

DIAGRAM -A-
SCALE 1:250

NOTE
NORTHERN END OF BOUNDARY IS IN LOCATION OF
VO FENCE ERRECTED IN ABOUT 1873 (DP88459)

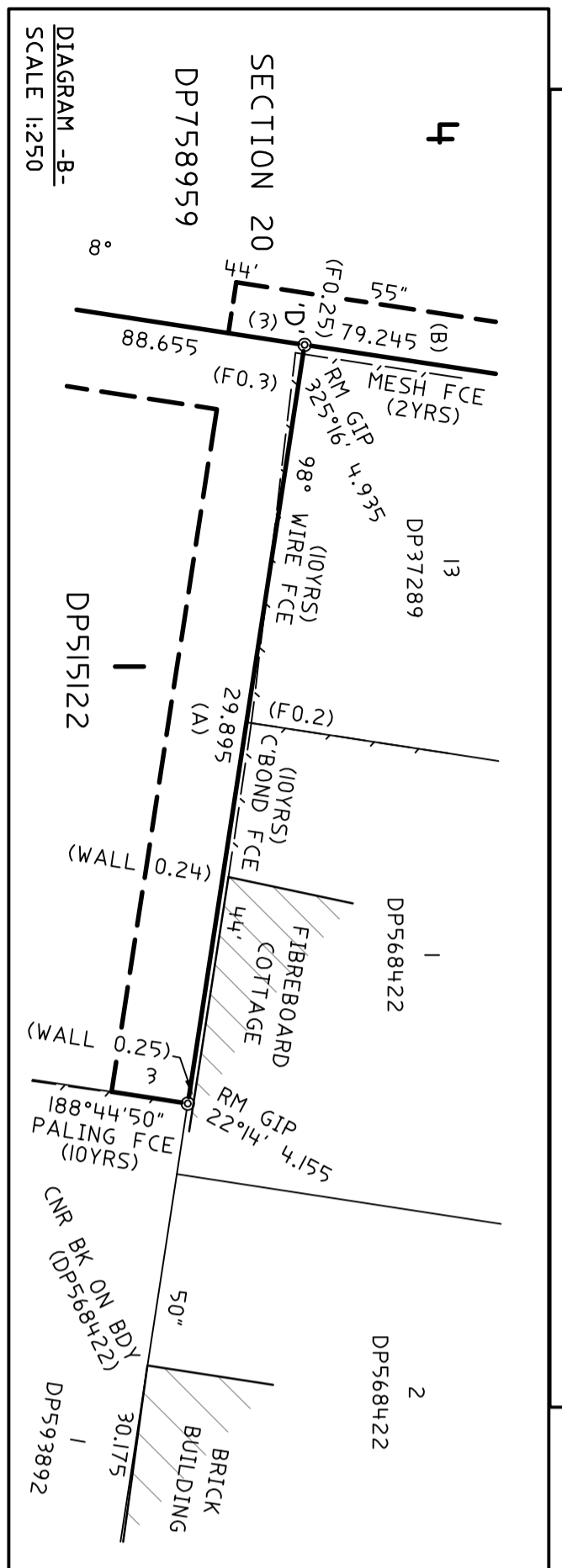


DIAGRAM -B-
SCALE 1:250

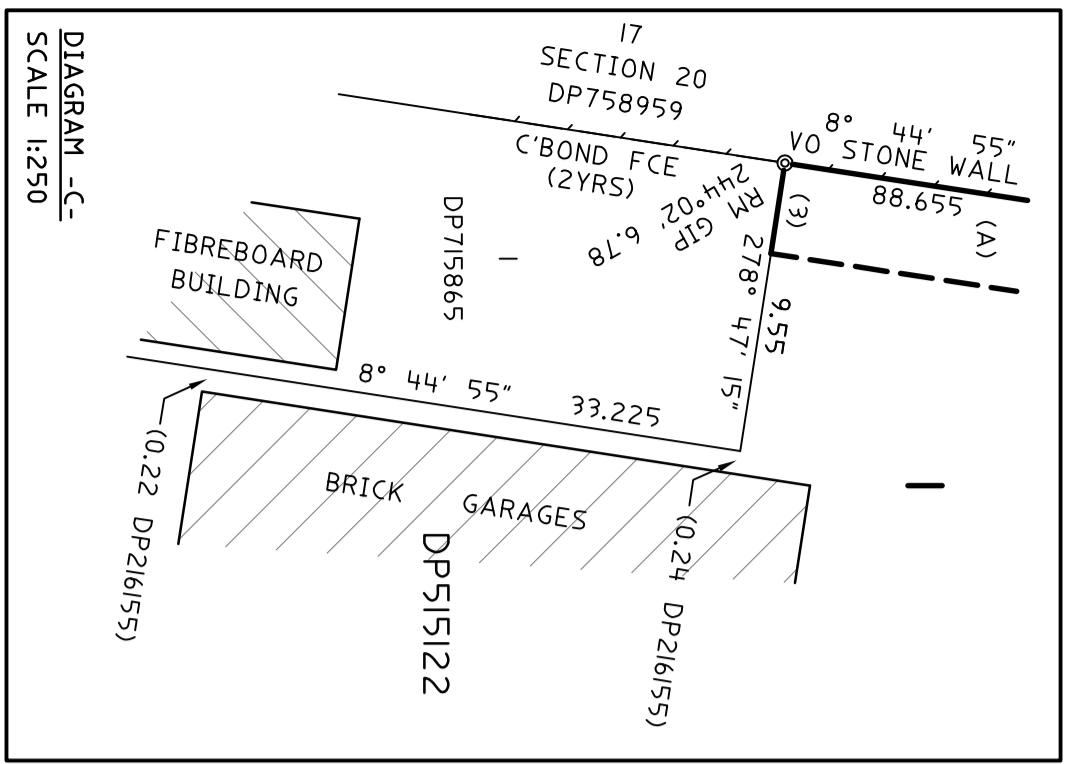
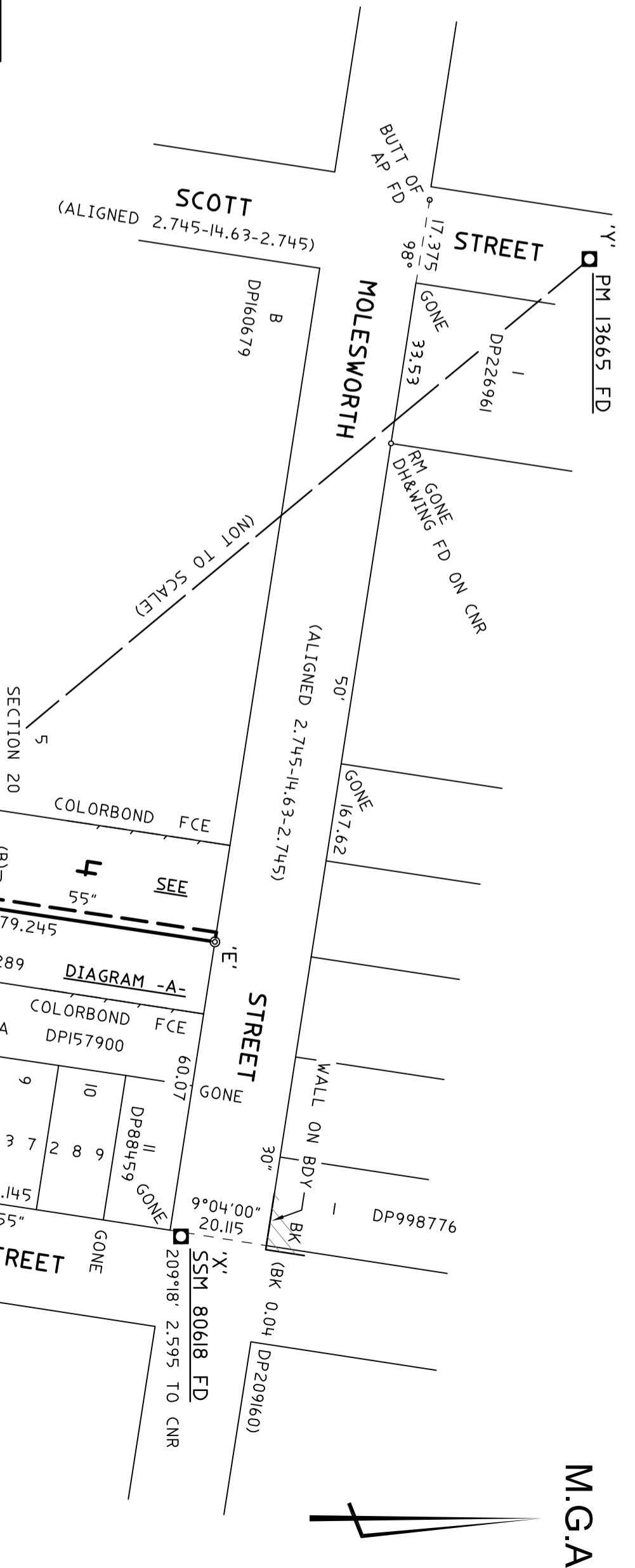


DIAGRAM -C-
SCALE 1:250



CONNECTIONS

'X' - 'Y'

SSM 80618 - PM 13665
325°17'55" 312.255 ME
325°17'55" 312.261 MGA GROUND

PM 13665 - PM 13649
187°56'27" 444.66 ME
187°56'27" 444.643 MGA GROUND

SSM 80618 - CNR 'E'
276°33'50" 61.21

PM 13665 - CNR 'D'
162°14'20" 344.485

CNR 'C' - CNR 'D'
278°44'50" 60.07 ME
270°00'00" 60.07 DP568422 & DP216155

(A) EASEMENT TO DRAIN WATER 3 WIDE
(B) EASEMENT TO DRAIN WATER 2 WIDE

SURVEYING AND SPATIAL INFORMATION REGULATION 2012:
CLAUSE 6(1)(2)

MARK	MGA CO-ORDINATES		CLASS	ORDER	METHOD	ORIGIN
	EASTING	NORTHING				
PM 13649	404295.538	6785721.937	56	C	3	SCIMS FOUND
PM 13665	404356.940	6786162.129	56	C	3	SCIMS FOUND
SSM 80618	404534.634	6785905.519	56	A	1	SCIMS FOUND

COMBINED SEA LEVEL AND SCALE FACTOR 0.999575
OBTAINED FROM SCIMS (17/02/2014)

Surveyor: KENNETH GEORGE BUCKLEY
Date of Survey: 15/07/2014
Surveyor's Ref: TEH0097-SVI

PLAN OF EASEMENTS TO DRAIN
WATER WITHIN LOT 1 IN
DP515122 AND LOT 4 OF
SECTION 20 IN DP758959

LGA: TENTERFIELD
Locality: TENTERFIELD
Subdivision No.

Registered

DP

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 Table of mm

M.G.A

D ON CNR

50 GONE 167.62
(ALIGNED 2.745-14.63-2.745)

WALL ON BDY BK

DP998776

(BK 0.04 DP209160)

STREET

X' SSM 80618 FD

209'18" 2.595 TO CNR

TO SCALE

SECTION 20
DP758959

SECTION 20
DP758959

DIAGRAM - A

COLORBOND FCE

60.07

DP88459

10

3 7 2 8 9

9

18

D P

BK

DP568422

2

SEE
DIAGRAM - B

50'

DP593892

30.175

DP1083316

A DP153606

2

DP37289

72.9

2

DP515122

2

DP515122

RM GONE

DH ON CNR FD (DP515122)

WALL 0.025 CLR

188°

GONE

15'

188°34'

20.115

RM GONE

FACE OF WALL ON BDY (DP831565)

34.15

DP831565

DP

(WALL 0.185)

DP216155

A DP933656

SECTION 20
DP758959

SECTION 20
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SECTION 20
DP758959

HIGH

(ALIGNED 2.745-14.63-2.745)

47'

6
DP183746

WHEREAT

(9.145 WIDE)

LANE

DH ON

WALL FD (DP831565)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

DP

(WALL 0.185)

STREET

ROUSE

STREET

GONE

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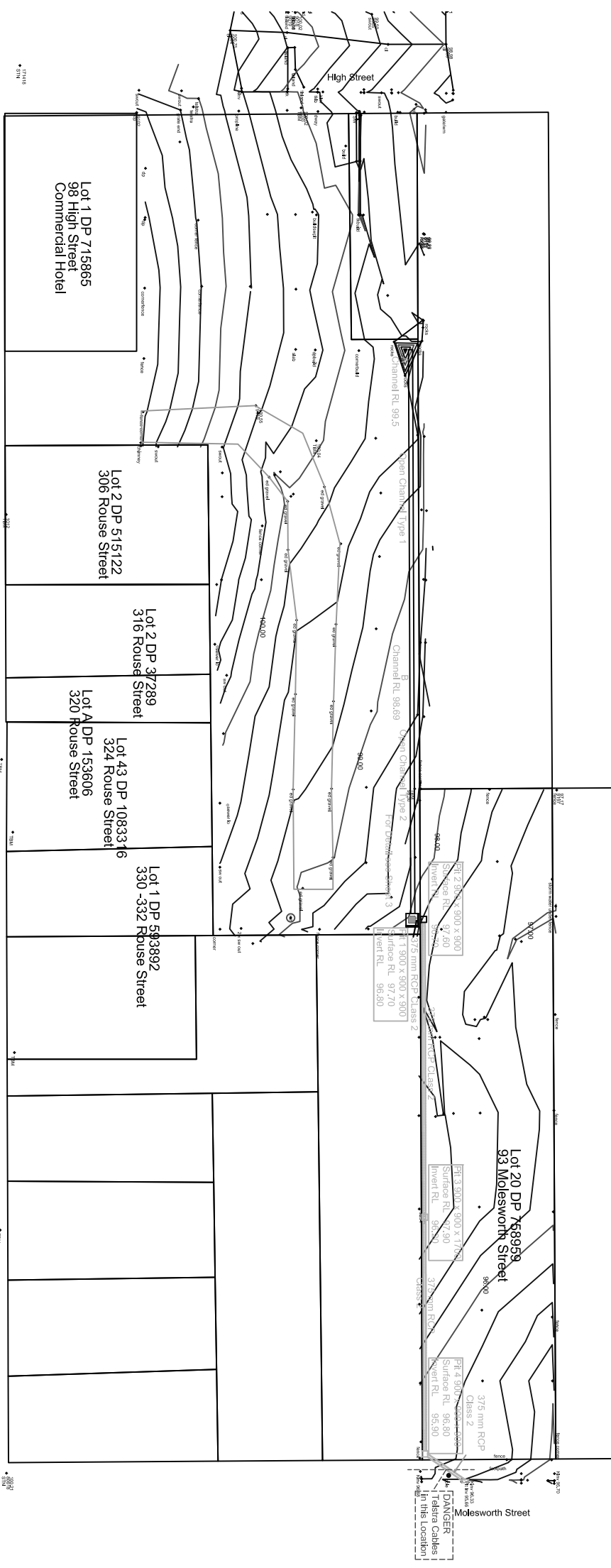
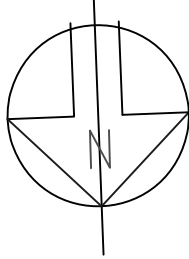
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SCOPE OF WORKS

- 1 Construction of Stormwater Drainage.
- 2 All works and services required to construct the Stormwater system as per the attached drawings.
- 3 Works include but not limited to:
 - a) Stripping and stockpiling of topsoil
 - b) Formation and compaction of Open flow channels
 - c) Supply and installation of RCPs and Precast Pits
 - d) Supply and installation of Core filled blocks and concrete apron to pit 1
 - e) Supply and installation of custom built Inlet grate to pit 1
 - f) Make good to pavers in Molesworth Street
- 4 Survey control to be provided by TSC

Earthworks

Ew 1 Topsoil

Strip area to be occupied by the works of all topsoil by grubbing to a depth of at least 100 mm below natural surface or foundation level, whichever is the lower. Stockpile topsoil separately from the grass and mulch material from clearing and from sub-soil. Topsoil shall be the surface or top layer of soil including fine roots which is characterised by a clearly visible percentage of humus material. Do not mix sub-soil with topsoil to be re-spread.

Ew 2 Stockpile all topsoil from stripping operations on site. Establish stockpiles in heights not greater than 2 m. Provide adequate watering, drainage and aeration. Do not allow traffic on stockpiles.

Ew3 COMPACTION REQUIREMENTS

Use selected excavated material or imported material, free from debris, roots, lumber and other debris as fill material. Place fill in near horizontal layers not exceeding 200 mm in loose thickness. Limit maximum particle size to two-thirds of compacted layer thickness. Compaction moisture content shall be 1% dry to 2% wet of the optimum. Lightly scarify top of each compacted layer to a depth of 25mm before placing next layer of fill for compaction. At the cessation of fill placement for the day, roll flat the surface to protect the work. Prior to resumption of fill placement, scarify the surface as specified above and adjust the moisture content to the specified range. Compact the soils to the following minimum standard dry density ratios (AS 1289.5.4.1) for cohesive materials and density indexes (AS 1289.E6.1) for cohesionless soil:
Pipeline Compaction 95 %

EW 4 EARTHWORKS FOR PIPELINES

Excavation

Levels or grades shall generally be as indicated on the submitted drawings. Where levels or grades are not indicated on the submitted drawings, the minimum cover as specified in the paragraph following shall deemed to apply to all buried pipelines.

Additional Excavation

Where extra excavation is required below the design depth in order to obtain a firm foundation, re-fill the portion so excavated in layers up to the design depth specified with non-cohesive material compacted to 95% Density Index in accordance with AS 1289.E6.1.

Unattended excavations

Erect and maintain at all unattended excavations safety protection measures including but be not limited to:-

- (i) safety and stockproof fencing or
- (ii) installation of trench covers or
- (iii) temporary backfilling of all excavations, irrespective of excavation depth.

CONCRETE

C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.

C2. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.

C3. MINIMUM COVER (mm) TO ALL REINFORCEMENT EXCEPT F41 MESH UNLESS OTHERWISE SHOWN SHALL BE AS FOLLOWS :

- C4. i) CONCRETE CLASS - MINIMUM 25 MPA AT 28 DAYS
- 20 NOMINAL MAXIMUM AGGREGATE SIZE
- 80 MAXIMUM SLUMP +/-10MM

STRUCTURAL STEEL

S1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100.

S2. WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554.

S3. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN.

S4. CAMBER TO BE AS NOTED ON THE DRAWINGS.

S5. EXCEPT WHERE OTHERWISE SHOWN WELDS TO BE 6mm CONTINUOUS FILLET.

REINFORCED MASONRY

M1. ALL CONCRETE MASONRY UNITS SHALL CONFORM TO THE REQUIREMENTS OF AS4456.4 & 10. FUC=15 MPA. MORTAR SHALL COMFORM TO THE REQUIREMENTS OF AS3700. GROUT SHALL BE CONCRETE WITH CHARACTERISTIC STRENGTH AT 28 DAYS (FC) OF 20 MPA AND A SLUMP OF 250 MM WITH A POURABLE CONSISTENCY. MAXIMUM AGGREGATE SIZE SHALL BE 6 MM.

M2. ACCURATELY POSITION VERTICAL REINFORCEMENT TO PROVIDE THE COVER INDICATED ON THE DRAWINGS. OTHERWISE THERE SHALL BE A MINIMUM OF 5 MM COVER OF GROUT AROUND ALL REINFORCEMENT. SECURE VERTICAL BARS IN POSITION PRIOR TO PLACING CONCRETE OR GROUT.

M3. BLOCKWORK SHALL CURE AT LEAST THREE DAYS TO GAIN STRENGTH BEFORE POURING GROUT.

M6. GROUT SHALL BE PLACED BY PUMPING OR BY ANOTHER APPROVED METHOD AND SHALL BE PLACED BEFORE ANY INITIAL SET OCCURS AND IN NO CASE MORE THAN 1-1/2 HOURS AFTER WATER IS ADDED.

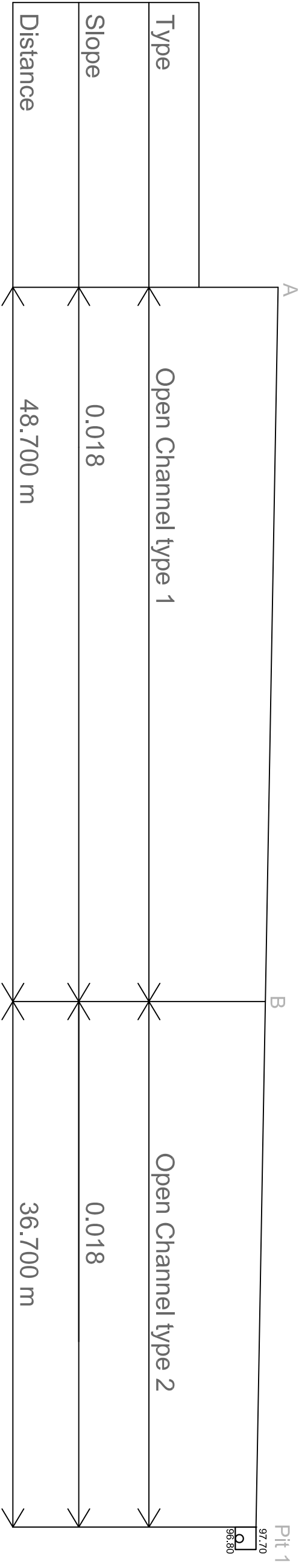
PRECAST PITS AND PIPELINES

P1. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

A	12/7/13 For Tender									
		SURVEYED: M Whittion	DATE		ISSUE	A	DATE	12/07/13		
		DESIGNED:	SIGNED		SHEET NUMBER	1	OF	4	SHEETS	
		DRAWN: WEDS	APPROV		PLAN No.	WEDS 13-201				
		CHECKED: BT			ARCHIVE FILE					
		ACCEPTED:								
		REASON FOR ISSUE								
		ISSUE								
		DATE								

1 : 800

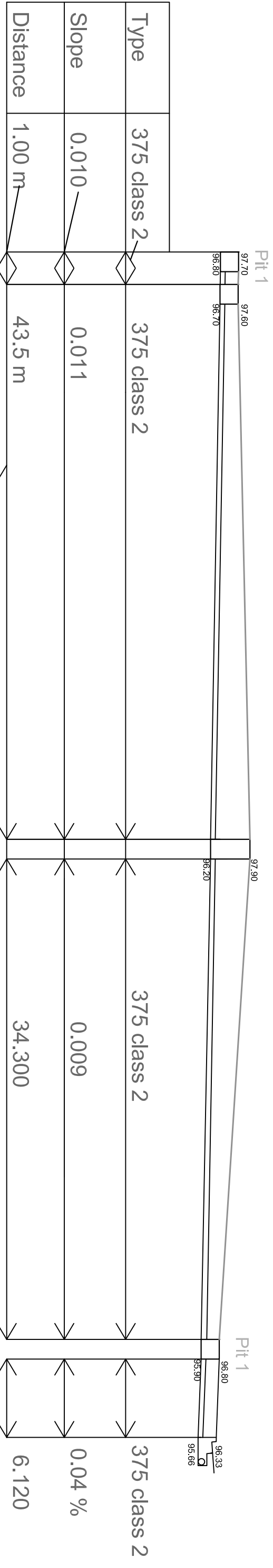
Tenterfield Shire Council
Commercial Hotel Drainage
Tenterfield
Layout Plan & Notes



Point A
Surface RL 99.50
Invert RL 99.40

Point B
Surface RL 98.80
Invert RL 98.69

Pit 1 900 x 900 x 900
Surface RL 97.70
Invert RL 96.80



Pit 1 900 x 900 x 900
Surface RL 97.70
Invert RL 96.80

Pit 2 900 x 900 x 900
Surface RL 97.60
Invert RL 96.70

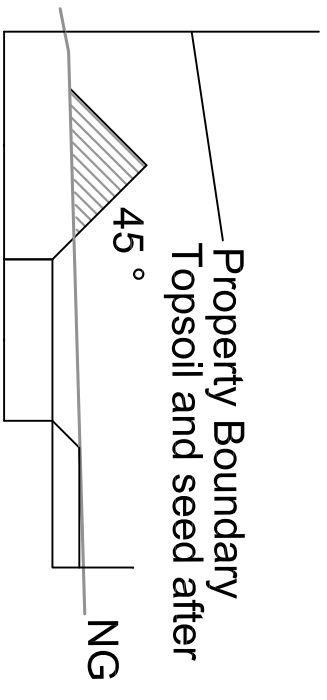
Pit 3 900 x 900 x 1700
Surface RL 97.90
Invert RL 96.20

Pit 4 900 x 900 x 900
Surface RL 96.80
Invert RL 95.90

Existing Pit
Surface RL 96.33
Invert RL 95.66

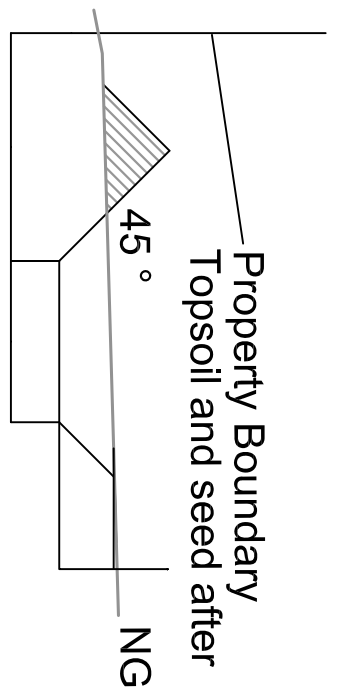
DO NOT SCALE

A		13/7/13	For Tender			SUPERVISED: M Whittton		DPTM NWS (ISG) Zone 56/2		SCALES 1 : 200		Tenterfield Shire Council		JOB NUMBER		ISSUE A		DATE 12/07/13	
						DESIGNED:		BENCHMARK				Commercial Hotel Drainage		FILE NAME		SHEET NUMBER 3 OF 4 SHEETS		PLAN No. WEDS 13-201	
						DRAWN: WEDS						Tenterfield		ARCHIVE FILE					
						CHECKED: DG						Channel / Pipeline Longsection							
						ACCEPTED:													
ISSUE		DATE	REASON FOR ISSUE	SIGNED		APPROV													



Open Channel Type 1

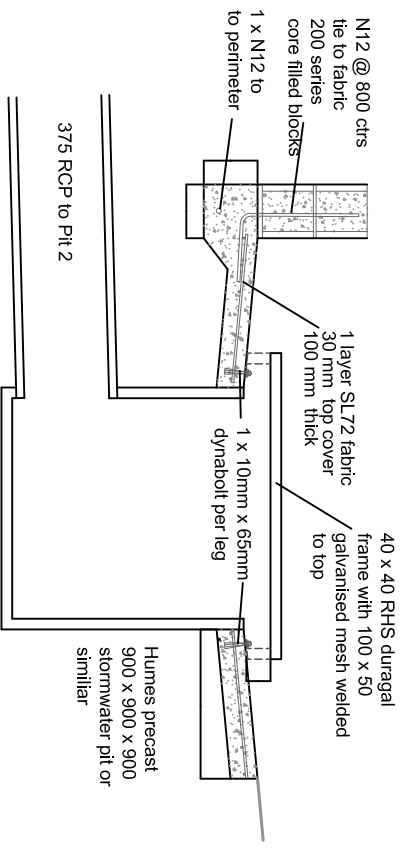
Channel Slope	0.018
Depth of flow (mm)	100
Width of base (mm)	600
Side Slopes	45°
Mannings n	0.025
Discharge (l/s)	69
Flow Velocity (m/s)	0.99



Open Channel Type 2

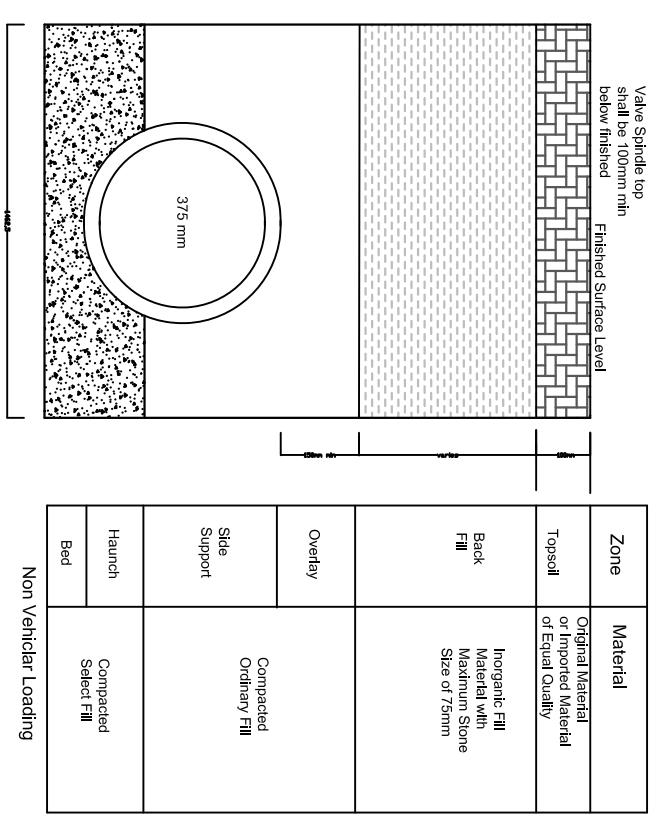
Channel Slope	0.018
Depth of flow (mm)	200
Width of base (mm)	600
Side Slopes	45°
Mannings n	0.025
Discharge (l/s)	228
Flow Velocity (m/s)	1.43

Number	Length	Width	Height	Lid type
Pit 1	900	900	900	custom
Pit 2	900	900	900	Lid with grate
Pit 3	900	1700	900	solid
Pit 4	900	900	900	Lid with grate

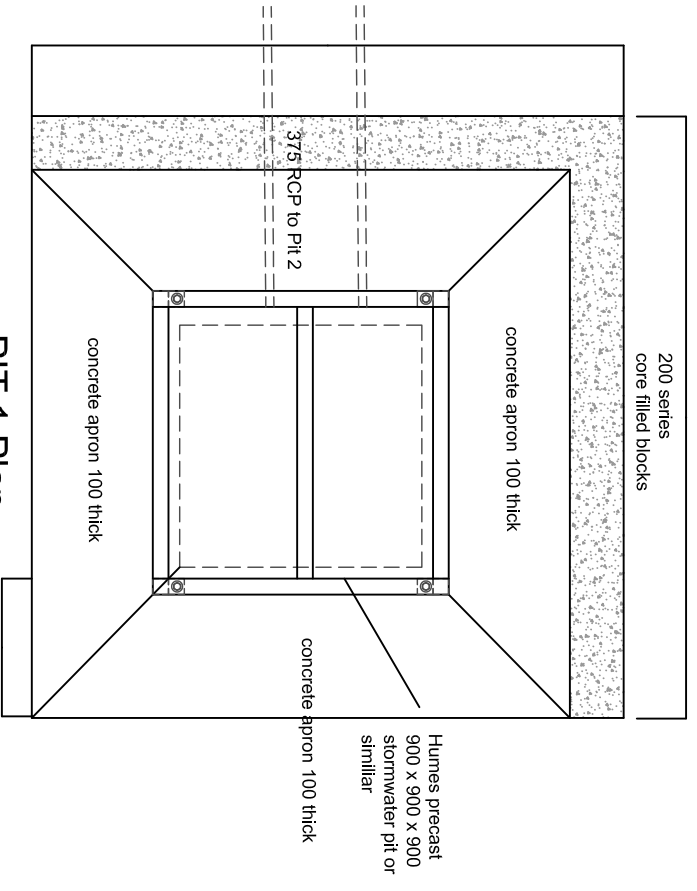


PIT 1 SECTION

DO NOT SCALE



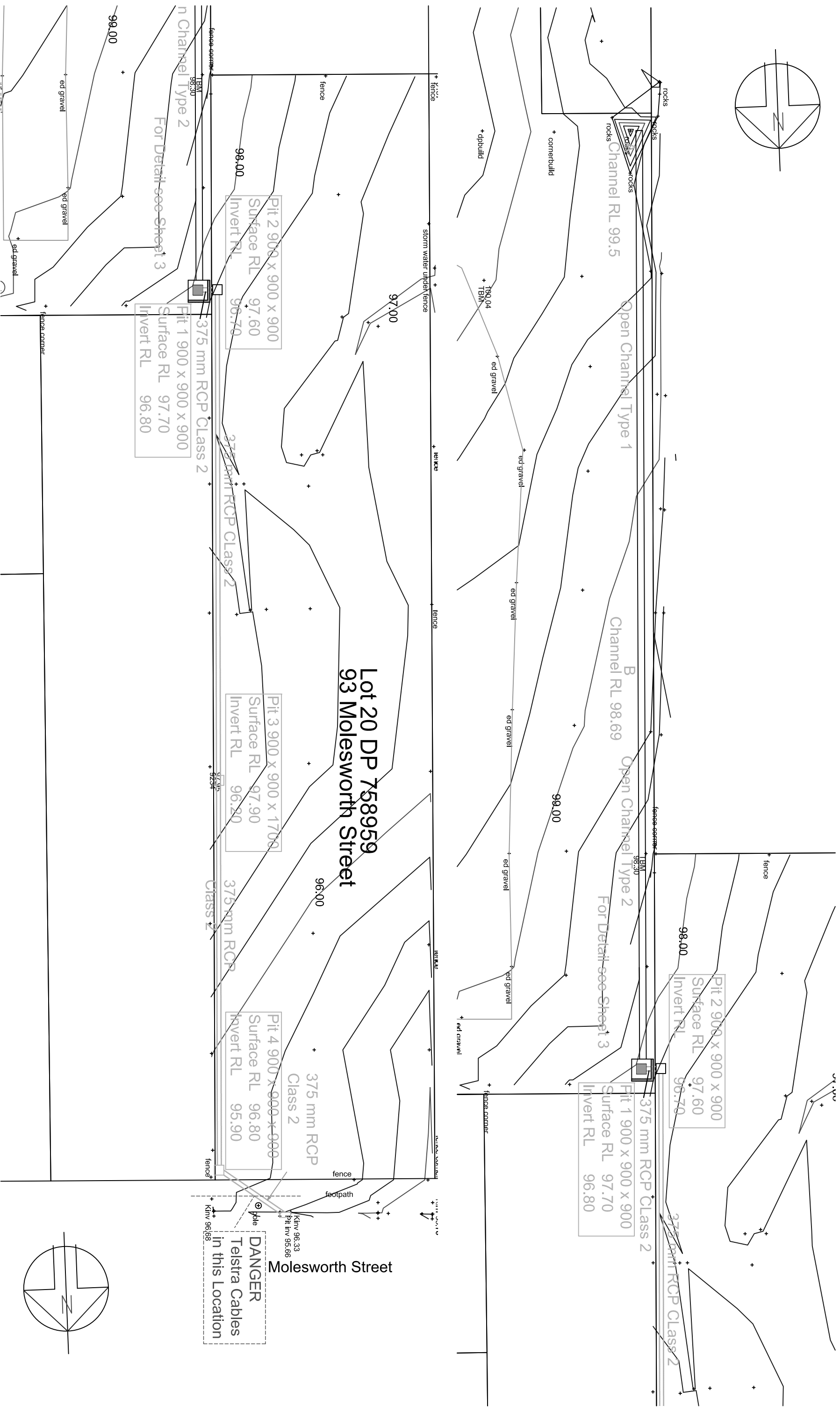
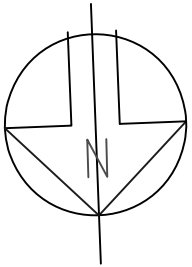
Stormwater Pipeline Trench & Backfill Typical Arrangement



PIT 1 Plan

A	12/7/13	For Tender	SUPERVISED: M Whittion	DESIGNED: NWS (ISG) Zone 56/2	SCALE: 1 : 200	Tenterfield Shire Council	JOB NUMBER	ISSUE: A	DATE: 12/07/13
			DRAWN: WEDS	CHECKED: DG		Commercial Hotel Drainage	FILE NAME	SHEET NUMBER: 3 of 4 SHEETS	
			SIGNED: APPROV: ACCEPTED:	BENCHMARK		Tenterfield Details	ARCHIVE FILE		PLAN No. WEDS 13-201

Do Not Scale



Do Not Scale

ISSUE	DATE	REASON FOR ISSUE	SIGNED	APPROV	SURVEYED: M. Whittton	DESIGNED:	DRAWN: WEDES	CHECKED: DG	ACCEPTED:	SCALES	1 : 200	Tenterfield Shire Council Commercial Hotel Drainage Tenterfield Plan of Works Detailed	JOB NUMBER	ISSUE	A	DATE	12/07/13	
													FILE NAME	SHEET NUMBER	2	OF	4	SHEETS
													ARCHIVE FILE	PLAN No.	WEDES 13-201			