

Map by: DMcP P:\GIS\Projects\253963\_NT\_Town\_Camps\253963\_003\_Roads\_DDP2.mxd 11/02/2017 17:17 Imagery: copyright DigitalGlobe WV 2

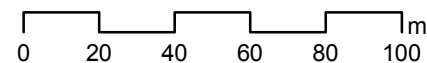


**Legend**

- Start of road
- Road\_Condition**
- 1-Very poor
- 2-Poor
- 3-Good
- 4-Very good
- 5-Excellent
- Town Camp boundary



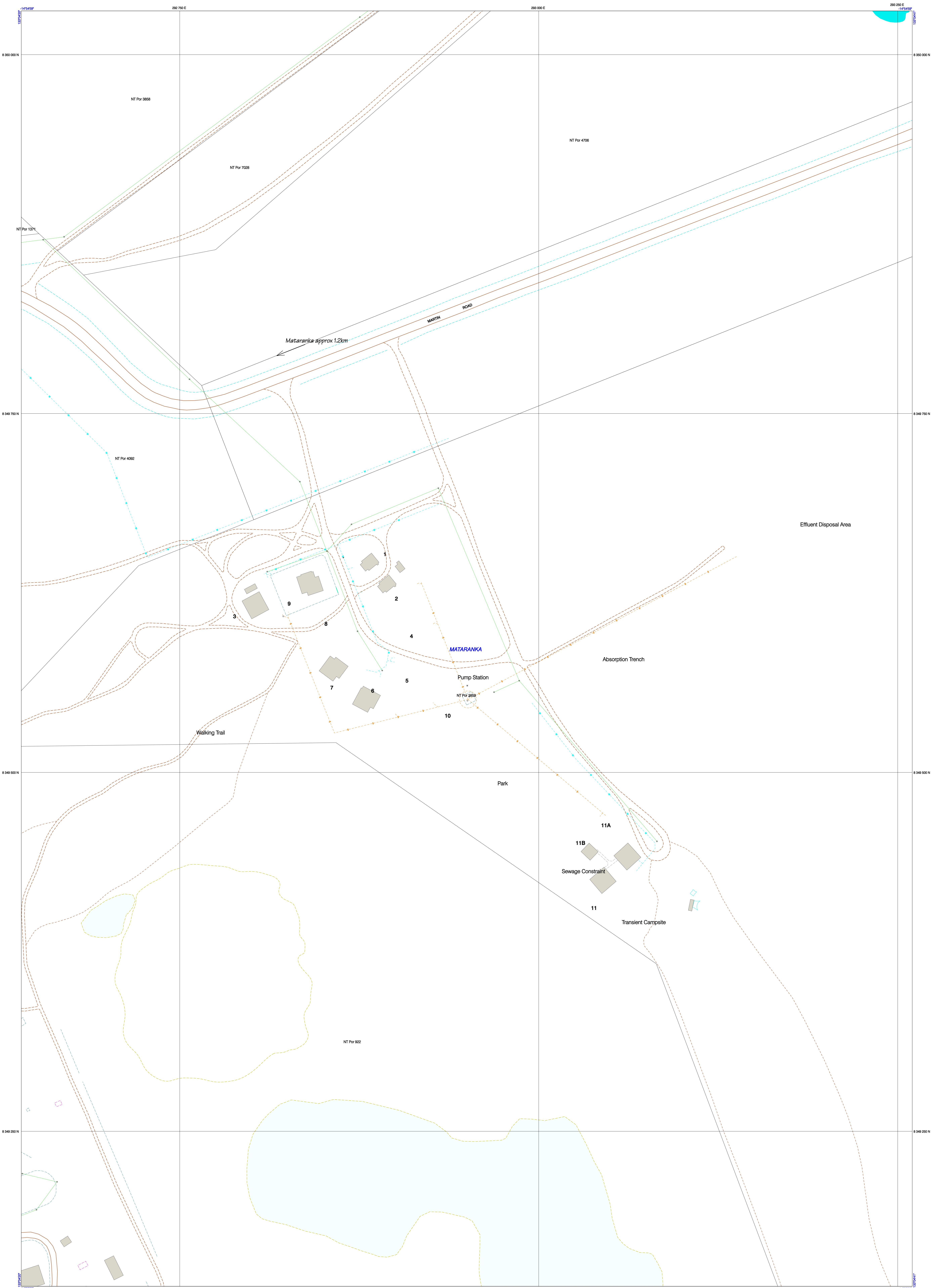
A3 scale: 1:2,000



Date: 11/02/2017 Version: 1  
Coordinate system: GDA 1994

### NT Town Camp Road Assessments 971 - Mulggan (Mataranka)

# Existing drawings



**LEGEND**

<b>LAND USE PLANNING</b>	<b>CADASTRE</b>	<b>TOPOGRAPHY</b>
APPROX POSITION OF BUILDING	Current 123	Road, Borehole, Dam, Culvert
GENERAL EXCLUSION BUFFERS	Proposed 123	Wall, Gate, Fence, Cattle Grid
CULTURAL EXCLUSION AREAS	LOCALITY	Railway, Elevated Railway
UNDEVELOPED AREAS	LOCALITY	Aerodrome/Terminal, Landing Strip
UNDEVELOPED AREAS	LOCALITY	Telnet, Aerial
UNDEVELOPED AREAS	LOCALITY	Pipeline: Oil, Water, Undetermined Gas, Sewage
UNDEVELOPED AREAS	LOCALITY	Building, Building-Shape unconfirmed
UNDEVELOPED AREAS	LOCALITY	Shade Structure, Incomplete Building
UNDEVELOPED AREAS	LOCALITY	Sewage Ponds, Tailings Pond
UNDEVELOPED AREAS	LOCALITY	Oval, Arena, Swimming Pool
UNDEVELOPED AREAS	LOCALITY	High Water Mark, Low Water Mark
UNDEVELOPED AREAS	LOCALITY	Mine, Quarry, Surface Excavation
UNDEVELOPED AREAS	LOCALITY	Contour: Index, Intermediate
UNDEVELOPED AREAS	LOCALITY	Contour: Depression

**UTILITY SERVICES**

LOW VOLTAGE	ELECTRICITY
HIGH VOLTAGE	ELECTRICITY
WATER RETICULATION	WATER
SEWER	SEWER
SEWER MAIN	SEWER
SEWER MAIN	SEWER

**LOCALITY DIAGRAM**

**AVAILABLE FROM AND PRODUCED BY:**

Northern Territory Government

**LOCALITY DIAGRAM**

This product is a compilation of data holdings from (but not restricted to) NT Dept of Lands and Planning, NT Dept of Housing, Local Government and Regional Services, Power and Water Corporation and Aboriginal Areas Protection Authority.

While every effort has been made to ensure the accuracy of this map, errors and omissions may occur. No warranty is given concerning the accuracy of this information. Users should refer to the originating bodies or departments regarding the accuracy and currency of the data.

**General enquiries, corrections, updates, errors and omissions:**  
 Indigenous Community Land Use Planning, Department of Lands and Planning  
 TEL: (08) 8999 1300, FAX: (08) 8999 7189, Email: planning@nt.gov.au

**Topographic Information:**  
 Land Information Division  
 Dept of Lands and Planning  
 TEL: (08) 8999 5311  
 FAX: (08) 8999 5366  
 Email: landinfo@nt.gov.au

**Planning Information:**  
 Heritage Operations Planning Branch  
 Dept of Lands and Planning  
 TEL: (08) 8999 1300  
 FAX: (08) 8999 7189  
 Email: planning@nt.gov.au

**Power, Water or Sewer Information:**  
 Heritage Operations Planning Branch  
 Dept of Lands and Planning  
 TEL: (08) 8999 1300  
 FAX: (08) 8999 7189  
 Email: planning@nt.gov.au

**Aboriginal Areas Protection Authority:**  
 The Regional  
 Aboriginal Areas Protection Authority  
 TEL: (08) 8999 4332  
 FAX: (08) 8999 5110  
 Email: enquiries.aapa@nt.gov.au

**Housing Infrastructure Information:**  
 Infrastructure Delivery Branch  
 Dept of Housing, Local Government & Regional Services  
 TEL: (08) 8999 9013  
 FAX: (08) 8999 5110  
 Email: info.dh@nt.gov.au

**NOTES:** POWER POLES, MARCHES, DEPT. TRAILS, TOWNSHIP RIGHTS and other similar shaped objects are captured from Aerial Photography and have not been verified from field survey techniques. These features are subject to LOCAL SURVEY CONTROL. Their ground location is expected to be within +/-0.3m of their mapped location.

DAI, 89/08/100 (20) phase 1(B) (revised) is not available for water, sewer and power information and construction requirements for developments contact Power and Water Corporation, Indigenous Community Development on 1800 245 582, and visit http://www.powerwater.com.au/business.

**SOURCE INFORMATION**

CURRENCY OF TOPOGRAPHY: 6 June 2010  
 SOURCE MAP SCALE: 2500  
 ZONE UTM: 53  
 CONTOUR INTERVAL: 53  
 HORIZONTAL DATUM: Transverse Mercator  
 VERTICAL DATUM: Transverse Mercator  
 DATE GENERATED: 20 June 2012

**Logos:** Northern Territory Government, GDA

**Scale:** 0 10 20 30 40 50 metres

**SERVICED LAND AVAILABILITY PROGRAM**

**SLAP Map**

**Mulgan (Mataranka Town Camp)**

Mataranka Town Camp

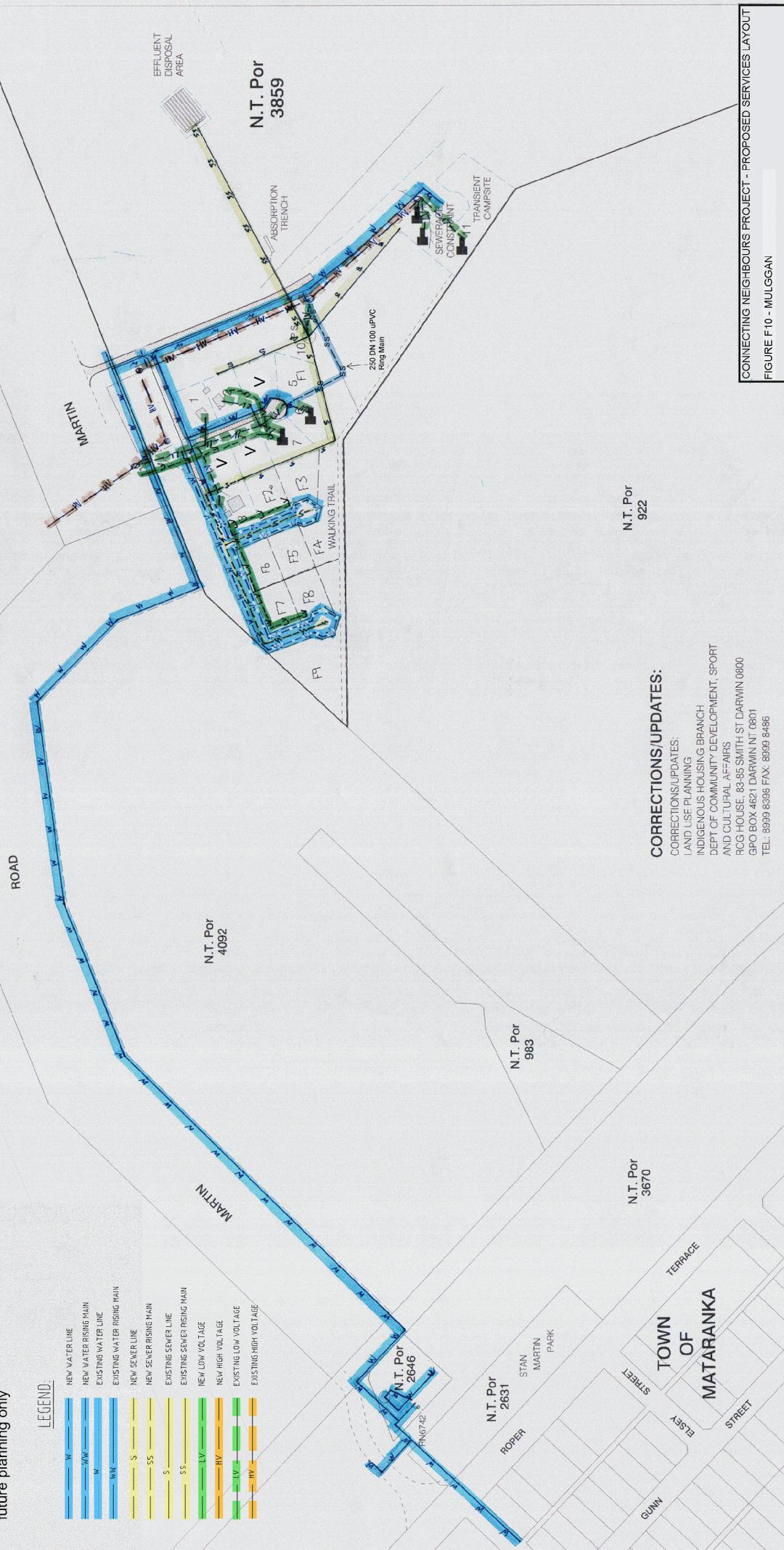
Roper Gulf Shire Council

Community ID : 971

- H Existing Residential Development (or as highlighted by building sketch layout).
- V Forecast Residential Lots for Development (up to 2014). Utility Reticulation Services Compliance has been costed for Existing and Forecast Development up to 2014 only.
- F Future Residential Lots Forecast for Development beyond 2014. Utility Reticulation Services shown for future planning only

**LEGEND:**

W	NEW WATER LINE
WW	NEW WATER RISING MAIN
W	EXISTING WATER LINE
WN	EXISTING WATER RISING MAIN
S	NEW SEWER LINE
SS	NEW SEWER RISING MAIN
S	EXISTING SEWER LINE
SS	EXISTING SEWER RISING MAIN
LV	NEW LOW VOLTAGE
LV	NEW HIGH VOLTAGE
LV	EXISTING LOW VOLTAGE
LV	EXISTING HIGH VOLTAGE



**CORRECTIONS/UPDATES:**  
 CORRECTIONS/UPDATES:  
 LAND USE PLANNING  
 INDIGENOUS HOUSING BRANCH  
 DEPT OF COMMUNITY DEVELOPMENT, SPORT AND CULTURAL AFFAIRS  
 RCG HOUSE, 83-85 SMITH ST DARWIN 0800  
 GPO BOX 4621 DARWIN NT 0801  
 TEL: 8999 8398 FAX: 8999 8486

CONNECTING NEIGHBOURS PROJECT - PROPOSED SERVICES LAYOUT  
 FIGURE F 10 - MULGGAN

**COMMUNITY MAP**  
**MULGGAN**  
 MATARANKA TOWN CAMP  
 MULGARN  
 MULGARN  
 971

**JILKMINGGAN**  
**COMMUNITY GOVERNMENT**  
**COUNCIL**

The Serviced Land Availability Program (SLAP) map system contains planning, engineering and topographical information.  
 The map, called the SLAP map, contains information used for land use planning purposes.

REFERENCE DRAWINGS		AMENDMENTS	
No.	Date	Amendment	Authorised
1	JUN 02	PLAN PRODUCED	I. REDMOND
2	AUG 02	SEWERAGE CONSTRAINT ADDED	I. REDMOND
3	FEB 03	NEW BUILDINGS ADDED TO LOTS 6 AND 7	N. THORPE
4	OCT 03	TWO SHELTERS AND ABLUATION BLOCK ADDED TO LOT 11	C. ROLLINSON
PLAN LAST UPDATED BY: BCSJ ON THE 28/10/08			

**Northern Territory Government**  
 Department of Community Development, Sport & Cultural Affairs

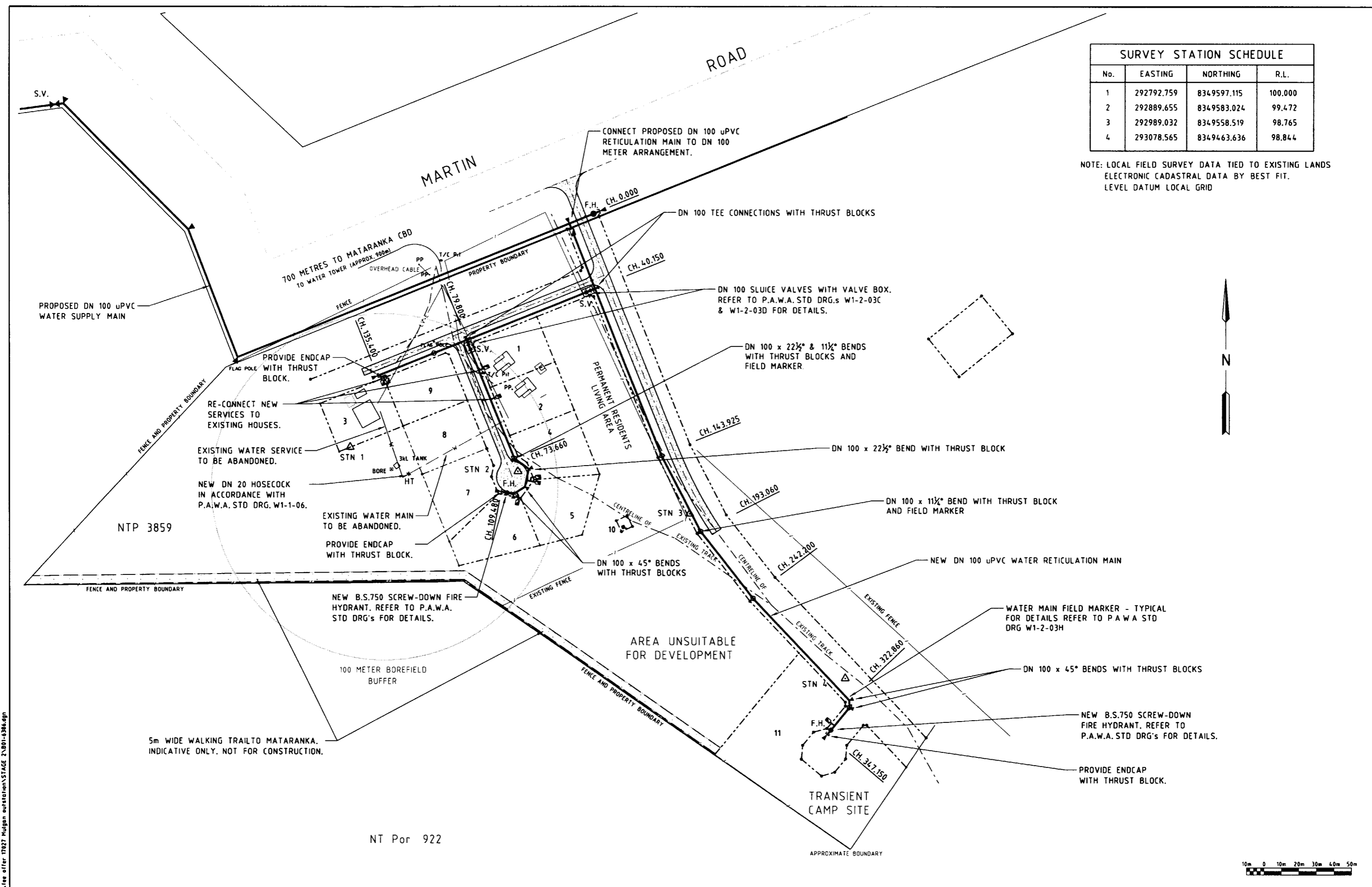
PREPARED BY: DEPARTMENT OF INFRASTRUCTURE,  
 PLANNING AND ENVIRONMENT  
 DATE OF PHOTOGRAPHY: (C) NORTHERN TERRITORY OF AUSTRALIA

SCALE 1:2500

HORIZONTAL DATUM : GDAS4 (ZONE 53)  
 VERTICAL DATUM : AHD (metres)

SURVEY STATION SCHEDULE			
No.	EASTING	NORTHING	R.L.
1	292792.759	8349597.115	100.000
2	292889.655	8349583.024	99.472
3	292989.032	8349558.519	98.765
4	293078.565	8349463.636	98.844

NOTE: LOCAL FIELD SURVEY DATA TIED TO EXISTING LANDS ELECTRONIC CADASTRAL DATA BY BEST FIT. LEVEL DATUM LOCAL GRID



28-Nov-01 08:15:04 AM W:\A\20\1\ee after 17027 Mulgan outstation\STAGE 2\B01-6386.dwg


No.	DESCRIPTION	DATE	INIT.
1	WATER MAIN FIELD MARKERS ADDED	23/11/01	S.K.
0	ISSUED FOR CONSTRUCTION	5/11/01	S.K.
D	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED & TRANSIENT CAMP SERVICE ROAD MOVED)	23/10/01	S.K.
C	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED)	3/10/01	S.K.
B	ISSUED FOR 90% DESIGN REVIEW	1/10/01	S.K.
A	ISSUED FOR 30% DESIGN REVIEW	31/7/01	S.K.

NT Por 922



**TERRITORY HOUSING**  
NORTHERN TERRITORY GOVERNMENT

DRAWN S.B.	CHECKED D.A.	DATE July 2001	DATE Nov 2001
DESIGNED S.KWAN	CHECKED B.M.	DATE July 2001	DATE Nov 2001
DESIGN PROJECT LEADER B.M.	PROJECT OFFICER M. [Signature]	DATE Nov 2001	DATE Nov 2001



**DEPARTMENT OF TRANSPORT AND WORKS**  
CONSTRUCTION DIVISION  
Copyright Reserved

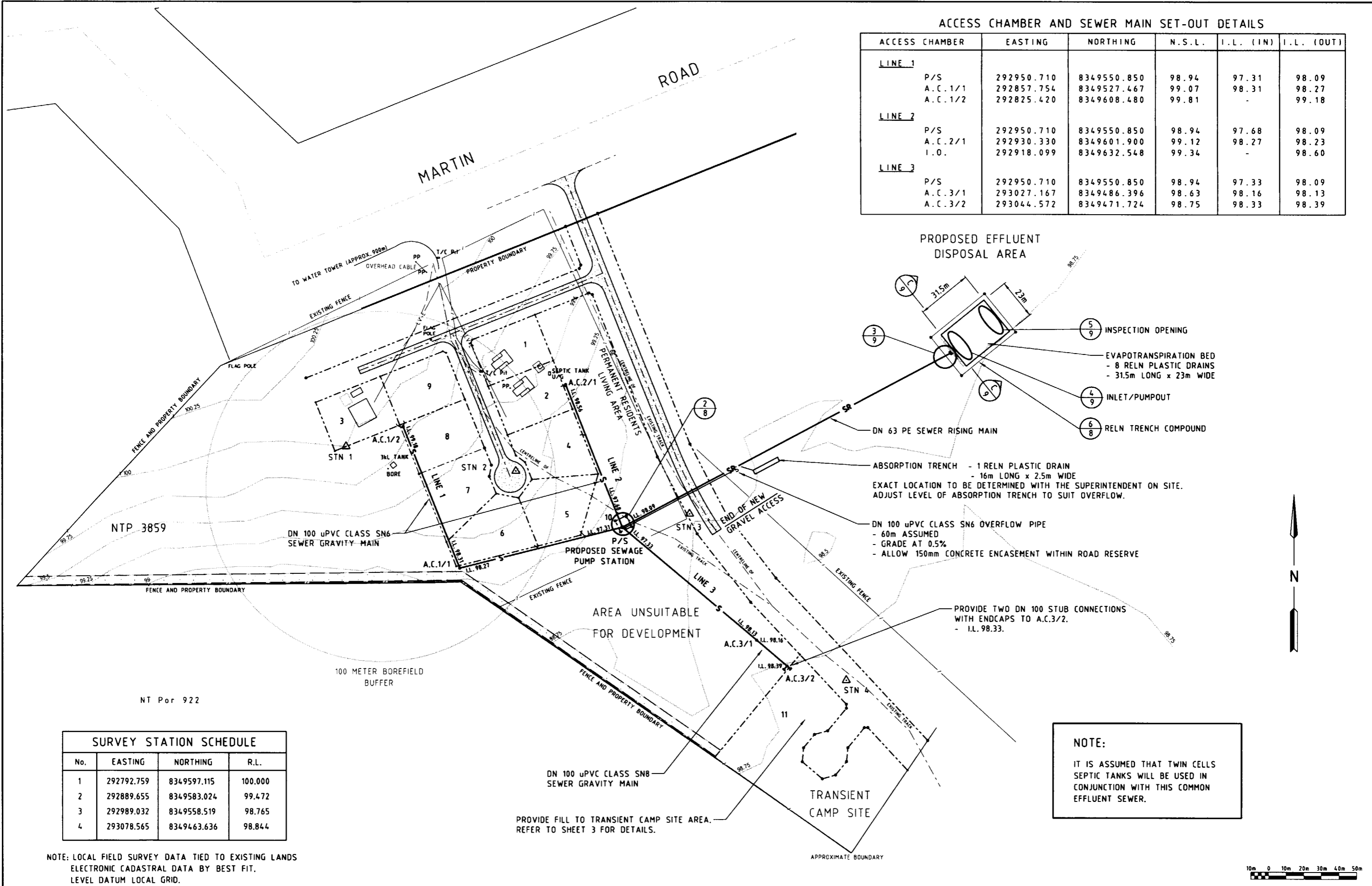
KATHERINE REGION - CIVIL  
MULGGAN OUTSTATION PROVISION OF SERVICES

**WATER RETICULATION MAIN LAYOUT PLAN**

FILE No. ALK-01350	SHEET No. 4 OF 9	DRAWING NUMBER B01-6386	AMENDMENT 1	SHEET SIZE A1
-----------------------	---------------------	----------------------------	----------------	------------------

ACCESS CHAMBER AND SEWER MAIN SET-OUT DETAILS

ACCESS CHAMBER	EASTING	NORTHING	N.S.L.	I.L. (IN)	I.L. (OUT)
<b>LINE 1</b>					
P/S	292950.710	8349550.850	98.94	97.31	98.09
A.C.1/1	292857.754	8349527.467	99.07	98.31	98.27
A.C.1/2	292825.420	8349608.480	99.81	-	99.18
<b>LINE 2</b>					
P/S	292950.710	8349550.850	98.94	97.68	98.09
A.C.2/1	292930.330	8349601.900	99.12	98.27	98.23
I.O.	292918.099	8349632.548	99.34	-	98.60
<b>LINE 3</b>					
P/S	292950.710	8349550.850	98.94	97.33	98.09
A.C.3/1	293027.167	8349486.396	98.63	98.16	98.13
A.C.3/2	293044.572	8349471.724	98.75	98.33	98.39



**NOTE:**  
IT IS ASSUMED THAT TWIN CELLS SEPTIC TANKS WILL BE USED IN CONJUNCTION WITH THIS COMMON EFFLUENT SEWER.

SURVEY STATION SCHEDULE			
No.	EASTING	NORTHING	R.L.
1	292792.759	8349597.115	100.000
2	292889.655	8349583.024	99.472
3	292989.032	8349558.519	98.765
4	293078.565	8349463.636	98.844

NOTE: LOCAL FIELD SURVEY DATA TIED TO EXISTING LANDS ELECTRONIC CADASTRAL DATA BY BEST FIT. LEVEL DATUM LOCAL GRID.

23-Nov-01 04:04:31 PM W:\AEG\New offer 17027 Mulgan outstation\STAGE 2\B01-6387.dwg

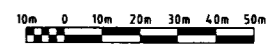
No.	DESCRIPTION	DATE	INIT.
1	A.C.2/1 RELOCATED	23/11/01	S.K.
0	ISSUED FOR CONSTRUCTION	5/11/01	S.K.
D	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED & TRANSIENT CAMP SERVICE ROAD MOVED)	23/10/01	S.K.
C	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED)	3/10/01	S.K.
B	ISSUED FOR 90% DESIGN REVIEW	1/10/01	S.K.
A	ISSUED FOR 30% DESIGN REVIEW	8/8/01	S.K.
AMENDMENTS			



DRAWN S.B.	CHECKED D.A.
DATE July 2001	DATE Nov 2001
DESIGNED S.KWAN	CHECKED B.M.
DATE July 2001	DATE Nov 2001
DESIGN PROJECT LEADER B.M.	PROJECT OFFICER [Signature]
DATE Nov 2001	DATE

NORTHERN TERRITORY OF AUSTRALIA  
**DEPARTMENT OF TRANSPORT AND WORKS CONSTRUCTION DIVISION**  
Copyright Reserved

KATHERINE REGION - CIVIL	
MULGAN OUTSTATION PROVISION OF SERVICES	
<b>COMMON EFFLUENT SEWER LAYOUT PLAN</b>	
FILE No. ALK-01350	SHEET No. 5 OF 9
DRAWING NUMBER B01-6387	AMEND. 1
DATE	SIZE A1



SEWER ACCESS CHAMBER No.	P/S	A.C. 1/1	A.C. 1/2
CHAMBER SHAPE, COVER AND DUTY	CCB	C(1050) CB	C(1050) CB
CHAMBER DROP TYPE		1	1

P/S	A.C. 2/1
CCB	C(1050) CB
	1

P/S	A.C. 3/1	A.C. 3/2
CCB	C(1050) CB	C(1050) CB
	1	1

**LEGEND:**

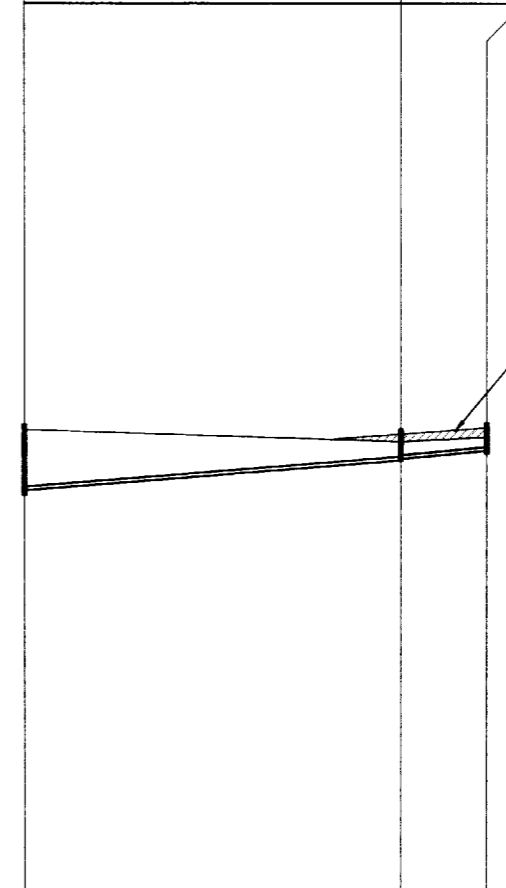
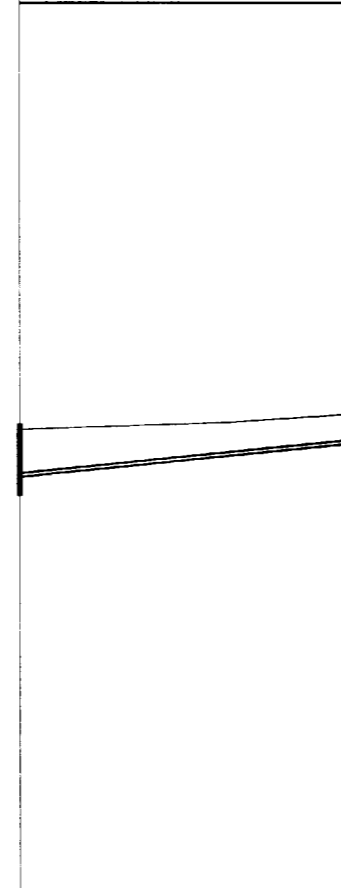
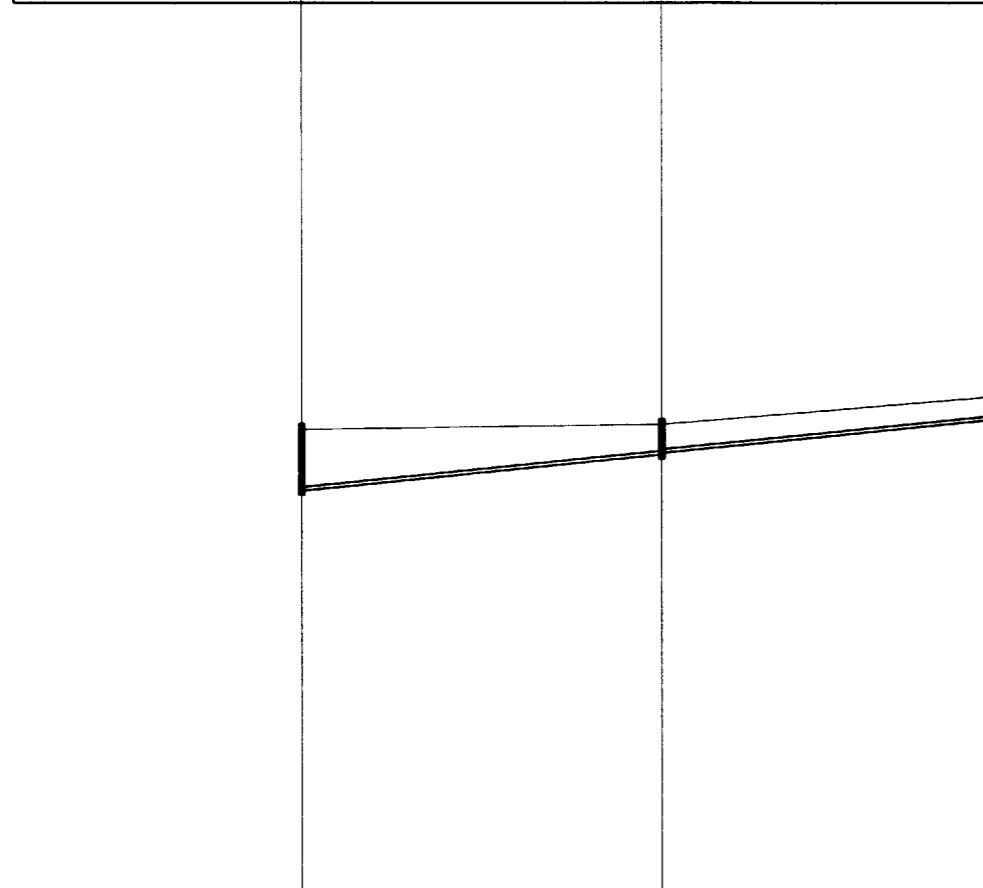
I.O. - INSPECTION OPENING  
(REFER TO W2-1-05/1)

B - CAST IRON CLASS 'B' TO A.S. 3902  
D - CAST IRON CLASS 'D' TO A.S. 3902

CRC

- ACCESS CHAMBER COVER DUTY (REFER W2-2-01D)
- ACCESS CHAMBER COVER SHAPE  
C=CIRCULAR R=RECTANGULAR
- ACCESS CHAMBER SHAPE  
C=CIRCULAR R=RECTANGULAR

\* = FINISHED SURFACE LEVEL



BEDDING TYPE	TYPE 1	
PIPE DIA (mm), TYPE AND JOINTING	DN 100 - uPVC CLASS SN6 - RRJ	
PIPE LENGTH (m) AND GRADE (mm/m)	95.80 - 10.02	87.22 - 10.00
LOCATION	VACANT	LOT
DATUM R.L. 80.00		

BEDDING TYPE	TYPE 1	
PIPE DIA (mm), TYPE AND JOINTING	DN 100 - uPVC CLASS SN6 - RRJ	
PIPE LENGTH (m) AND GRADE (mm/m)	88.00 - 10.00	
LOCATION	VACANT	LOT
DATUM R.L. 80.00		

BEDDING TYPE	TYPE 1	
PIPE DIA (mm), TYPE AND JOINTING	DN 100 - uPVC CLASS SN6 - RRJ	
PIPE LENGTH (m) AND GRADE (mm/m)	100.00 - 8.00	22.76 - 10.00
LOCATION	VACANT	LOT
DATUM R.L. 80.00		

DEPTH TO INVERT	1.63	0.80	0.63
INVERT LEVEL	97.31	98.27	99.18
NATURAL SURFACE LEVEL	98.94	99.07	99.81
SURVEY CHAINAGE			
DESIGN CHAINAGE	0.000	95.800	183.020

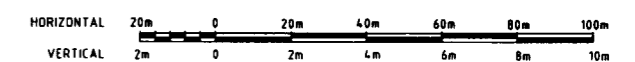
DEPTH TO INVERT	1.26	0.78
INVERT LEVEL	97.68	98.56
NATURAL SURFACE LEVEL	98.94	99.34
SURVEY CHAINAGE		
DESIGN CHAINAGE	0.000	88.000

DEPTH TO INVERT	1.61	0.70	0.61
INVERT LEVEL	97.33	98.13	98.67
NATURAL SURFACE LEVEL	98.94	98.83	99.00
SURVEY CHAINAGE			
DESIGN CHAINAGE	0.000	100.000	122.760

LINE 1

LINE 2

LINE 3

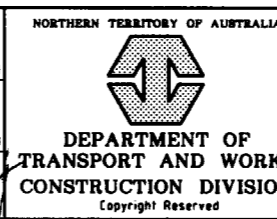


23-Nov-01 04:00:13 PM W:\Users\jlee after 17027 Mulgan outstation\STAGE 2\B01-6388.dgn

1	A.C. 2/1 RELOCATED	23/11/01	S.K.
0	ISSUED FOR CONSTRUCTION	5/11/01	S.K.
D	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED & TRANSIENT CAMP SERVICE ROAD MOVED)	23/10/01	S.K.
C	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED)	3/10/01	S.K.
B	ISSUED FOR 90% DESIGN REVIEW	1/10/01	S.K.
A	ISSUED FOR DESIGN REVIEW	21/8/01	S.K.
No.	DESCRIPTION	DATE	INIT.
AMENDMENTS			



DRAWN	S.B.	CHECKED	D.A.
DATE	Aug 2001	DATE	Nov 2001
DESIGNED	S. KWAN	CHECKED	B.M.
DATE	Aug 2001	DATE	Nov 2001
DESIGN PROJECT LEADER	B.M.	PROJECT OFFICER	
DATE	Nov 2001	DATE	



NORTHERN TERRITORY OF AUSTRALIA		KATHERINE REGION - CIVIL	
DEPARTMENT OF TRANSPORT AND WORKS		MULGGAN OUTSTATION PROVISION OF SERVICES	
CONSTRUCTION DIVISION		COMMON EFFLUENT SEWER LONGITUDINAL SECTION	
FILE No.	ALK-01350	SHEET No.	6 OF 9
DRAWING NUMBER	B01-6388	AMEND.	1
		DATE	23/10/01
		SCALE	A1

PUMP STATION SCHEDULE OF LEVELS

CODE	DESCRIPTION	R.L.
A	SEWER LINE 1 INLET I.L.	97.31
B	SEWER LINE 2 INLET I.L.	97.68
C	SEWER LINE 3 INLET I.L.	97.33
D	STANDBY PUMP 'ON'	97.35
E	DUTY PUMP 'ON'	97.27
F	PUMPS 'OFF'	97.07

TECHNICAL REQUIREMENTS FOR THE SUPPLY, DELIVERY AND INSTALLATION OF SUBMERSIBLE PUMPS, PUMP STATION AND ELECTRICAL SERVICES.

1. GENERAL:

- PUMP STATION, PUMPSET AND CONTROLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE SUBMERSIBLE PUMPSET SHALL INCLUDE THE FOLLOWING EQUIPMENT AND/OR FUNCTION REQUIREMENTS:-

2. MOTOR/PUMP SET:

- SUPPLY, DELIVER AND INSTALL PUMPS IN PUMP STATION INCLUDING PUMPS COMPLETE WITH SWITCHES, AUTO ON/OFF FLOAT MOTOR, REFLUX AND GATE VALVES, GALVANISED LIFTING CHAIN, PEDESTAL MOUNTING FIXTURES AND ASSOCIATED EQUIPMENT REQUIRED TO COMPLETE THE INSTALLATION.
- THE MOTOR/PUMP SET SHALL BE DUAL 'GRUNDFOS' MODEL AP35B.50.06.A1.V SUBMERSIBLE EFFLUENT PUMPS (ONE OPERATION & ONE STANDBY), OR APPROVED EQUIVALENT WITH A DUTY OF 1.67 L/s @ 6.0m HEAD.
- SHAFT MATERIAL - POLYETHYLENE CONFORMING TO A.S./N.Z.S. 4130.
- HOLDING DOWN BOLTS TO BE STAINLESS STEEL CONFORMING TO A.S.1444/303.
- SUPPLY FULL DETAILS OF PUMP UNITS AT TIME OF TENDER SUBMISSION INCLUDING MATERIAL LISTS.

3. PUMP STATION:

- PUMP STATION SHALL BE NOT LESS THAN 8mm POLYETHYLENE CONSTRUCTION AS SHOWN ON DRAWING OR SIMILAR APPROVED COMPLYING WITH B.S.4994. INCLUDE SUPPLY, DELIVERY AND CONSTRUCTION OF COVER AND BALLAST.
- COMPACT 100mm SAND BED TO A FINISHED DEPTH 100mm DEEPER THAN TANK DEPTH. BED TANK DOWN IN FRESH CONCRETE AND POUR ADDITIONAL CONCRETE AROUND SIDES UP TO A DEPTH OF 400mm.
- VENT AND CONDUIT PENETRATIONS TO BE MADE ON SITE AND SEALED WITH 'FERROPRE' INSIDE AND OUT. VENT AND CONDUIT TO BE AS CLOSE AS POSSIBLE TO TOP OF TANK. ALL PENETRATIONS TO BE AT RIGHT ANGLES TO TANK WALL.
- FOR WALL-MOUNTED PUMP CONTROLLERS, INSTALL A 50mm CONDUIT FOR EACH PUMP, SEALED THROUGH TANK WALL AND CABLES SEALED WITH SILICON ON INSIDE OF CONDUIT TO PREVENT GAS PENETRATING INTO PUMP CONTROLLER. USE LONG RADIUS BENDS NOT ELBOWS. CHECK MINIMUM POWER SUPPLY BEFORE COMMENCING INSTALLATION.

4. ELECTRICAL SERVICES:

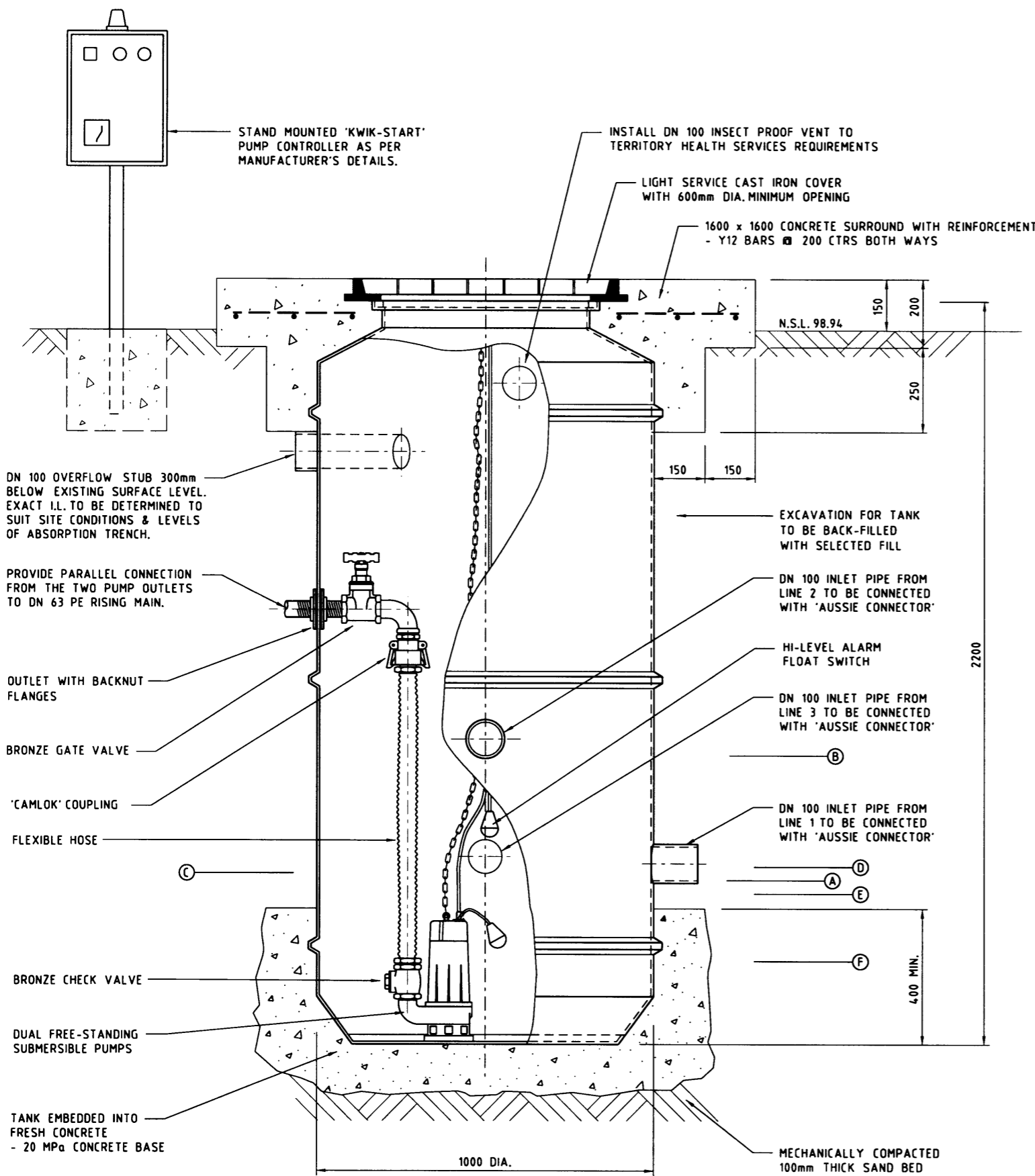
- SUPPLY AND INSTALL POWER SUPPLY AS REQUIRED TO COMPLETE THE WORK, INCLUDING APPROVED CONTROL PANELS, CABLES, CONDUITS, CIRCUIT BREAKER, JUNCTION BOXES AND CONNECTIONS.
- COMPLY WITH A.S./N.Z.S. 3000 WIRING RULES.
- LOCATION OF CONTROL PANEL AND ALARM INDICATOR TO BE DETERMINED ON SITE IN CONJUNCTION WITH THE SUPERINTENDENT.
- BEFORE CONNECTING POWER SUPPLY TO STARTER, CHECK ALL CONNECTIONS AND RELAYS FOR ANY LOOSE CONNECTIONS THAT MAY HAVE OCCURRED DURING TRANSPORT. WHEN COMMISSIONING, SET OVERLOADS TO PUMP NAMEPLATE AMPS. RECORD VOLTAGE AND RUNNING CURRENT WHILST PUMP IS UNDER LOAD. IMPORTANT: ON THREE PHASE UNITS, DIRECTION OF ROTATION MUST BE PHYSICALLY SIGHT CHECKED BY LIFTING PUMP.

5. COMMISSIONING:

- CODES D, E & F ARE FOR REFERENCE ONLY.
- ADJUST START LEVEL TO GIVE A MINIMUM OF ONE START PER DAY UNDER NORMAL OPERATING CONDITIONS, WITH A MAXIMUM OF 6 STARTS PER HOUR CONTINUOUS, OR FOR INTERMITTENT, 10 STARTS PER HOUR. SET HIGH-LEVEL ALARM FLOAT 100mm ABOVE STANDBY PUMP 'ON' LEVEL.
- ON COMPLETION OF THE PUMP STATION AND RISING MAIN THE PUMPS SHALL BE COMMISSIONED BY THE CONTRACTOR. COMMISSIONING SHALL BE CARRIED OUT IN THE PRESENCE OF THE SUPERINTENDENT. COMMISSIONING SHALL COMPRISE THE RUNNING OF ALL PUMPS IN ISOLATION FOR NOT LESS THAN FIFTEEN MINUTES FOR EACH COMBINATION. THE CONTRACTOR SHALL DEMONSTRATE THE CORRECT OPERATION OF ALL EQUIPMENT INCLUDING FLOATS, ALARM, CHECK AND STOP VALVES, ETC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE GOOD AT HIS OWN COST ANY DEFECTS.

6. MAINTENANCE:

- TANK TO BE REGULARLY CLEANED BY HAND-HELD HOSE, AND PUMP AND ALARM OPERATION CHECKED. IN HIGH GREASE APPLICATIONS, TANK SHOULD BE DEGREASED ON A REGULAR BASIS BY A WASTE REMOVAL CONTRACTOR. PUMP TO BE REMOVED FOR SERVICE ON APPROXIMATELY A 12 MONTHLY CYCLE.



'ALL-PUMPS' PE2200 AUTOMATIC SEWAGE PUMP STATION DETAIL

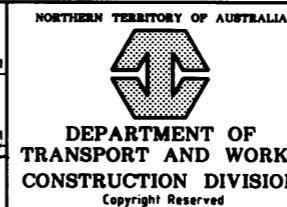
N.T.S.

02-Nov-01 03:43:08 PM W:\dca\lee offer 17027 Mulgan outstation\STAGE 2\B01-6389.dgn

No.	DESCRIPTION	DATE	INIT.
0	ISSUED FOR CONSTRUCTION	5/11/01	S.K.
D	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED & TRANSMIT CAMP SERVICE ROAD MOVED)	23/10/01	S.K.
C	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED)	3/10/01	S.K.
B	ISSUED FOR 90% DESIGN REVIEW	1/10/01	S.K.
A	ISSUED FOR DESIGN REVIEW	21/8/01	S.K.



DRAWN S.B.	CHECKED D.A.
DATE Aug 2001	DATE Nov 2001
DESIGNED S.KWAN	CHECKED B.M.
DATE Aug 2001	DATE Nov 2001
DESIGN PROJECT LEADER B.M.	PROJECT OFFICER M.J. 31/11/01
DATE Nov 2001	DATE 15/11

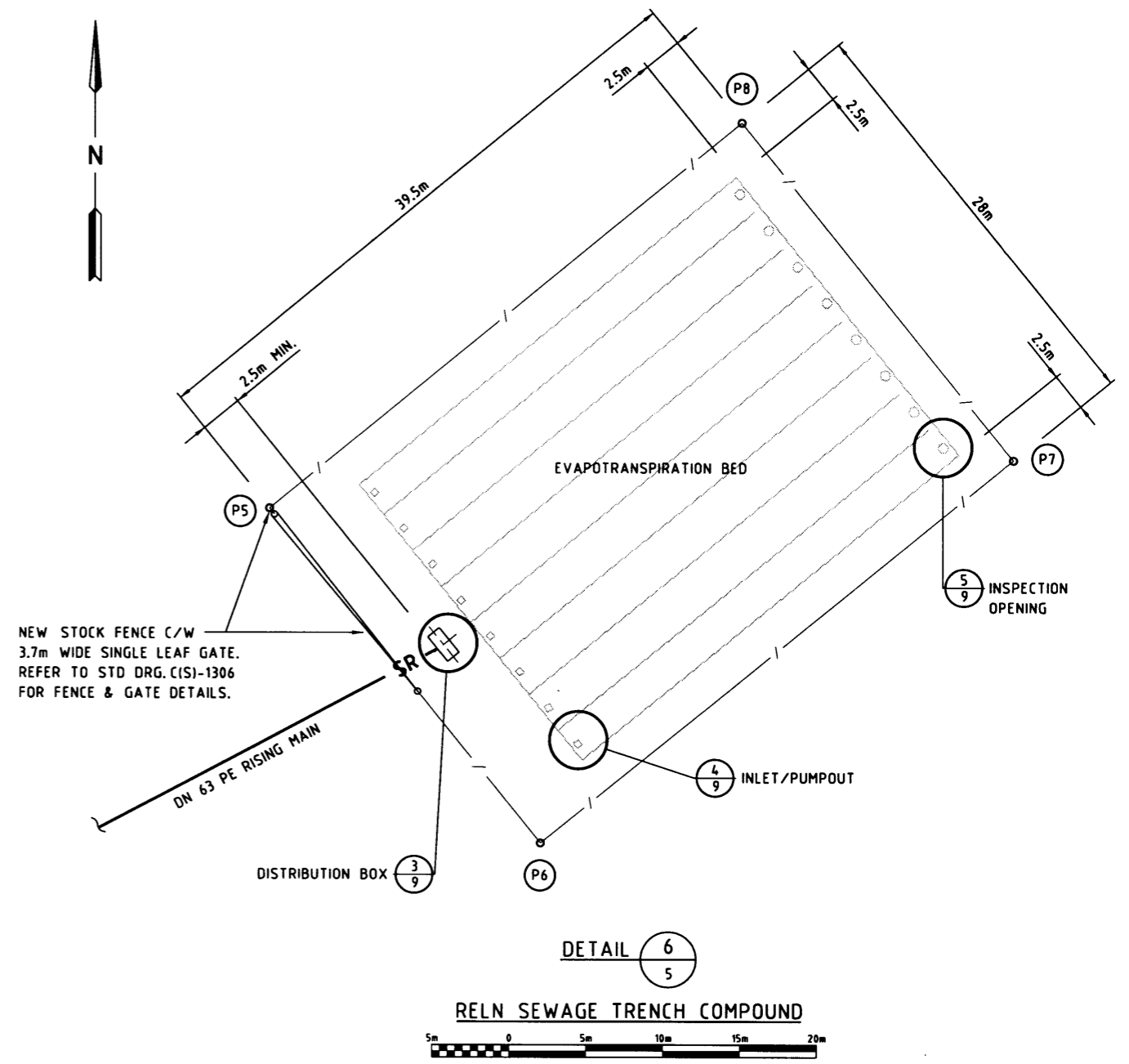
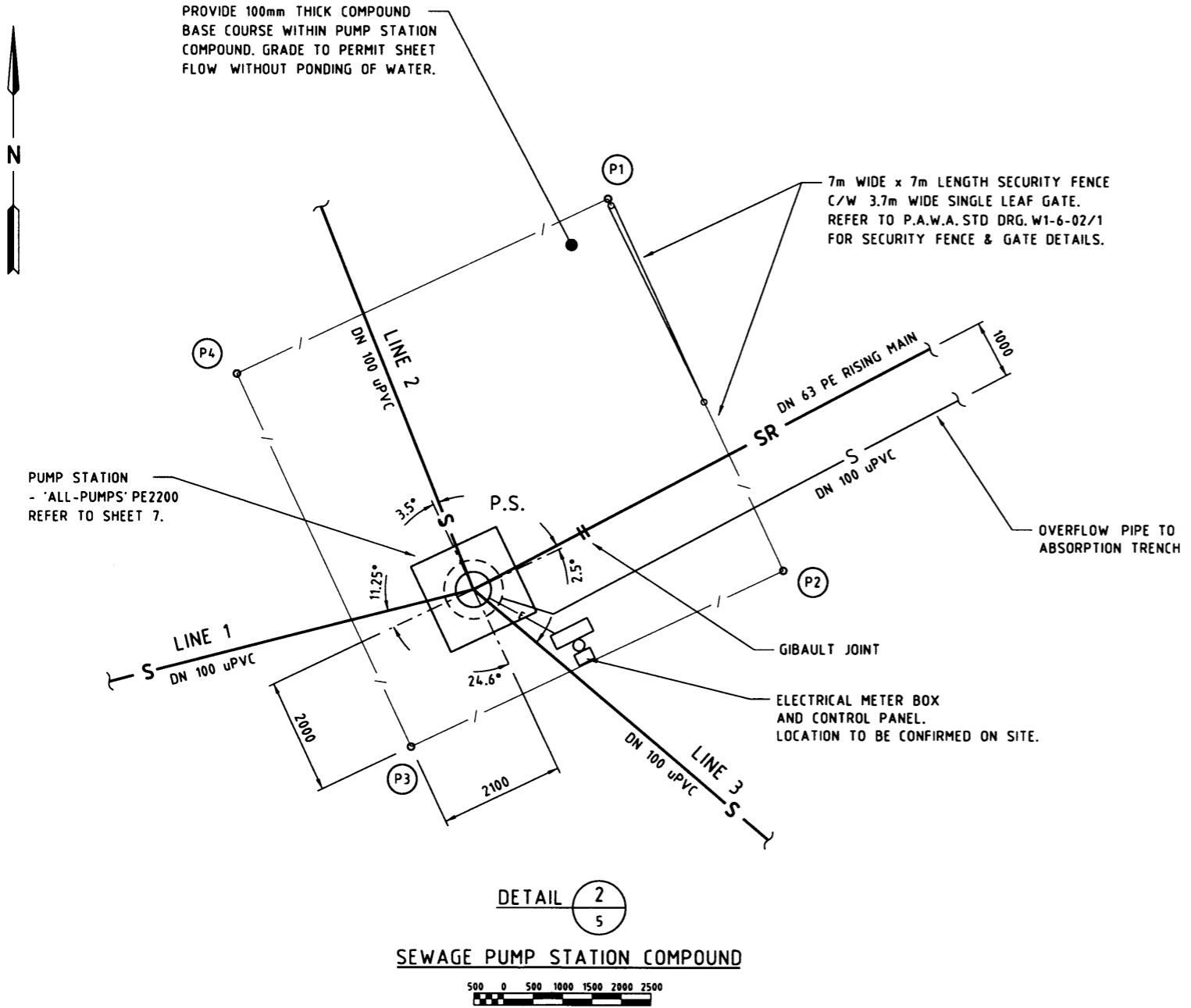


NORTHERN TERRITORY OF AUSTRALIA		KATHERINE REGION - CIVIL	
MULGGAN OUTSTATION PROVISION OF SERVICES		SEWAGE PUMP STATION DETAILS	
FILE No. ALK-01350	SHEET No. 7 OF 9	DRAWING NUMBER B01-6389	AMEND. SHEET SIZE 0 A1



SEWER PUMP STATION COMPOUND  
SCHEDULE OF BOUNDARY CO-ORDINATES

POINT	EASTING	NORTHING
P1	292952.990	8349557.505
P2	292955.980	8349551.175
P3	292949.650	8349548.186
P4	292946.661	8349554.515
CENTRE P.S.	292950.710	8349550.850



RELN SEWAGE TRENCH COMPOUND  
SCHEDULE OF BOUNDARY CO-ORDINATES

POINT	EASTING	NORTHING
P5	293127.036	8349659.632
P6	293144.669	8349637.883
P7	293175.350	8349662.760
P8	293157.720	8349684.510
CENTRE DISTRIBUTION BOX	293138.356	8349650.787

02-Nov-01 03:24:59 PM M:\data\lee after 17027 Mulgan outstation\STAGE 2\B01-6390.dgn

No.	DESCRIPTION	DATE	INIT.
0	ISSUED FOR CONSTRUCTION	5/11/01	S.K.
D	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED & TRANSIENT CAMP SERVICE ROAD MOVED)	23/10/01	S.K.
C	RE-ISSUED FOR DESIGN REVIEW (LOT LAYOUT CHANGED)	3/10/01	S.K.
B	ISSUED FOR 90% DESIGN REVIEW	1/10/01	S.K.
A	ISSUED FOR DESIGN REVIEW	21/8/01	S.K.

  
**TERRITORY HOUSING**  
 NORTHERN TERRITORY GOVERNMENT

DRAWN S.B.	CHECKED D.A.
DATE Aug 2001	DATE Nov 2001
DESIGNED S. KWAN	CHECKED B.M.
DATE Aug 2001	DATE Nov 2001
DESIGN PROJECT LEADER B.M.	PROJECT OFFICER M. SP
DATE Nov 2001	DATE 15/11

NORTHERN TERRITORY OF AUSTRALIA  
  
 DEPARTMENT OF  
**TRANSPORT AND WORKS**  
 CONSTRUCTION DIVISION  
 Copyright Reserved

KATHERINE REGION - CIVIL		MULGGAN OUTSTATION PROVISION OF SERVICES	
<b>SEWAGE PUMP STATION AND RELN SEWAGE TRENCH COMPOUND LAYOUT PLANS</b>			
FILE No. ALK-01350	SHEET No. 8 OF 9	DRAWING NUMBER B01-6390	AMEND. 0
			SHEET SIZE A1

# Transformer data

Group	Com Id	Location	Community Name	Dwellings No. (Funded Dwellings)	Dwellings No. (Bennett Design)	New Houses ** (Future Demand)	Primary Voltage Level (KV)	PWC Substation ID	PWC Test Number	Transformer size (KVA)	KVA Total dwellings @ 4.5KVA	KVA Total dwellings @ 7KVA	Comments
1	290	Darwin	Bagot	55	55		11	1924	1735	300	247.5	385	
	344	Darwin	Knuckey Lagoons	18	19	2	11	1771	2163	100	85.5	133	
	347	Darwin	Kulaluk	19	19		11	1092	10607	50	85.5	133	
	403	Darwin	Palmerston Town Camp	20	16		22	10196	10245	100	90	140	Two transformers for this Town Camp. Transformers are not in boundary of Town Camp [The nearest transformers data to Town Camp are highlighted in yellow].
							22	265	11645	25			
	412	Darwin	Railway Dam (One Mile Dam)	5	6	2	11	1041	4378	200	27	42	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	427	Adelaide River	Amangal	9	9		22	216	12187	100	40.5	63	Two transformers for this Town Camp.
	687	Jabiru	Manabadurma	10	12		11	5050	11107	200	54	84	
825	Darwin	Minmarama Park	24	24		11	2147	11372	100	108	168		
2	606	Katherine	Warlpiri Transient Camp	9	9		22	6416	4886	100	40.5	63	Two transformers for this Town Camp.
							22	6074	4695	25			
	621	Katherine	Miali Brumby (Kalano)	47	31		22	6133	12247	315	211.5	329	
	640	Pine Creek	Pine Creek Compound	4	4		22	6666	3147	25	18	28	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
971	Mataranka	Mulggan	12	9	4	22	6819	5296	16	54	84		
						22	6818	5297	16				
						22	6384	11028	25				
3	215	Tennant Creek	Blueberry Hill (Munji-Marla)	2	2		22	7079	1868	200	9	14	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	223	Tennant Creek	Dump Camp (Marla-Marla)	7	7		22	7181	11088	200	31.5	49	
	224	Elliott	Elliott South Camp	12	12		11	7504	4718	200	54	84	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	225	Elliott	Elliott North Camp	36	25		11	7505	4715	100	162	252	
	238	Tennant Creek	Kargaru (East Side Camp)	12	12	1	22	7572		200	54	84	
	246	Tennant Creek	Ngalpa Ngalpa	18	21		22	7179		200	94.5	147	Two transformers for this Town Camp.
							22	7033	10904	315			
	271	Tennant Creek	Village Camp	12	12	1	22	7183	11107	200	54	84	
681	Tennant Creek	Tingkarli	12	12		22	7180		200	54	84		
684	Tennant Creek	Wuppa	15	15	1	22	7141	11092	100	67.5	105	Two transformers for this Town Camp.	
						22	7182	11095	200				
4	3	Alice Springs	Akngwertnarre (Morris Soak)	11	15		11	8596	11336	300	67.5	105	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	16	Alice Springs	Anthelk Ewlpaye (Charles Creek)	17	10		11	8569	315	315	76.5	119	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	17	Alice Springs	Anthepe	15	15		22	8598	5874	200	67.5	105	Data extracted from PWC asset information. There was not access to this Town Camp due to ceremony on inspection day.
							22	8597	11244	315			
	19	Alice Springs	Aper Alwerrkng (Palmers)	7	6		11	8405	2939	200	31.5	49	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	35	Alice Springs	Ewyenper Atwatye (Hidden Valley)	47	47		11	8622	11202	100	211.5	329	
							11	8623	11203	100			
							22	8625	11205	63			
							11	8626	11204	100			
	47	Alice Springs	Ilparpa	13	13		22	8611	11702	200	58.5	91	
	48	Alice Springs	Ilperle Tyathe (Walpiri)	10	9		11	8001	11209	315	45	70	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].
	50	Alice Springs	Ilyperenye (Old Timers)	10	10		22	8145	3323	100	45	70	
	64	Alice Springs	Bassos	2	2		11	8002	10946	50	9	14	
	69	Alice Springs	Karnte	19	19		22	8282	2345	100	85.5	133	
	87	Alice Springs	Yarrenty Altere (Larapinta Valley)	34	34		11	8617	11334	100	153	238	
						11	8618	11200	63				
						11	8619	11335	100				
						11	8620	11201	100				
90	Alice Springs	Inarlange (Little Sisters)	16	22		22	8137	2925	100	99	154	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].	
108	Alice Springs	Mpwetyerre (Abbotts)	6	6		11	8093	11703	315	27	42	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].	
113	Alice Springs	Mount Nancy (Nyewente)	11	12		11	8405	2939	200	54	84		
129	Alice Springs	Nyewente (Trucking Yards)	26	26		11	8629	11312	300	117	182		
675	Alice Springs	Hoppys	15	19						85.5	133	There is not any Transformer in boundary of Town Camp. Also it's not shown in PWC asset information.	
676	Alice Springs	Ipiye Ipiye (Golders Camp)	15	14		11	8314	369	50	67.5	105		
1029	Alice Springs	Kunoth	4	4		11	8569	315	315	18	28	Transformer is not in boundary of Town Camp [The nearest transformer data to Town Camp is highlighted in yellow].	
5	222	Borrooloola	Mara	28	29	2	11	6187	12610	100	130.5	203	Two transformers for this Town Camp.
							11	6545	10203				
	229	Borrooloola	Garawa 1	16	14		11	6546	10166	100	72	112	Two transformers for this Town Camp.
							11	6332	4890	100			
	278	Borrooloola	Yanyula	29	29		11	6162	10496	200	130.5	203	Data extracted from PWC asset information. It's outside of Twon Camp, shown only Transformer to this Town Camp.
						11		10167				This transformer is not shown in PWC asset information. It's installed in Boat Ramp Road near to Town Camp and connected to Electrical reticulation of Town Camp.	
992	Borrooloola	Garawa 2	11	11		11	6189	2669	25	49.5	77		

\*\* For New house's demand calculation see section 13.4 "Future Demand".