

NOT TO SCALE

**NBN PITS** NBN PITS MUST BE INSTALLED IMMEDIATELY OUTSIDE THE EXCLUSION ZONE OF THE ELECTRICITY PILLAR & EXACTLY 3m FROM CORNER TRUNCATIONS AS PER DETAIL B.

#### PITS ON ZERO LOT BOUNDARY Proposed communications pits are to be offset as indicated below away from the zero lot line. The pits shall be aligned on the same side as the electrical pillar, away from the driveway location. Electrical pillars are located a minimum of 1.0m from the driveway edge with the communications pit position immediately outside the exclusion zone of the electrical pillar. Comms pits shall not clash with potential driveway positions indicated. The side of the Electricity pillar is to be aligned with boundary line Zero Lot RP line indicated onside of boundary with Grey line location Lot No-NOT TO SCALE

LEGEND: NBN CONDUITS & PITS

Fibre Distribution Hub (FDH) site - 1m x 1m

Fibre Access Node (FAN) site

Proposed 100mm Main Conduit

Proposed 50mm Lateral Conduit

Proposed 23mm Service Drop

Conduits by Civil Contractor

Proposed shared trench

Service Drop Access Pit

Premises Connection (Houses an MPT)

Local Network Connection Pit

Fibre Distribution Hub (FDH) Pit

Depth over alignment indicator

(used with every Marker Post)

(Description of type of work & Quantity involved)

Existing or proposed Energex pole (& pole ID)

Existing Telstra Manholes (Access Chambers)

"AS CONSTRUCTED" DOCUMENTS The electrical contractor shall email the "as constructed"

'AS CONSTRUCTED' CERTIFICATION

The installation of NBN conduits and pits has been completed in accordance with this drawing & NBN specification NBN-TE-CTO-194, subject to any changes marked up in red. Mandrel testing of all conduits has been preformed as detailed

The minimum depths of conduits are as specified, except as

drawing, test results & closure documents to: as.constructed@robrus.com.au

(5) Existing Telstra Pits (size 2,3,4,5,6,7,8 or 9)

Existing network item to be removed/replaced

Existing Traffic Signals Box

△ 'C' communications marker plate

I certify as follows:

marked up in red. signature of certifier:

date of certification:

name of company:

certifier's position:

ELECTRICAL DESIGNER

CIVIL ENGINEER

SURVEYOR

CARDNO SPLAT

GAS

JUSTIN LUCHT Ph: 07 3872 5555

COMMS CONDUIT DESIGNER

JUSTIN LUCHT Ph: 07 3872 5555

CONSTRUCTION COORDINATOR

BERNIE RUSSELL Ph: 0413 598 560

ACOR CONSULTANTS (QLD) PTY LTD

JOSHUA MELTON Ph: 3844 5900

RPS AUSTRALIA EAST PTY LTD

DAMIAN LING Ph: 07 3437 2099

LANDSCAPE ARCHITECT

MICAH HOOGLAND Ph: 07 3100 2107

SILVIA HART Ph: 07 3215 6655

on the attached Mandrel Test Report.

CONSTRUCTION CONTACTS

ROBIN RUSSELL & ASSOCIATES PTY LTD

name of authorised certifier:

**ELECTRICAL ENGINEER** 

Within 5m of FDH Site

(Post to be numbered)

Pad Mount / Pole Mount

Existing Telstra conduit trench layout (Proposed conduit indicated for comms cable)

183A R2 Multi Dwelling Unit (MDU)

Transformer

**———** Existing NBN 100mm conduit

Existing Telstra Exchange

Cross-Road & Other Premises Connection (No MPT)

at entry/exit to estate; @ 250m ccs on distribution conduit

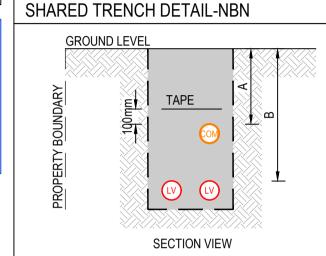
Premises Connection & Fibre Splice Closure

Distribution / Local Network Connection Pit

Local Network Pit

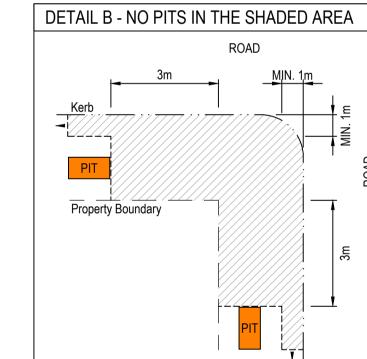
Boundary Pit

Proposed length of bored conduit



SECTION VIEW					
MINIMUM CONDUIT DEPTH *					
LOCATION	Α	В			
√erge	450mm	750mm			
_ocal Road	600mm	Energex 800mm; Ergon 900mm			

DTMR Road 800mm 1200mm \* supercedes Energex/Ergon requirements



## NOTES - NBN

Additional requirements and explanatory information are contained in Robin Russell & Associates' General Specification for Installation of Electricity Reticulation and Street Lighting - Issue 'Z'.

For details of trenching and electrical conduits, refer associated RRA works plan.

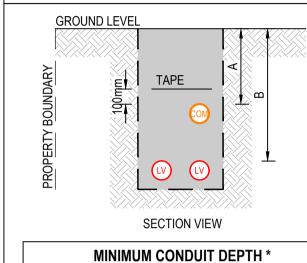
In residential subdivisions, NBN conduits shall be laid in shared trenches, above electricity conduits. The Civil Contractor shall install

telecommunications alignment, as specified.

The installation of white warning tape is NOT required. If conduit is not installed in a shared trench with electricity, brass "C" markers shall be installed in the kerbs directly above road-crossing conduits.

Pits shall be installed relative to the property boundary as shown, immediately outside the exclusion zone of the electricity pillar. Unless otherwise specified, pit levels shall be calculated for a verge profile of 2.5%, i.e. 1 in 40 rise from back of kerb, within a

	SOURCE DOCUMENTS								
	CREATOR	DRAWING	DWG. NO.	REV. NO.	DATE				
	RRA	STAGE 33 - ELECTRICAL	C451	Α	19/12/2017				
	RRA	STAGE 42A - NBN	C285-N	Α	24/10/2017				



NBN conduits and pits shall be installed in compliance with NBN Co specification: NBN-TE-CTO-194 V 7.0 New Developments: Deployment of the NBN Co Conduit and Pit Network - Guidelines for Developers. This can be downloaded at: http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments/design-build-install/pit-and-pipe-build-process.html

road-crossing conduits and other conduits as shown (see legend). In commercial subdivisions, or where no electricity conduit is present, NBN conduits shall be laid on the standard

On State roads, the required cover of 1200mm precludes the use of shared trenches.

Contractors shall not access existing Telstra pits or conduits.

The Electrical Contractor shall give the Superintendent written notice (a) 10 business days before it anticipates achieving Practical Completion of the conduit and pit installation, and (b) on achieving Practical Completion, to allow the required notices to be given to

Conduit lengths are nominal horizontal distances only. Fibre lengths shall be verified in advance by actual measurement. The electrical contractor shall perform mandrel testing of all telecommunications conduits, including cross-road and lead-in conduits

SOURCE DOCUMENTS								
CREATOR	DRAWING	DWG. NO.	REV. NO.	DATE				
RRA	STAGE 33 - ELECTRICAL	C451	Α	19/12/2017				
RRA	STAGE 42A - NBN	C285-N	Α	24/10/2017				

## **PLAN VIEW** SCALE 1:1000 1: 1000 (A1 - NOT REDUCED) Note: Pits and FDH plinths are not drawn to scale.

#### SITE INFORMATION TOTAL NUMBER OF LOTS

PROPERTY DESCRIPTION

DANGER

1417

LOTS 1412-1446, 1666-1668, 1675-1677, 1853-1855, 1885-1889, 1906-1907 & 3066 CANCELLING PART OF LOT 7022 ON SP279904



# ORIGINAL ISSUE Telecommunications infrastructure will

CODE	ITEM	NOMINAL SIZE (Inside Diameter) AS/NZS 1477:2006	WALL THICKNESS (Table 4.2 A)	QUANTITY (metres)	
P20	SDU service drop	23mm	PN12	415	
P50	MDU service drop	53mm	PN12	-	
P50	lateral conduit	53mm	PN12	200	
P100	local network conduit	104mm	PN9	720	
P100	distribution network conduit	104mm	PN9	-	
Additional trenching					

NBN CONDUIT SCHEDULE - CIVIL CONTRACTOR

CODE ITEM

SDU service drop - lots 1418, 1419,

road crossing conduit

P100 | footpath conduit - retaining walls

P100 road crossing conduit

P100 | enveloping conduit

Additional trenching

NOMINAL SIZE (Inside Diameter)

AS/NZS 1477:2006

23mm

104mm

104mm

WALL THICKNESS

(Table 4.2 A)

PN12

PN12

PN9

PN9

PN9

QUANTITY

(metres)

12

90

255

140

17

1425

1426

1437

1424

	CONDUIT SPECIFICATIONS - NBN COMMUNICATIONS				
Australian Standard	conduits and fittings shall comply with AS/NZS 1477:2006 PVC pipes & fittings for pressure applications				
colour	white				
labelled	"NBN - Communications"				
Min. bend radius	20mm dia: 300mm   50mm dia: 300mm   100mm dia: 800mm				
finish	test; fit draw rope; seal				
Min. depth of cover	service drop: 300mm (350mm in joint use trench); verge: 450mm; road: 600mm; State road: 800mm				
verge alignment	300-900mm except as indicated				

NBN PIT SCHEDULE - ELECTRICAL CONTRACTOR

8 distribution/local network connection pit (dual lid) 1360 x 555 x 860mm

QUANTITY

16

650 x 280 x 565mm

700 x 450 x 650mm

1360 x 555 x 650mm

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVIS
13/02/2018	Α	INITIAL ISSUE	R.R.					:
22/02/2018	В	ROAD NAMES ADDED	R.R.					



SUBDIVISION **ELECTRICAL SERVICES** 204/6 Babarra Street, Stafford, QLD 4053 Tel: (07) 3872 5555 Fax: (07) 3872 5566 Email: rr@robrus.com.au www.robrus.com.au A.B.N. 78 010 589 661

s	SPECIFICATION NO.	NBN-TE-CTO-194	DESIGNED	JUSTIN LUCHT
3	COUNCIL	IPSWICH CITY	CHECKED	K.R.
	COUNCIL REF	40/2015/MA/E	APPROVED BY	ROBIN RUSSELL RPEQ 1546
	UBD REF	Map Grid 254 J10	SIGNED	Poli homela
	DWT REV	V41 - 20170726	DATE	13/02/2018

PIT ITEM

service drop access pit

service/boundary pit (single lid)

local network connection pit (dual lid)

## DESCRIPTION **NBN CONDUITS & PITS**

Daleswan Pty Ltd ta Providence Ripley

PROVIDENCE STAGE 33 PROVIDENCE PDE **SOUTH RIPLEY** 

THIS DOCUMENT IS COPYRIGHT AND THE PROPERTY OF ROBIN RUSSELL & ASSOCIATES PTY LTD THIS DOCUMENT IS COPYRIGHT AND THE PROPERTY OF ROBIN RUSSE
AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY

C451-N-01B

AYCA-4VAZKT 1 of 1