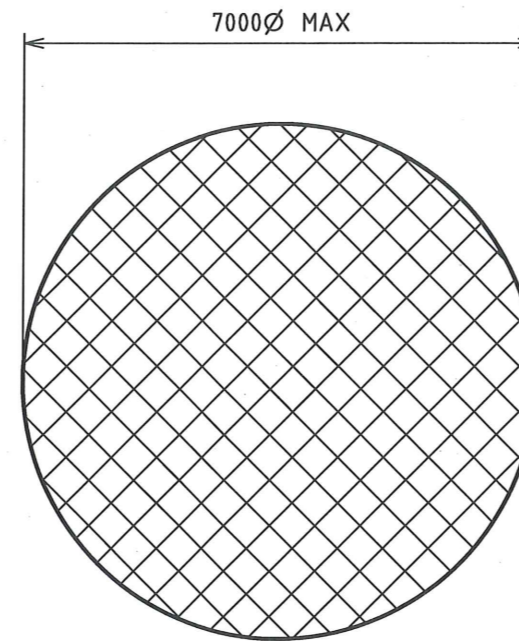
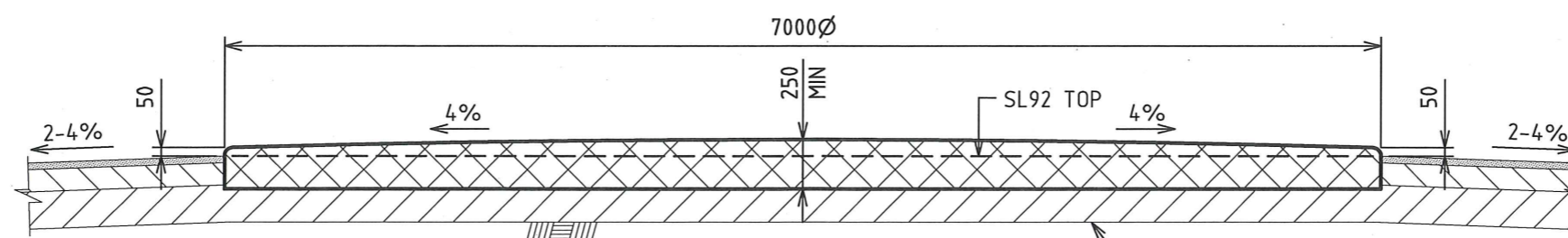




DENOTES 250 THICK N32 GRADE CONCRETE REINFORCED WITH SL92 FABRIC TOP 40 MIN COVER. REFER TO DETAILS





**ROUNDAABOUT PLAN - TYPE 1**  
SCALE 1:100

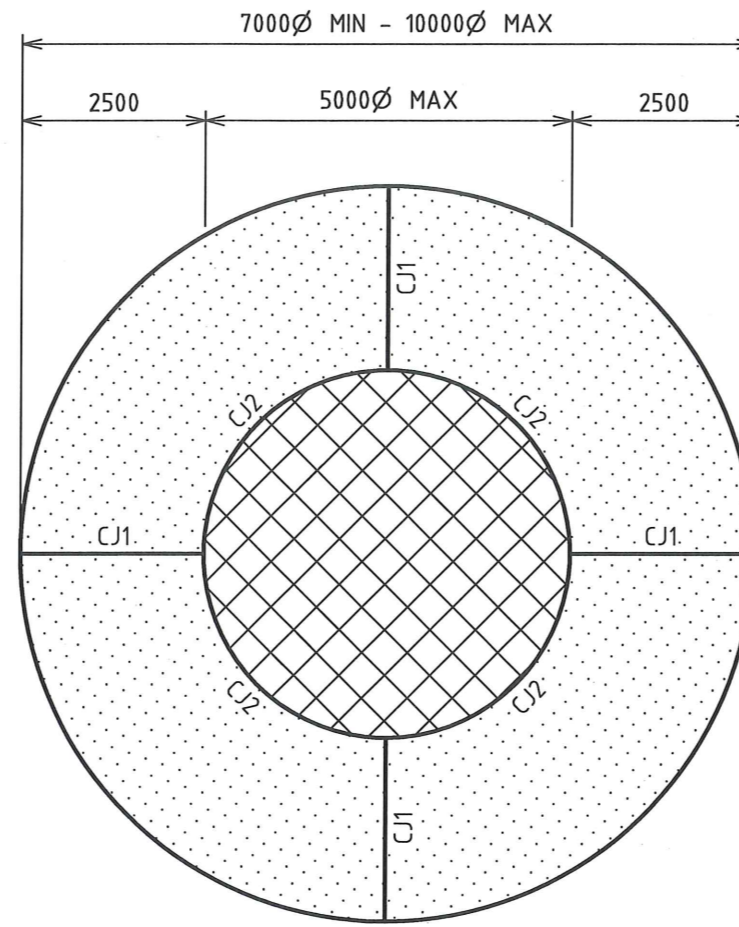


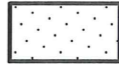

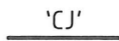
**ROUNDAABOUT SECTION - TYPE 1**  
SCALE 1:40

REFER TO NOTES ON SHEET 4

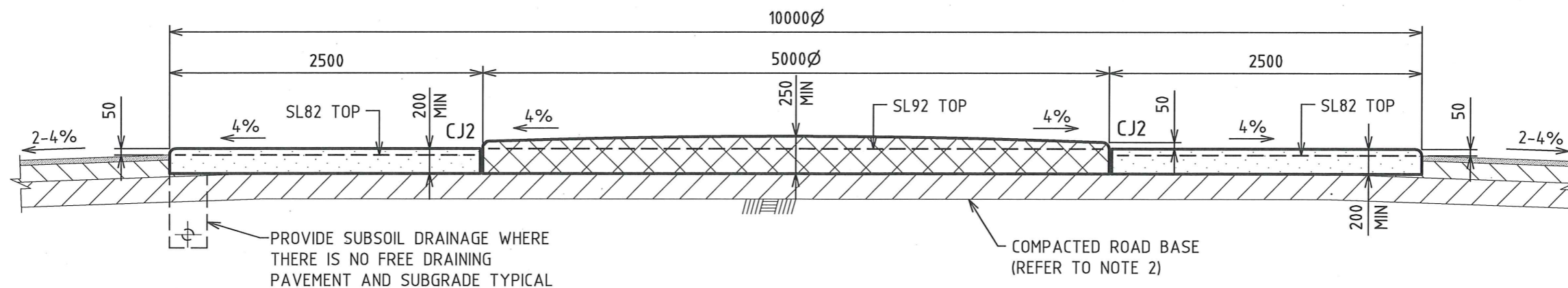
FOR USE ON LOCAL STREETS WHERE LARGER VEHICLES NEED TO MOUNT ANNULUS TO TURN

				SCALE	 INFRASTRUCTURE MANAGEMENT SERVICES	APPROVED:	<b>THE CITY OF NEWCASTLE</b> <b>ROUNDAABOUT CONSTRUCTION</b> <b>DETAILS - TYPE 1</b>	NCC PLAN No.	SHEET No.
				AS SHOWN		SIGNED:  INFRASTRUCTURE MANAGEMENT SERVICES MANAGER DATE: 29.09.2016		A1102	1 OF 4 SHEETS
1	GENERAL REVISION	05.07.16	T.A.						
0	CONSTRUCTION	29.04.14	T.A.						
No.	AMENDMENT DETAILS	DATE	INITIALS						
A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED				COORDINATE SYSTEM:	HEIGHT DATUM: AHD	REVIEWED: J.C.		AMENDMENT No.	



-  DENOTES 200 THICK N32 GRADE CONCRETE REINFORCED WITH SL82 FABRIC TOP 40MIN COVER. REFER TO DETAILS
-  DENOTES 250 THICK N32 GRADE CONCRETE REINFORCED WITH SL92 FABRIC TOP 40 MIN COVER. REFER TO DETAILS
-  DENOTES CONSTRUCTION JOINT. REFER TO DETAILS



ROUNABOUT PLAN - TYPE 2  
SCALE 1:100

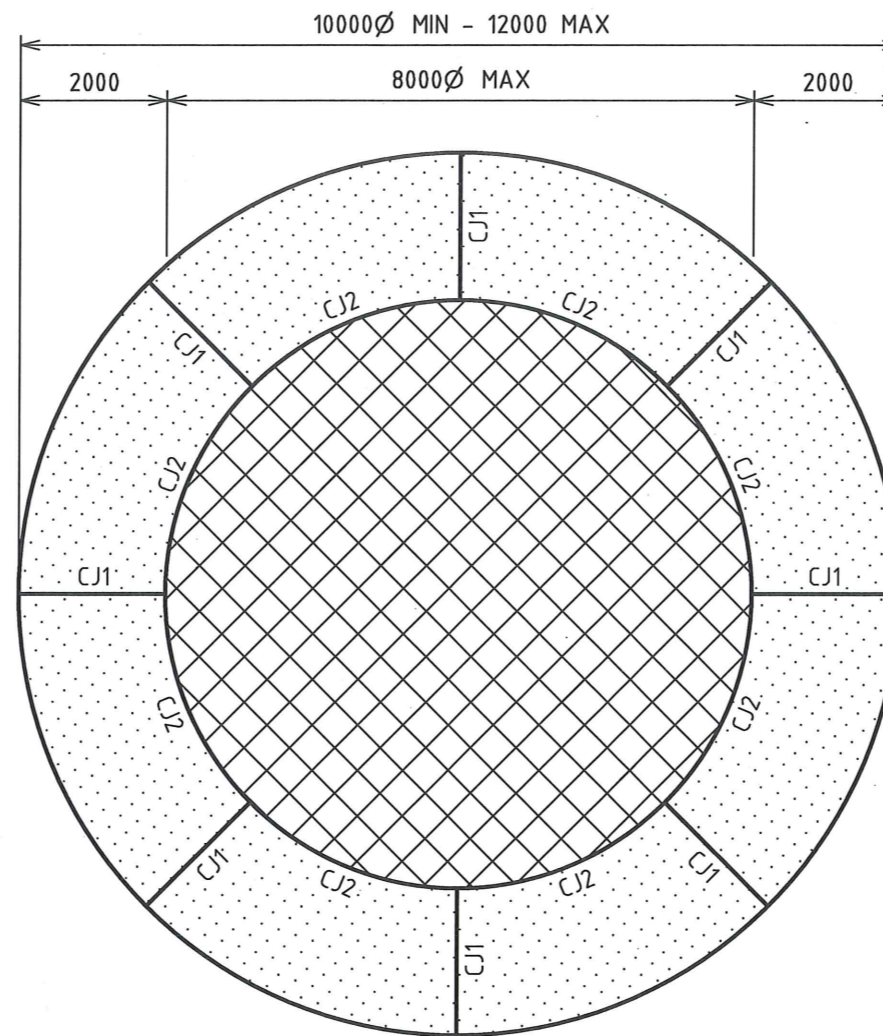


ROUNABOUT SECTION - TYPE 2  
SCALE 1:40

REFER TO NOTES ON SHEET 4



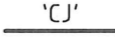
FOR USE ON LOCAL STREETS WHERE LARGER VEHICLES NEED TO MOUNT ANNULUS TO TURN

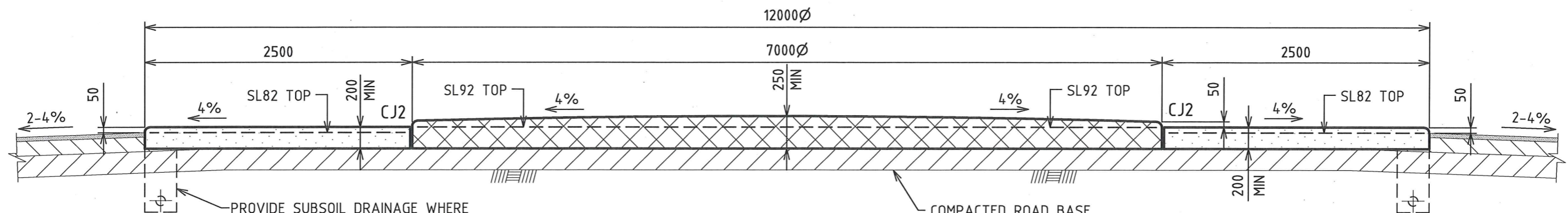
				SCALE AS SHOWN			APPROVED: 	<b>THE CITY OF NEWCASTLE</b> <b>ROUNABOUT CONSTRUCTION</b> <b>DETAILS - TYPE 2</b>		NCC PLAN No. <b>A1102</b>	SHEET No. 2 OF 4 SHEETS
1	GENERAL REVISION	05.07.16	T.A.								
0	CONSTRUCTION	29.04.14	T.A.								
No.	AMENDMENT DETAILS	DATE	INITIALS								
A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED				COORDINATE SYSTEM:	HEIGHT DATUM: AHD	REVIEWED: J.C.	SIGNED: INFRASTRUCTURE MANAGEMENT SERVICES MANAGER	DATE: 29.09.2016		AMENDMENT No.	



ROUNABOUT PLAN - TYPE 3

SCALE 1:100

-  DENOTES 200 THICK N32 GRADE CONCRETE REINFORCED WITH SL82 FABRIC TOP 40MIN COVER. REFER TO DETAILS
-  DENOTES 250 THICK N32 GRADE CONCRETE REINFORCED WITH SL92 FABRIC TOP 40 MIN COVER. REFER TO DETAILS
-  DENOTES CONSTRUCTION JOINT. REFER TO DETAILS





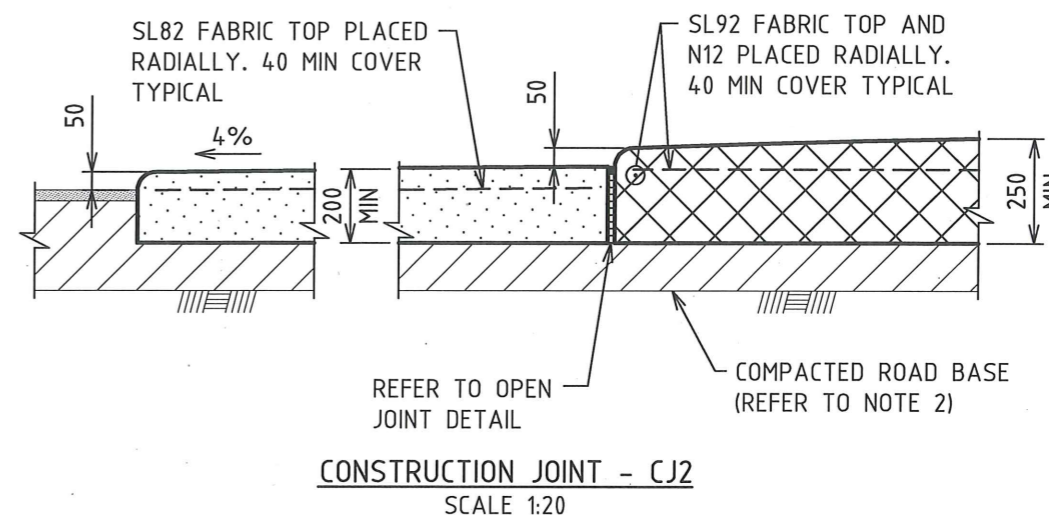
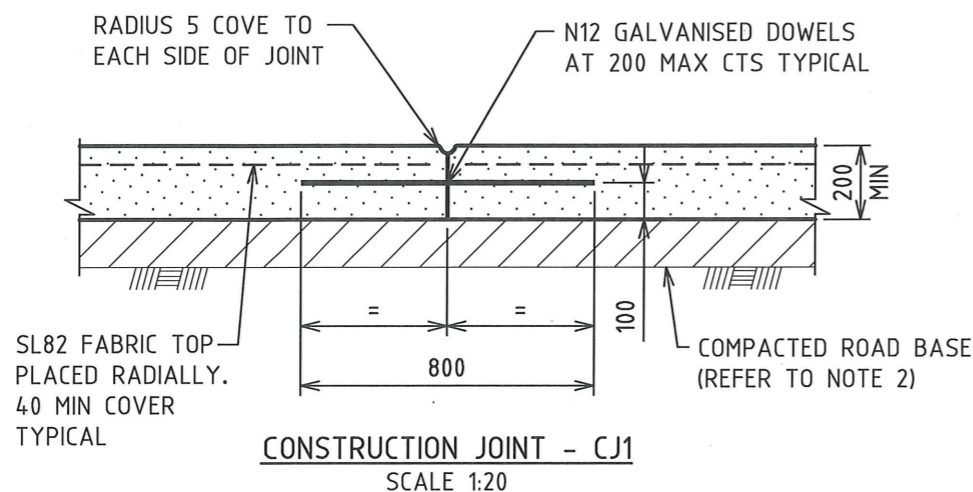
ROUNABOUT SECTION - TYPE 3

SCALE 1:40

REFER TO NOTES ON SHEET 4



FOR USE ON LOCAL STREETS WHERE LARGER VEHICLES NEED TO MOUNT ANNULUS TO TURN

				SCALE	 INFRASTRUCTURE MANAGEMENT SERVICES	APPROVED:	<b>THE CITY OF NEWCASTLE</b> <b>ROUNABOUT CONSTRUCTION</b> <b>DETAILS - TYPE 3</b>	NCC PLAN No.	SHEET No.
				AS SHOWN		SIGNED:  INFRASTRUCTURE MANAGEMENT SERVICES MANAGER DATE: 29-09-2016		A1102	3 OF 4 SHEETS
1	GENERAL REVISION	05.07.16	T.A.					AMENDMENT No.	
0	CONSTRUCTION	29.04.14	T.A.						
No.	AMENDMENT DETAILS	DATE	INITIALS						
A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED				COORDINATE SYSTEM:	HEIGHT DATUM: AHD				



**NOTES**

1. ALL WORKMANSHIP AND MATERIAL SHALL COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS IN PARTICULAR AS3600
2. CONCRETE IS TO BE FOUNDED ON A PAVEMENT IN ACCORDANCE WITH A GEOTECHNICAL ENGINEERS ADVICE.
3. CONCRETE GENERALLY TO BE DESIGNED TO HAVE A 4.0% CROSS FALL. POORLY DRAINED SITES MAY REQUIRE SUB SURFACE DRAINAGE TO PROTECT THE ROUNDABOUT CONCRETE.
4. DOWELS ARE TO BE ACCURATELY ALIGNED PERPENDICULAR TO THE JOINT LINE. ALL DOWELS AND JOINT FORMERS ARE TO BE GALVANISED.
5. BITUMINOUS JOINT FILLER TO SEAL THE EXPOSED SURFACE OF JOINTS AND SHOULD BE LOCATED TO THE JOINT TOP AND JOINT EDGES.
6. CONCRETE THICKNESS IS TO BE AS DETAILED FROM N32 GRADE CONCRETE WITH A MAXIMUM AGGREGATE SIZE OF 20mm, MINIMUM SLUMP OF 65mm AND A MINIMUM COVER TO REINFORCEMENT OF 40mm UNLESS NOTED OTHERWISE.
7. FOR CONSTRUCTION WITHIN 1KM OF THE COASTLINE (COASTAL ZONE) A MINIMUM GRADE OF CONCRETE SHALL BE N40 WITH A MINIMUM COVER OF 45mm.
8. TO ASSIST IN THE CURING AND DURABILITY OF CONCRETE:
  - THE SUB BASE SHOULD BE THOROUGHLY MOISTENED PRIOR TO PLACING CONCRETE (RESULTING IN REDUCED LOSS OF MOISTURE);
  - AS SOON AS THE TEXTURING VIA EITHER A DECORATIVE FINISH, WOOD FLOAT OR BROOMING HAS BEEN DONE, CURING SHOULD BE INITIATED BY COVERING WITH DAMP HESSIAN OR WELL SECURED PLASTIC SHEETING, OR APPLYING A CURING COMPOUND AT THE RATE OF 0.3 L/MIN<sup>2</sup>;
  - WATER SHOULD NOT BE ADDED TO THE AS-DELIVERED MIX
9. CONCRETE TO HAVE A BROOM FINISH TRANSVERSE TO THE PAVEMENT WITH A 50mm RADIUS TOOLING OF ALL EDGES.

				SCALE		APPROVED:	<b>THE CITY OF NEWCASTLE</b> ROUNDABOUT CONSTRUCTION DETAILS	NCC PLAN No.	SHEET No.
				AS SHOWN		SIGNED:  INFRASTRUCTURE MANAGEMENT SERVICES MANAGER DATE: 29.09.2016		AMENDMENT No.	4 OF 4 SHEETS
1	GENERAL REVISION	05.07.16	T.A.						
0	CONSTRUCTION	29.04.14	T.A.						
No.	AMENDMENT DETAILS	DATE	INITIALS						
A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED				COORDINATE SYSTEM:	HEIGHT DATUM: AHD	REVIEWED: J.C.			