO RECEIVE AN APPLIED FINISH OR COATING FOR WHICH THERE IS NO COMPATIBLE RELEASE AGENT). WHERE NECESSARY CLEAN REINFORCEMENT TO REMOVE TRACES OF RELEASE AGENT.
6. SEAL JOINTS BETWEEN FORMWORK PANELS, AND TO HARDENED CONCRETE WITH A FLEXIBLE RUBBER STRIP. SET OUT FORMWORK TO GIVE A REGULAR ARRANGEMENT OF PANELS, JOINTS, BOLT HOLES AND SIMILAR VISIBLE ELEMENTS IN FORMED SURFACE.
7. PROVIDE HOLES IN REBATE FORMERS, ETC, AS REQUIRED TO PREVENT AIR ENTRAPMENT.
8. DO NOT STRIP FORMWORK UNTIL CONCRETE IS HARDENED SUFFICIENTLY TO WITHSTAND MOVEMENT AND FORM REMOVAL WITHOUT DAMAGE. MINIMUM STRIPPING TIMES TO BE AS PER AS3610 TABLE 5.4.1.
9. STRIP FORMWORK TO AS3600 CLAUSE 17.6. REMOVE FORM TIE BOLTS WITHOUT DAMAGING CONCRETE. PARTS OF BOLTS LEFT IN CONCRETE MUST NOT INTRUDE INTO COVER CONCRETE. FLUSH FILL HOLES USING PRE-MIXED NON-SHRINK CEMENTITIOUS APPROVED REPAIR MORTAR MATCHING CONCRETE SURFACE COLOUR, STRENGTH AND DURABILITY AND ADEQUATE BOND. SUBMIT DETAILS OF PROPOSED REPAIR METHODS TO SUPERINTENDENT FOR APPROVAL.

PLACING OF CONCRETE

1. CONSTRUCTION TOLERANCES TO BE TO AS3610.
2. FORMWORK, REINFORCEMENT AND COVER, DOWELS, WATERSTOPS, CAST-IN ITEMS ETC TO BE INSPECTED AND APPROVED BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER / SUPERINTENDENT / BUILDING SURVEYOR BEFORE CONCRETE IS PLACED.
3. REMOVE FREE WATER, DUST AND DEBRIS, STAINS ETC FROM FORMS, EXCAVATIONS ETC BEFORE PLACING CONCRETE. IN HOT CONDITIONS DAMPEN FORMWORK AND / OR SUB-GRADE BEFORE PLACING CONCRETE
4. INSTALL 0.2 MM HIGH IMPACT RESISTANT VIRGIN POLYETHYLENE FILM DAMP PROOF MEMBRANE TO AS2870 TO BASE TO RETAIN WATER IN FRESH CONCRETE.
5. PLACE CONCRETE IN LAYERS LESS THAN 300 MM THICK FOR FIRST LAYER AND 75% OF IMMERSION VIBRATOR LENGTH FOR SUBSEQUENT LAYERS, AND VIBRATE EACH LAYER BEFORE PLACING NEXT.
6. ELAPSED TIME BETWEEN WETTING OF MIX AND DISCHARGE OF CONCRETE AT SITE MUST BE AS SHORT AS POSSIBLE, AND MUST NOT EXCEED LIMITS GIVEN WITHOUT SUPERINTENDENT'S PRIOR WRITTEN CONSENT.

CONCRETE TEMPERATURE AT TIME OF DISCHARGE (°C)	MAXIMUM ELAPSED TIME (HOURS)
10-24	2.00
24-27	1.50
27-30	1.00
30-32	0.75

7. ELAPSED TIME LIMITS MAY BE VARIED IF TRIALS DEMONSTRATE USE OF SET RETARDERS (TYPE RE OR WRRE TO AS1478) PROVIDE ADEQUATE RETENTION OF WORKABILITY FOR LONGER PERIODS AT REQUIRED TEMPERATURE. SLUMP LIMITS STILL APPLY. RE-TEMPERING BEYOND MAXIMUM ALLOWED DISCHARGE TIME USING WATER OR ADMIXTURES IS NOT ALLOWED.
8. USE PLACEMENT METHODS THAT WILL MINIMISE PLASTIC SETTLEMENT AND SHRINKAGE CRACKING. LIMIT VERTICAL FREE FALL BY USE OF CHUTES, ETC. KEEP CHUTES VERTICAL, FULL AND IMMERSED IN CONCRETE. PLACE CONCRETE IN LAYERS AND BLEND SUCCEEDING LAYERS BY COMPACTION. MAINTAIN CONCRETE EDGE IN A PLASTIC STATE. PROPERLY COMPACT CONCRETE USING MECHANICAL VIBRATORS (AND HAND METHODS IF REQUIRED AND APPROVED BY SUPERINTENDENT) TO REMOVE AIR BUBBLES AND GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION OF CONCRETE. TAKE CARE TO AVOID CONTACT BETWEEN VIBRATORS AND PARTIALLY HARDENED CONCRETE, FORMWORK OR REINFORCEMENT. DO NOT USE VIBRATORS TO MOVE CONCRETE ALONG FORMS.
9. DO NOT DISTURB CONCRETE ONCE INITIAL SET HAS OCCURRED.
10. KEEP ON SITE A LOG BOOK RECORDING EACH PLACEMENT OF CONCRETE INCLUDING DATE, CLIMATIC CONDITIONS, PORTION OF WORK, SPECIFIED GRADE AND SOURCE OF CONCRETE, DELIVERY DOCKET DATA, METHODS OF PLACEMENT AND COMPACTION, PROJECT ASSESSMENT CARRIED OUT, SLUMP MEASUREMENTS, VOLUME AND OTHER NOTABLE MATTERS THAT MAY AFFECT PERFORMANCE OF CONCRETE.
11. IN COLD WEATHER MAINTAIN TEMPERATURE OF FRESHLY MIXED CONCRETE WITHIN LIMITS SHOWN BELOW. 'OUTDOOR' AIR TEMPERATURE IS AIR TEMPERATURE AT TIME OF MIXING, OR PREDICTED OR LIKELY AIR TEMPERATURE DURING NEXT 48 HOURS. BEFORE AND WHILE PLACING CONCRETE MAINTAIN TEMPERATURE OF FORMWORK AND REINFORCEMENT AT > 5C. DO NOT USE CALCIUM CHLORIDE TO ACCELERATE SETTING TIME. DO NOT USE SALTS, CHEMICALS OR OTHER MATERIAL IN MIX TO LOWER THE FREEZING POINT OF CONCRETE. DO NOT ALLOW FROZEN MATERIALS TO ENTER MIXER. EVALUATE THE NEED FOR INSULATION OF CONCRETE SURFACES. DO NOT USE HIGH ALUMINA CEMENT.
12. IN HOT WEATHER PREVENT PREMATURE STIFFENING OF FRESH CONCRETE; REDUCE WATER ABSORPTION AND EVAPORATION LOSSES. MIX, TRANSPORT, PLACE AND COMPACT CONCRETE AS QUICKLY AS POSSIBLE. DURING PLACEMENT TEMPERATURE OF CONCRETE MUST NOT EXCEED TEMPERATURES BELOW:

CONCRETE ELEMENT	TEMPERATURE LIMIT
UNREINFORCED CONCRETE IN SECTIONS ≥ 1 METRE EACH DIMENSION	27°C
CONCRETE f'c ≥ 40 MPa IN SECTIONS ≥500mm THICKNESS	27°C
CONCRETE IN FOOTINGS, BEAMS, COLUMNS, WALLS AND SLABS f'c ≤ 32MPa	32°C
ELSEWHERE	32°C

DO NOT MIX CONCRETE WHEN SURROUNDING OUTDOOR SHADE TEMPERATURE 38C. MAINTAIN TEMPERATURE OF FORMWORK AND REINFORCEMENT AT 32C BEFORE AND DURING PLACING. COOL REINFORCEMENT AND FORMWORK AS REQUIRED. MAINTAIN SPECIFIED TEMPERATURE OF PLACED CONCRETE BY:
- PLACING CONCRETE WHEN AMBIENT TEMPERATURE IS LOW (AT NIGHT)
- COOL CONCRETE USING LIQUID NITROGEN INJECTION BEFORE PLACING, OR
- COVER CONTAINER IN WHICH CONCRETE IS TRANSPORTED TO FORMS, OR
- SHADING AND SPRAYING COARSE AGGREGATE USING COLD WATER, OR
- USE CHILLED MIXING WATER.

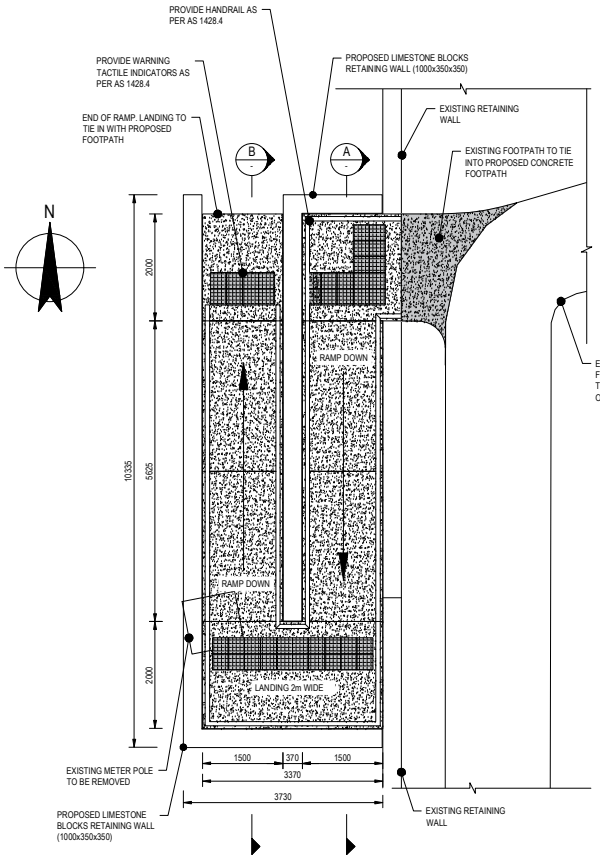
13. PROTECT FRESH CONCRETE FROM PREMATURE DRYING - PARTICULARLY IN HOT, WINDY OR DRY (LOW HUMIDITY) CONDITIONS, EXCESSIVELY HOT OR COLD TEMPERATURES, RAIN, ETC. PROVIDE WIND BREAKS. MAINTAIN CONCRETE AT A REASONABLY CONSTANT TEMPERATURE WITH MINIMUM MOISTURE LOSS FOR CURING PERIOD
14. FOR CONCRETE WITH WATER:CEMENT RATIO LESS THAN 0.5, IN HOT, WINDY OR DRY (LOW HUMIDITY) CONDITIONS SPRAY EXPOSED SURFACES OF FRESH CONCRETE WITH FOG SPRAY APPLICATION OF ALIPHATIC ALCOHOL RETARDANT IMMEDIATELY AFTER PLACEMENT TO REDUCE RISK OF PLASTIC SHRINKAGE CRACKING. IN SEVERE CLIMATIC CONDITIONS CONSIDER RE-VIBRATING CONCRETE BEFORE IT REACHES INITIAL SET.
15. COMMENCE CURING OF CONCRETE TO AS3600 AS SOON AS POSSIBLE AFTER PLACING AND FINISHING OR STRIPPING, AND WITHIN ONE HOUR. ENSURE EXPOSED SURFACES ARE NOT STAINED. ACCEPTABLE METHODS OF CURING INCLUDE:
   - RETENTION OF FORMWORK
   - PONDING OR CONTINUOUS SPRINKLING WITH WATER (MOIST CURING)
   - AN IMPERMEABLE MEMBRANE (USE CLEAR, WHITE OR LIGHT COLOURED PLASTIC IN HOT CONDITIONS) SEALED AROUND EDGES
   - AN ABSORPTIVE COVER KEPT CONTINUOUSLY WET AND COVERED BY IMPERMEABLE MEMBRANE
   - STEAM CURING
   - AN APPROVED CURING COMPOUND. PROVIDE:
   - EFFICIENCY INDEX
   - CERTIFIED TEST RESULTS FOR WATER RETENTION TO AS3799 APPENDIX B
   - EVIDENCE THAT AN ACCEPTABLE FINAL SURFACE COLOUR WILL BE OBTAINED
   - EVIDENCE OF COMPATIBILITY WITH CONCRETE AND APPLIED FINISHES (IF ANY)
   - METHODS OF OBTAINING REQUIRED ADHESION FOR TOPPINGS, RENDER ETC.
   - UNIFORM CONTINUOUS FLEXIBLE COATING WITHOUT VISIBLE BREAKS OR PINHOLES, WHICH REMAINS UNBROKEN FOR AT LEAST THE CURING PERIOD AFTER APPLICATION.
16. CURE CONTINUOUSLY UNTIL NUMBER OF DAYS DURING WHICH AIR TEMPERATURE IS ABOVE 10°C TOTALS:
   - 3 DAYS FOR EXPOSURES CLASSIFICATION A1 AND A2
   - 7 DAYS FOR EXPOSURE CLASSIFICATION B1, B2 AND C
   - 14 DAYS FOR MIXES CONTAINING GB CEMENT AND SUPPLEMENTARY CEMENTITIOUS MATERIALS.
   - PREVENT RAPID DRYING OUT AT END OF CURING PERIOD.
   - FINISHES TO LANDSCAPE ARCHITECTS DETAILS
17. FINISH CONCRETE SURFACES TO AS3610 AND AS SHOWN BELOW:
   - FORMED SURFACES:
   - EXPOSED SURFACES 1C, 2C, 3C OR 4
   - HIDDEN SURFACES 5
18. FINISHES AS LAID:
   - EXPOSED SURFACES - STEEL TROWEL UNO
   - HIDDEN SURFACES - WOOD FLOAT
19. DO NOT MAKE HOLES, PENETRATIONS, RECESSES, CHASES, NOR EMBED PIPES (OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS) WITHOUT APPROVAL OF SUPERINTENDENT. DO NOT PLACE CONDUITS, PIPES ETC WITHIN COVER CONCRETE. LOCATE CONDUITS, PIPES ETC ONLY IN MIDDLE THIRD OF SLAB OR BEAM DEPTH AND BETWEEN REINFORCEMENT LAYERS, SPACED AT 3 X PIPE / CONDUIT DIAMETER CENTRES MINIMUM. DO NOT CUT REINFORCEMENT AT PENETRATIONS WITHOUT APPROVAL.

JOINTS

1. IF CONSTRUCTION JOINTS PROPOSED OTHER THAN WHERE SHOWN, PROVIDE PROPOSED LOCATIONS FOR SUPERINTENDENT'S APPROVAL AT LEAST 7 DAYS PRIOR TO CONSTRUCTION.
2. PROVIDE JOINTING MATERIALS COMPATIBLE WHEN USED TOGETHER, AND NON-STAINING TO CONCRETE IN VISIBLE LOCATIONS.
3. PROVIDE DETAILS OF CONSTRUCTION JOINTS FOR SUPERINTENDENT'S APPROVAL AT LEAST 7 DAYS PRIOR TO CONSTRUCTION.
4. INSTALL WATERSTOPS ONTO SMOOTH CONCRETE SURFACE. DO NOT SCABBLE CONCRETE BENEATH WATERSTOPS.
5. SUBMIT PROPOSALS FOR CUTTING OR CORING HARDENED CONCRETE OR SAW CUT JOINTS, INCLUDING METHODS, TIMING AND SEQUENCE AT LEAST 7 DAYS BEFORE UNDERTAKING WORKS.
6. DO NOT INSTALL SEALANTS IF EXPECTED MAXIMUM DAILY TEMPERATURE EXCEEDS 30 DEGREES C. ENSURE RECESSES ARE CLEAN AND DRY PRIOR TO INSTALLING FILLERS OR SEALANTS, AND PREPARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TOLERANCE ON SEALANT WIDTHS +5, -0 MM.

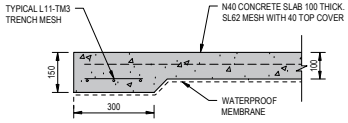
REINFORCEMENT

1. SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:
   - N: HOT ROLLED GRADE 500 DEFORMED (RIBBED) BAR DUCTILITY CLASS N TO AS/NZS4671
   - SL: MESH GRADE 500 PLAIN BAR
2. MANUFACTURERS AND PROCESSORS OF STEEL REINFORCING AND PRE-STRESSING MATERIALS MUST HOLD A VALID CERTIFICATE OF APPROVAL ISSUED BY ACRS (AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS). PROVIDE ACRS CERTIFICATION OF COMPLIANCE WITH AS/NZS4671, PRODUCT TAGS AND SUPPORTING DOCUMENTATION FOR ALL REINFORCEMENT. PROVIDE CERTIFICATION OF COMPLIANCE WITH AS/NZS4672.1 FOR ALL PRESTRESSING TENDONS.
3. PROVIDE DOCUMENTATION TO SHOW THAT REINFORCEMENT SUPPLIER AND MILL COMPLY WITH AS/NZS4671.
4. REINFORCEMENT MUST HAVE UNIQUE MARKS TO IDENTIFY SUPPLIER.
5. USE MESH SUPPLIED IN FLAT SHEETS UNLESS APPROVED OTHERWISE
6. REINFORCEMENT TO BE CLEAN, FREE OF LOOSE MILL SCALE, RUST, OIL, GREASE, MUD OR OTHER MATERIAL THAT MIGHT REDUCE BOND BETWEEN REINFORCEMENT AND CONCRETE.
7. SUBMIT PROPOSAL FOR CUTTING OR DISPLACING REINFORCEMENT. CLEAN AND PROTECT EXPOSED CUT ENDS OF REINFORCEMENT USING 6 MM APPROVED EPOXY. REFER TO CONCRETE REPAIR NOTES FOR T



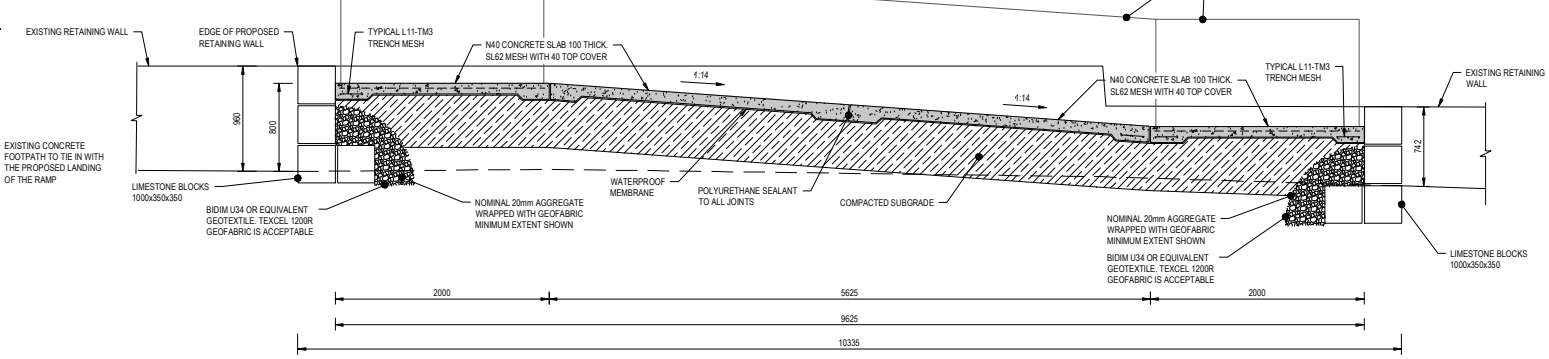
RAMP AND RETAINING WALL LAYOUT

SCALE 1:50



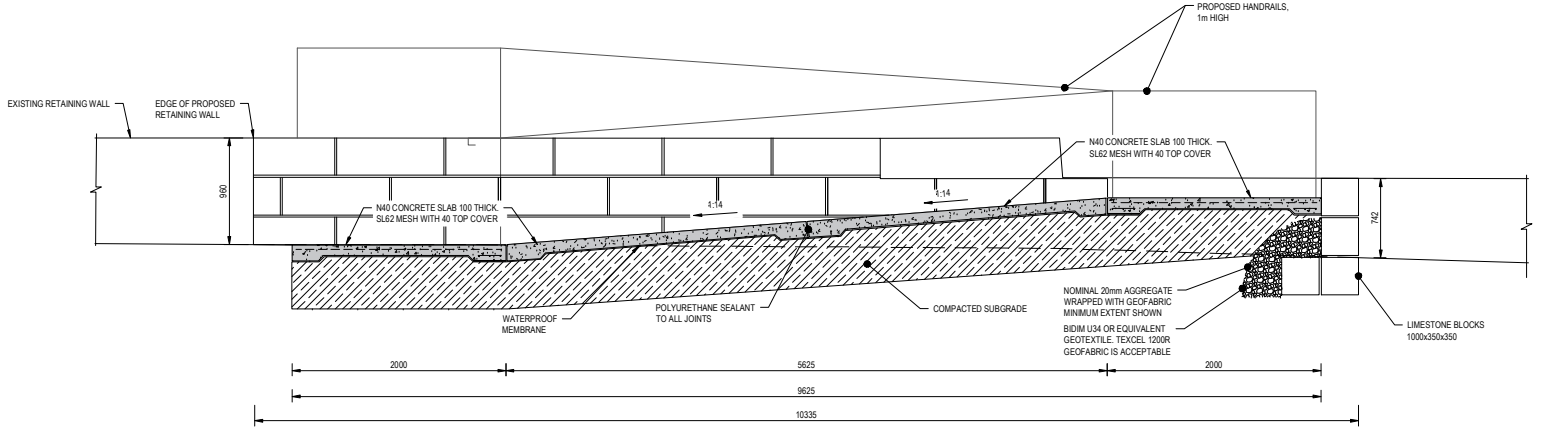
TYPICAL EDGE THICKENING

SCALE 1:10



A SECTION

SCALE 1 : 25



B SECTION

SCALE 1 : 25

FINAL DESIGN

No	Revision	Drawn	Job Manager	Project Director	Date
B	FINAL DESIGN - ISSUED FOR REVIEW	AS	EA	AK	14.12.20
A	ISSUED FOR CLIENT REVIEW	AS			04.11.20

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 100 200 300 400 500mm
SCALE 1:10 AT ORIGINAL SIZE
0 250 500 750 1000 1250mm
SCALE 1:25 AT ORIGINAL SIZE
0 500 1000 1500 2000 2500mm
SCALE 1:50 AT ORIGINAL SIZE

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

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Drawn	A. SUBBA	Designer	B. BARTON
Drafting Check	B. BARTON	Design Check	B. BARTON
Approved (Project Director)			
Date			
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client: SHIRE OF IRWIN
Project: MORETON TERRACE - DONGARA TOWN CENTRE UPGRADE
Title: RAMP AND RETAINING WALL LAYOUT & DETAILS

Original Size: A1
Drawing No: 12533215-S002
Rev: B

Plot Date: 14 December 2020 - 4:04 PM
Plotted by: Abhishek Subba
Cad File No: N:\AU\Perth\Projects\61\12533215\CADD\Drawings\Ramp and Retaining Wall\12533215-S002.dwg

FINAL

Client: Shire of Irwin
Project Title: Moreton Tce and Car Park Upgrade
BOQ - Final Design Stage - DRAFT
Revision: A
Date: 08/02/2021
Prepared: Steven Davies
Checked: Antoinette Krause

		ACTIVITY / DESCRIPTION	QTY	UOM	UNIT RATE	TOTAL
1		**PRELIMINARIES**				
	1.1	Project management, site management and administration, reviews and approvals. Health, safety and environment compliance, engineering supports and management.	1	Item		$0.00
						$0
2		**SITE ESTABLISHMENT/GENERAL**				
	2.1	Site establishment including mobilisation of plant and personnel	1	Item		$0.00
	2.2	Contractor's site facilities	1	Item		$0.00
	2.3	Water/electricity supply during construction (12 month period)	1	Item		$0.00
	2.4	Setting out survey and as con survey	1	Item		$0.00
	2.5	Geotechnical testing	1	Item		$0.00
	2.6	Traffic Management for standard work hours (12 months)	264	Days		$0.00
		SUB TOTAL				**$0**
3		**EARTHWORKS**				
	3.1	Clearing and grubbing/site preparation/removal of unwanted site furniture, including disposal	1	Item		$0.00
		SUB TOTAL				**$0**
4		**HOSKEN STREET AND CAR PARKS**				
	4.1	**Hosken Street and On-street Parking**				
	4.1.1	Removal of exisitng asphalt surfacing on Hosken Street	990	sq.m		$0.00
	4.1.2	Removal and disposal of kerbing	140	m		$0.00
	4.1.3	Trim, prepare and compact existing basecourse to 98% MMDD	950	sq.m		$0.00
	4.1.4	Boxing out and compation of subgrade level for new pavement areas	45	sq.m		
	4.1.5	Supply and install 200 mm basecourse and compact to 98% MMDD for new widened pavement	45	sq.m		$0.00
	4.1.6	Supply and lay asphalt corrector layer as directed on site by superintendent (assume 50% of surfacing area)	425	sq.m		$0.00
	4.1.7	Supply and install primer seal	1,075	sq.m		$0.00
	4.1.8	Supply and lay - 40mm thickness AC10 asphalt (black) - road	710	sq.m		$0.00
	4.1.9	Supply and lay - 40mm thickness AC7 asphalt (red) - on street parking	140	sq.m		$0.00
	4.1.10	Install semi-Mountable kerb (Type 1): 250mm wide kerb, 180mm long slope, face off vertical	140	m		$0.00
	4.1.11	Line marking (white 100mm wide) - on street parking	105	m		$0.00
	4.1.12	Drainage: Remove existing cover and install class D Wave Grate or approved equivalent	1	Item		$0.00
	4.1.13	Install concrete footpath(2.0m wide): Concrete paving N32 - 100mm thick (footpath) laid on 25mm sand base, compacted subgrade.	16	m		$0.00
	4.1.14	Install concrete infill areas: Concrete paving N32 - 100mm thick laid on 25mm sand base, compacted subgrade.	45	sq.m		$0.00
	4.1.15	Install concrete wheel stops	5	Item		$0.00
		SUB TOTAL - ITEM 4.1				**$0**
	4.2	**Town Park Car Park**				
	4.2.1	Removal of existing asphalt surfacing	975	sq.m		$0.00
	4.2.2	Removal and disposal of brick paving	4	sq.m		$0.00
	4.2.3	Removal and disposal of kerbing	65	m		$0.00
	4.2.4	Removal and disposal of exisitng tree	1	Item		$0.00
	4.2.5	Removal and disposal of existing car park pavement (405 sq.m) (area to be rehabilitated for grassing)	1	Item		$0.00
	4.2.6	Trim, prepare and compact existing basecourse to 98% MMDD	975	sq.m		$0.00
	4.2.7	Boxing out and compation of subgrade level for new pavement areas	85	sq.m		$0.00
	4.2.8	Supply and install 200 mm basecourse and compact to 98% MMDD for new widened pavement	85	sq.m		$0.00
	4.2.9	Supply and lay asphalt corrector layer as directed on site by superintendent (assume 50% of surfacing area)	503	sq.m		$0.00
	4.2.10	Supply and install primer seal	1,040	sq.m		$0.00
	4.2.11	Supply and lay 30 mm minimum thickness AC10 asphalt (black) – road way (access road from Moreton Terrace)	95	sq.m		$0.00
	4.2.12	Supply and lay 30 mm minimum thickness AC7 asphalt (red) – parking areas	910	sq.m		$0.00
	4.2.13	Install semi-mountable kerb (Type 1): 250mm wide kerb, 180mm long slope, face off vertical	65	m		$0.00
	4.2.14	Line marking (100mm width white) - car park	105	m		$0.00
	4.2.15	Line marking (100mm width yellow) - disabled bays	42	m		$0.00
	4.2.16	Line marking (150mm width yellow) - shared area	26	sq.m		$0.00
	4.2.17	Disabled parking bay pavement symbol	2	Item		$0.00
	4.2.18	Shared area bollard	2	Item		$0.00
	4.2.19	Relocation / adjustment of services	1	PS	$2,500.00	$2,500.00
	4.2.20	Supply and install new combination side entry pit with class D Wave Grate or approved equivalent	1	Item		$0.00
	4.2.21	Drainage: Connect new combination side entry pit to the exisitng pit in Hosken Street (31m DN300 RCP RRJ pipe length, 1 no. Pits and 1 no. Break in the Exisitng Pit reinstate concrete footpath and lawn)	1	Item		$0.00

		ACTIVITY / DESCRIPTION	QTY	UOM	UNIT RATE	TOTAL
	4.2.22	Backfill and import top soil (100mm min.) and grass the former parking area (370 sq.m)	1	Item		$0.00
	4.2.23	Miscellaneous (infill with cracker dust, signage, incidentals, finishing)	1	PS	$7,500.00	$7,500.00
		SUB TOTAL - ITEM 4.2				**$10,000**
	4.3	**Community Resources Centre Carpark**				
	4.3.1	Removal & disposal of exisitng tree	1	Item		$0.00
	4.3.2	Rework the exisitng basecourse, top up with gravel if required, trim, compact to 98% MMDD	600	sq.m		$0.00
	4.3.3	Boxing out and compation of subgrade level for new pavement areas (access to Hosken Street)	495	sq.m		$0.00
	4.3.4	Supply and install 200 mm basecourse and compact to 98% MMDD for new pavement (access to Hosken Street)	495	sq.m		$0.00
	4.3.5	Supply and install primer seal	1,100	sq.m		$0.00
	4.3.6	Supply and lay 30 mm minimum thickness AC10 asphalt (black) – road way	520	sq.m		$0.00
	4.3.7	Supply and lay 30 mm minimum thickness AC7 asphalt (red) – parking areas	455	sq.m		$0.00
	4.3.8	Install semi-mountable kerb (Type 1): 250mm wide kerb, 180mm long slope, face off vertical	220	m		$0.00
	4.3.9	Supply and install concrete wheel stops	11	Item		$0.00
	4.3.10	Line marking (100mm wide white) - car park	170	m		$0.00
	4.3.11	Line marking (100mm width yellow) - disabled bays	20	m		$0.00
	4.3.12	Line marking (150mm width yellow) - shared area	17	sq.m		$0.00
	4.3.13	Disabled parking bay pavement symbol	1	Item		$0.00
	4.3.14	Shared area bollard, adjacent to disabled parking bay	1	Item		$0.00
	4.3.15	Install new grated gully pits with class D Wave Grate of approved equivalent	5	Item		$0.00
	4.3.16	Connect new pit to the exisitng pit in Hosken Street (70m DN300 RCP RRJ pipe length, 5 no. Pits with grated gully and 1 no. break in the exisitng pit on Hosken Street)	1	Item		$0.00
	4.3.17	Supply and construct 1m wide brick paved footpath	150	sq.m		$0.00
	4.3.18	Miscellaneous (infill with cracker dust, signage, incidentals, finishing)	1	PS	$7,500.00	$7,500.00
		SUB TOTAL - ITEM 4.3				**$7,500**
		SUB TOTAL				**$17,500**
5		**DONGARA HOTEL PRECINCT - CAR PARKS UPGRADE**				
	5.1	Remove existing seal	2,300	sq.m		$0.00
	5.2	Removal and disposal of kerbing	260	m		$0.00
	5.3	Removal and disposal of existing car park pavement (200 sq.m) - proposed for landscaped areas	1	Item		$0.00
	5.4	Trim, prepare and compact existing basecourse to 98% MMDD (section in front of hotel)	970	sq.m		$0.00
	5.5	Removal and disposal of existing pavement and boxing out and compation of subgrade level for new pavement areas (985 sq.m) (section on side of hotel)	1	Item		$0.00
	5.6	Construct retaining wall	1	Item		$0.00
	5.7	Supply and install 200 mm basecourse and compact to 98% MMDD	985	sq.m		$0.00
	5.8	Supply and install primer seal	1,950	sq.m		$0.00
	5.9	Supply and lay 30 mm minimum thickness AC10 asphalt (black) – road way	1,115	sq.m		$0.00
	5.10	Supply and lay 30 mm minimum thickness AC7 asphalt (red) – parking areas	680	sq.m		$0.00
	5.11	Install semi-mountable kerb (Type 1): 250mm wide kerb, 180mm long slope, face off vertical	280	m		$0.00
	5.12	Install mountable kerb (Type M-1): 300mm wide flush kerb	30	m		$0.00
	5.13	Line marking (100mm wide white) - car park	215	m		$0.00
	5.14	Line marking (100mm width yellow) - disabled bays	31	m		$0.00
	5.15	Line marking (150mm width yellow) - shared area	20	sq.m		$0.00
	5.16	Disabled parking bay pavement symbol	1	Item		$0.00
	5.17	Shared area bollard, adjacent to disabled parking bay	1	Item		$0.00
	5.18	Supply and construct 2m wide brick paved footpath	210	sq.m		$0.00
	5.19	Supply and install pram ramps with tactiles	2	Item		$0.00
	5.20	Supply and install in line kerb ramp to AS1428.1	1	Item		$0.00
	5.21	Install concrete wheel stops	14	Item		$0.00
	5.22	Backfill and import top soil (100mm min.) to former parking area (up to 200 sq.m)	1	Item		$0.00
	5.23	Small traffic islands, signs, finishing, infill with cracker dust etc	1	PS	$10,000.00	$10,000.00
		SUB TOTAL				**$10,000**
6		**MORETON TERRACE UPGRADE**				
	6.1	**STAGE 1**				
	6.1.1	Remove existing seal and dispose off site	3,450	sq.m		$0.00
	6.1.2	Removal and disposal of existing grated gully	2	Item		$0.00
	6.1.3	Removal and disposal of existing side entry pit	1	Item		$0.00
	6.1.4	Removal and disposal of existing pavement for rain garden and landscaping (110 sq.m)	1	Item		$0.00
	6.1.5	Backfill and Import Top Soil (100mm min.) to rain garden and landscaping area (110 sq.m)	1	Item		$0.00
	6.1.6	Removal and disposal of existing pavement and boxing out and compation of subgrade level for new pavement areas (40 sq.m) (2x parking bays opposite CRC car park entrance)	1	Item		$0.00
	6.1.7	Supply and install 200 mm basecourse and compact to 98% MMDD (parking bays mentioned in 6.1.5)	40	sq.m		$0.00
	6.1.8	Trim, prepare and compact existing basecourse to 98% MMDD.	3,960	sq.m		$0.00
	6.1.9	Supply and lay asphalt corrector layer as directed by the superintendent (assume 50% of surfacing area)	1,420	sq.m		$0.00
	6.1.10	Supply and install primer seal for road	4,000	sq.m		$0.00
	6.1.11	Supply and lay - 40mm thickness AC10 asphalt (black) for road	2,330	sq.m		$0.00
	6.1.12	Supply and lay - 40mm thickness AC7 asphalt (red) for on-street parking and median	510	sq.m		$0.00
	6.1.13	Removal and disposal of brick paving	1,080	sq.m		$0.00

		ACTIVITY / DESCRIPTION	QTY	UOM	UNIT RATE	TOTAL
	6.1.14	Remove existing kerb and dispose off site	570	m		$0.00
	6.1.15	Removal and disposal of existing concrete footpath	60	sq.m		$0.00
	6.1.16	Install semi-mountable kerb (Type 1): 250mm wide kerb, face off vertical	735	m		$0.00
	6.1.17	Install mountable kerb (Type M-1): 300mm wide flush kerb	60	m		$0.00
	6.1.18	Supply and install roundabout linemarking and signage	1	Item		$0.00
	6.1.19	Line marking (120mm wide white) - median outline	430	m		$0.00
	6.1.20	Line marking (100mm wide white) - onstreet parking	155	m		$0.00
	6.1.21	Isolation and removal or existing light poles	8	Item		$0.00
	6.1.22	Removal and disposal of existing traffic, roundabout and median islands with concrete infill (including kerb)	170	sq.m		$0.00
	6.1.23	Remove speed hump and dispose off site	1	Item		$0.00
	6.1.24	Replace existing side entry pit cover and apron slab and dispose of old cover and apron	4	Item		$0.00
	6.1.25	Convert existing manhole to class D Wave Grate or approved equivalent and dispose of old cover	1	Item		$0.00
	6.1.26	Convert existing side entry pit to manhole with class D cover and dispose of side entry pit cover and apron	2	Item		$0.00
	6.1.27	Convert existing side entry pit to grated gully with class D Wave Grate or approved equivalent and dispose of side entry pit cover and apron	2	Item		$0.00
	6.1.28	Supply and construct 2m wide brick paved footpath and tie in to existing brick paved footpath, including edge restraints	1,585	sq.m		$0.00
	6.1.29	Supply and install pram ramps with tactiles	13	Item		$0.00
	6.1.30	Supply and install in-line kerb ramp to AS1428.1	1	Item		$0.00
	6.1.31	Install concrete footpath(2.0m wide): Concrete paving N32 - 100mm thick (footpath) laid on 25mm sand base, compacted subgrade.	65	m		$0.00
	6.1.32	Supply and construct brick paved cross-overs with flush kerbing	65	m		$0.00
	6.1.33	Remove existing boardwalk and dispose off site	1	Item		$0.00
	6.1.34	Relocate existing water meter, including liaison with Utility Authority	1	Item		$0.00
	6.1.35	Relocate existing power dome/pit, including liaison with Utility Authority	2	Item		$0.00
	6.1.36	Remove trees (3 no.) and dispose off site	3	Item		$0.00
	6.1.37	Replace existing non standard drainage structure with new side entry pit	1	Item		$0.00
	6.1.38	Supply and install new combination side entry pit with class D Wave Grate or approved equivalent	1	Item		$0.00
	6.1.39	Miscellaneous (infill with cracker dust or other fill material, handrails and any other miscellaneous items, finishing)	1	PS	$10,000.00	$10,000.00
		SUB TOTAL - ITEM 6.1				**$10,000**
	6.2	**STAGE 2**				
	6.2.1	Remove existing seal and dispose off site	2,820	sq.m		$0.00
	6.2.2	Remove existing kerb and dispose off site	330	m		$0.00
	6.2.3	Removal and disposal of brick paving	730	sq.m		$0.00
	6.2.4	Removal and disposal of concrete footpath	25	sq.m		$0.00
	6.2.5	Removal and disposal of asphalt footpath	85	sq.m		$0.00
	6.2.6	Boxing out and compaction of subgrade level for new pavement areas (at south side of roundabout)	30	sq.m		$0.00
	6.2.7	Supply and install 200 mm basecourse and compact to 98% MMDD for new widened pavement	30	sq.m		$0.00
	6.2.8	Trim, prepare and compact existing basecourse to 98% MMDD.	2,760	sq.m		$0.00
	6.2.9	Supply and lay asphalt corrector layer as directed by the superintendent (assume 50% of surfacing area)	1,230	sq.m		$0.00
	6.2.10	Supply and install primer seal for road	2,800	sq.m		$0.00
	6.2.11	Supply and lay - 40mm thickness AC10 asphalt (black) for road	2,120	sq.m		$0.00
	6.2.12	Supply and lay - 40mm thickness AC7 asphalt (red) for on-street parking and median	340	sq.m		$0.00
	6.2.13	Roundabout linemarking and signage	1	Item		$0.00
	6.2.14	Supply and install pedestrian crossing linemarking and signage	1	Item		$0.00
	6.2.15	Line marking (120mm wide white) - median outline	210	m		$0.00
	6.2.16	Line marking (100mm wide white) - on street parking	125	m		$0.00
	6.2.17	Line marking (100mm wide white) - Westpac parking	55	m		
	6.2.18	Isolation, removal and disposal of existing light poles	4	Item		$0.00
	6.2.19	Removal and disposal of existing traffic, roundabout and median islands with concrete infill, including kerbing	115	sq.m		$0.00
	6.2.20	Remove speed hump and dispose off site	1	Item		$0.00
	6.2.21	Supply and install kerb ramps	10	Item		$0.00
	6.2.22	Supply and construct brick paved cross-overs with flush kerbing	30	m		$0.00
	6.2.23	Supply and construct 2m wide brick paved footpath and tie in to existing brick paved footpath, including edge restraints	1,315	sq.m		$0.00
	6.2.24	Remove tree and dispose off site	1	Item		$0.00
	6.2.25	Drainage: Removal and disposal of existing cover and install Class D Wave Grate or approved equivalent	1	item		$0.00
	6.2.26	Install semi-mountable kerb (Type 1): 250mm wide kerb, face off vertical	515	m		$0.00
	6.2.27	Install mountable kerb (Type M-1): 300mm wide flush kerb	45	m		$0.00
	6.2.28	Miscellaneous (infill with cracker dust or other fill material, handrails and any other miscellaneous items, finishing)	1	PS	$7,500.00	$7,500.00
		SUB TOTAL - ITEM 6.2				**$7,500**
	6.3	**STAGE 3**				
	6.3.1	Remove existing seal and dispose off site	1,720	sq.m		$0.00
	6.3.2	Remove existing kerb and dispose off site	235	m		$0.00
	6.3.3	Removal and disposal of brick paving	125	sq.m		$0.00
	6.3.4	Removal and disposal of timber railing in road rerserve	15	m		$0.00
	6.3.5	Trim, prepare and compact existing basecourse to 98% MMDD.	1,730	sq.m		$0.00

		ACTIVITY / DESCRIPTION	QTY	UOM	UNIT RATE	TOTAL
	6.3.6	Boxing out and compaction of subgrade level for new pavement areas	210	sq.m		$0.00
	6.3.7	Supply and install 200 mm basecourse and compact to 98% MMDD for new widened pavement	210	sq.m		$0.00
	6.3.8	Supply and lay asphalt corrector layer as directed by the superintendent (assume 50% of surfacing area)	783	sq.m		$0.00
	6.3.9	Supply and install primer seal for road	1,940	sq.m		$0.00
	6.3.10	Install mountable kerb (Type M-1): 300mm wide flush kerb	35	m		$0.00
	6.3.11	Install semi-mountable kerb (Type 1): 250mm wide kerb, face off vertical	290	m		$0.00
	6.3.12	Supply and lay - 40mm thickness AC10 asphalt (black) for road	1,260	sq.m		$0.00
	6.3.13	Supply and lay - 40mm thickness AC7 asphalt (red) for on-street parking and median	305	sq.m		$0.00
	6.3.14	MRWA road reserve - Pavement markings and regulatory signs including any payment and coordinatIon with Main Roads WA	1	PS	$20,000.00	$20,000.00
	6.3.15	Relocate existing signs	2	Item		$0.00
	6.3.16	Supply and install Heavy Vehicles Must Turn Left ar Point Leander Drive sign	1	Item		$0.00
	6.3.17	Line Marking (120mm wide white) - median outline	290	m		$0.00
	6.3.18	Line Marking (100mm wide white) - on street bays	140	m		$0.00
	6.3.19	Isolation and removal or existing light poles	2	Item		$0.00
	6.3.20	Supply and install kerb ramps	3	Item		$0.00
	6.3.21	Supply and construct brick paved cross-overs with flush kerbing	30	m		$0.00
	6.3.22	Boxing out filling and compaction of subgrade level for new footpath sections (connection to medical car park and footpath to the new entry statement development)	1	PS		$0.00
	6.3.23	Supply and construct 2m wide brick paved footpath and tie in to existing brick paved footpath, including edge restraints	725	sq.m		$0.00
	6.3.24	Construct retaining wall and concrete ramp (medical centre car park tie in)	1	Item		$0.00
	6.3.25	Install concrete wheel stops to angle parking bays	5	Item		$0.00
	6.3.26	Supply and install boardwalk and handrail at Moreton Bay Fig Tree in the presence of an arborist (if approved by Shire of Irwin)	1	PS	$5,000.00	$5,000.00
	6.3.27	Miscellaneous (infill with cracker dust or other fill material, handrails and any other miscellaneous items, finishing)	1	PS	$7,500.00	$7,500.00
		SUB TOTAL - ITEM 6.3				**$32,500**
		SUB TOTAL				**$50,000**
7		**SITE CLEAN-UP AND DEMOBILISATION**				
	7.1	Site clean-up and demobilisation	1	Item		$0.00
		SUB TOTAL				**$0**
8		**PROVISIONAL ITEMS**				
	8.1					
	8.2					
		SUB TOTAL				**$0**
		TOTAL DIRECT COSTS (ex GST)			**$0**	**$77,500**
		TOTAL INDIRECT COSTS (ex GST)				
		TOTAL COSTS (ex GST)			**$0**	**$77,500**

5.1 Masterplan

LEGEND

- Proposed new shade trees
- Existing Trees
- Proposed garden beds
- Proposed seating
- Existing Internal Access Roads
- 1 Proposed memorial walls
- 2 Proposed lawn cemetery with headstones only
- 3 Existing car park
- 4 Existing footpath
- 5 Earth mounding and tree planting
- 6 Proposed plaque and memorial gardens
- 7 Proposed Children's memorial garden
- 8 Proposed Indigenous memorial garden and footpath
- 9 Retained exsisting memorial walls and gardens
- Perspective view

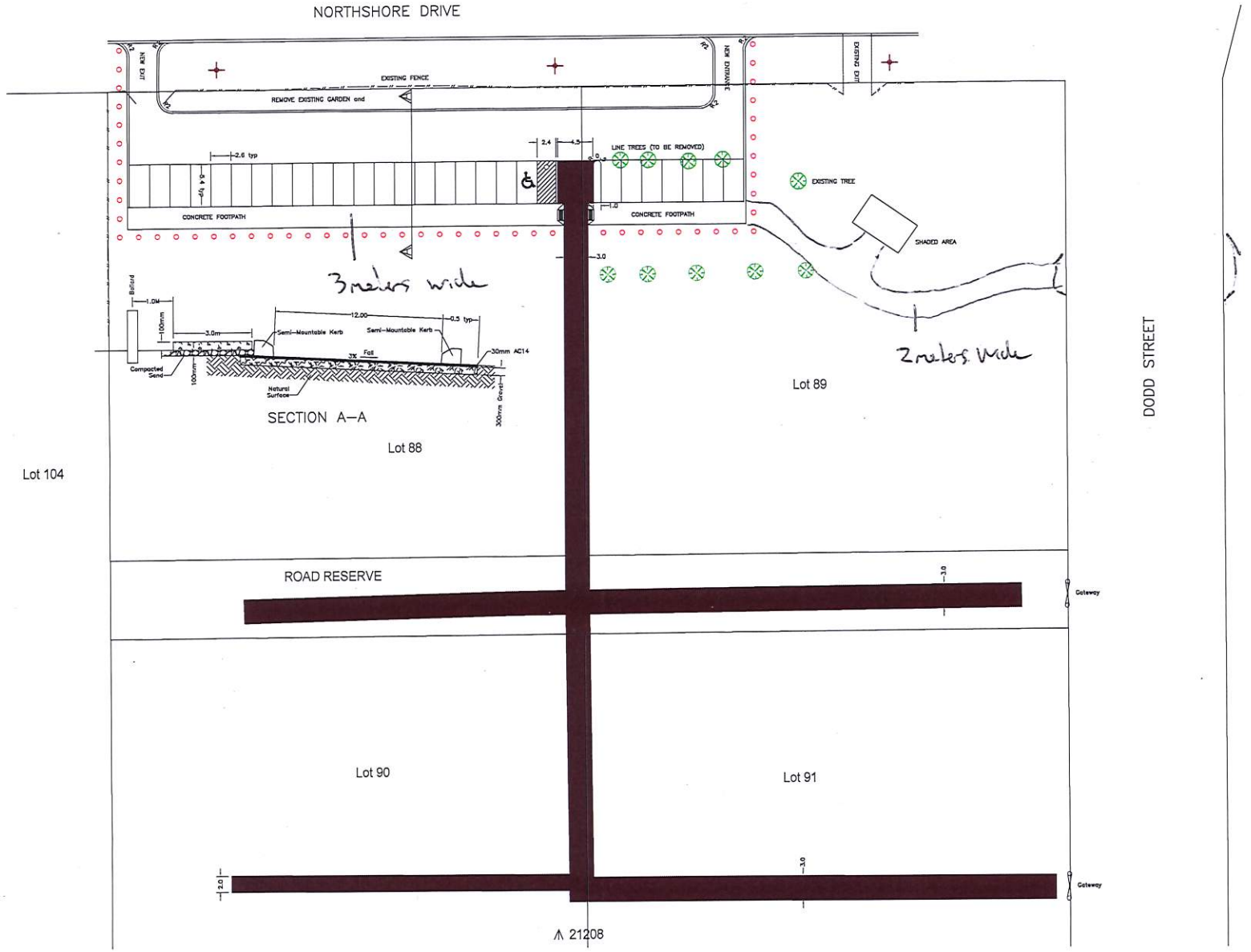


N

Cemetery Carpark and Walkway Upgrades

CODE	DESCRIPTION	QUAN.	UNIT	LABOUR	PLANT	MATERIAL	FACTOR	TOTAL RATE	ESTIMATE
5	DESIGN	3	%						
10	SURVEY (incl. material testing)	3	%						
15	TRAFFIC MANAGEMENT ASPHALT		%	$ 3,680.00		$ 1,550.00	4.0		
16	TRAFFIC MANAGEMENT LIGHTS		%	$ 2,750.00	$ 200.00	$ 1,550.00	4.0	$ 2,950.00	
18	MOBILISATION/DEMOBILISATION		HOUR	$ 30.00			1.0	$ 30.00	$ -
19	ACCOMMODATION		ITEM			$ 465.00	16.0	$ 7,440.00	
20	CLEARING		ITEM						
25	EARTHWORKS(cut to spoil)		m³	$ 10.00	$ 10.00		2.0	$ 40.00	$ -
26	EARTHWORKS(cut to fill)	250	m³	$ 6.00	$ 6.00		1.0	$ 12.00	$ 3,000.00
27	EARTHWORKS-FILL(supply&cart)		m³	$ 3.75	$ 3.25	$ 2.00	1.0	$ 9.00	$ -
28	EARTHWORKS-FILL(sprd&cmpct)		m³	$ 4.00	$ 3.00		1.0	$ 7.00	$ -
30	FORMATION PREPARATION		m2	$ 2.50	$ 1.50		1.0	$ 4.00	$ -
33	SUB-BASE (supply)		m3			$ 10.00	1.0	$ 10.00	$ -
34	SUB-BASE(cart - Shire)		m3	$ 2.00	$ 2.00		1.0	$ 4.00	$ -
35	SUB-BASE(cart - Contract)		m3	$ 3.00	$ 3.00		1.0	$ 6.00	$ -
38	SUB-BASE(spread & compact)		m3	$ 10.00	$ 10.00		1.0	$ 20.00	$ -
40	GRAVEL(supply)	870	m³	See Sheet2			1.0	$ 10.00	$ 8,700.00
42	GRAVEL (cart - Shire)		m³	$ 2.00	$ 2.00		1.0	$ 4.00	$ -
43	GRAVEL (cart - Contract)	870	m3	$ 3.00	$ 3.00		1.0	$ 6.00	$ 5,220.00
44	GRAVEL(spread & compact)	870	m3	$ 8.00	$ 8.00		1.0	$ 16.00	$ 13,920.00
50	GRAVEL(waterbind)	2314	m²	$ 1.00	$ 1.00		1.0	$ 2.00	$ 4,628.00
55	PRIMERSEAL(7mm agg.)		m²	$ 0.30	$ 0.20	$ 1.50	1.0	$ 2.00	$ -
60	SEAL(10/14mm agg.)		m²	$ 0.30	$ 0.20	$ 2.00	1.0	$ 2.50	$ -
61	PROFILING		m²		$ 16.00		1.0	$ 16.00	$ -
64	ASPHALT CORRECTOR		tonne			$ 388.68	1.0	$ 388.68	$ -
65	ASPHALT (BLACK)	1114	m²	$ 13.55		$ 13.55	1.0	$ 27.10	$ 30,189.40
66	ASPHALT (RED)	900	m²	$ 16.50		$ 16.50	1.0	$ 33.00	$ 29,700.00
67	~~ASPHALT BLACK R/A/BOUT~~		m²	$ 14.50		$ 14.50	1.0	$ 29.00	$ -
69	LINEMARKING		m				1.0	$ 1.00	$ 4,000.00
70	KERB(inc. prep. and backfill)	213	m	$ 4.00	$ 4.00	$ 13.50	1.0	$ 61.67	$ 13,135.71
71	KERB REMOVAL		No				2,500.0	$ -	$ -
72	FOOTPATH REMOVAL		m²	$ 12.00			1.0	$ -	$ -
73	CONCRETE HAUNCHING		m	$ 20.00			1.0	$ 20.00	$ -
74	ISLAND INFILL(brick)		m²	$ 30.00	$ 12.00	$ 44.50	3.0	$ 259.50	$ -
75	FOOTPATH(Brickpaved)		m²	$ 30.00	$ 12.00	$ 44.50	1.0	$ 86.50	$ -
76	FOOTPATH(Concrete)	75	m²	$ 30.00	$ 12.00	$ 44.50	1.0	$ 86.50	$ 6,487.50
79	CROSSOVER(Asphalt)		m2	$ 8.00	$ 9.00	$ 20.00	1.0	$ 37.00	$ -
80	CROSSOVER(Concrete)		m3	$ 8.00	$ 9.00	$ 20.00	1.0	$ 37.00	$ -
81	CROSSOVER(Seal incl.pipes)		m²	$ 12.00	$ 9.00	$ 26.00	1.0	$ 47.00	$ -
86	PRAM RAMP		No				1.0	$ 1,800.00	$ -
89	BOLLARDS	54	No						
90	GUIDE POSTS		No				1.0	$ 25.00	$ -
91	GUARDRAIL		m	$ 30.00	$ 25.00	$ 70.00	1.0	$ 125.00	$ -
95	SIGNS		No	$ 45.00	$ 25.00	$ 80.00	1.0	$ 150.00	$ -
98	FENCING(post & wire)		m				1.0	$ 40.00	$ -
99	LIGHTING		No.			$ 19,575.00	1.0	$ 19,575.00	$ -
SERVICES									
100	TELSTRA		ITEM				1.0	$ -	$ -
101	WATER CORP. WATER		ITEM				1.0	$ -	$ -
102	WATER CORP. SEWER		ITEM				1.0	$ -	$ -
103	WESTRN POWER		ITEM				1.0	$ -	$ -
DRAINAGE(includes: supply,delivery,excavate,lay & backfill)									
203	300mm dia (RRJ Conc.)		m	$ 20.00	$ 20.00	$ 60.00	1.0	$ 100.00	$ -
205	375mm dia (RRJ Conc.)		m	$ 20.00	$ 29.00	$ 28.00	1.0	$ 77.00	$ -
207	450mm dia (RRJ Conc.)		m	$ 25.00	$ 45.00	$ 42.00	1.0	$ 112.00	$ -
209	525mm dia (RRJ Conc.)		m	$ 32.00	$ 56.00	$ 50.00	1.0	$ 138.00	$ -
211	600mm dia (RRJ Conc.)		m	$ 43.00	$ 66.00	$ 60.00	1.0	$ 169.00	$ -
213	750mm dia (RRJ Conc.)		m	$ 68.00	$ 100.00	$ 90.00	1.0	$ 258.00	$ -
215	900mm dia (RRJ Conc.)		m	$ 100.00	$ 150.00	$ 130.00	1.0	$ 380.00	$ -
219	90/100 PVC		m	$ 5.00	$ 5.00	$ 5.00	1.0	$ 15.00	$ -
220	SUBSOIL		m	$ 12.00	$ 14.00	$ 10.00	1.0	$ 36.00	$ -
221	BOX CULVERTS		ITEM				1.0	$ -	$ -
250	MANHOLE COMPLETE		No	$ 2,656.00		$ 1,300.00	1.0	$ 3,956.00	$ -
260	GRATED GULLY COMPLETE		No	$ 2,656.00		$ 750.00	1.0	$ 3,406.00	$ -
261	SIDE ENTRY GULLY COMPLETE		No	$ 2,656.00		$ 952.00	1.0	$ 3,608.00	$ -
262	ADJUST MANHOLE/GULLY		No	$ 180.00	$ 260.00	$ 70.00	1.0	$ 510.00	$ -
270	HEADWALLS		No	$ 100.00	$ 80.00	$ 180.00	1.0	$ 360.00	$ -
276	SOAKWELLS		No	$ 180.00	$ 260.00	$ 320.00	1.0	$ 760.00	$ -
GENERAL									
310	OTHER		ITEM				1.0	$ -	$ -
SUB TOTAL									$ 118,980.61
399	**CONTINGENCIES(5%)**								$ 5,949.03
TOTAL									$ 124,929.64

5/05/2020



LEGEND:

- NEW BOLLARD
- NEW PRAM RAMP
- NEW ASPHALT WALKWAY

NOTES:

ROAD	MRWA CODE
REFERENCE DRAWINGS / DOCUMENTS	

NO.	DATE	REVISION	BY	CHKD	APPR	DATE
0		ISSUED FOR COMMENT	JC			19/3/20

C.A.D.D. File Nos.

CAD FILES	DESIGN FILES
S:\SURVEY WORKS MORETON TCE\ 10047.dwg	S:\SURVEY WORKS\ MORETON TCE\ New Kerbline
SURVEYED BY: J CLIFFORD	H DATUM: JURIEN COASTAL
DATE SEPT 2019	V DATUM: AHD 71

NOT TO BE USED FOR CONSTRUCTION UNTIL SIGNED APPROVED.

APPROVED .....

POSITION .....

DATE .....

DESIGNER TO COMPLETE		DATE
DESIGNED	J CLIFFORD	19/03/20
DRAWN	J CLIFFORD	19/03/20
DRAFT CHECK		
DESIGN CHECK		

TECHNICAL SERVICES DIRECTORATE

JOB NO. ????

SHIRE OF IRWIN
DONGARA-PORT DENISON
A BRILLIANT BLEND

PLAN SHOWING KERB, PARKING and FOOTPATH UPGRADE on RESERVE 21208 (DONGARA CEMETERY)

SCALE:		DWG NO.	REV NO.
1:250	A1	10004	0

RFQ EVALUATION MATRIX

Title of RFQ:	**VP232405 Moreton Terrace Asphalt Works**

SELECTION CRITERIA

			COMPLIANCE CRITERIA					QUALITATIVE CRITERIA									
			NON-WEIGHTED					A. Experience		B. Resources		C. Demonstrated Understanding		D. Price			
			Item a	Item b	Item c	Item d	Item e	10%		30%		10%		50%			
	Tenderer	Quoted Lump sum price (inc. GST)	Y/N	Y/N	Y/N	Y/N	Y/N	Score 0-5	Weighted Score	Score 0-5	Weighted Score	Score 0-5	Weighted Score	Score 0-5	Weighted Score	TOTAL weighted score	RANKING
A	[redacted]		[redacted]													N/A	**N/A**
B	[redacted]															N/A	**N/A**
C	[redacted]		Y	Y	Y	Y	Y									94.00	**1**

ATTACHMENT: 9.2.1

Local Emergency Management Committee

Attachment 1
Minutes of the Local Emergency Management Committee (LEMC) Meeting held
Wednesday, 2 December 2020

I certify that this copy of the Minutes is a true and correct record of the meeting held on
02 December 2020

Signed:……...
Mark Teale – Chairperson

Date:……..

Shire of Irwin Local Emergency Management Committee (LEMC) Meeting

to be held in the Council Chambers

Wednesday, 2 December 2020

at 2.00pm

Minutes

1 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

2 RECORD OF ATTENDANCE/APOLOGIES/LEAVE OF ABSENCE

(please sign the attendance register on arrival)

Members

Cr M T Smith	Shire of Irwin President & Presiding Member
Mr G Crabb	Chief Bush Fire Control Officer
B Cassidy	Officer in Charge Dongara Police
J Gardener	DFES District Emergency Management Advisor
Mr K Shaw	Department of Communities
Mr T Keeping	DFES Area Officer Midlands

Staff

Mr S Ivers	Chief Executive Officer
Mr M Teale	Community Emergency Services Manager
Mrs N A M'Leane	Development & Executive Officer

Apologies

Cr G S Eva	Shire of Irwin Councillor
Cr H Wells	Shire of Irwin Councillor
J Henriques	Parks and Wildlife Service
C McCartney	Paramedic, St Johns Ambulance
J Calver	Dongara District High School
T Pavelka	DEMHS
P Herbert	Main Roads WA

3 BUSINESS ARISING

3.1

COMMITTEE DECISION 011120:	
MOVED: B Cassidy	**SECONDED: S Ivers**
That the Minutes of the 1 September 2020 LEMC Meeting, as previously circulated, be adopted as true and accurate recording of that meeting.	

3.2 Action Item - Hydrant letter of support from DFES – Leaving it until further notice
A letter was received following a recent structure fire identifying that there were no hydrants in the area of the incident. The Shire of Irwin wrote a letter of support on the request of DFES Area Officer Midlands. DFES have forwarded a request to Water Corp**.** Remain as Action Item for Mark Teale to follow up.
Action Item – Mark Teale

The Shire of Irwin wrote a letter of support on the request of DFES Area Officer Midlands. DFES have forwarded a request to Water Corp.

4 ANNOUNCEMENTS BY PERSON PRESIDING

Nil.

5 DECLARATIONS OF INTEREST

Identify real, perceived or potential conflicts of interest experienced by any member in relation to the items on the agenda. These should be declared now and if possible raised with the chairperson prior to the meeting to determine the appropriate way to manage the conflict.

Nil.

6 CORRESPONDENCE IN

6.1 COVID-19 Welfare Centre Guidelines
Requests for copies of this document can be directed to Mark Teale.
6.2 Midwest Gascoyne DEMC – Unconfirmed Minutes 14/10/20
6.3 NBN Co Newsletter – Emergency Prep 20/11/20
6.4 2020-21 NDRP Grant Round Open
6.5 DEMA – Contact details update request
6.6 Guidance Note: Pandemic recovery planning

7 CORRESPONDENCE OUT

7.1 Irwin LEMC Minutes 1 September 2020 sent to DEMA

8 GENERAL BUSINESS

8.1 Upcoming Community Events
Australia Day – no action required
Easter – to be discussed at the next Irwin LEMC Meeting
8.2 Amendments to LEMA/Contact Details
Please provide updated contact details as required to M Teale.
Copies of the document were available at the meeting, it was noted by M Teale to members that the list is not for circulation outside of the committee.
8.3 Agency Updates
J Gardener

- Meeting with CESM's in March to coordinate exercises
- Discussions happening around combining LEMC meetings with other committees that share a geographical relationship
- State level agency involvement with LECM's to encourage engagement pre- and post-season
- Government approach to COVID-19 recovery, OASG & WACHS still meeting

K Shaw

- Discuss items around evacuation centers and department guidelines
- Rec Centre identified as an evacuation centre for Irwin
    - 1-person x 4sqm (sleeping)
    - Recent inspection identified rooms suitable as a last resort for evacuees with COVID-19, high risk or in isolation
    - PPE stocks identified as an action items, gloves, masks for staff and evacuees
      Action Item – Mark Teale
- DDHS identifies as a potentially suitable location for a second evacuation centre
    - Advantages include being located North of the Irwin River
    - Large and enclosed space being the "under cover area"
    - Action Item - Further investigation into this option including, access during school holidays (keys & alarms) and PPE stocks
      Action Item – Mark Teale

B Cassidy

- Been providing resources to boarders, and officers deployed up North
- Continuing home checks of people isolating, there are some exemptions currently for truck drivers
- South Australia boarder causing some issues
- Few minor vehicle accidents and 1 boating incident recently
- Officers discussed procedures for incidents involving trucks carrying hazardous materials
- Requested a dedicated LEMC exercise be coordinated, Mark Teale noted this as an action item
  Action Item – Mark Teale

G Crabb

- Few small fires in recent period
- Working to build the relationship between the Irwin and Town Brigades, initial efforts are showing to be successful with approximately 40 attendees at a recent barbeque
- Training nights to be shares between Irwin and Town locations
- Recent training course attracted 6 Shire of Irwin employees and 4 Grange employees
- John Moss – Irwin Captain
- New Fire Control Officers
    - Steve Johns
    - Hugh Campbell
- Raised concern around the vegetation around the Irwin River and the catastrophic event that could unfold should a fire get in there
    - Shire President acknowledged the concerns raised by G Crabb
    - Shire CEO, S Ivers provided comments around the Shire's plans for the Irwin River including;
        - Working with a consultant to reduce fuel load
        - Potential breaks
        - Utilising Mitigation Activity Fund and Bushfire Plan

- Utilising MEEDAC for assistance clearing out pest species and fuel load
- Identified a "burn off" would not be suitable, requires mulching and hands-on work

T Keeping

- Working with local brigades on preparedness, communication focus and familiarisation training
- Bush Fire Pre-Planning App – media releases
- Discussion around community knowledge of evacuation centre locations
- Take advantage of mitigation grants next year for proposed works at the Irwin River and communicate/build relationships with residents on the North side of the Irwin River

S Ivers

- Raised the implementation of contact tracing app SafeWA on Saturday, 5 December 11, 2020
- Raised that the new WHS Legislation will impact volunteers in a significant way, the legislation has provision for large fines and imprisonment, huge level of liability for the Shire of Irwin. More investigation into the legislation to gain a better understanding is required. WHS Legislation impacts on volunteers noted as an action item.
  Action Item – Mark Teale

M Teale

- Will be focusing efforts on the review of Bushfire Mitigation within Shire following the fire season.
- Note that there is a number of mining operations within the Shire. Have met with a gas plant recently and also staff from another potential project in the planning stages.
- Will be looking at AWARE funding opportunities in the future for Local Recovery Coordinator training and evacuation centre training/exercise.
- Currently looking at an application for Community Water Supply Grants for emergency water supply tanks.
- Shire currently working on DRAFWA claim for previous storm event.
- Will be conducting a walkthrough of the evacuation centre in near future.

8.4 COVID-19 Discussion

Members discussed the implementation of the Department of Health SafeWA App involving QR Codes and contact tracing for volunteer facilities, and other facilities that may be affected implementation date is Saturday, 5 November 2020.
J Gardener advised members that Officer training through WACHS is still available and information about this will be included in an upcoming WALGA Newsletter. Contact J Gardener for information regarding the training.

Members discussed the distribution of as newsletter in regard to COVID-19, as a reminder not to become complacent.

8.5 LEMC Membership Changes

M Teale discussed the changes to the LEMC membership. As discussed with other members the membership list has been reviewed and reduced. Heads of departments are invited to represent their department, this decision made in aim to ensure the meetings are purposeful and items can be discussed at a strategic level rather than operational. Members from within Departments can be invited as special guests to meetings as required.

9 URGENT BUSINESS ARISING

Nil.

10 SETTING OF FUTURE MEETING DATES

Future meeting dates will be determined at a later date. Direction from DFES is for Shires aim to combine 2 meetings per year with nearby Local Governments.

11 CLOSURE

There being no further business, the Presiding Member declared the meeting closed at 3.19pm.

ATTACHMENT: 9.2.2

Audit Committee

Attachment 1
Minutes of the Audit Committee Meeting held Wednesday, 17 March 2021

Shire of Irwin Audit Committee Meeting

to be held in the Council Chambers

Tuesday 16 March 2021

at 4.00pm

Minutes

1. DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

2. RECORD OF ATTENDANCE/APOLOGIES/LEAVE OF ABSENCE

Members

Cr M T Smith	Shire of Irwin
Cr I F West	Shire of Irwin
Cr M Leonard *(via teleconference)*	Shire of Irwin
Cr B Wyse	Shire of Irwin

Staff

Mr S D Ivers	Chief Executive Officer
Mrs D K Chandler	A/Manager Corporate & Community
Miss N A M'Leane	Development & Executive Officer

Apologies

Guests

3. CONFIRMATION OF MINUTES

3.1. Minutes of the Audit Committee Meeting held Tuesday 11 February 2020

A copy of the minutes of the Audit Committee Meeting held 11 February 2020 have been provided to all Committee Members under separate cover.

COMMITTEE MOTION	
MOVED: Cr Smith	**SECONDED: Cr Wyse**
That the Minutes of the Audit Committee Meeting, held 11 February 2020, be confirmed as a true and accurate recording of that meeting.	
VOTING DETAILS:	**Carried 4/0**

4. NEW BUSINESS ITEMS

4.1. Compliance Audit Return (CAR) 2020

Members of the Audit Committee have been provided with the complete Compliance Audit Return (CAR) for the 2020 calendar year (Attachment 4.1). Local governments are required by legislation to complete the statutory compliance return annually and have the return adopted by Council.

The return is a checklist of a local government's compliance with the requirements of the Act and its Regulations, concentrating on areas of compliance considered "high risk".

The Audit Committee is to review the annual CAR and report to Council the results of that review, prior to adoption of the return by Council. After adoption the return is to be signed by the Shire President and the CEO prior to it being forwarded to the Department of Local Government, Sport and Cultural Industries (DLGSCI). A report will be prepared for Council's consideration at the 23 February 2021 Ordinary Council Meeting.

The following provides an outline of each section addressed in the 2020 return:

Commercial Enterprises by Local Governments
The acquisition of the Dongara Medical Centre in 2020 was considered a major land transaction that was not exempt, therefore a business plan was prepared in accordance with s3.59(2)(b) of the *Local Government Act* and Regulations 7, 8 and 10 of the *Local Government (Functions and General) Regulations 1996.* Compliance with public notice requirements and proceeding by absolute majority has all been met in accordance with s3.59(4)(5).

Delegation of Power / Duty
An investigation was undertaken to ensure that the Shire is meeting statutory obligations regarding Delegated Authority. N/A response has been provided for questions relating to delegation of powers to Committees as there have been no delegations of this type. Regarding delegations from Council to CEO and CEO to staff, processes around administering and recording these delegations are sound, particularly with the in-depth review of Council to CEO delegations and adoption of the new register at the 28 July 2020 Ordinary Council Meeting.

Disclosure of Interest
Recordkeeping practices for Disclosures of Interest are sound and staff have a number of practices/procedures in place to ensure compliance in this area.

All annual returns were lodged by the 31 August as per Section 5.76 of the *Local Government Act 1995*, however a primary return was not lodged by an employee within three months of their start date. This was reported to the DLGSCI with a response advising that the Department has considered the matter and determined that in this case no further action will be taken. However, the employee should be reminded of their obligations under the Act to submit all future annual returns by the due date. The Department also advised that the matter has been recorded in their case management system should a similar matter arise in the future. To fulfill obligations by the CEO, the matter was also reported to the Crime and Corruption Commission with notification of the outcome advising that no further action will be taken.

It was also reported in the Compliance Audit Return that the Codes of Conduct were reviewed, and new Codes of Conduct adopted at the 20 August 2020 Ordinary Council Meeting in accordance with Regulations 34B and 34C of the *Local Government (Administration) Regulations 1996*.

Disposal of Property
The Shire disposed of a number of vehicles, furniture, equipment & property during 2020 by public auction and other means. Therefore, the Shire is considered to be compliant in all areas relating to disposal of property.

Elections
N/A response was provided for this section as there were no disclosures of electoral gifts received by the CEO during the reporting period.

Finance
This section relates to the Audit & Risk Committee and its duties. For the reporting period the Shire is considered to be compliant in all areas. The Shire is required to report on actions taken

to address significant adverse trends identified in the 2019/20 audit within 3 months of receiving the audit report. The auditor's report was received 4 February. A Performance Audit Report addressing significant adverse trends will be presented to the Audit Committee in late March / early April 2021.

Integrated Planning and Reporting
This section seeks input about Integrated Planning and Reporting and Regulation 17 of the Government (Audit) Regulations 1996. Council have adopted a recent Strategic Community Plan, Long Term Financial Plan and Corporate Business Plan. It has been identified previous to completion of the CAR, that a revised Asset Management Plan and Workforce Plan all need to be developed and adopted. These will be done after an early review of the Strategic Community Plan in 2021.

Local Government Employees
This section relates to the recruitment of the Chief Executive Officer (CEO) or designated senior employees. All responses are N/A as there were no appointments of the CEO or senior employees.

Official Conduct
The Shire of Irwin has not received any Complaints relating to official conduct of Council members resulting in an action under s5.110(6)(b) or (c) during 2020.

Optional Questions
All optional questions were answered in the return with the Shire considered compliant in all areas, including adoption of council policy CP45 Attendance at Events in accordance with s5.90A(2) and council policy CP44 Councillor Training and Continuing Professional Development in accordance with s5.128(1).

Tenders for Providing Goods and Services
The Shire is considered to be compliant in all areas of this section.

The Compliance Audit Return is due for submission to the DLGSCI by 31 March 2021.

COMMITTEE MOTION	
MOVED: Cr Leonard	**SECONDED: Cr Smith**
That the Shire of Irwin Audit & Risk Committee supports the information provided in the 2020 Compliance Audit Return (CAR) provided as Attachment 4.1	
VOTING DETAILS:	**Carried 4/0**

4.2. 2019/20 Annual Financial Statements and Independent Audit Report

Moore Australia, on behalf of the Office of the Auditor General, has completed the audit of the 2019/20 Annual Financial Statements.

Findings identified during the final audit:

Review of asset residual values and useful lives
The Shire has not documented an assessment of its property, plant and equipment and infrastructure asset useful lives and residual values for the current reporting period. This is considered a **moderate** rating implication. As a requirement of *AASB 116 Property, Plant and Equipment,* this assessment is intended to review the current condition of Shire assets, the remaining useful lives of existing assets and any residual values assigned to the Shire's assets.

Failure to perform this assessment may result in potential impairment factors occurring undetected or existing useful lives and residual values do not reflect current market conditions or replacement cost for the Shire's assets. This could lead to accounting misstatements in the financial statements.

The Shire will perform an assessment of its property, plant and equipment and infrastructure assets including assessing the current condition of the Shire's assets, the asset useful lives and depreciation rates, and any residual values applied to relevant assets in preparation for the financial report. Where changes to asset useful lives and residual values are required, the Shire will assess the implications and adjust the asset and depreciation account balances accordingly.

Report on Other Legal and Regulatory Requirements

"In accordance with the Local Government (Audit) Regulations 1996 I report that:

(i) In my opinion, the following material matters indicate significant adverse trends in the financial position of the Shire:

a. The Current Ratio as reported in Note 34 of the annual financial report has been below the Department of Local Government, Sport and Cultural Industries' standard for the past three financial years.

b. The Asset Sustainability Ratio as reported in Note 34 of the annual financial report has been below the Department of Local Government, Sport and Cultural Industries' standard for the past three financial years.

c. The Operating Surplus Ratio as reported in Note 34 of the annual financial report has been below the Department of Local Government, Sport and Cultural Industries' standard for the past three financial years.

(ii) All required information and explanations were obtained by me.

(iii) All audit procedures were satisfactorily completed.

(iv) In my opinion, the Asset Consumption Ratio and the Asset Renewal Funding Ratio included in the annual financial report were supported by verifiable information and reasonable assumptions.

In accordance with section 7.12A(4), a report on the 2019/20 Performance Audit is being prepared for the Minister addressing the three significant adverse trends in the Shire's Current, Asset Sustainability and Operating Surplus Ratios. Once reviewed by the Audit & Risk Committee, the report will be presented to Council for adoption at the 27 April 2021 Ordinary Council Meeting. The report will then be submitted to the Minister within 3 months of receiving the audit report and will be published on the Shire of Irwin website.

COMMITTEE MOTION	
MOVED: Cr Wyse	**SECONDED: Cr Smith**
That the Shire of Irwin Audit & Risk Committee receives the information provided in the 2019/20 Annual Financial Statement and Independent Audit Report, provided as Attachment 4.2.	
VOTING DETAILS:	**Carried 4/0**

5. GENERAL BUSINESS

5.1 Cr West raised the topic of the Audit Committee being more involved and supporting the CEO with internal structures, policy development etc. this is to be discussed further at a future meeting.

6. URGENT BUSINESS APPROVED BY CHAIR OR BY COMMITTEE DECISION

7. SETTING OF FUTURE MEETING DATES

The next meeting will be held April 2021, the purpose of this meeting is for the Audit Committee to receive a report on the 2019/20 Performance Audit addressing the three significant adverse trends in the Shire's Current Asset Sustainability and Operating Surplus to be prepared for the Minister and presented at the April Ordinary Council Meeting.

Date to be confirmed.

8. CLOSURE

There being no further business, the meeting was declared closed at 4.38pm.