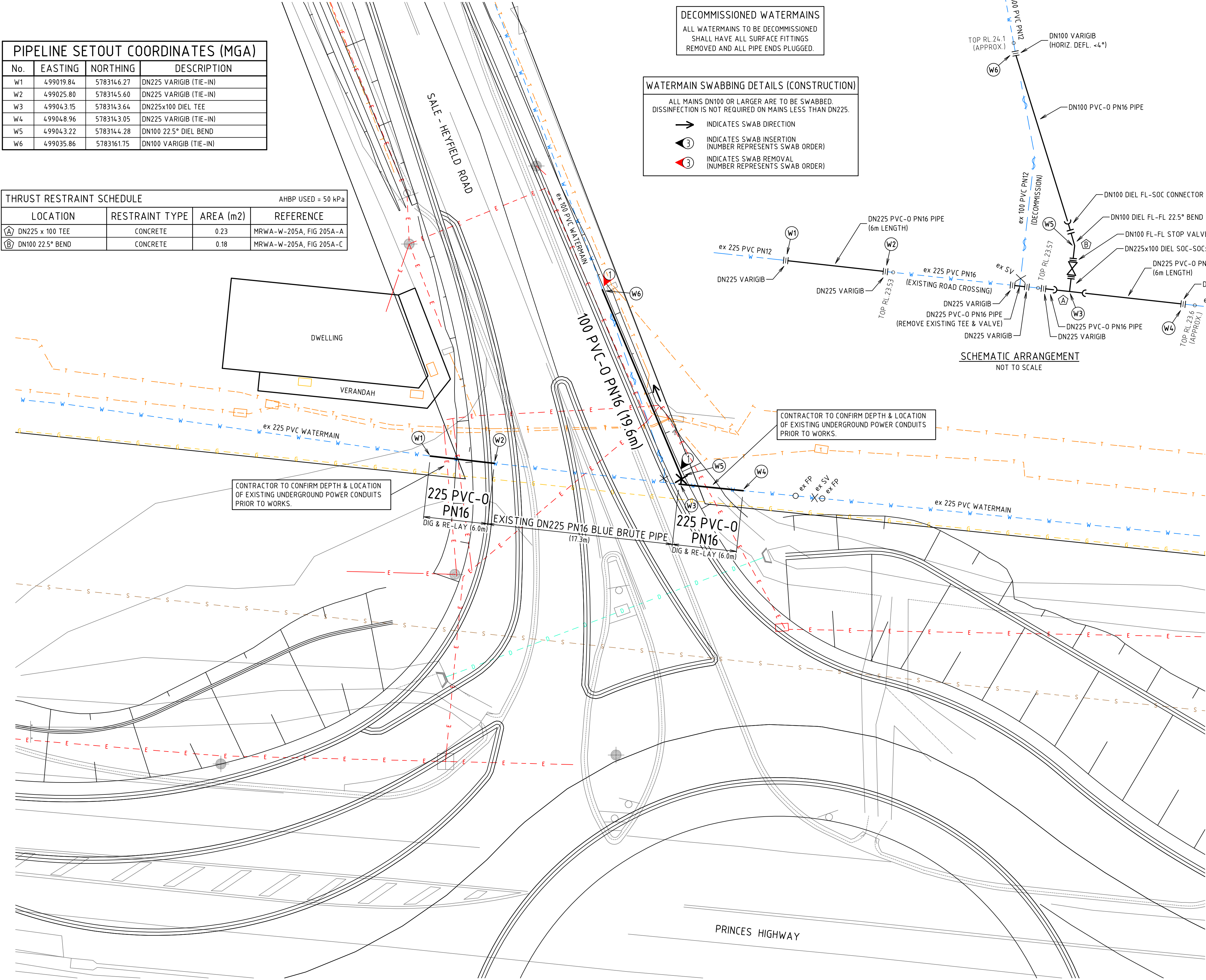


PIPELINE SETOUT COORDINATES (MGA)			
No.	EASTING	NORTHING	DESCRIPTION
W1	499019.84	5783146.27	DN225 VARIGIB (TIE-IN)
W2	499025.80	5783145.60	DN225 VARIGIB (TIE-IN)
W3	499043.15	5783143.64	DN225x100 DIEL TEE
W4	499048.96	5783143.05	DN225 VARIGIB (TIE-IN)
W5	499043.22	5783144.28	DN100 22.5° DIEL BEND
W6	499035.86	5783161.75	DN100 VARIGIB (TIE-IN)

THRUST RESTRAINT SCHEDULE				AHBP USED = 50 kPa
LOCATION	RESTRAINT TYPE	AREA (m2)	REFERENCE	
A DN225 x 100 TEE	CONCRETE	0.23	MRWA-W-205A, FIG 205A-A	
B DN100 22.5° BEND	CONCRETE	0.18	MRWA-W-205A, FIG 205A-C	



DECOMMISSIONED WATERMAINS
ALL WATERMAINS TO BE DECOMMISSIONED
SHALL HAVE ALL SURFACE FITTINGS
REMOVED AND ALL PIPE ENDS PLUGGED.

WATERMAIN SWABBING DETAILS (CONSTRUCTION)
ALL MAINS DN100 OR LARGER ARE TO BE SWABBED.
DISINFECTION IS NOT REQUIRED ON MAINS LESS THAN DN225.

→ INDICATES SWAB DIRECTION
③ INDICATES SWAB INSERTION (NUMBER REPRESENTS SWAB ORDER)
③ INDICATES SWAB REMOVAL (NUMBER REPRESENTS SWAB ORDER)

SCHEMATIC ARRANGEMENT
NOT TO SCALE

NOTES:

- GENERAL
- WORKS MUST BE CONSTRUCTED TO WSA 03-2011 (MRWA) AND THE RELEVANT GIPPSLAND WATER SUPPLEMENT.
 - MARKER POSTS AND BLUE PAVEMENT REFLECTORS ARE TO BE INSTALLED AS PER GIPPSLAND WATER REQUIREMENTS.

PIPELINE CONSTRUCTION

- REFER TO STANDARD DRAWINGS AS PER WSA 03-2011 (MRWA) AND THE RELEVANT GIPPSLAND WATER SUPPLEMENT.
- DETECTABLE TAPE IS TO BE INSTALLED IN ALL PIPE TRENCHES AND PLACE BETWEEN 150mm AND 300mm BELOW FINISHED SURFACE.
- MAINTAIN THE INSIDE OF ALL PIPES CLEAN AND DRY DURING CONSTRUCTION IN ACCORDANCE WITH WSA 03-2011 (MRWA), SECTION 15.1.1 & 15.1.3.
- MAINS TO BE CONSTRUCTED UNDER DEED CONDITIONS IN ACCORDANCE WITH WSA CONSTRUCTION SPECIFICATIONS, GIPPSLAND WATER SUPPLEMENT AND OTHER REQUIREMENTS OF GIPPSLAND WATER AT OFFSETS SHOWN.
- WHERE GRADE OF PIPE EXCEED 1 IN 20 TRENCH STOPS ARE REQUIRED. REFER TO MRWA-W-209.

PROPERTY SERVICE CONNECTIONS

- ALL NEW SERVICE CONNECTIONS MUST BE IN ACCORDANCE WITH WSA 03-2011 (MRWA) STANDARD DRAWING MRWA-W-110 AND GIPPSLAND WATER STANDARD DRAWING A3-59295.
- PROPERTY SERVICE CONNECTIONS ARE TO BE CONSTRUCTED WITH APPROVED POLYETHYLENE PIPE TO WSA PE CODE OF PRACTICE.
- REFER WSA 03-2011 (MRWA) STANDARD DRAWING MRWA-W-110 FOR TAPPING ARRANGEMENTS.
- THE PROPERTY SERVICE CONNECTION TIES SHOWN ON THE DETAIL PLAN ARE FROM THE APPROPRIATE TITLE PEG. ALL PROPERTY SERVICE CONNECTIONS ARE TO BE MARKED ON THE KERB WITH A 'W' IN LINE WITH THE SERVICE CONNECTION. THE 'W' SHALL BE PERMANENTLY MARKED ON THE KERB.

WATERMAIN FITTINGS AND COVERS

- REFER TO STANDARD DRAWINGS AS PER WSA 03-2011 (MRWA) AND THE GIPPSLAND WATER SUPPLEMENT.
- ALL COVERS ARE TO BE CLASS B IN NON TRAFFICABLE AREAS AND CLASS D IN TRAFFICABLE AREAS.
- COVERS SHALL BE LEVEL WITH AND SHALL CONFORM TO SLOPE AND CROSSFALL OF THE FINISHED SURFACE. THE FINISHED SURFACE LEVELS SHOWN ARE APPROXIMATE ONLY AND SHALL NOT BE USED FOR THE FIXING OF ANY COVER LEVELS. COVERS IN ROAD RESERVE AND R.O.W.'S CONSTRUCTED PRIOR TO THE CONSTRUCTION OF FOOTPATHS AND ROADS SHALL BE PROVIDED WITH A TEMPORARY COVER. THE PLACING OF THE FINAL COVER SHALL NOT BE CARRIED OUT UNTIL THE CONCRETE FOOTPATH OR ROAD PAVEMENT HAS BEEN CONSTRUCTED.
- CONCRETE SHALL BE WSA N25 UNLESS OTHERWISE SPECIFIED.
- THRUST RESTRAINTS TO BE INSTALLED IN ACCORDANCE WITH THE THRUST RESTRAINT SCHEDULE AND STANDARD DRAWINGS MRWA-W-204 TO MRWA-W-206 (CONCRETE & RECYCLED PLASTIC ONLY AS SCHEDULED).

EARTHWORKS & RETAINING WALLS

- IN AREAS SUBJECT TO EARTHWORKS, THE CONSTRUCTION OF WATERMAINS MUST NOT COMMENCE UNTIL THE EARTHWORKS HAVE BEEN COMPLETED.

WORK ON LIVE WATER MAIN

- THE CONTRACTOR IS NOT PERMITTED TO CUT-IN TO AN EXISTING LIVE PIPELINE, UNLESS APPROVED BY GIPPSLAND WATER.
- ALL WORKS ON A LIVE MAIN MUST BE CARRIED OUT BY A GIPPSLAND WATER APPROVED CONTRACTOR. THE CONTRACTOR IS TO PROVIDE GIPPSLAND WATER WITH 10 DAYS NOTICE ALONG WITH SUBMITTING A FORM 3W BEFORE COMMENCING WORK ON LIVE WATER MAINS (SHUTDOWN ONLY).

ATTENTION TO CONTRACTOR

- IN ACCORDANCE WITH CLAUSE 15 OF AS1242 AUSTRALIAN STANDARD CONDITIONS OF CONTRACT, THE CONTRACTOR MUST ENSURE THE SAFETY OF THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PEOPLE WHO ARE ON OR ADJACENT TO THE SITE. THE CONTRACTOR MUST COMPLY WITH THE VICTORIAN OCCUPATIONAL HEALTH AND SAFETY ACT.
- THE CONTRACTOR MUST ENSURE THAT ALL PEOPLE EMPLOYED ON THE SITE WEAR APPROVED SAFETY APPAREL. THIS INCLUDES SAFETY HELMETS, VESTS, SAFETY BOOTS, EYE & EAR PROTECTION, WHERE APPROPRIATE.
- THE CONTRACTOR SHALL REINSTATE ANY DAMAGED FOOTPATH, VEHICLE CROSSING AND NATURE STRIP TO THE REQUIREMENTS OF THE RELEVANT COUNCIL.
- THE DESIGN CONSULTANT IS RESPONSIBLE FOR DESIGN OF THE WORKS. ANY ALTERATIONS TO THE DESIGN SHALL BE DIRECTED TO THE DESIGN CONSULTANT FOR REVIEW & APPROVAL PRIOR TO THOSE ALTERATIONS BEING CONSTRUCTED.
- THE CONTRACTOR IS DIRECTLY RESPONSIBLE FOR THE SETOUT. SHOULD ACTUAL SITE CONDITIONS CONFLICT IN ANY WAY WITH THAT DOCUMENTED, THE CONTRACTOR MUST CONTACT THE DESIGN CONSULTANT FOR CLARIFICATION BEFORE PROCEEDING.
- CONTRACTOR SHALL NOTE DETAILS OF PROPERTY CONNECTIONS AND ANY CHANGES AND SUPPLY TO DESIGN CONSULTANT UPON REQUEST.

ENVIRONMENTAL

- THE CONTRACTOR IS RESPONSIBLE FOR ENVIRONMENTAL MANAGEMENT OF THE SITE.
- ALL TREES MUST BE PRESERVED & PROTECTED AT ALL TIMES UNLESS OTHERWISE NOTED ON THE DESIGN PLANS.

TESTING

- PRESSURE AND BACTERIOLOGICAL TESTING OF WATER MAINS MUST BE IN ACCORDANCE WITH PART 2 OF WSA 03-2011 (MRWA), AND THE GIPPSLAND WATER DISINFECTION POLICY, AND ONLY UNDER DIRECT SUPERVISION OF GIPPSLAND WATER. A MINIMUM OF 48 HOURS NOTICE OF THE PROPOSED TESTING MUST BE GIVEN PRIOR TO TESTING.
- ALL PIPELINES REQUIRING DISINFECTION SHALL BE DISINFECTED BY A GIPPSLAND WATER APPROVED CONTRACTOR.
- DISINFECTION AND PRESSURE TESTING DOCUMENTATION TO BE PROVIDED TO THE DESIGN CONSULTANT IMMEDIATELY ON COMPLETION OF WORKS.

ROAD OPENING PERMIT

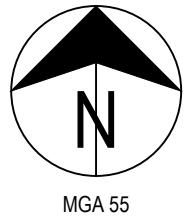
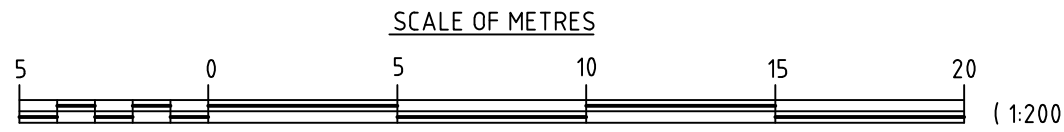
- THE CONTRACTOR SHALL OBTAIN A ROAD OPENING PERMIT FOR ANY WORKS WITHIN THE ROAD RESERVE AND COMPLY WITH ALL REQUIREMENTS.

CONNECTION NOTE

- 10 DAYS NOTICE MUST BE GIVEN TO GIPPSLAND WATER BEFORE MAKING A SHUTDOWN CONNECTION TO EXISTING WATERMAINS BY SUBMITTING A FORM 3W.
- 5 DAYS NOTICE MUST BE GIVEN TO GIPPSLAND WATER BEFORE MAKING A TAPPING UNDER PRESSURE TO EXISTING WATERMAINS BY SUBMITTING A FORM 3.
- ALL WORKS ARE TO BE DONE AT OWNERS COST.

NORMAL MINIMUM PIPE COVER	
ZONE	COVER (mm)
NO VEHICLE LOADING	900
VICROADS ROAD CROSSINGS	1200

TOTAL NEW WORK			
SIZE	TYPE	CLASS	LENGTH
100	PVC-O	16	19.6m
225	PVC-O	16	13m



LEGEND

- EX. WATER MAIN
— NEW WATER MAIN 225mm DIA. & UNDER
— NEW WATER MAIN >225mm DIA.
— DECOMMISSIONED MAIN
— FUTURE WATER MAIN
- ✕ VALVE
● FIRE PLUG
○ WASHOUT ASSEMBLY
— TAPER OR REDUCER
— RETAINING WALL
- O/HEAD POWER
- - - U/GROUND POWER
— SEWER MAIN
— GAS MAIN
— FOC — FIBRE OPTICS
— TELCO CABLE
— STORMWATER DRAIN

IMPORTANT

The following construction tolerances shall be observed:

- WATERMAIN LINE +/- 100mm FROM SPECIFIED LOCATION
WATERMAIN LEVEL +/- 50mm FROM SPECIFIED LEVELS
WATERMAIN STRUCTURE LOCATION +/- 500mm FROM SPECIFIED LOCATION
PROPERTY SERVICE LOCATION +/- 500mm FROM SPECIFIED LOCATION

Any changes that fall outside the above tolerances shall be referred to the Supervising Engineer for approval.

WARNING

NOT ALL SERVICES ARE SHOWN.
LOCATION OF SERVICES SHOWN IS
APPROXIMATE ONLY. ALL SERVICE
LOCATIONS SHOULD BE CONFIRMED
ON SITE PRIOR TO CONSTRUCTION



DESIGN HEAD = 65m
(STATIC PLUS SURGE)

SYSTEM TEST PRESSURE = 1000 kPa

REVISIONS

No.	DATE	DESCRIPTION	APP'D
A	7/8/15	ISSUED AS TYPICAL DRAWING	GBS
B	15/10/15	UPDATED TO INCLUDE SWABBING DETAILS	GBS
C	6/1/20	UPDATED LEGEND & THRUST RESTRAINT DETAILS	LN

REFERENCES

PLAN No.	TITLE

DESIGNED BY:

DO NOT SCALE

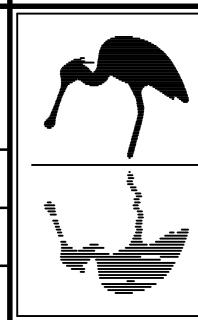
GIPPSLAND WATER
DRAWING STATUS

TYPICAL DRAWING ONLY

GIPPSLAND WATER FACILITY CODE

CERTIFICATION OF
COMPLIANCE WITH
GIPPSLAND WATER'S
DESIGN & DRAFTING
REQUIREMENTS

DESIGNED:	NAME
DATE	
DRAWN:	NAME
DATE	
CHECKED:	NAME
DATE	



A1-59287

REV. C

TYPICAL DRAWING
WATERMAIN REPLACEMENT
PRINCES HIGHWAY & SALE-HEYFIELD ROAD
LAYOUT PLAN & DETAILS