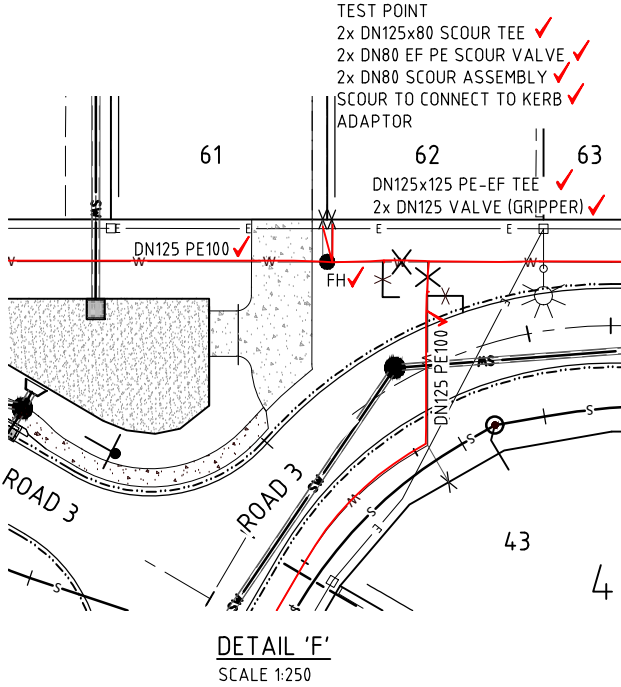
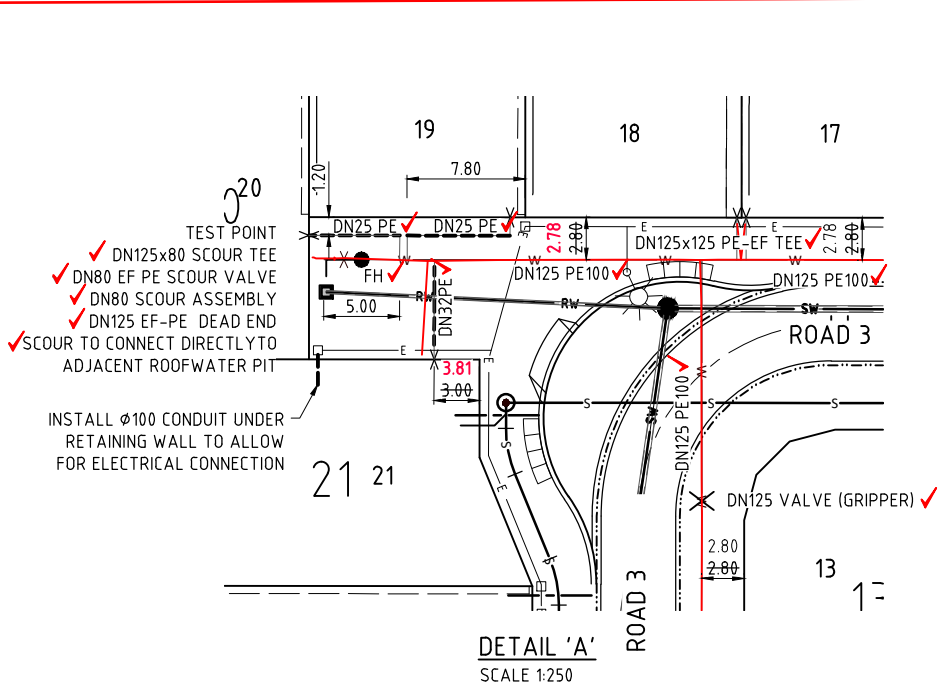


Mirvac will not be responsible for any loss, damage or costs incurred as a result of any errors or omissions in relation to the material in this document or for any possible actions ensuing from information contained in the document.

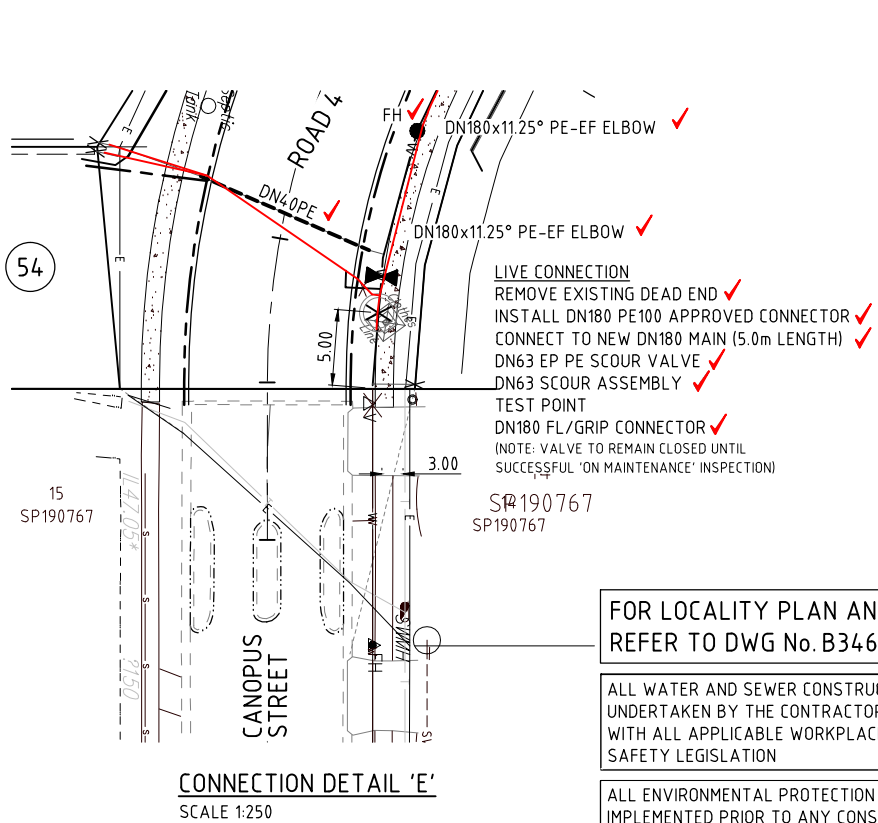
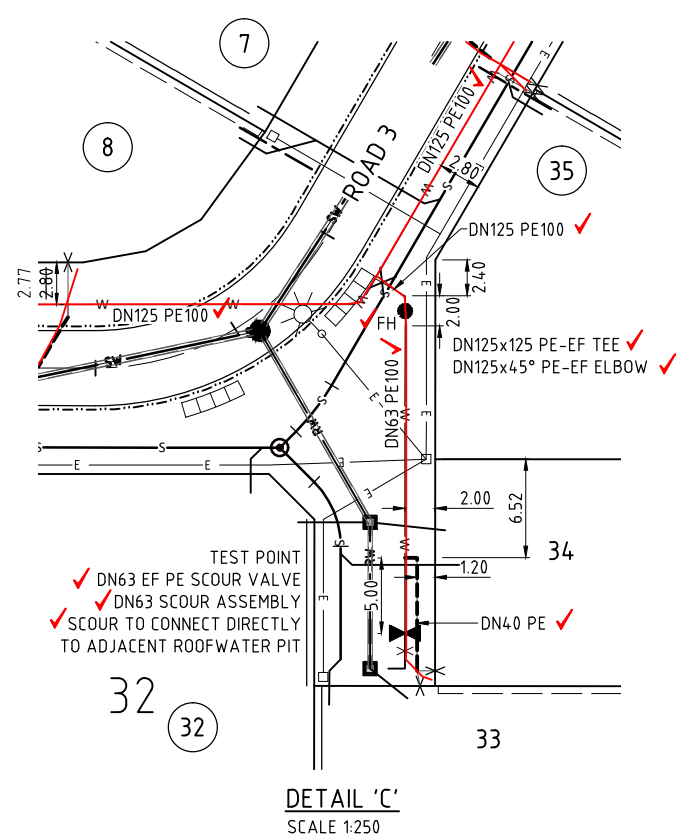
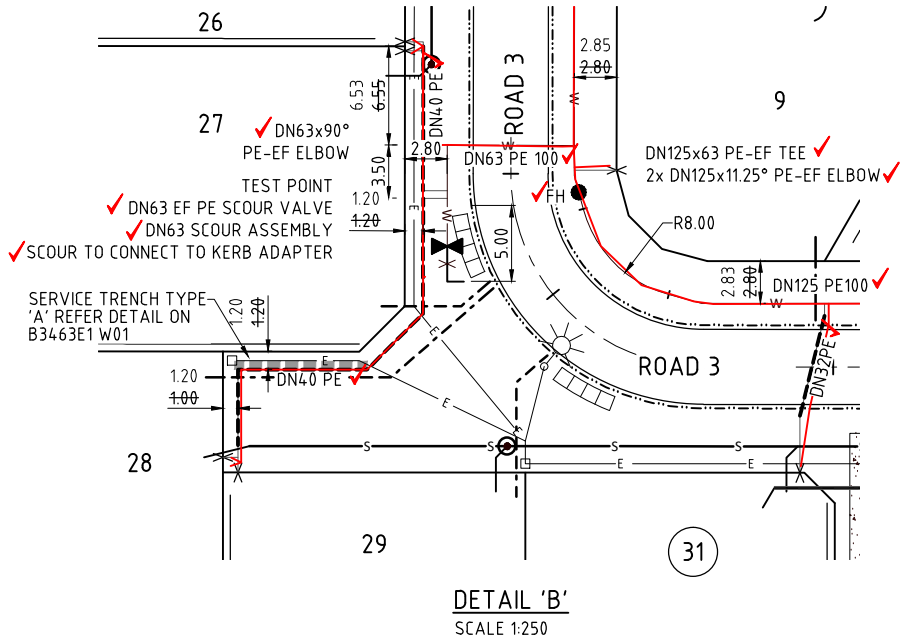
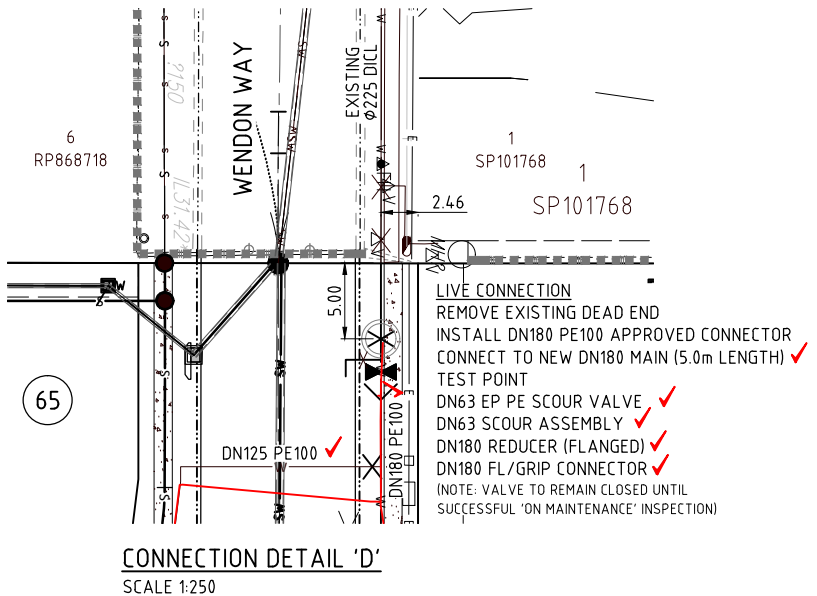
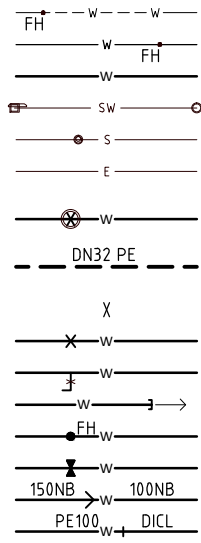


PLEASE NOTE:
Services locations and dimensions are indicative only and may be subject to change.
These plans do not detail the exact location of services. Mirvac does not provide any warranty as to the accuracy or completeness of the information and some constructed services may not be shown. Therefore it is vital that all services are located on site by a suitably qualified person.
Mircav will not be responsible for any loss, damage or costs incurred as a result of any errors or omissions in relation to the material in this document or for any possible actions ensuing from information contained in the document.



LEGEND

- MAIN TO BE DISUSED
- EXISTING WATER MAIN
- PROPOSED MAIN
- STORMWATER DRAINAGE
- SEWERAGE
- U.G. ELECTRICITY
- ISOLATION VALVE TO REMAIN CLOSED
- PENDING CLEARANCE OF NEW MAIN
- WATER SERVICE CONDUIT (with service size shown)
- WATER SERVICE POINT
- ISOLATION VALVE
- SCOUR VALVE
- DEAD END
- FIRE HYDRANT
- TEST/CHLORINATION POINT
- REDUCER
- PIPE MATERIAL CHANGE



FOR LOCALITY PLAN AND NOTES
REFER TO DWG No. B3463E1 W03

ALL WATER AND SEWER CONSTRUCTION WORK
UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY
WITH ALL APPLICABLE WORKPLACE HEALTH AND
SAFETY LEGISLATION

ALL ENVIRONMENTAL PROTECTION MEASURES SHALL BE
IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK,
INCLUDING CLEARING COMMENCING

AS-CONSTRUCTED
ENDORSED BY:



I, TOM MCKINNEY, certify the works have
been completed generally in accordance with the
approved design.

RPEQ No. 5087 (signature) 7/01/16 (date)

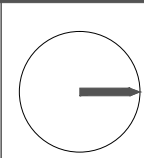
CERTIFICATION OF AS-CONSTRUCTED WORKS BY SURVEYOR

QUEENSLAND SURVEYING SOLUTIONS PTY LTD DO CERTIFY THAT THE AS CONSTRUCTED DATA AND PLANS PROVIDED TO PENSAR CONSTRUCTIONS GROUP (AS THE PRINCIPAL CIVIL CONTRACTOR) FOR THE DEVELOPMENT AT 26 DARIE STREET, BRIDGEMAN DOWNS IS A TRUE AND ACCURATE REFLECTION OF THE WORKS COMPLETED ON SITE. WE CONFIRM THAT ALL DATA AND PLANS HAVE BEEN PRESENTED USING THE CORRECT DATUM AND ORIENTATION APPROPRIATE TO THE SITE IN A FORMAT AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY STANDARDS.

SIGNATURE: [Signature]
NAME: JOHN DONALD O'BRIEN
DULY AUTHORISED ON BEHALF OF: QUEENSLAND SURVEYING SOLUTIONS PTY LTD
DATE: 04/01/16

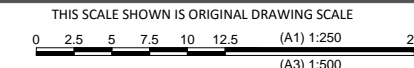
CONSULTANT: JFP URBAN CONSULTANTS PTY LTD
CONTACT: MR. TOM MCKINNEY
TELEPHONE: 3012 0100

NORTH:



SCALE:

1:250
A1



DO NOT SCALE FROM THIS DRAWING - USE ONLY DIMENSIONS PROVIDED - IF IN DOUBT PLEASE ENQUIRE

ISSUE:

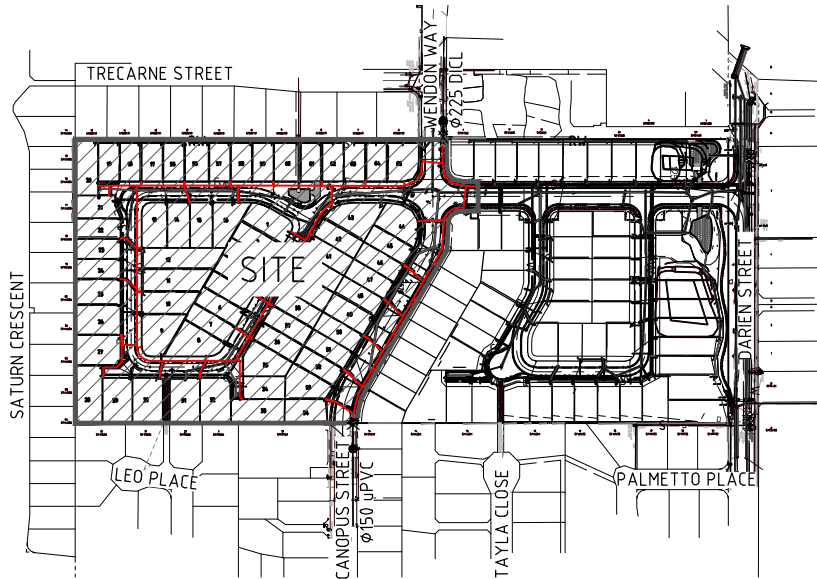
DESIGNED	CD	C	AS CONSTRUCTED ISSUE
DRAWN	CD	B	QUU AMENDMENTS FOR APPROVAL
CHECKED	SK	A	ORIGINAL ISSUE FOR COUNCIL
DATUM:	AHD	ISSUE:	DETAILS:

TITLE:

WATER RETICULATION
LAYOUT DETAILS PLAN
MIRVAC QUEENSLAND PTY LTD
ASTON GROVE - STAGE 1A & 1B
26 DARIE STREET, BRIDGEMAN DOWNS

DETAILS:

PROJECT:	PLAN:	ISSUE:
B3463E1	W02	C
LOCAL AUTHORITY REF:		
BRISBANE CITY COUNCIL		
COUNCIL REF:		
A003963559		
FILE NAME:		
QSS519-019-A AS-CON WATER.DWG		



LOCALITY PLAN

SCALE 1:2500

UBD MAP REFERENCE No. 118 Q,3

PLEASE NOTE:

Services locations and dimensions are indicative only and may be subject to change.

These plans do not detail the exact location of services. Mirvac does not provide any warranty as to the accuracy or completeness of the information and some constructed services may not be shown. Therefore it is vital that all services are located on site by a suitably qualified person.

Mirvac will not be responsible for any loss, damage or costs incurred as a result of any errors or omissions in relation to the material in this document or for any possible actions ensuing from information contained in the document.

NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
4. COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
5. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
6. A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH STANDARD DRAWING FOR QUEENSLAND URBAN UTILITIES (Q.U.U.).
7. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH Q.U.U.'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY Q.U.U.
8. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
9. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STD. DWG. NO. SEW-WAT-1410-1.
10. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO Q.U.U.'S RETICULATION SYSTEM.

ENVIRONMENTAL NOTES

VEGETATION PROTECTION

- A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHOULD BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- C. TREE ROOTS SHALL BE TUNNELED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED, THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL

- A. TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- B. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

CREEK CROSSINGS

- A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- B. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- C. NO SOIL SHOULD BE STOCKPILED WITHIN 5m OF THE CREEK.

REHABILITATION

- A. PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS ARE TO BE REINSTATED.
- B. PREDISTURBANCE VEGETATION PATTERNS SHOULD BE RESTORED.

SAFETY

- A. THE DESIGN AND CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION

CONNECTIONS & SUBSTITUTION		SERVICE DETAILS		ASSET REGISTER – WATER RETICULATION				AS CONSTRUCTED RECEIVED	
STREET QUU CONNECTION – WENDON WAY FROM ADJ LOT 1 ALONG WENDON WAY TO OPP LOT 65 ALONG ROAD 4 LENGTH 5.0m DATE COMMENCED 16/11/15 DATE COMPLETED 16/11/15 SIGNATURE	TYPE OF MAIN DN180PE100	No.	SIZE	LOT NUMBERS		ESTATE/STAGE		BY	
		44	DN32	1, 8–13, 16–18, 21, 30, 35–44, 55–65		26 DARIEN STREET, BRIDGEMAN DOWNS		UTILITY/DELEGATE	
			DN25	FUTURE LOTS 66, 75–84		A003963559		DATE	/ /
		2	DN25	19–20		QUU DELEGATES APP. DATE		ON MAINTENANCE DETAILS	
						21/11/2014		Start	/ /
STREET QUU CONNECTION – CANOPUS STREET FROM ADJ LOT 14 ALONG CANOPUS ST TO ADJ LOT 75 ALONG CANPOUT STREET LENGTH 5.0m DATE COMMENCED 16/11/15 DATE COMPLETED 16/11/15 SIGNATURE	TYPE OF MAIN DN180PE100					CLIENT		Finish	/ /
						MIRVAC		UTILITY DELEGATE'S COMMENTS	
						DRAWING/PLAN No.			
STREET ROAD 4 AND ROAD 5 FROM WENDON WAY TO CANOPUS STREET LENGTH 219 DATE COMMENCED 09/15 DATE COMPLETED 10/15 SIGNATURE	TYPE OF MAIN DN180								
STREET ROAD 3 FROM INTERSECTION ROAD 2 TO INTERSECTION ROAD 3 LENGTH 572 DATE COMMENCED 09/15 DATE COMPLETED 10/15 SIGNATURE	TYPE OF MAIN DN125								

CONSULTANT: JFP URBAN CONSULTANTS PTY LTD
CONTACT: MR. TOM MCKINNEY
TELEPHONE: 3012 0100

AS-CONSTRUCTED

ENDORSED BY:



I, TOM MCKINNEY, certify the works have been completed generally in accordance with the approved design.

RPEQ No. 5087

(signature)

7/01/16
(date)

CERTIFICATION OF AS-CONSTRUCTED WORKS BY SURVEYOR

QUEENSLAND SURVEYING SOLUTIONS PTY LTD DO CERTIFY THAT THE AS CONSTRUCTED DATA AND PLANS PROVIDED TO PENSAR CONSTRUCTIONS GROUP (AS THE PRINCIPAL CIVIL CONTRACTOR) FOR THE DEVELOPMENT AT 26 DARIEN STREET, BRIDGEMAN DOWNS IS A TRUE AND ACCURATE REFLECTION OF THE WORKS COMPLETED ON SITE. WE CONFIRM THAT ALL DATA AND PLANS HAVE BEEN PRESENTED USING THE CORRECT DATUM AND ORIENTATION APPROPRIATE TO THE SITE IN A FORMAT AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY STANDARDS.

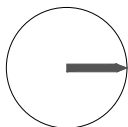
SIGNATURE : _____

NAME : JOHN DONALD O'BRIEN

DULY AUTHORISED ON BEHALF OF : QUEENSLAND SURVEYING SOLUTIONS PTY LTD

DATE : 04/01/16

NORTH:



SCALE:

NOT TO SCALE THIS SCALE SHOWN IS ORIGINAL DRAWING SCALE

A1

DO NOT SCALE FROM THIS DRAWING - USE ONLY DIMENSIONS PROVIDED - IF IN DOUBT PLEASE ENQUIRE

ISSUE:

DESIGNED	CD	C	AS CONSTRUCTED ISSUE	05/01/16	GW
DRAWN	CD	B	QUU AMENDMENTS FOR APPROVAL	18/05/15	DJG
CHECKED	SK	A	ORIGINAL ISSUE FOR COUNCIL	23/03/15	DJG
DATUM: AHD			ISSUE: DETAILS:	DATE:	INIT:

TITLE:

WATER RETICULATION NOTES AND DETAILS PLAN

MIRVAC QUEENSLAND PTY LTD

ASTON GROVE - STAGE 1A & 1B
26 DARIEN STREET, BRIDGEMAN DOWNS

DETAILS:

PROJECT: B3463E1 PLAN: W03 ISSUE: C

LOCAL AUTHORITY REF:
BRISBANE CITY COUNCIL

COUNCIL REF:
A003963559

FILE NAME: QSS519-019-A AS-CON
WATER.DWG