Planning Scheme 2006

Burnett Shire

Prepared under the
Integrated Planning Act 1997

Development Works Planning Scheme Policy

Standard Drawings

Volume 5

STANDARD DRAWINGS BY OTHERS

Main Roads

For all Main Roads Drawings refer to the hyperlinked Web Site

http://www.mainroads.qld.gov.au/MRWEB/Prod/Content.nsf/b495dab138a6b17a4a256a42001c8f4f/4a2390f764ec17884a256cc900062196!OpenDocument

For road/drainage elements where there is no Burnett Shire Standard Drawing refer to Main Roads Standard Drawings.

Local Government standard drawings take precedence over those provided by Department of Main Roads where applicable.

WSA - Water Services Association of Australia

For all WSA Codes and Associated Drawings refer to the hyperlinked Web Site

https://www.wsaa.asn.au/

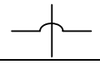
Please note that the Codes contain the Standard Drawings:
WSA 02-2002 V2.3 Sewerage Code of Australia
WSA 03-2002 V2.3 Water Supply Code of Australia

WSA have also produced specifications, which are the **default** requirements for products and materials referenced in the Sewerage Code of Australia, WSA 02 and the Water Supply Code of Australia, WSA 03.

Local Government specifications/standard drawings take precedence over those provided by WSA and Aus-Spec where applicable.

In cases, where the Local Government procedures differ to the WSA drawings, comment has been provided relevant to these differences on the following sheets.

STANDARD DRAWINGS from WSA 03-2002 - 2.3 WATER

Drawing	Title	Burnett Shire Comment / Requirement
PIPELINE LAYOUT		
WAT-1100	Design Layouts Typical Locality Plan	
WAT-1101	Design Layouts Typical Site Plan	• Main in Cul-D-Sac to be looped near entrance • Show non intersections 
WAT-1102	Typical Mains Construction Reticulation Main Arrangements	• Do not use Copper services • Do not use DI tapped connectors • Do not use PVC Fittings • Use SS bolts throughout
WAT-1103	Typical Mains Construction Distribution and Transfer Mains	*Use Flanged offtakes in DI and GRP Fittings*
WAT-1104	Typical Mains Construction DN 63 PE Cul-de-Sac Arrangement	• Main size to be a minimum of NB 100mm • Do not use Detail A2 or Detail B
WAT-1105	Typical Mains Construction Connection to Existing Mains	*Do not use Wrap offtakes*
WAT-1106	Property Services Single Service Main to Meter	• Conduit to laid from boundary to boundary. • Kerb marker to be a brass insert with a stamped W
WAT-1107	Property Services Split Service Main to Meter	• Conduit to laid from boundary to boundary • Connections to be established at side boundary alignment
WAT-1108	Property Services Connection to Main	• Do not use pre-tapped DI Connector • Do not use Wrap offtakes
WAT-1109	Property Services Above Ground Meter Assembly Arrangement	*All domestic meters are to be installed below ground level with a Burnett Shire Council standard polyethylene meter box and lid*
EMBEDMENT / TRENCHFILL AND RESTRAINTS		
WAT-1200	Soil Classification Guidelines And Allowable Bearing Pressures for Anchors and Thrust Blocks	*Apply standard soil classification practices*
WAT-1201	Embedment & Trenchfill Typical Arrangement	
WAT-1202	Standard Embedment All Pipe Types	
WAT-1203	Special Embedments Inadequate and Poor Foundation	*Timber not to be used for permanent support*
WAT-1204	Special Embedments Concrete, Geotextile and Cement Stabilised Systems	
WAT-1205	Thrust Block Details Concrete Blocks	
WAT-1206	Thrust Block Details Timber 8 Recycled Plastic Blocks	• Timber thrust not acceptable • Use WAT 1205
WAT-1207	Thrust and Anchor Blocks Gate Valves and Vertical Bends	
WAT-1208	Restrained Joint System DN 100 to DN 375 DI Mains	
WAT-1209	Trench Drainage Bulkheads and Trenchstop	
WAT-1210	Trench Drainage . Typical Systems	

STANDARD DRAWINGS from WSA 03-2002 - 2.3 WATER (cont)

Drawing	Title	Burnett Shire Comment / Requirement
EMBEDMENT / TRENCHFILL AND RESTRAINTS		
WAT-1211	Buried Crossings Under Obstructions	
WAT-1212	Buried Crossings Major Roadways	
WAT-1213	Buried Crossings Railways	
WAT-1214	Buried Crossings Bored & Jacked Encasing Pipe Details	
INSTALLATION PRACTICES/ STRUCTURES		
WAT-1300	Valve and Hydrant Identification Identification Markers & Marker Posts	*Do not use hydrant marker posts Refer BSC Drawing W401* *Bases for scour valve posts are to be concreted to a min depth of 300mm*
WAT-1301	Typical Valve & Hydrant Installation Valve Arrangement	
WAT-1302	Typical Valve & Hydrant Installation Hydrants and Air Relief Valves	*Do not use fittings with combined hydrant and isolating valve*
WAT-1303	Typical Surface Fitting Installation Gate Valve Surface Boxes Non Trafficable	
WAT-1304	Typical Surface Fitting Installation Gate Valve Surface Boxes Trafficable	
WAT-1305	Typical Surface Fitting Installation Hydrant Surface Boxes Trafficable and Non Trafficable	
WAT-1306	Typical Surface Fitting Installation Hydrant Surface Boxes Trafficable	
WAT-1307	Typical Appurtenance Installation Scour Arrangements	
WAT-1308	Typical Appurtenance Installation Valve Chambers	
WAT-1309	Typical Appurtenance Installation Pressure Reducing Valves (PRV)	*Above ground bypass preferred*
WAT-1310	Aerial Crossings Aqueduct	
WAT-1311	Aerial Crossings Aqueduct Protection Grille	
WAT-1312	Aerial Crossings Bridge Crossing Concepts	
WAT-1313	Flanged Joints Bolting Details	

STANDARD DRAWINGS from WSA 03-2002 - 2.3 WATER (cont)

Drawing	Title	Burnett Shire Comment / Requirement
FABRICATION DETAILS		
WAT-1400	Typical Steel Pipe Jointing Butt Welding of Joints	
WAT-1401	Typical Steel Pipe Jointing Rubber Ring Joint Spigot Bands	
WAT-1402	Typical Steel Pipe Jointing Welded Pipe Collars	
WAT-1403	Typical Steel Fabrication Bends	
WAT-1404	Typical Steel Fabrication Access Opening for Pipes >-DN 750	
WAT-1405	Typical Steel Fabrication Dismantling and Flexible Joints	
WAT-1406	Typical Steel Fabrication Valve Connection 8 Bypass	
WAT-1407	DI Installation Valve Bypass Arrangement DI and GRP Pipe	
WAT-1408	Joint Corrosion Protection Cement Mortar Lined Steel Pipe DN 300 to DN 1200	
WAT-1409	Hydrant Installation Fittings PE Assemblies	

STANDARD DRAWINGS from WSA 02-2002- 2.2 SEWERAGE

Drawing	Title	Burnett Shire Comment / Requirement
SEW- 1100	Design Layouts Typical Locality & Site Plan	
SEW-1101	Design Layouts Longitudinal Sections	
SEW-1102	Design Layouts Connection to Existing Sewer Schedule of Works	
SEW-1103	Pipe laying Typical Arrangements	*Use Manhole at changes of direction*
SEW-1104	Property Connection Details Sewer in Road Reserve	*Use single jump-up to sewer main*
SEW-1105	Property Connection Details Sewer in Easements & Inside Property	
SEW-1106	Property Connection Details 10 Interface Method	*Avoid Vertical Riser if possible*
SEW-1107	Property Connection Details Buried Interface Method	
SEW-1108	Property Connection Details "Y" Branch & Around Obstructions	
SEW-1109	Property Connection Details Private Property & Marking Systems	• Use a concrete surround • bolted • Screw-On Trap
EMBEDMENT / TRENCHFILL AND SUPPORT SYSTEMS		
SEW- 1200	Soil Classification Guidelines And Allowable Bearing Pressures for Bulkheads	*Apply standard soil classification practices*
SEW-1201	Embedment and Trenchfill Typical Arrangements	
SEW-1202	Standard Embedment Flexible & Rigid Pipes	
SEW-1203	Special Embedment Inadequate Foundations Requiring Over Excavation & Replacement	
SEW-1204	Special Embedment Support Utilising Piles	*Timber not to be used for permanent support*
SEW-1205	Special Embedment Concrete & Stabilised Supports	
EMBEDMENT / TRENCHFILL AND SUPPORT SYSTEMS *(cont)*		
SEW-1206	Trench Drainage Bulkheads & Trench stop	
SEW-1207	Trench Drainage Typical Systems	
SEW-1208	Verticals & Near Verticals Exposed & Concealed Methods	

STANDARD DRAWINGS from WSA 02-2002- 2.2 SEWERAGE (cont)

Drawing	Title	Burnett Shire Comment / Requirement
ACCESS STRUCTURES		
SEW-1 300	Maintenance Holes Sewers <- DN 300 Precast Types P1 & P2	*No ladder or step irons to be provided in Maintenance Holes*
SEW-1301	Maintenance Holes Sewers <_ DN 300 Cast Insitu Types C1 & C2	
SEW-1302	Maintenance Holes Pipe Connection Details	
SEW-1303	Maintenance Holes Sewers _< DN 300 Changes in Level Details	• Do not use external Drop Junction • Manhole size to be adjusted to accommodate internal Drop Junction
SEW-1304	Maintenance Holes For Sewers _< DN 300 Typical Channel Arrangements	
SEW-1305	Maintenance Holes Typical Channel Details	
ACCESS STRUCTURES		
SEA--1306	Maintenance Holes Alternative Drop Connections	*Top Bend to have horizontal clearing access*
SEW-1307	Maintenance Holes Step Irons & Ladders	*No ladder or step irons to be provided in Maintenance Holes*
SEW-1308	Maintenance Holes Typical MH Cover Arrangements	
SEW-1309	Maintenance Holes Sewers DN 375 to DN 750	
SEW-1310	Maintenance Holes Permanent Formwork >_ DN 375	
SEW-1311	Maintenance Holes Depth to Invert 6 m to 15 m	*No ladder or step irons to be provided in Maintenance Holes*
SEW-1312	Maintenance Holes Depth to Invert > 15 m	*No ladder or step irons to be provided in Maintenance Holes*
SEW-1313	Maintenance Shafts Typical Installation	
SEW-1314	Maintenance Shafts MS & Variable Bend Installations	
SEW-1315	Maintenance Shafts TMS and Connection Installations	
SEW-1316	Maintenance Shafts Typical MS Cover Arrangements	
SEW-1317	Maintenance Holes MH Connection Details DN 110 to DN 450 PE Pipe	

STANDARD DRAWINGS from WSA 02-2002- 2.2 SEWERAGE (cont)

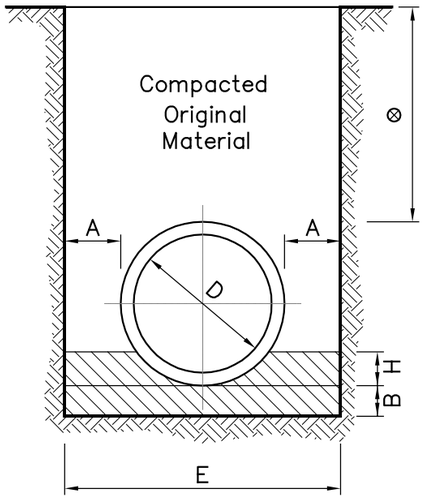
Drawing	Title	Burnett Shire Comment / Requirement
SPECIAL CROSSINGS 1 STRUCTURES ARRANGEMENTS		
SEW-1400	Buried Crossings Syphon Arrangement	
SEW-1401	Buried Crossings Railways	
SEW-1402	Buried Crossings Major Roadways	
SEW-1403	Buried Crossings Bored & Jacked Encasing Pipe Details	
SEW-1404	Aerial Crossings Aqueduct	
SEW-1405	Aerial Crossings Aqueduct Protection Grille	
SEW-1406	Aerial Crossings Bridge Crossing Concepts	
SEW-1407	Ventilation Systems Induct Vent	
SEW-1408	Ventilation Systems Educt Vent	
SEW-1409	Water Seal Arrangements Mains Type	
SPECIAL CROSSINGS 1 STRUCTURES ARRANGEMENTS *(cont)*		
SEW-1410	Water Seal Arrangements Maintenance Hole System	
SEW-1411	Water Seal Arrangements Twin Maintenance Hole System	
SEW- 1412	Emergency Relief Structures Typical Arrangement DN 150 to DN 375	
CONNECTIONS TO EXISTING SYSTEMS		
SEW-150C	Insertions & Repair Systems Cut-in Methods	
SEW-1501	Insertions & Repair Systems Insertion of Junctions	
SEW-1502	Insertions & Repair Systems Maintenance Structures	

BURNETT SHIRE COUNCIL STANDARD DRAWINGS

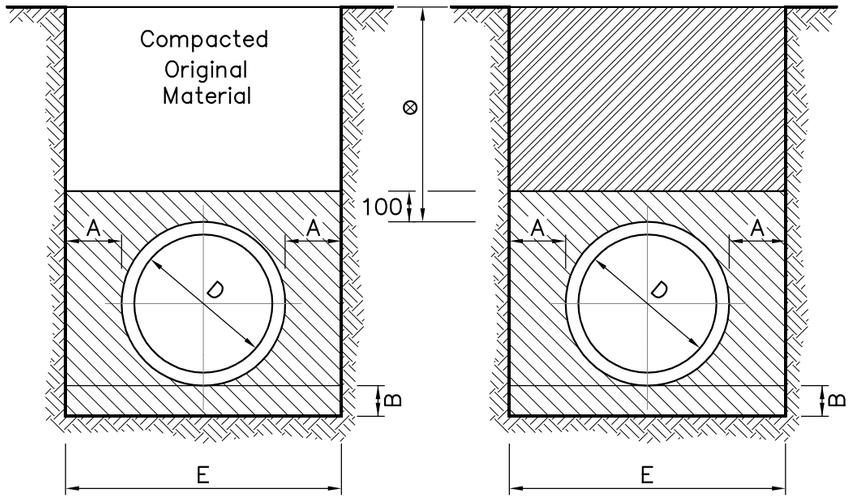
DRAINAGE

	Bedding And Backfilling
Number	Title /Topic
D201-1	Excavation, Bedding and Backfilling of Concrete Pipes - Sheet 1 of 2.
D201-2	Excavation, Bedding and Backfilling of Concrete Pipes - Sheet 2 of 2.
D202	Excavation, Bedding and Backfilling of Precast Box Culverts.
	Catchpit
D211-1	Bro-Pit Set out and Treatment to Kerb Type KC1.
D211-2	Bro-Pit Set out and Treatment to Kerb Types KC1 And KC2.
D211-3	Bro-Pit Set out and Treatment to Kerb Types KC1, KC2 And KC3 on Curves.
	Field Inlet
D221	Field Inlet / Grated Gully Pit Profiles and Dimensions

Note : For backfill volumes refer BSC Plan No. R201–2.

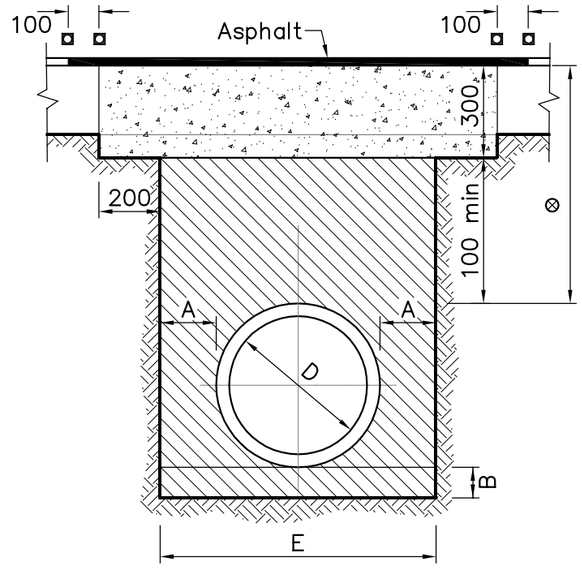


TYPE 1
PRIVATE PROPERTY

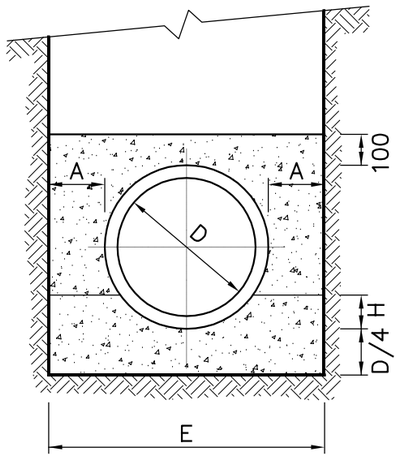


TYPE 2
FOOTPATHS

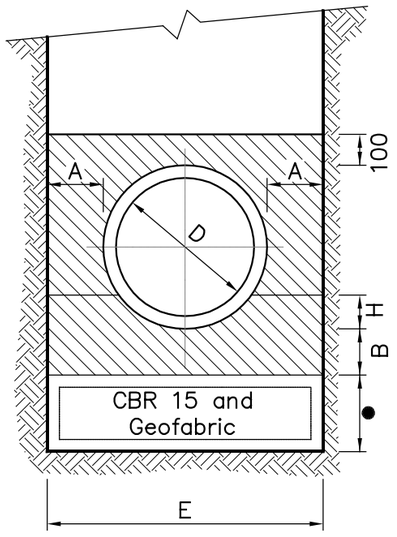
TYPE 3
ROAD SHOULDER
DRIVEWAYS



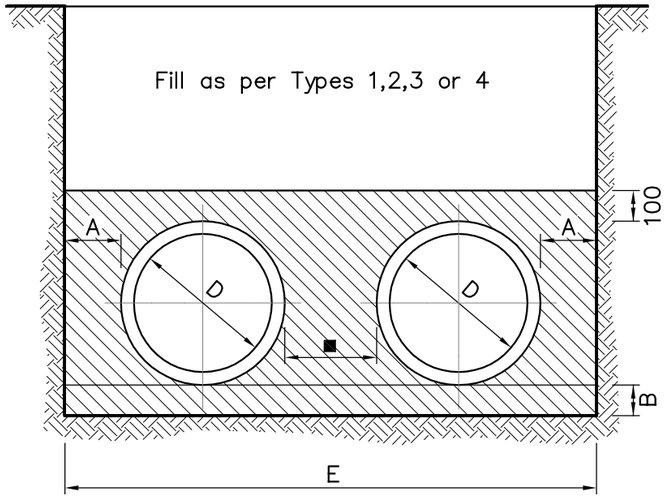
TYPE 4
PAVEMENT



TYPE 5
CONCRETE OR
GRAVEL SURROUND



TYPE 6
BEDDING IN
POOR GROUND



TYPE 7
BEDDING OF MULTIPLE PIPES

Nominal D ø	Min A	Haunch H	Bedding B	E (m) Des	E (m) Max
300	300	36	100	1.0	1.1
375	300	45	100	1.1	1.2
450	300	53	100	1.1	1.3
525	300	61	100	1.2	1.5
600	300	69	100	1.3	1.6
675	300	77	100	1.4	1.7
750	300	85	100	1.5	1.8
825	300	94	100	1.6	1.9
900	300	103	100	1.6	1.9
1050	300	120	100	1.8	2.1
1200	300	135	100	2.0	2.2
1350	300	150	100	2.1	2.4
1500	300	169	100	2.3	2.7
1650	330	184	150	2.3	2.9
1800	360	200	150	2.8	3.1
1950	390	222	150	3.1	3.3
2100	420	239	150	3.4	3.5

NOTES
1. Selected backfill in all cases shall be carried through to the wings and continued 300 thick for the length and height of the wings.
2. Bedding compaction : * Cohesive material 95% standard compaction, * Non–cohesive material to have density index of 70 min, refer AS1289.E5.1,
* Sand compacted by flooding and vibrators.
3. Backfill compaction :
* Crusher dust – 75mm run with vibrator.
* Gravel – 300mm layer under pavment 95% standard compaction.
* Natural Material – 90% standard compaction.
* Max. densities determined by tests to AS1289.5.1.1.
4. Refer to project drawings for types to be adopted.
5. Type U & H1 to conform to AS 3725.
6. All dimensions in millimetres.

BEDDING AND HAUNCH MATERIAL Gravel, loam, sand or mixture	
AS Sieve size	% Passing by mass
19.0	100
2.36	40 – 100
0.425	15 – 70
0.075	3 – 30

LEGEND
- ● Depth as approved by Works Engineer.
- ⊗ Cover as per manufacturers specification.
- ◘ Saw cut existing pavement.
- ■ 300 when pipe D is ⩽600, 600 when pipe D is 600 to 1800, 900 when pipe D is ⩾1800.
- Crusher dust.
- Lean mix concrete backfill, 1:15 mix.
- Sand to bedding & haunch material table

Scales:					
NOT TO SCALE	A	Revision to details	MLP 7/04	drawn	Org signed by BDF 05/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

EXCAVATION, BEDDING AND BACKFILLING OF CONCRETE PIPES- SHEET 1 OF 2

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Drawing No.
D201-1
A

Nominal D ø mm	Volume of Sand per Lineal Metre m^3
300	0.131
375	0.151
450	0.157
525	0.178
600	0.200
675	0.223
750	0.248
825	0.274
900	0.281
1050	0.337
1200	0.395
1350	0.457
1500	0.502
1650	0.697
1800	0.816
1950	0.953
2100	1.092

VOLUME OF SAND FOR BACKFILL TYPE 1

AS PER BSC PLAN NO. R201–1

Nominal D ø mm	Volume of Sand per Lineal Metre m^3
300	0.659
375	0.773
450	0.803
525	0.921
600	1.044
675	1.174
750	1.310
825	1.451
900	1.454
1050	1.749
1200	2.067
1350	2.409
1500	2.569
1650	3.065
1800	3.717
1950	4.415
2100	5.188

VOLUME OF SAND FOR BACKFILL TYPES 2,3,4 & 6.

AS PER BSC PLAN NO. R201–1

Nominal D ø mm	Volume of Concrete per Lineal Metre m^3
300	0.131
375	0.151
450	0.171
525	0.216
600	0.265
675	0.319
750	0.379
825	0.444
900	0.481
1050	0.630
1200	0.795
1350	0.956
1500	1.135
1650	1.301
1800	1.656
1950	2.000
2100	2.367

VOLUME OF CONCRETE FOR BACKFILL TYPE 5

AS PER BSC PLAN NO. R201–1

Nominal D ø mm	Wall Thickness mm	Width of trench		Depth from base of bedding to invert	
		Desired mm	Maximum mm	Types 1,2, 3,4,6&7	Type 5
300	31	1000	1100	131	131
375	35	1100	1200	135	135
450	42	1100	1300	142	155
525	41	1200	1500	141	172
600	44	1300	1600	144	194
675	48	1400	1700	148	217
750	51	1500	1800	151	239
825	54	1600	1900	154	260
900	57	1600	1900	157	282
1050	64	1800	2100	164	237
1200	70	2000	2200	170	370
1350	76	2100	2400	176	414
1500	76	2300	2700	176	451
1650	83	2300	2900	233	496
1800	89	2800	3100	239	539
1950	102	3100	3300	252	590
2100	114	3400	3500	264	639

NOTE: ALL VOLUMES CALCULATED ON DESIRED TRENCH WIDTH.

EXCAVATION DETAILS

Note : For backfill types refer BSC Plan No. R201–1.

Scales:

NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Revision to details	MLP 7/04	drawn	Org signed by BDF 05/98
			checked	
			designed	
Revisions			checked	

BURNETT SHIRE COUNCIL

Original signed by General Manager of Engineering Operations

EXCAVATION, BEDDING AND BACKFILLING OF CONCRETE PIPES- SHEET 2 OF 2

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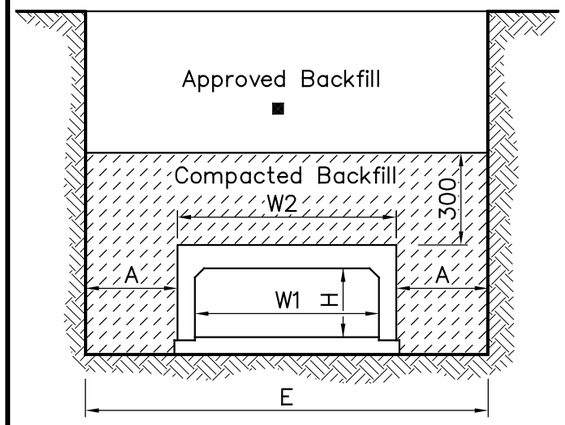
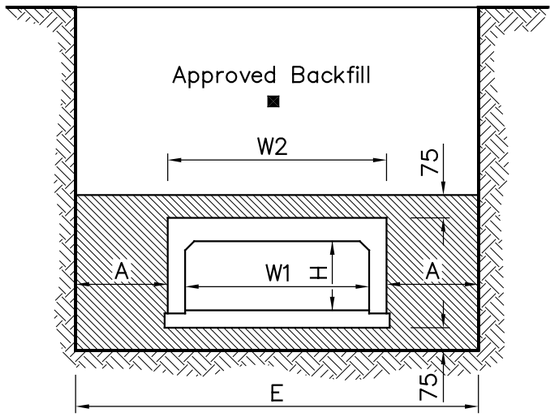
Drawing No. D201-2

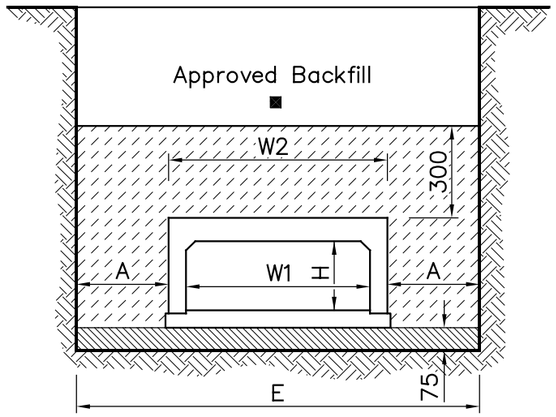
A



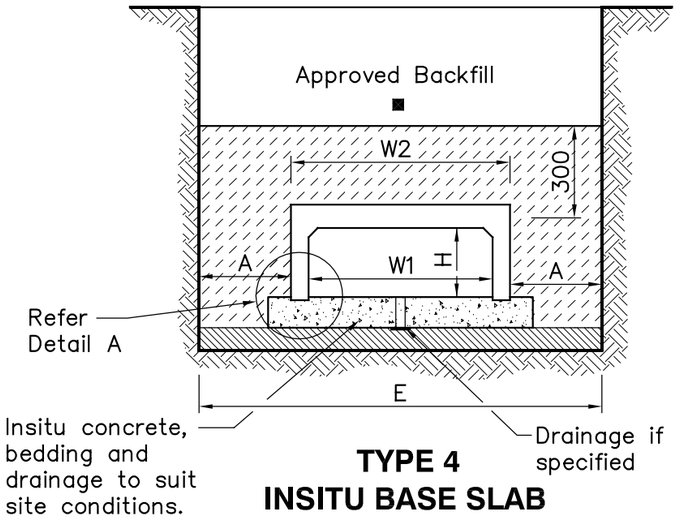
TYPE 1
NATURAL BEDDING



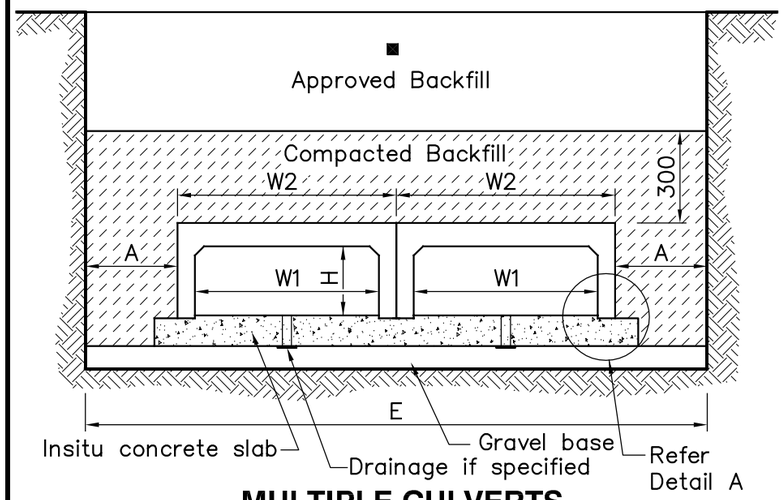
TYPE 2
SAND SURROUND



TYPE 3
SAND BEDDING



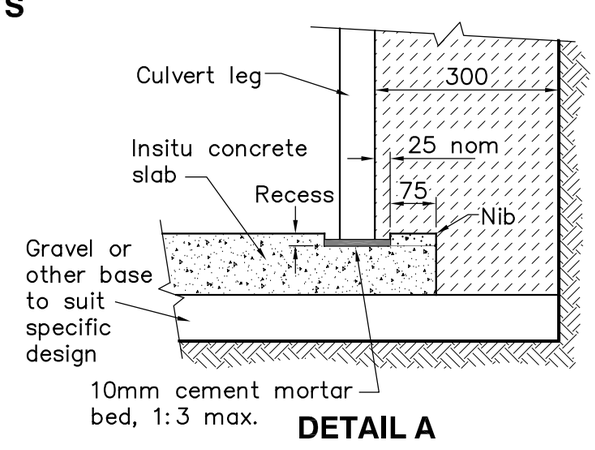
TYPE 4
INSITU BASE SLAB



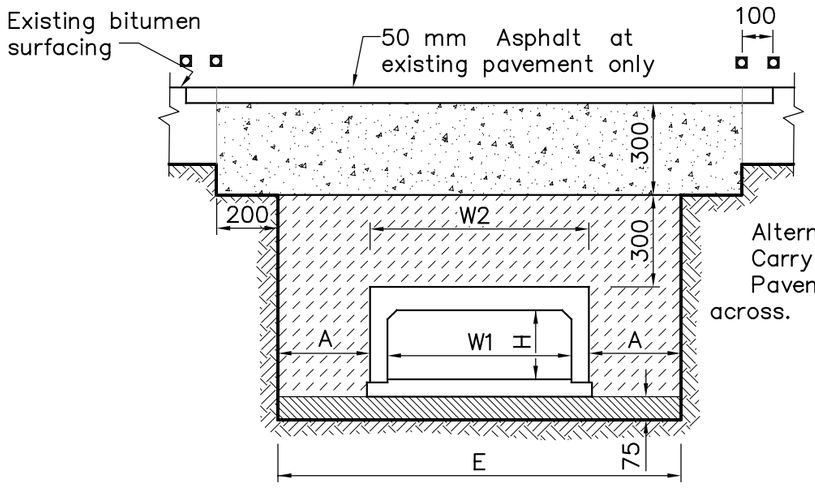
MULTIPLE CULVERTS

W1 nom	W2 nom	E nom
300	420	1000
375	500	1100
450	570	1200
600	730	1300
750	890	1500
900	1050	1700
1200	1360	2000
1520	1700	2300
1820	2010	2600
2130	2340	3000
2440	2670	3300

EXCAVATION WIDTH



DETAIL A

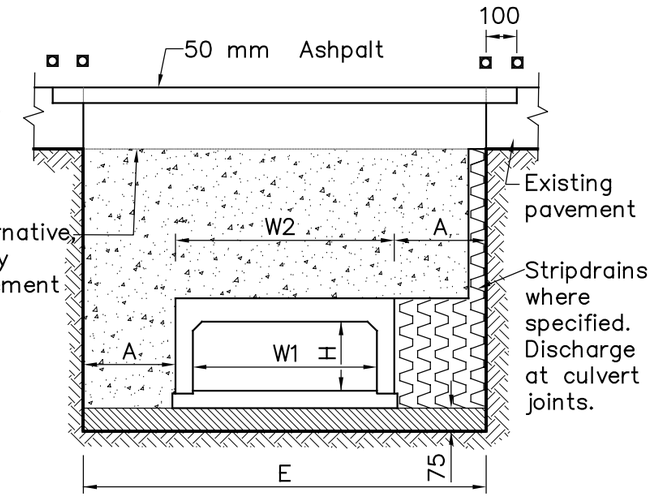


ALTERNATIVE A

AT EXISTING SURFACED PAVEMENTS OR AT NEW PAVEMENTS ON RESIDENTIAL STREETS AND RURAL ROADS.

LEGEND

- A 300mm Nominal
- ■ Refer alternative A for backfill requirements at new pavement.
- ◘ Saw cut existing pavement.
- Gravel (min CBR 15) or 75mm crusher dust run backfill.
- Lean mix concrete backfill, 1:15 mix.
- Sand
- Compacted backfill.



ALTERNATIVE B

AT EXISTING SURFACED PAVEMENTS OR ON INDUSTRIAL, TRUNK COLLECTOR, SUB-ARTERIAL AND ARTERIAL ROADS.

NOTES

1. Backfill Compaction :
   Approved fill/approved bedding/compacted backfill/CBR 15 gravel 90%.
   * Compacted gravel (300mm layer) under road pavement.
   * Compacted fill at footpaths/private property 90%.
   * Max densities determined by Standard compaction tests to AS 1289.E5.1.
2. Tape all joints with 75mm wide Denso (600) tape or equivalent.
3. All dimensions in millimetres.

Scales:

NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Revision to details	MLP 7/04	drawn	Org signed by BDF 05/98
			checked	
			designed	
			checked	
Revisions				

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

EXCAVATION, BEDDING AND BACKFILLING OF PRECAST BOX CULVERTS

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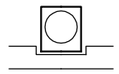
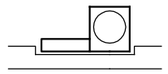
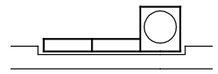
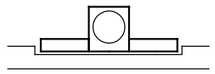
Drawing No.
D202
A

TABLE OF UPSTREAM AND DOWNSTREAM CUT–OUT LENGTHS				
PIT Ref.	1C0T	1C1T	1C2T	
Location	All	Grade and sag	Grade only	Sag only
Layout				
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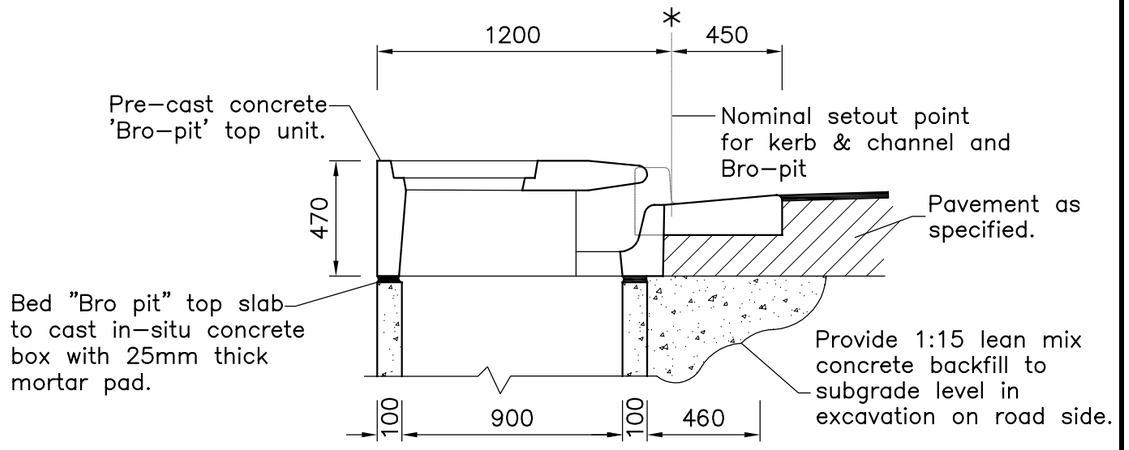
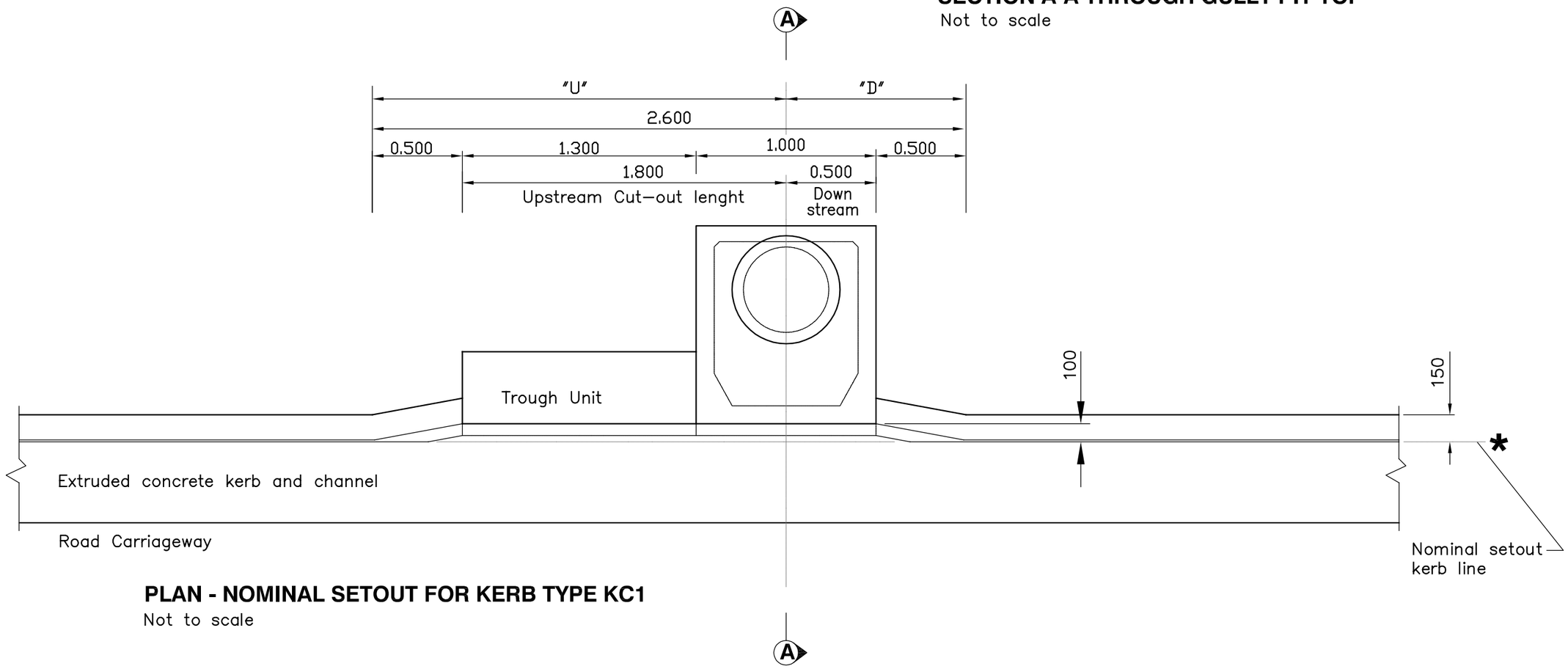
Dist "D"	1.000	1.000	1.000	2.300



SECTION A-A THROUGH GULLY PIT TOP
Not to scale



PLAN - NOMINAL SETOUT FOR KERB TYPE KC1
Not to scale

Scales:					
NOT TO SCALE	A	Revision to details	MLP 7/04	drawn	Org signed by BDF 05/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

BRO-PIT SETOUT AND TREATMENT TO KERB TYPE KC1

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Drawing No. D211-1

A

TABLE OF UPSTREAM AND DOWNSTREAM CUT–OUT LENGTHS				
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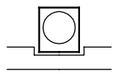
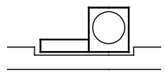
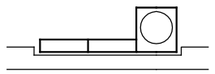
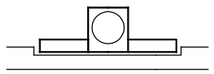
Layout				
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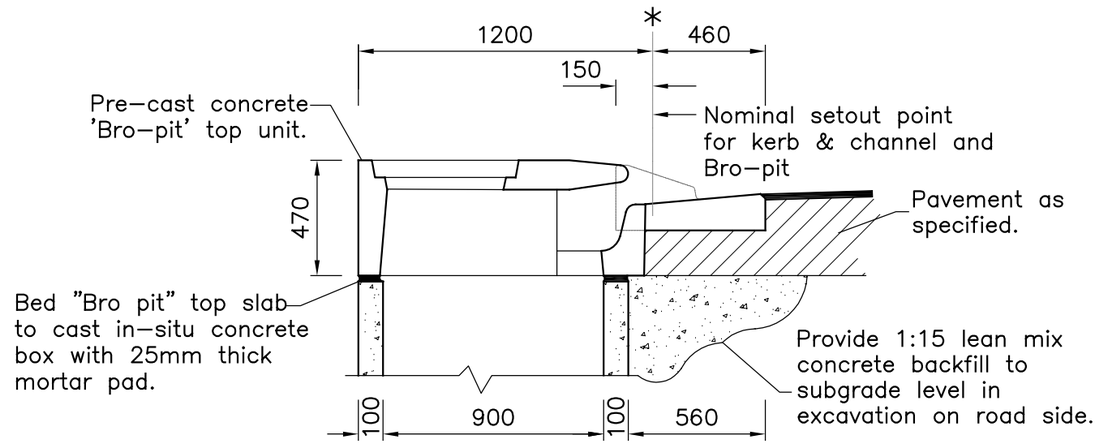
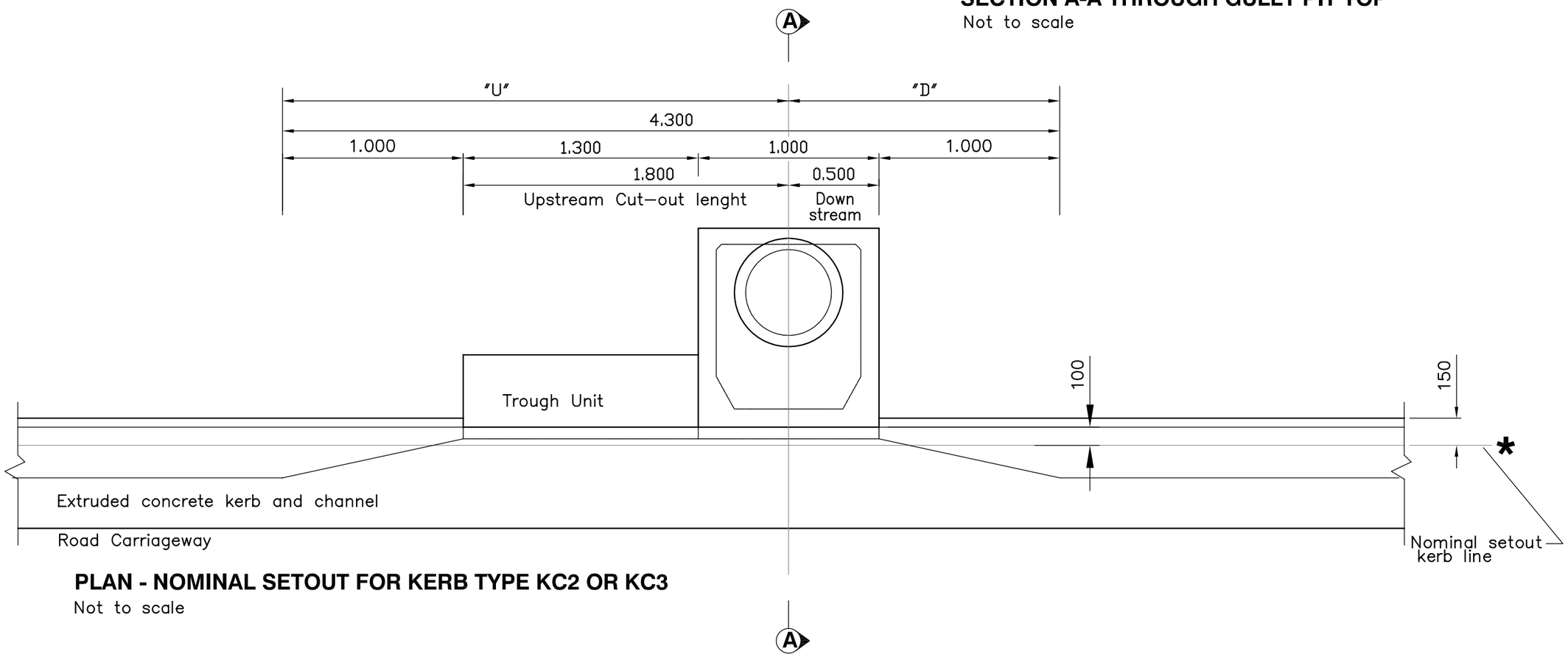


SECTION A-A THROUGH GULLY PIT TOP

Not to scale



PLAN - NOMINAL SETOUT FOR KERB TYPE KC2 OR KC3

Not to scale

Scales:					
NOT TO SCALE	A	Revision to details	MLP 7/04	drawn	Org signed by BDF 06/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

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General Manager of Engineering Operations

BRO-PIT SETOUT AND TREATMENT TO KERB TYPE KC2 & KC3

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Drawing No. D211-2

A

TABLE OF UPSTREAM AND DOWNSTREAM CUT–OUT LENGTHS					
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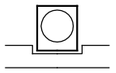
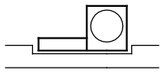
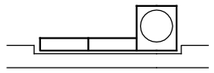
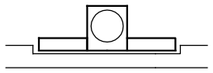
Layout					
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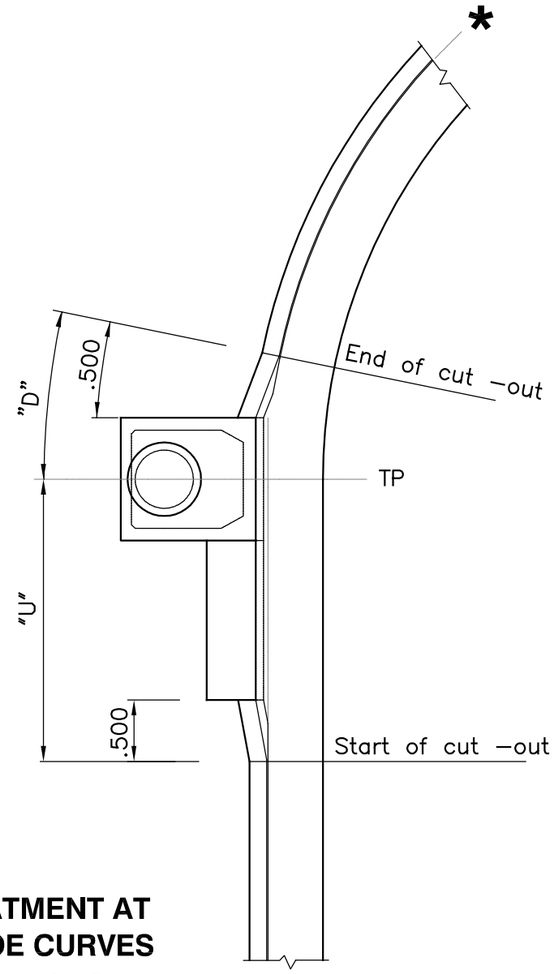
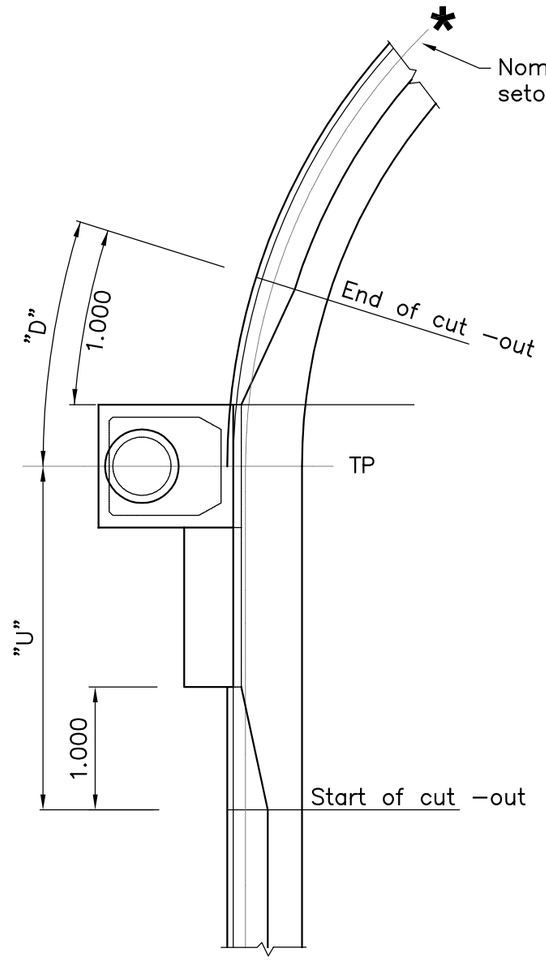
Dist "D"	KC1	1.000	1.000	1.000	2.300
Dist. "U"	KC2 & KC3	1.500	2.800	4.100	2.800
Dist "D"	KC2 & KC3	1.500	1.500	1.500	2.800



KERB TYPE KC1

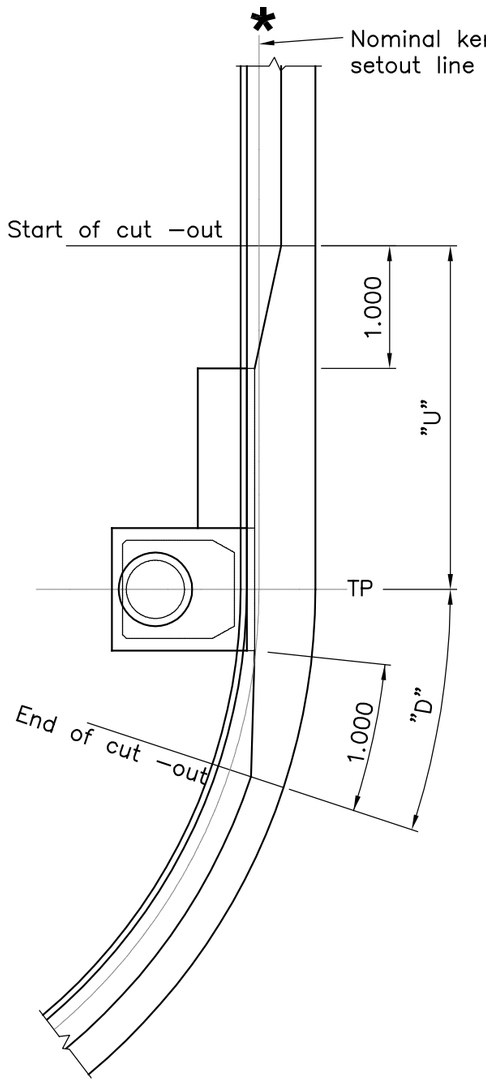


KERB TYPE KC2 & KC3

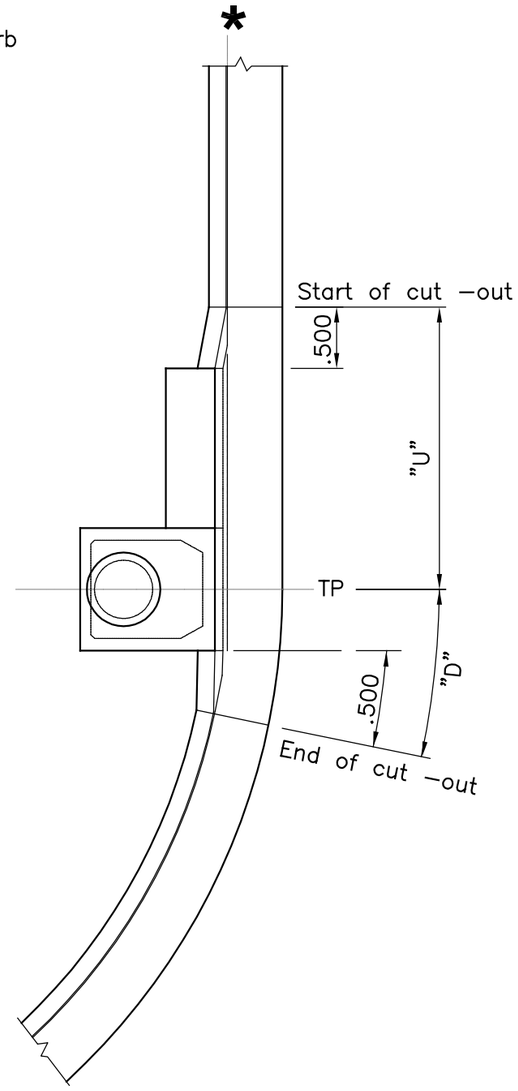
TREATMENT AT INSIDE CURVES

NOT TO SCALE

NOTE: All setout details as per Standard drawing R35–1 and R35–2.



KERB TYPE KC2 & KC3



KERB TYPE KC1

TREATMENT AT OUTSIDE CURVES

NOT TO SCALE

Scales: NOT TO SCALE	A	Revision to details	MLP 7/04	drawn	Org signed by BDF 06/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

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General Manager of Engineering Operations

BRO-PIT SETOUT AND TREATMENT TO KERB TYPES KC1, KC2 & KC3 ON CURVES

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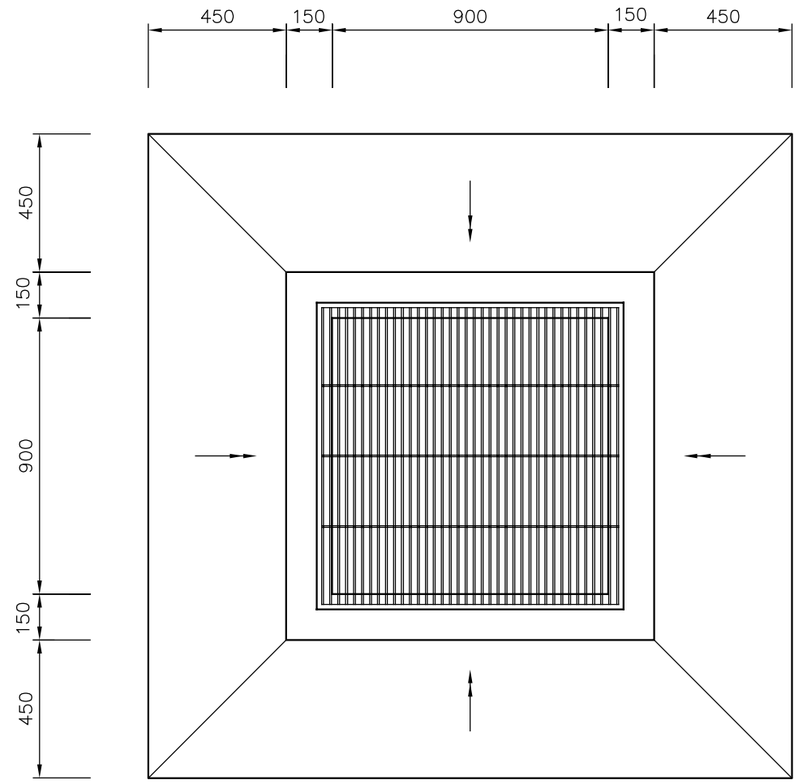
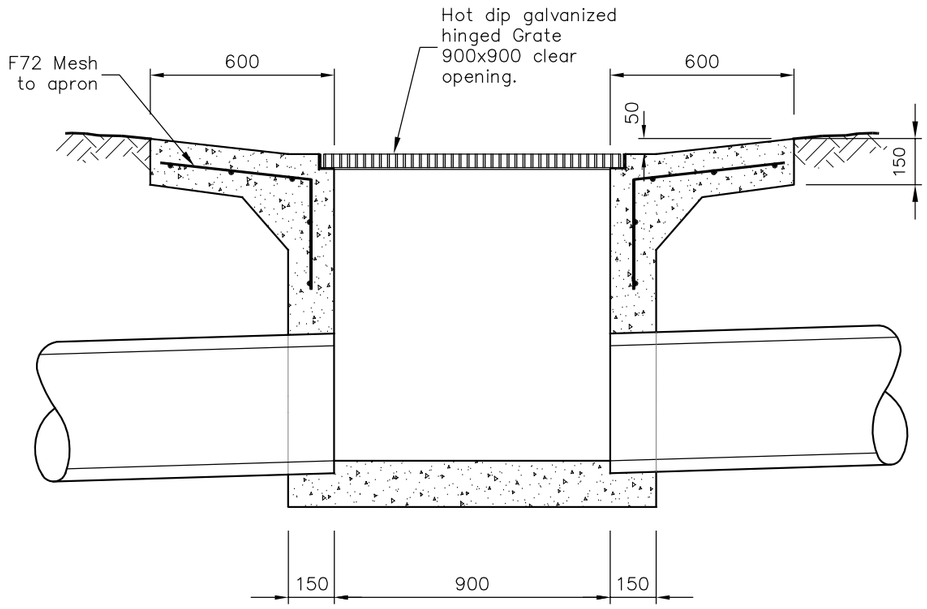
Drawing No. D211-3

A

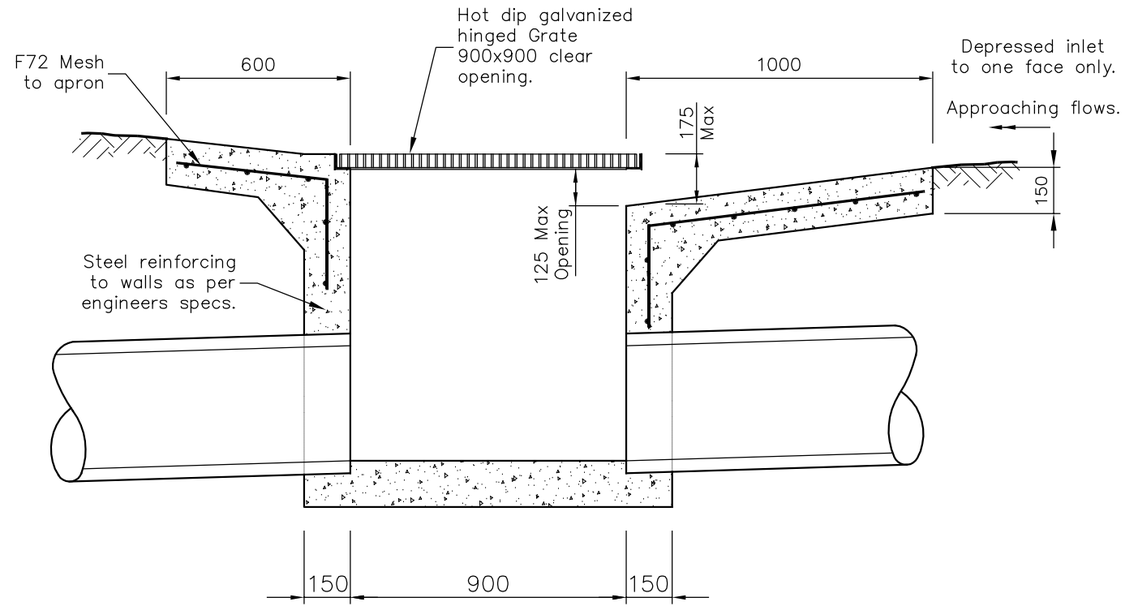


PLAN VIEW
NTS

Note
1. Concrete N25 in accordance with AS 1379 and AS 3600.
2. All welds to AS 1554.
3. Grate and frame to be hot dip galvanized after fabrication to AS 1101.3.
4. Reinforcing bars Grade 250 to AS 1302.
5. All flats Grade 250 to AS 3678.
6. all angles Grade 250 to AS 3679.
7. Hexagonal head bolts to AS 1111.
   Nuts to AS 1112.
   Washers to AS 1237.
   Galvanizing to AS1214.
8. Grate top to be designed to withstand loads to AS 3996–92.
9. Grate tops to be designed to suit there required use. eg. pedestrian safe bicycle safe.
10. Lid design to be submitted to Council for approval.
11. All dimensions in millimeters.



FIELD INLET
NTS



DEPRESSED INLET
NTS

Scales: NOT TO SCALE		drawn	Org signed by MLP 9/04
		checked	
		designed	
Sheet A3 , Datum: A.H.D.	Revisions	checked	

BURNETT SHIRE COUNCIL

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General Manager of Engineering Operations

FIELD INLET / GRATED GULLY PIT PROFILES AND DIMENSIONS

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Drawing No. D221

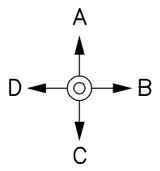
BURNETT SHIRE COUNCIL STANDARD DRAWINGS

PARKS

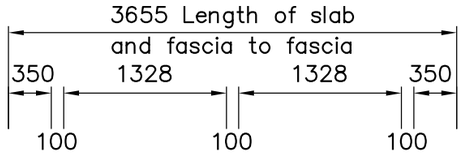
Number	Title / Topic
	Shelters
P301-1	Typical Bus Shelter - Type 1 - Sheet 1 of 2
P301-2	Typical Bus Shelter - Type 1 - Sheet 2 of 2
P303-1	Gazebo Shelter - Type 1 - Sheet 1 of 2
P303-2	Gazebo Shelter - Type 1 - Sheet 2 of 2
P305-1	Rectangular Shelter - Type 1 - Sheet 1 of 2
P305-2	Rectangular Shelter - Type 1 - Sheet 2 of 2
P306-1	Gazebo Shelter - Type 2 - Sheet 1 of 2
P306-2	Gazebo Shelter - Type 2 - Sheet 2 of 2
P307-1	Picnic Table Shelter - Type 1 - Sheet 1 of 2
P307-2	Picnic Table Shelter - Type 1 - Sheet 2 of 2
P308-1	Rectangular Shelter - Type 2 - Sheet 1 of 2
P308-2	Rectangular Shelter - Type 2 - Sheet 2 of 2
P309-1	Rotunda - Type 1 - Sheet 1 of 3
P309-2	Rotunda - Type 1 - Sheet 2 of 3
P309-3	Rotunda - Type 1 - Sheet 3 of 3
P311-1	Bus Shelter - Type 3 - Sheet 1 of 2
P311-2	Bus Shelter - Type 3 - Sheet 2 of 2
P312-1	Rectangular Skillion Roof Shelter - Type 3 - Sheet 1 of 4
P312-2	Rectangular Skillion Roof Shelter - Type 3 - Sheet 2 of 4
P312-3	Rectangular Skillion Roof Shelter - Type 3 - Sheet 3 of 4
P312-4	Rectangular Skillion Roof Shelter - Type 3 - Sheet 4 of 4

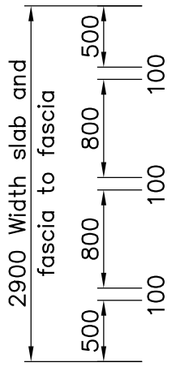
PARKS (continued)

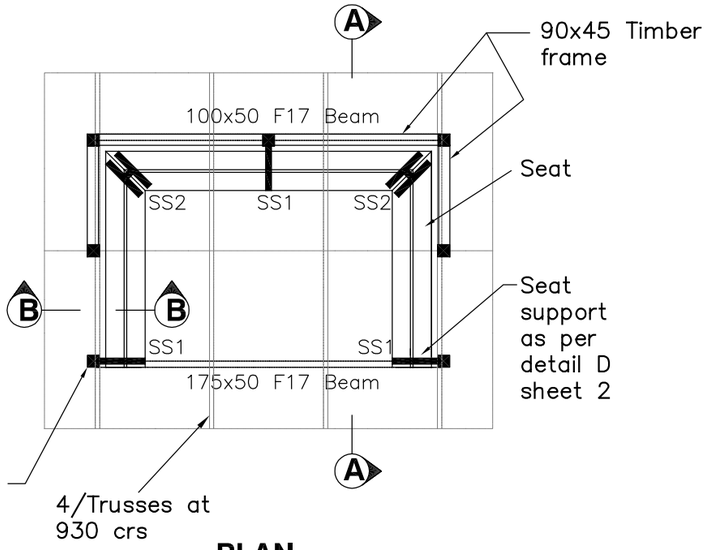
Number	Title / Topic
	Footbridges and Boardwalks
P304	Timber Footbridge Using Girder Poles
P310	1.4m Wide Lowset Boardwalk on Sleepers.
	Park Furniture
P320	Brick BBQ with Concrete Top - Single Hotplate
P321	Brick BBQ With Concrete Top - Double Hotplate
	Toilets and Amenities
P330	Layout of Toilet Fixtures for Disabled Toilets.
P331-1	Male/Female Amenities Block - Type 1 Layout Plan Sheet 1 of 6
P331-2	Male/Female Amenities Block - Type 1 Elevations Sheet 2 of 6
P331-3	Male/Female Amenities Block - Type 1 Section A-A Sheet 3 of 6
P331-4	Male/Female Amenities Block - Type 1 Foundation Plan Sheet 4 of 6
P331-5	Male/Female Amenities Block - Type 1 Notes Sheet 5 of 6
P331-6	Male/Female Amenities Block - Type 1 Toilet Fixtures Sheet 6 of 6
P335	Locking Plate For Septic Tank Lid
P337	Double Toilet Roll Holder
P338-1	Male/Female Amenities Block - Elevations Sheet 1 of 8
P338-2	Male/Female Amenities Block - Floor Plan Sheet 2 of 8
P338-3	Male/Female Amenities Block - Foundation Plan Sheet 3 of 8
P338-4	Male/Female Amenities Block - Section A-A Plan Sheet 4 of 8
P338-5	Male/Female Amenities Block - Framing Plan Sheet 5 of 8
P338-6	Male/Female Amenities Block - Bench And Basin Plan Sheet 6 of 8
P338-7	Male/Female Amenities Block - Toilet Fixtures And Notes Sheet 7 of 8
P338-8	Male/Female Amenities Block - Foundation Details Sheet 8 of 8



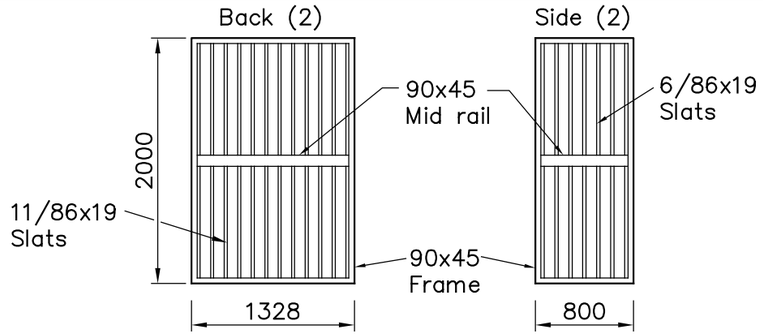
ELEVATIONS



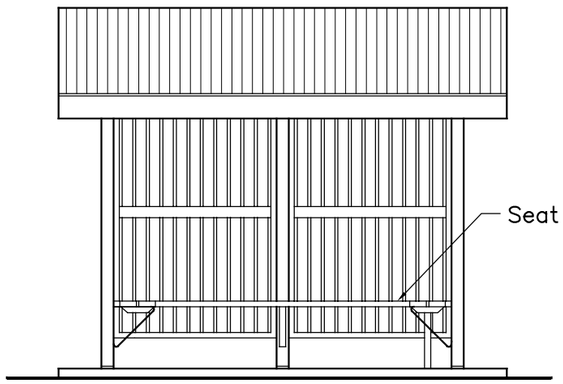




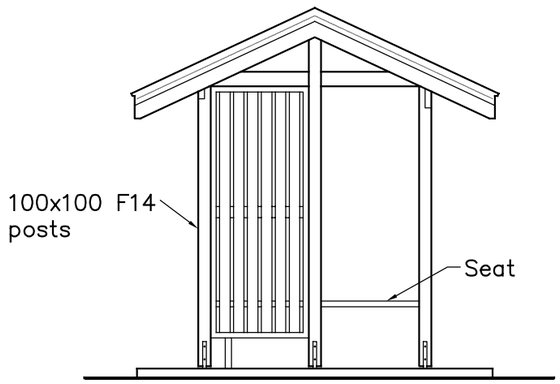
PLAN



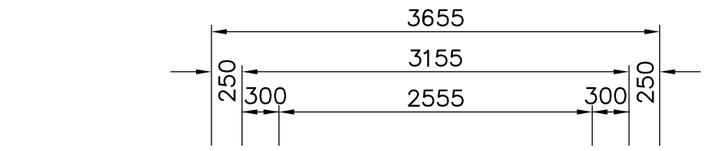
SLAT FRAME DETAILS

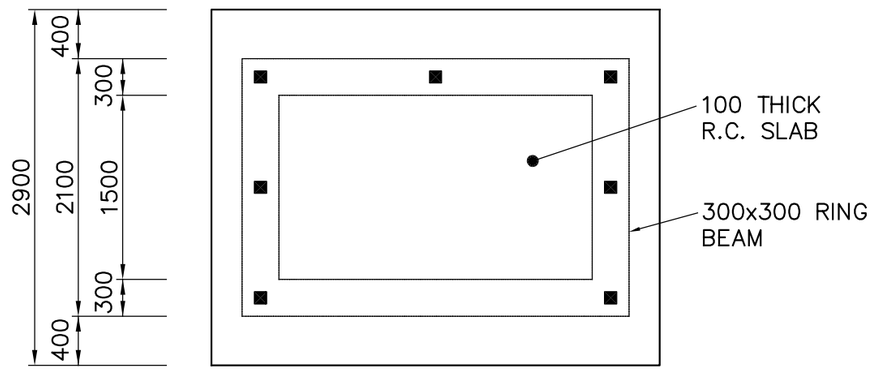


ELEVATION - VIEW A

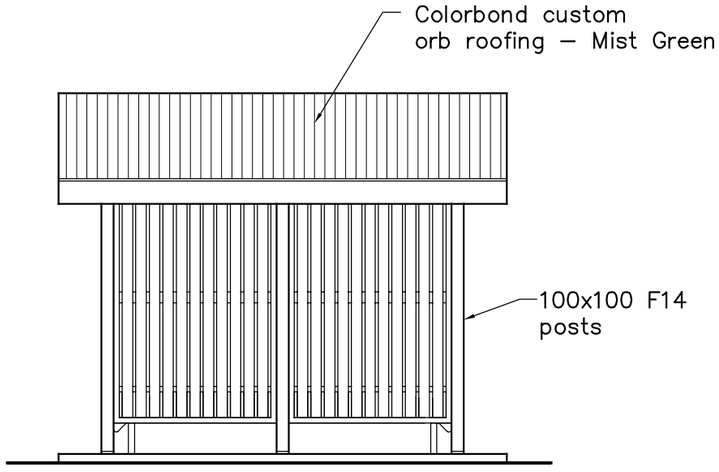


ELEVATION - VIEW B

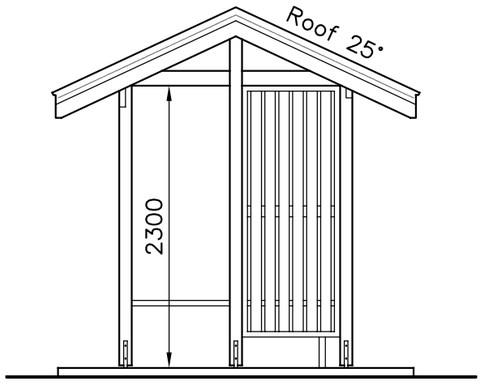




FOUNDATION PLAN



ELEVATION - VIEW C



ELEVATION - VIEW D

Scales: Scale 1:50

0 0.5 1.0 1.5m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 06/98
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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BUS SHELTER - TYPE 1
SHEET 1 0F 2

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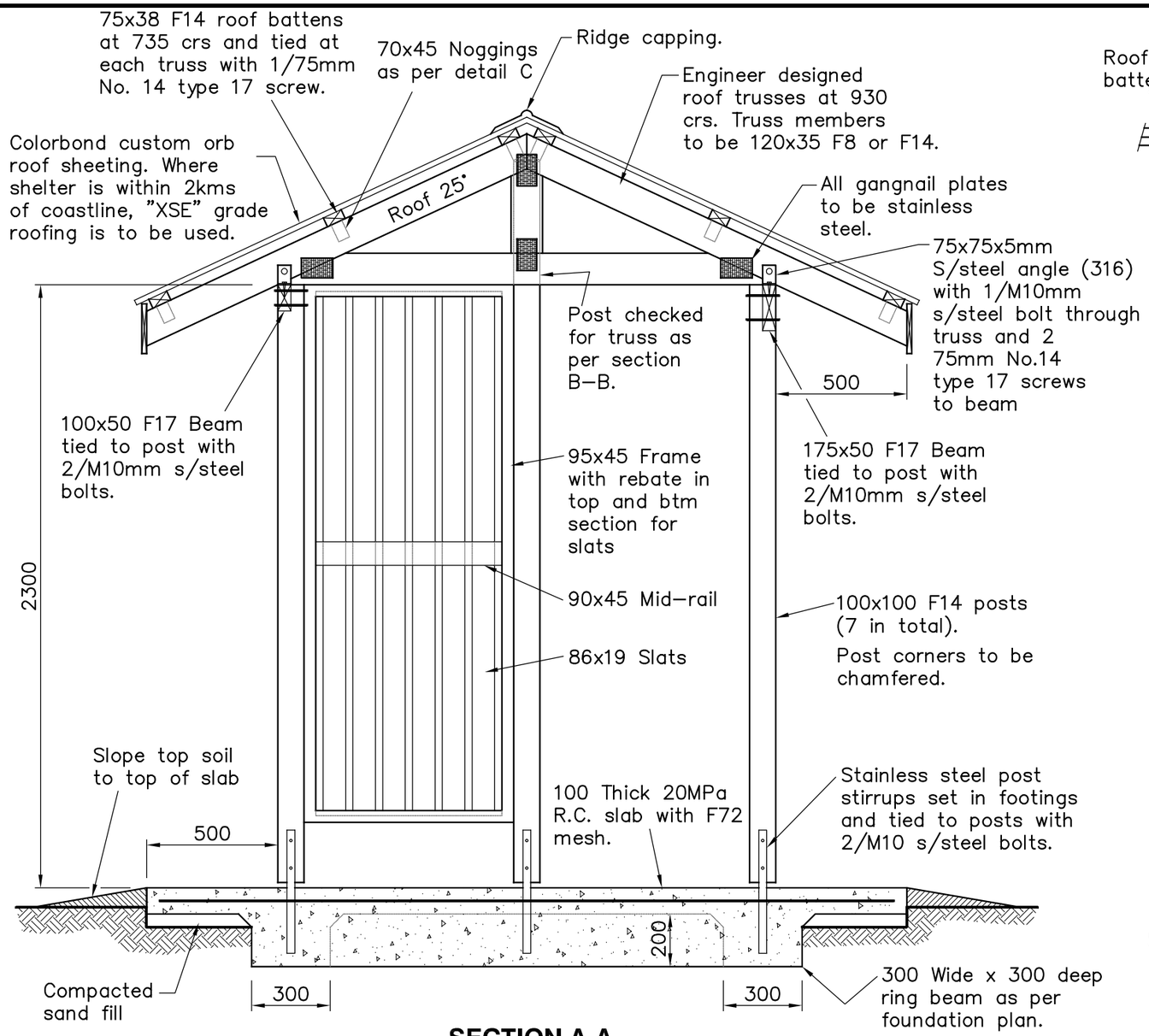
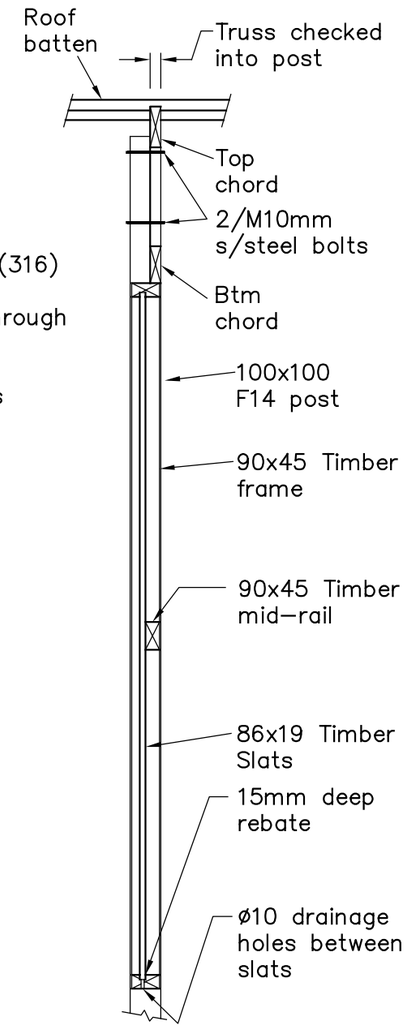
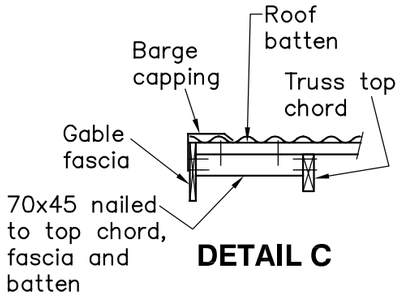
Drawing No.
P301-1



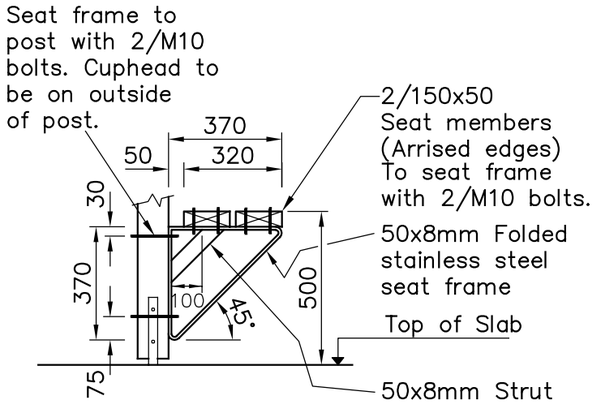
SECTION A-A



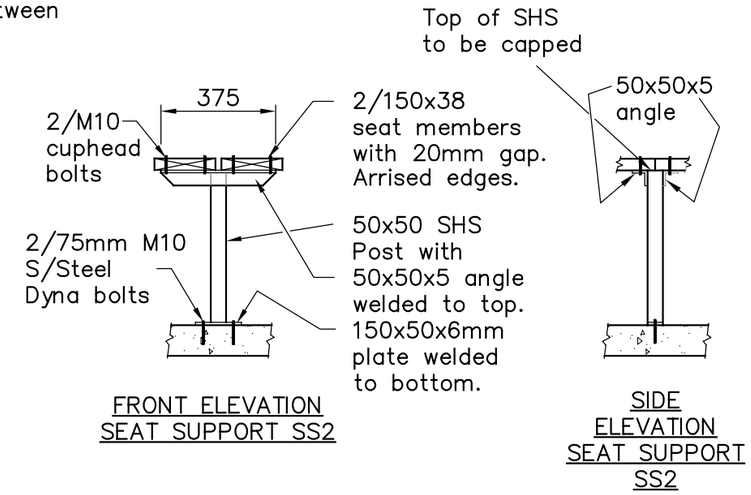
SECTION B-B



DETAIL C



SEAT SUPPORT SS1



FRONT ELEVATION SEAT SUPPORT SS2

SIDE ELEVATION SEAT SUPPORT SS2

DETAIL D - SEAT SUPPORTS

ALL SEAT SUPPORT MEMBERS TO BE STAINLESS STEEL (316)

NOTES

1. All timber to be F14 unless noted otherwise.
2. All nails to be galvanized.
3. Seat supports to be stainless steel (316).
4. Posts, slat frames and slats to be painted in colour "Mossvale Sand". Trusses, fascia boards, seats and roof battens to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of external acrylic paint.
5. Colorbond to be colour "Mist Green". Where XSE roofing is used, colour to be "Jubilee Jade".
6. Termite treatment provided in accordance with AS3660–1.
7. Any rough sawn timber to be given minor sanding to remove splinters from timber surface.
8. 200um Vapour barrier to be placed under slab.
9. Batten screws to be stainless steel. Roofing screws to be "Zac Screws".
10. All bolts to be stainless steel cuphead (min s/steel grade 304). Tack weld to end of bolt to prevent nut removal.
11. Where shelter is to be located further than 2km from coastline, galvanized bolts, screws and brackets may be used in lieu of stainless steel as directed by Works Engineer.

Scales: Scale 1:20

0 0.2 0.4 0.6m

Sheet A3 , Datum: A.H.D.

			drawn	Org signed by BDF 06/98
			checked	
			designed	
Revisions			checked	

BURNETT SHIRE COUNCIL

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BUS SHELTER - TYPE 1
SHEET 2 0F 2

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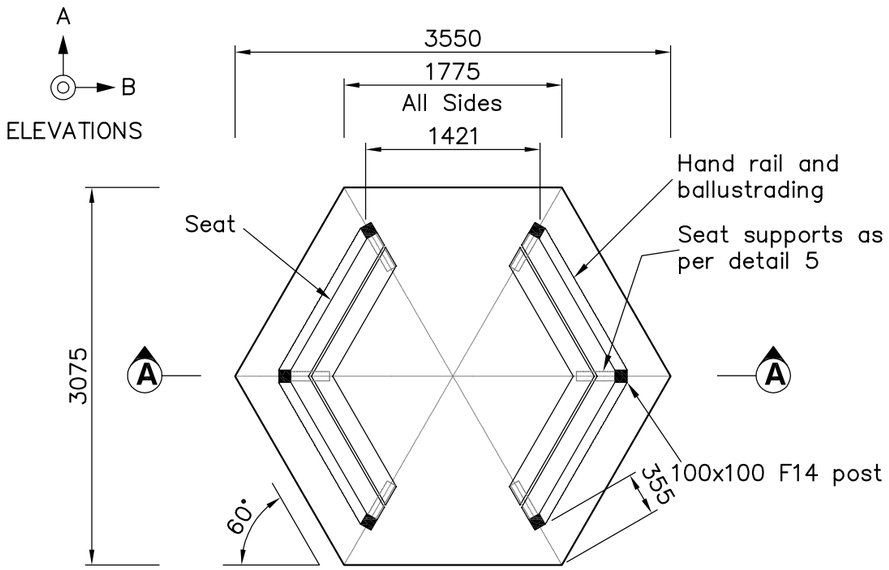
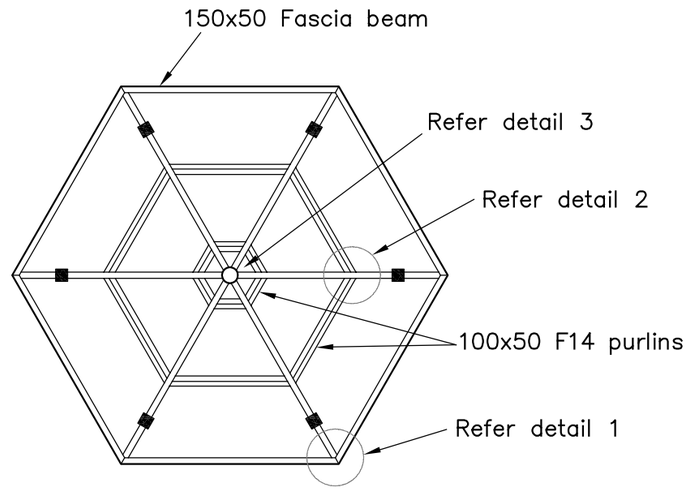
Drawing No.
P301-2



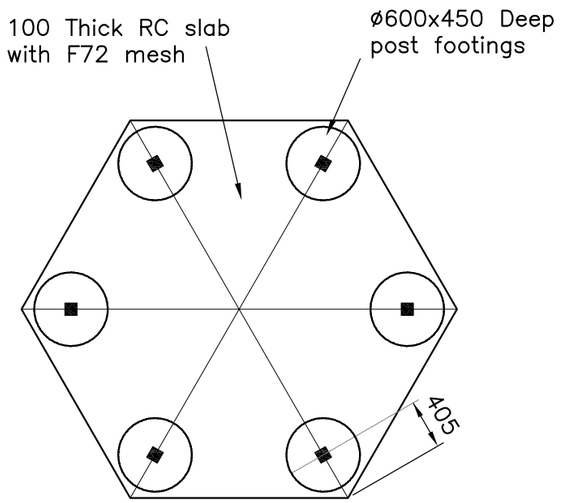
PLAN VIEW

Scale 1:50



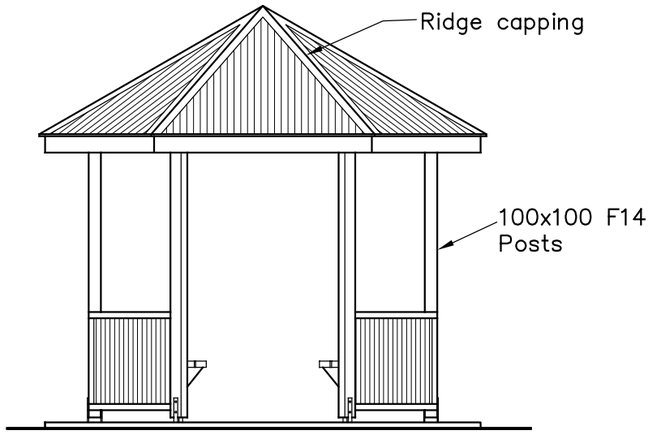
ROOF FRAMING PLAN

Scale 1:50



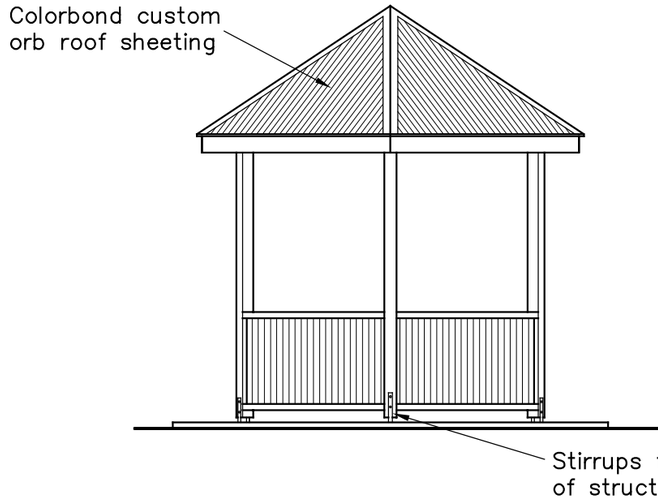
FOUNDATION PLAN

Scale 1:50



ELEVATION - VIEW A

Scale 1:50



ELEVATION - VIEW B

Scale 1:50

Scales: Scale 1:50		drawn	Org signed by BDF 09/98
0 0.5 1.0 1.5m		checked	
		designed	
Sheet A3 , Datum: A.H.D.	Revisions	checked	

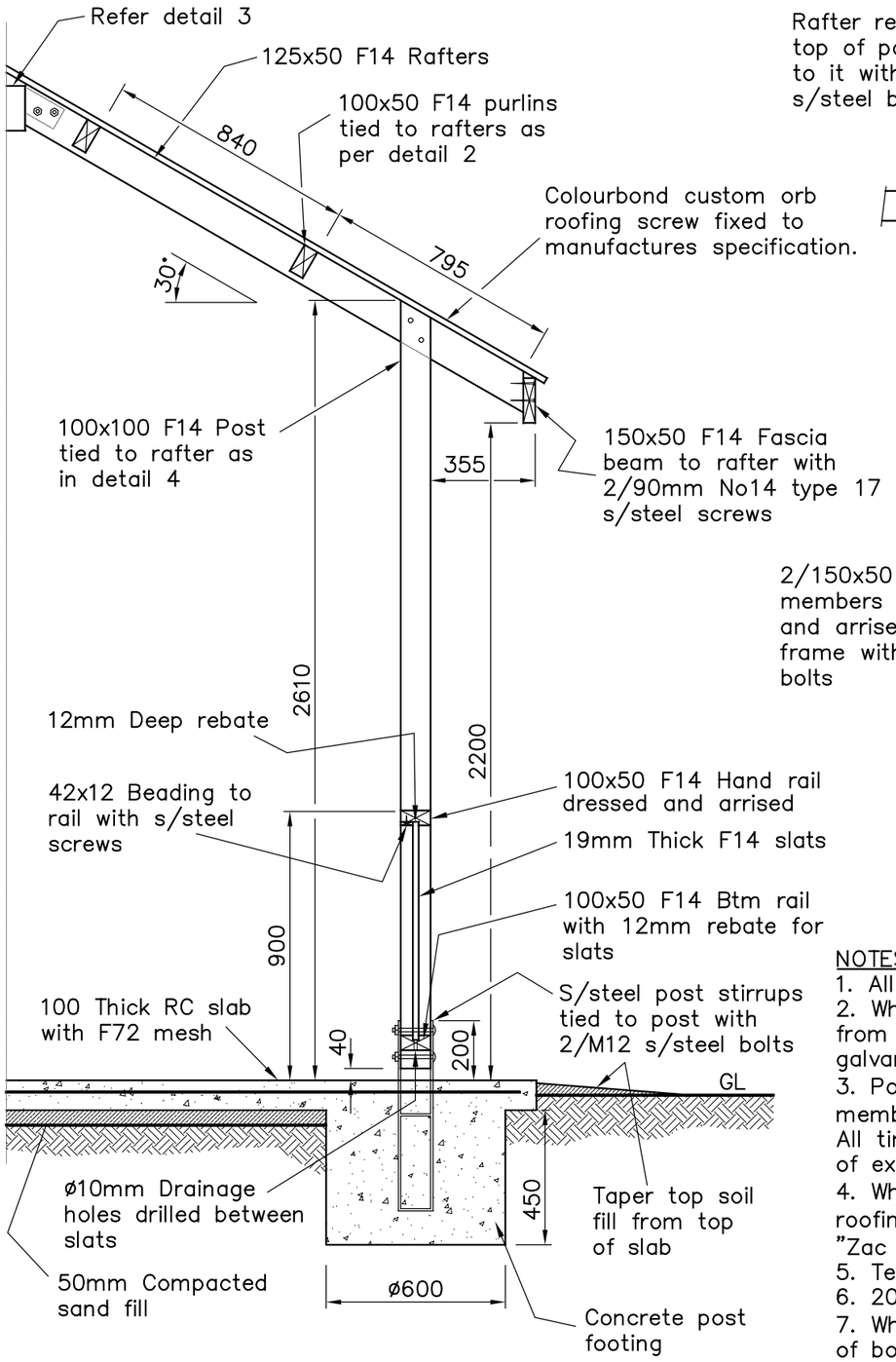
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

GAZEBO SHELTER
TYPE - 1 OF 2

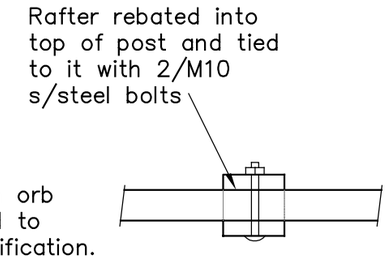
H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P303-1.dwg, 15/12/2004 9:01:10 AM

Drawing No.
P303-1



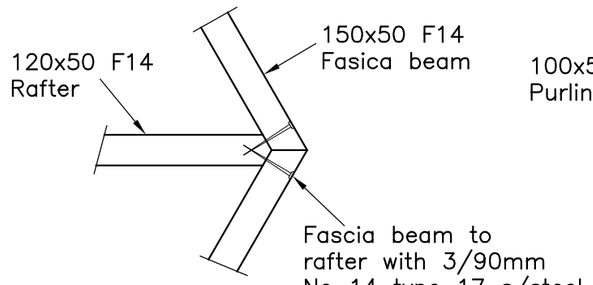
SECTIONAL DETAIL A-A

Scale 1:20



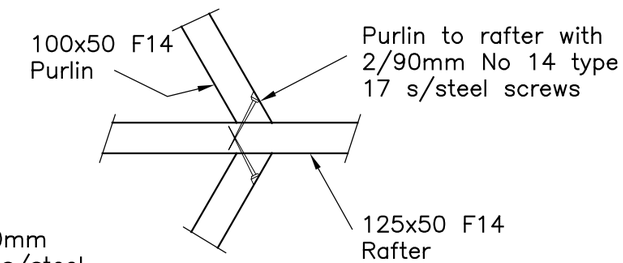
DETAIL 4

Scale 1:10



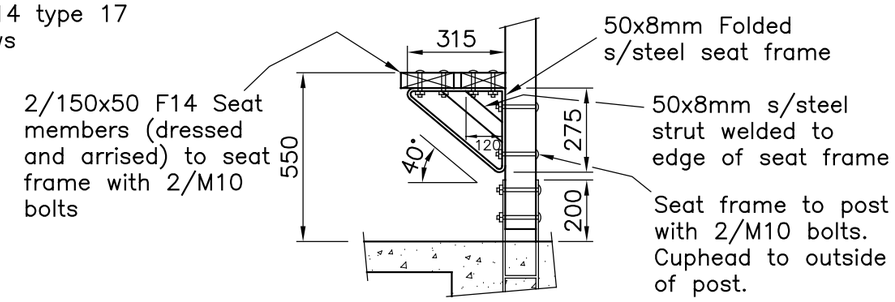
DETAIL 1

Scale 1:10



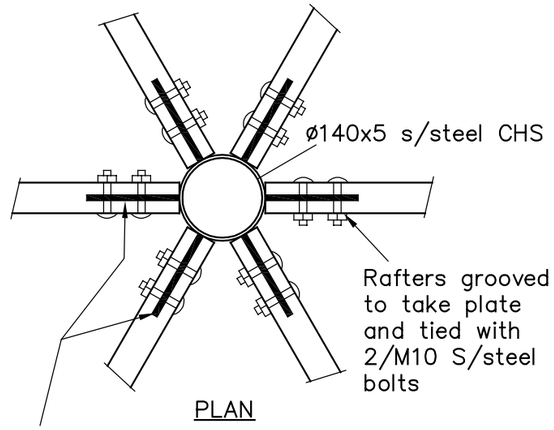
DETAIL 2

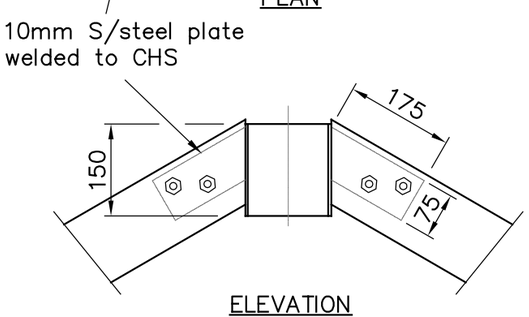
Scale 1:10



DETAIL 5

Scale 1:20





DETAIL 3

Scale 1:10

NOTES

1. All timber to be F14.
2. Where structure is to be constructed in an area greater than 2km from coastline, all stainless steel fittings should be replaced with galvanized fittings.
3. Posts, slats and rails to be painted in colour "Mossvale Sand". Roof members, seats and fascia beam to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of exterior acrylic paint.
4. Where structure is located within 2km of coastline, "XSE" grade roofing is to be used (colour "Jubilee Jade"), and is to be fixed with "Zac screws".
5. Termite treatment is to be provided in accordance with AS3660–1.
6. 200um Vapour barrier to be placed under slab.
7. Where s/steel bolts are used, a tack weld is to be provided to end of bolt to prevent nut removal.
8. Any rough sawn timber to be given minor sanding to remove any splinters from surface.
9. Ends of timber slats and rebates in any timber to be coated with a timber primer before assembly.

Scales: 1 : 20
0 0.2 0.4 0.6m
1 : 10
0 0.1 0.2 0.3m
Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 09/98
		checked	
		designed	
Revisions		checked	

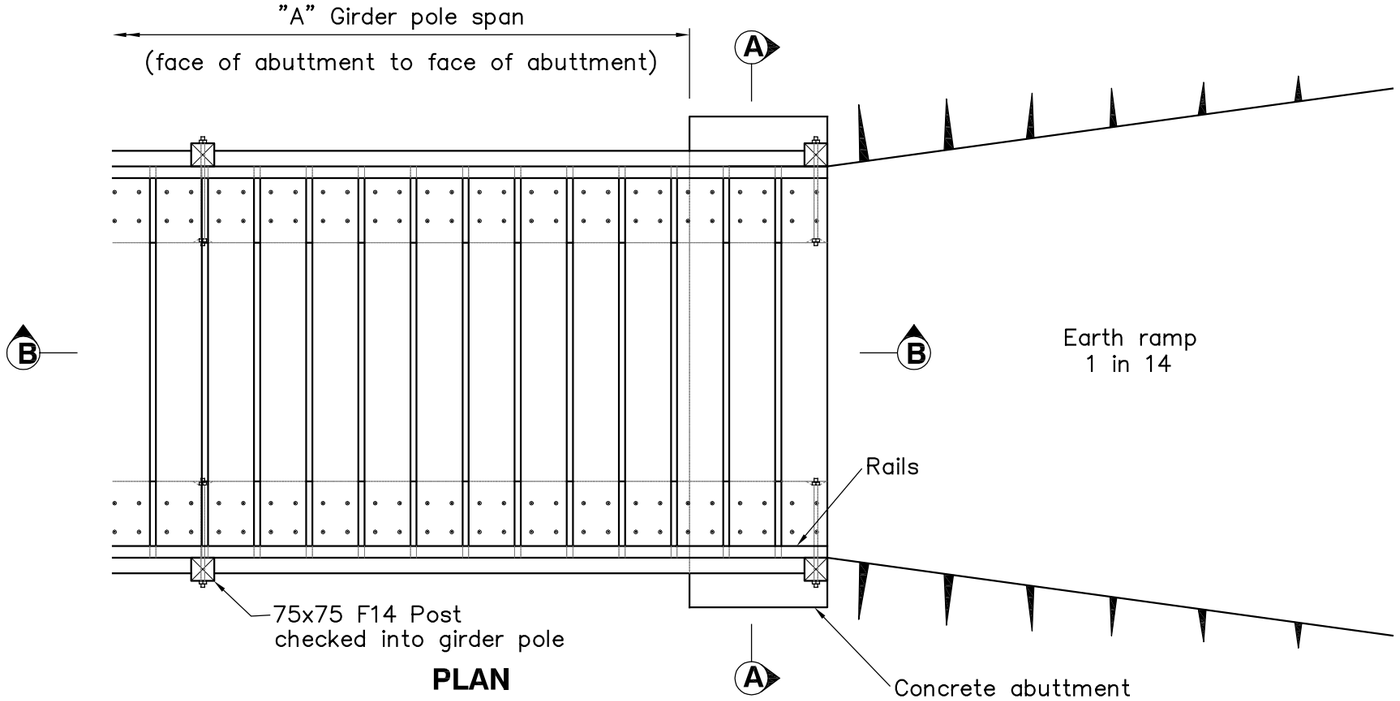
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

GAZEBO SHELTER
TYPE - 2 OF 2

H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P303-2.dwg, 10/11/2004 8:14:48 AM

Drawing No.
P303-2

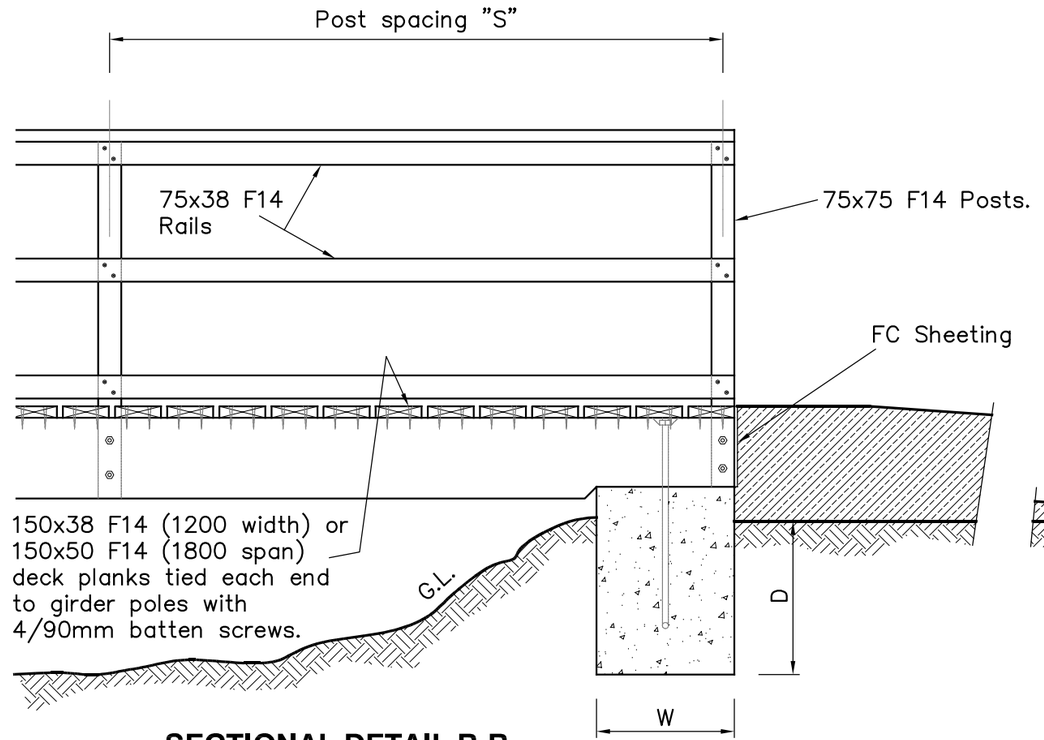


PLAN

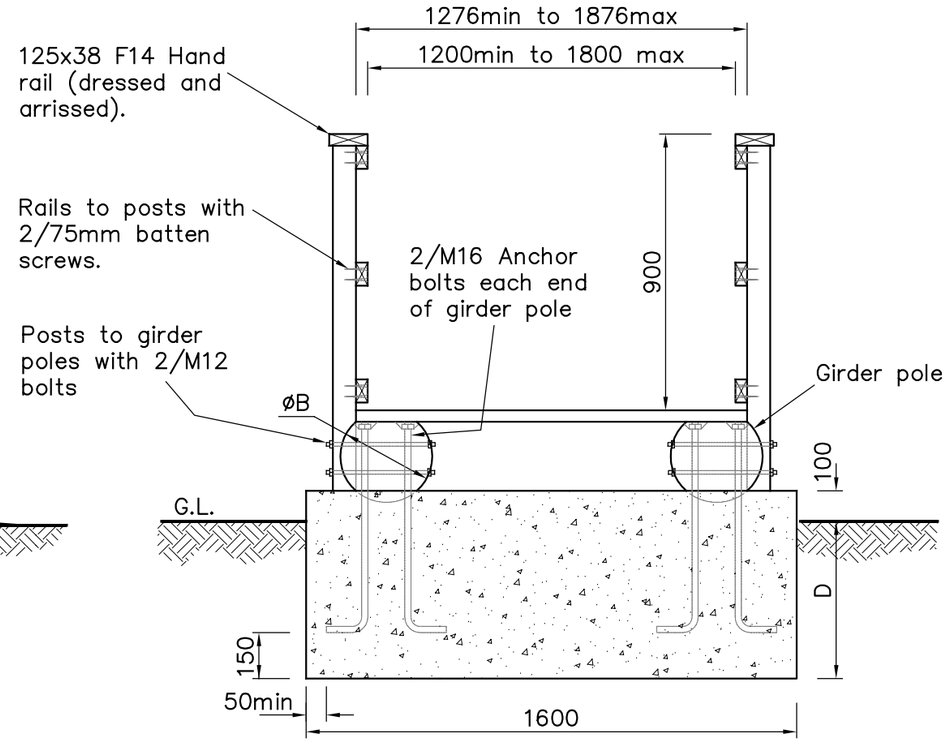
A (m) span	øB (mm) average	D (mm)	W (mm)	S (mm)
4	200	600	400	1575
5	250	600	400	1908
6	300	600	400	1681
7	300	600	500	1981
8	350	600	500	1785

NOTES

1. All sawn timber to be C.C.A. treated F14 hardwood.
2. Girder poles to be C.C.A. treated F27 hardwood.
3. If site is within 2km of coastline all hold down bolts, bolts and screws to be stainless steel. Otherwise all bolts and screws to be galvanized.
4. Structure has been designed for a live load of 3.0 Kpa and a maximum long term deflection of 1/300 span.
5. Maximum fall height of bridge to be 3.0m.



SECTIONAL DETAIL B-B



SECTIONAL DETAIL A-A

Scales:
Scale 1:20 (mm)
0 200 400 600
Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 08/98
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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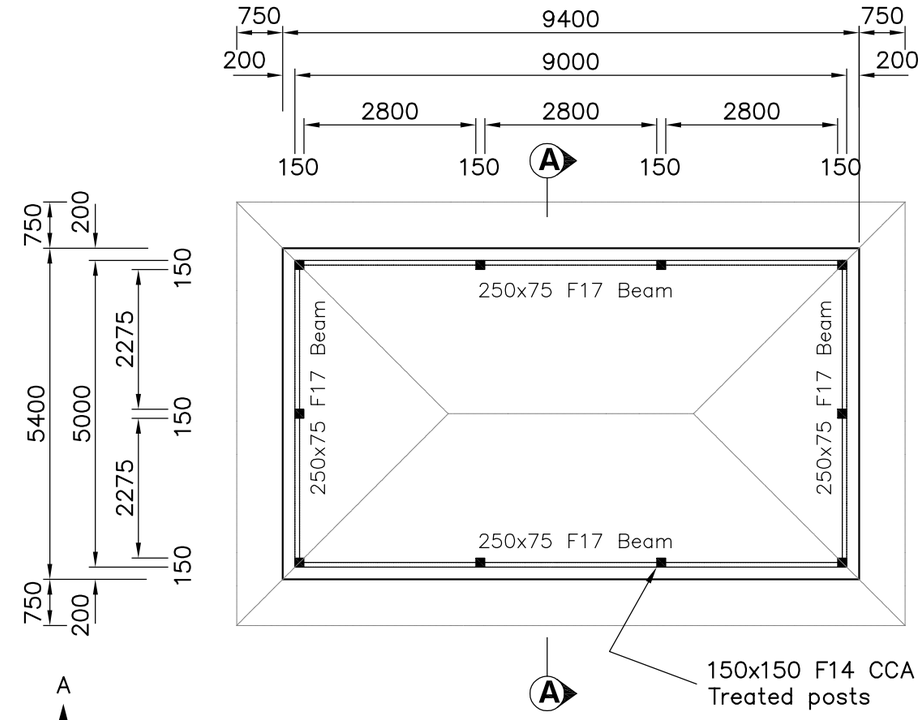
TIMBER FOOTBRIDGE USING GIRDER POLES

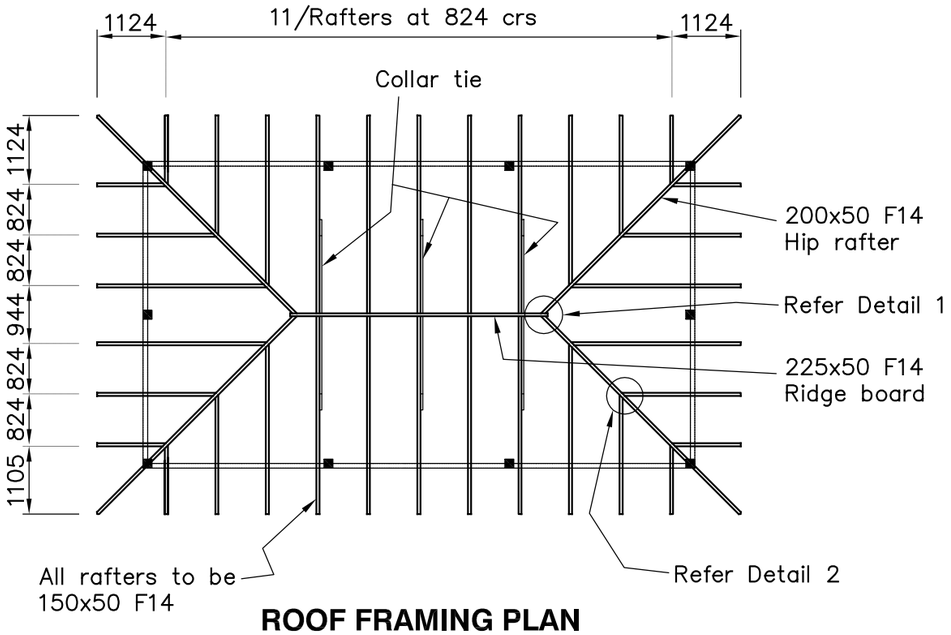
H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P304.dwg, 10/11/2004 8:12:57 AM

Drawing No. P304

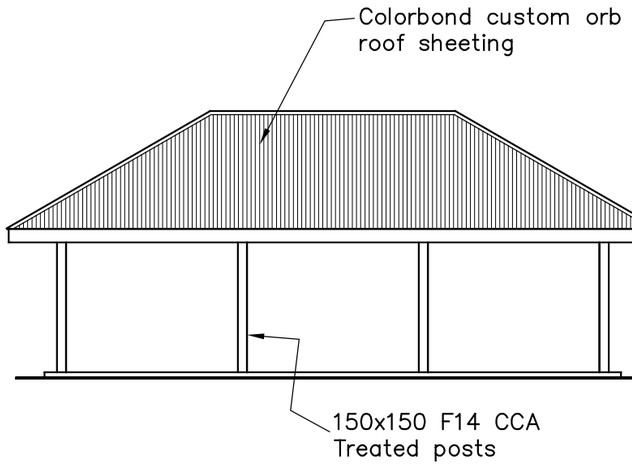


PLAN VIEW

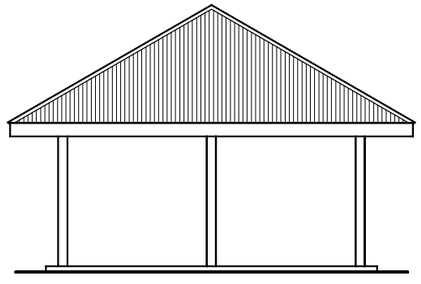
ELEVATIONS



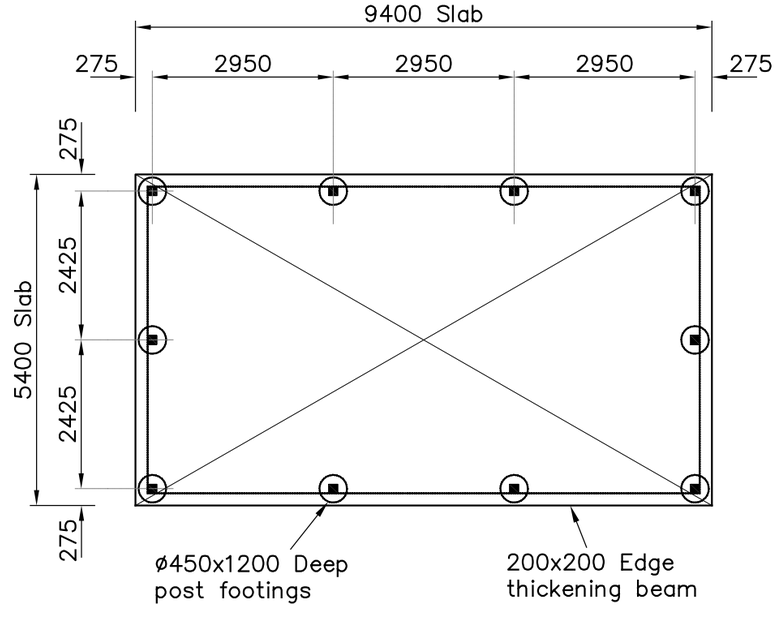
ROOF FRAMING PLAN



ELEVATION - VIEW A



ELEVATION - VIEW B



FOUNDATION PLAN

Scale 1:100

0 1 2 3m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 09/98
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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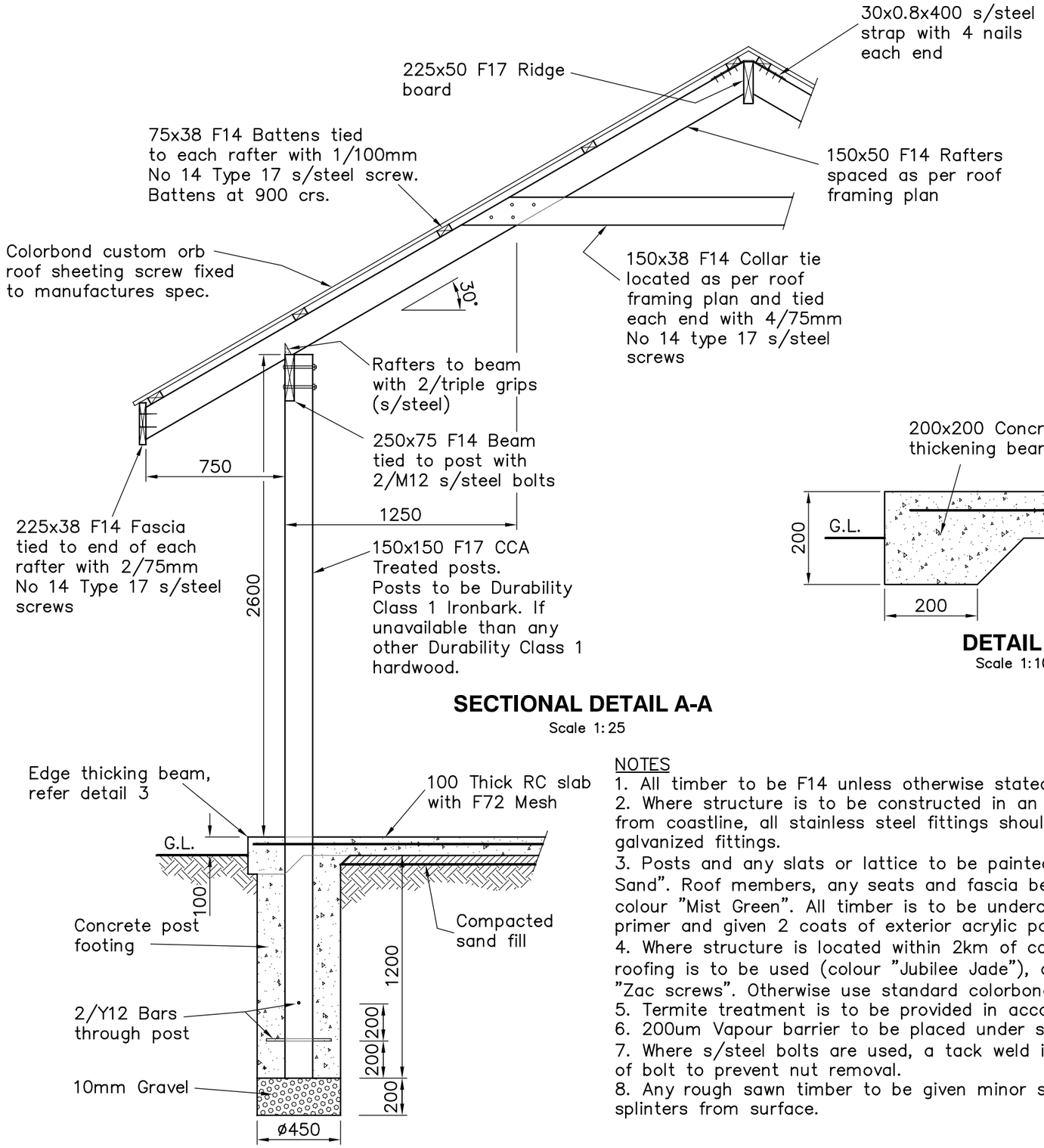
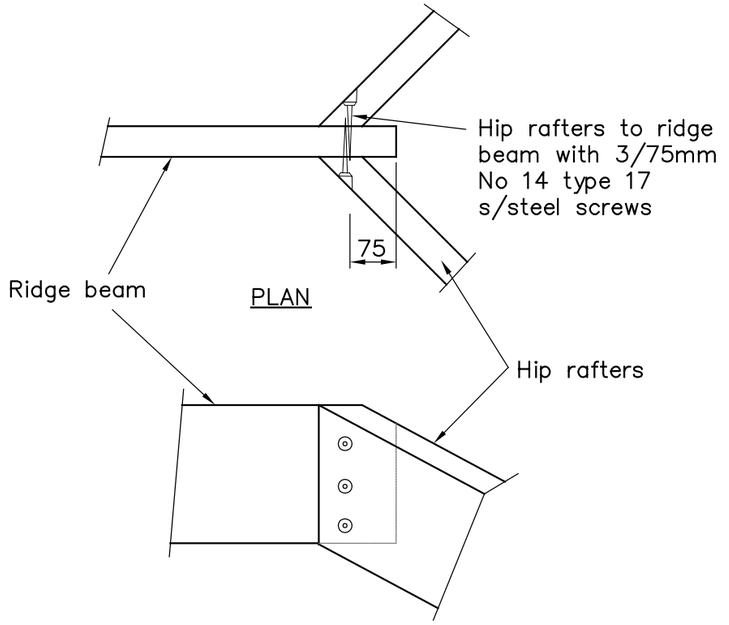
RECTANGULAR SHELTER - TYPE 1
SHEET 1 OF 2

H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P305-1.dwg, 09/11/2004 4:46:00 PM

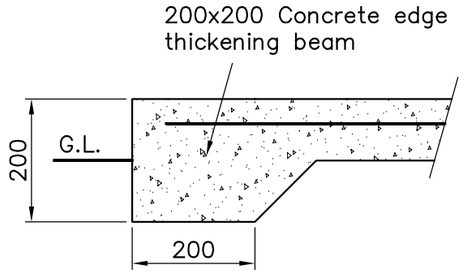
Drawing No.
P305-1



SECTIONAL DETAIL A-A
Scale 1:25

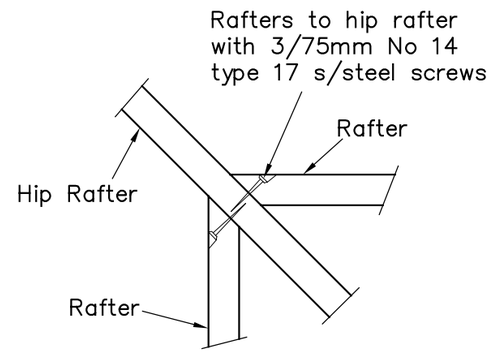


DETAIL 1
Scale 1:10



DETAIL 3
Scale 1:10

NOTES
1. All timber to be F14 unless otherwise stated.
2. Where structure is to be constructed in an area greater than 2km from coastline, all stainless steel fittings should be replaced with galvanized fittings.
3. Posts and any slats or lattice to be painted in colour "Mossvale Sand". Roof members, any seats and fascia beam to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of exterior acrylic paint.
4. Where structure is located within 2km of coastline, "XSE" grade roofing is to be used (colour "Jubilee Jade"), and is to be fixed with "Zac screws". Otherwise use standard colorbond in "Mist Green".
5. Termite treatment is to be provided in accordance with AS3660–1.
6. 200um Vapour barrier to be placed under slab.
7. Where s/steel bolts are used, a tack weld is to be provided to end of bolt to prevent nut removal.
8. Any rough sawn timber to be given minor sanding to remove any splinters from surface.



DETAIL 2
Scale 1:10

Scales: AS SHOWN		drawn	Org signed by BDF 09/98
		checked	
		designed	
Sheet A3 , Datum: A.H.D.	Revisions	checked	

BURNETT SHIRE COUNCIL

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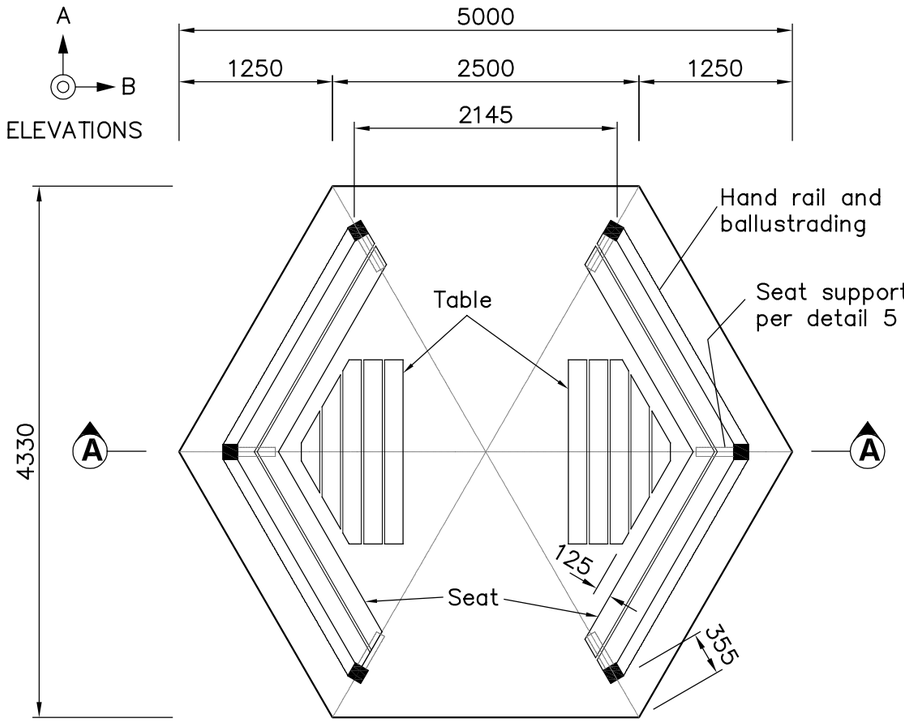
General Manager of Engineering Operations

RECTANGULAR SHELTER - TYPE 1
SHEET 2 OF 2

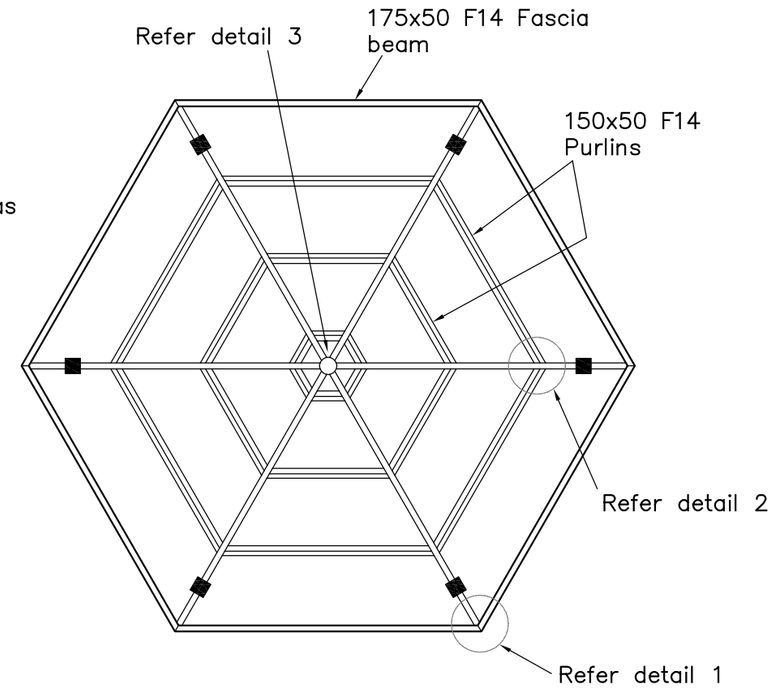
H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P305-2.dwg, 09/11/2004 4:43:06 PM

Drawing No.
P305-2



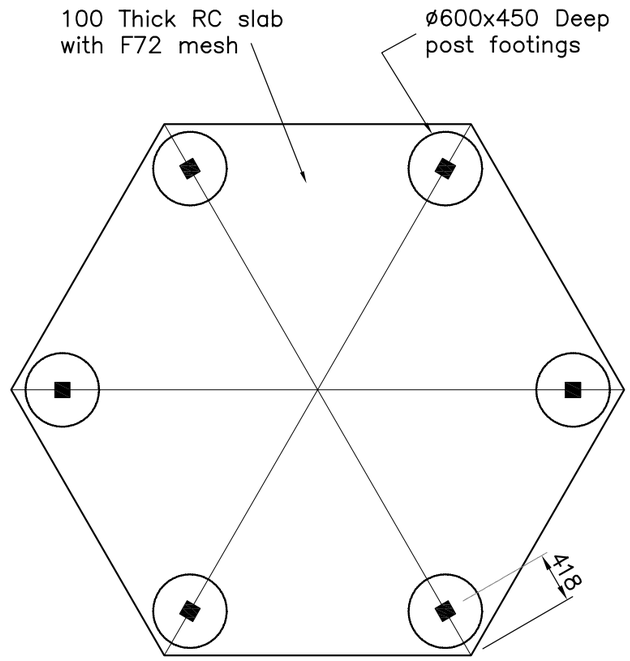
PLAN VIEW

Scale 1:50



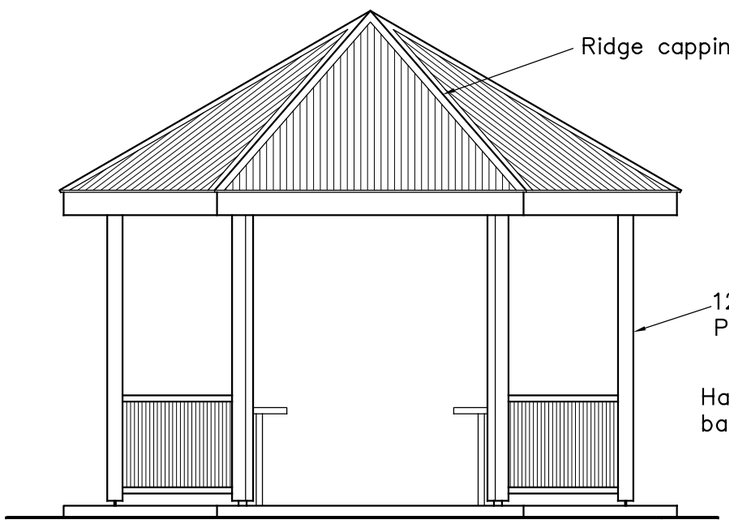
ROOF FRAMING PLAN

Scale 1:50



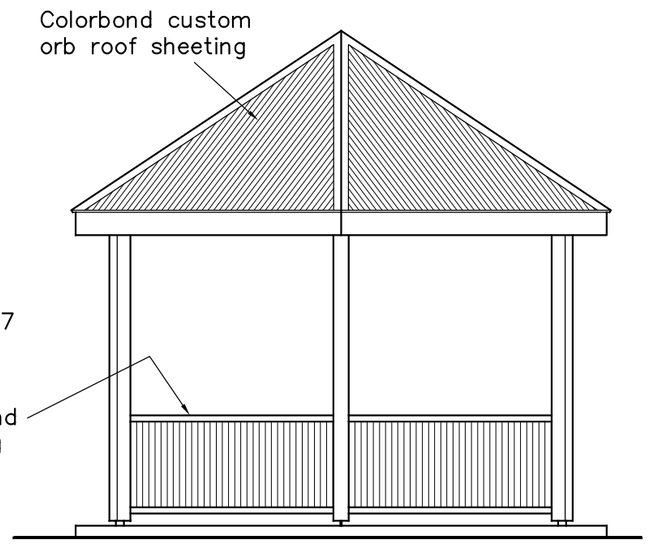
FOUNDATION PLAN

Scale 1:50



ELEVATION - VIEW A

Scale 1:50



ELEVATION - VIEW B

Scale 1:50

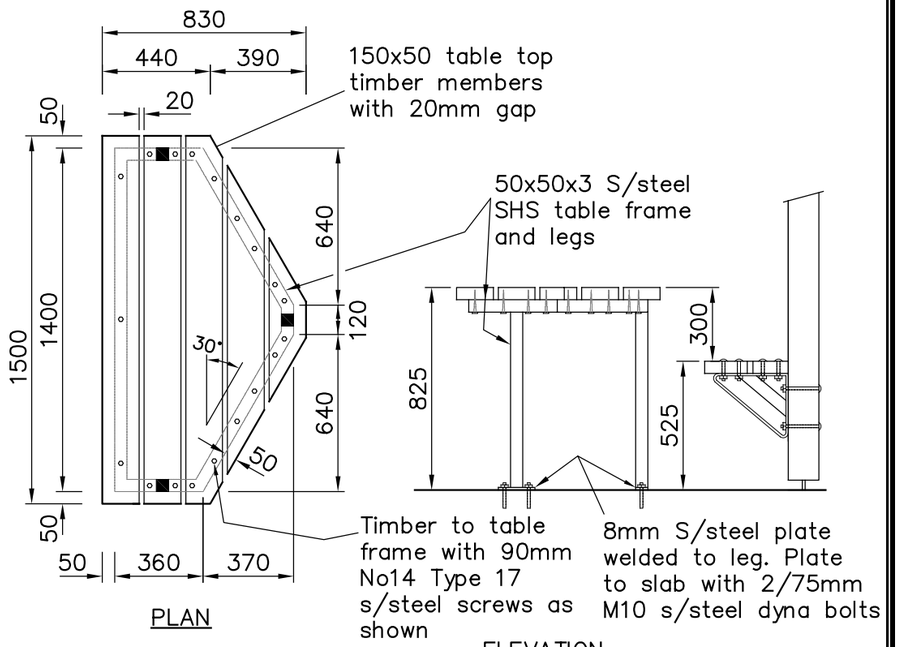


TABLE DETAILS Scale 1:25

Scales: 1:50

0 0.5 1.0 1.5m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 09/98
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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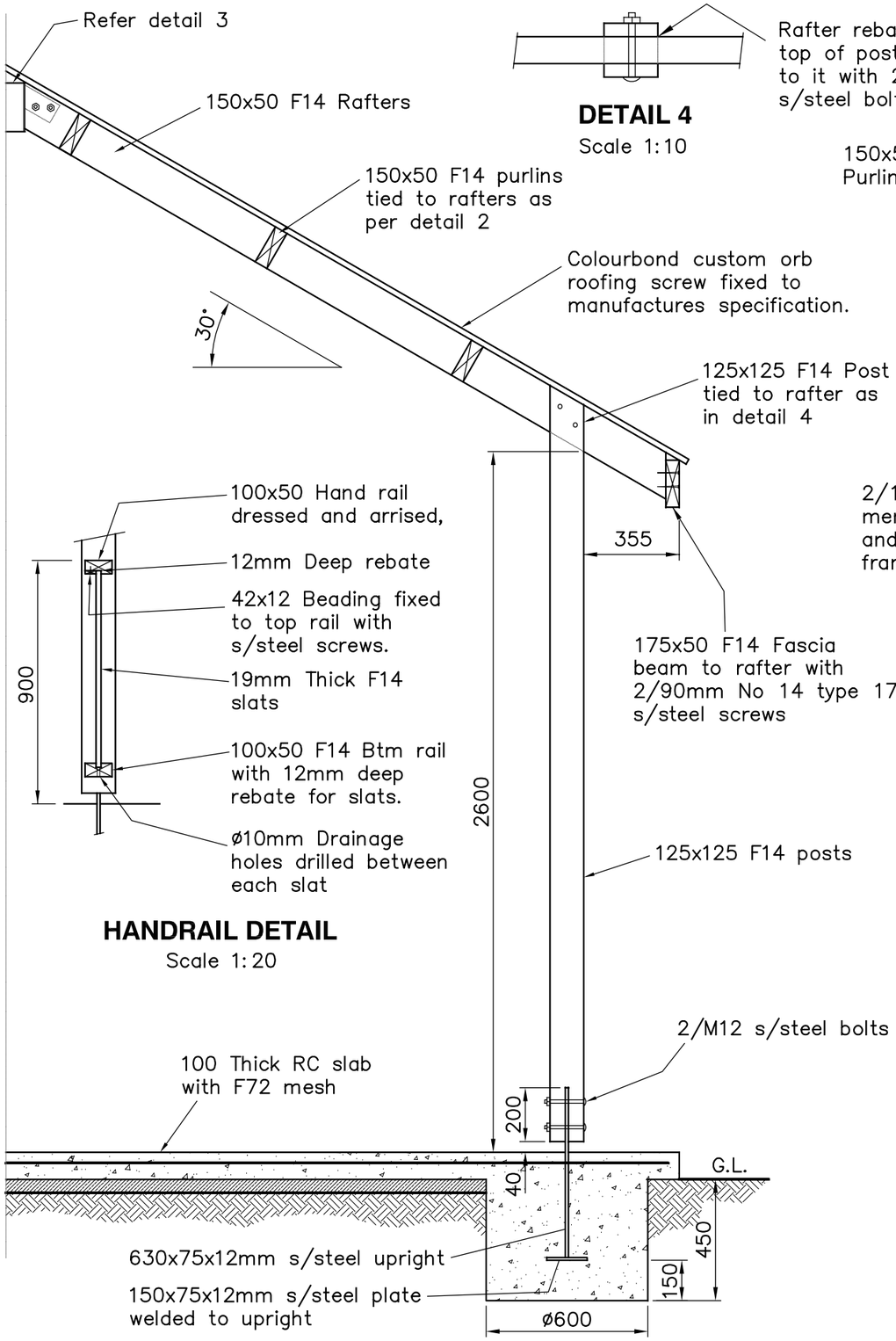
General Manager of Engineering Operations

GAZEBO SHELTER
TYPE 2 - SHEET 1 OF 2

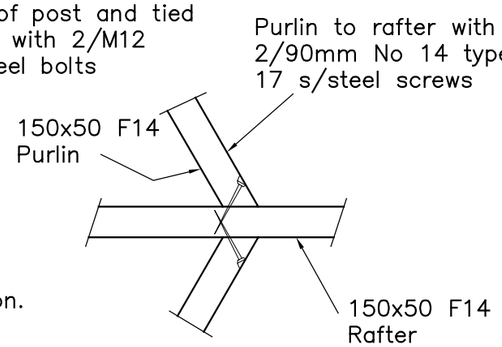
H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P306-1.dwg, 09/11/2004 4:21:47 PM

Drawing No.
P306-1



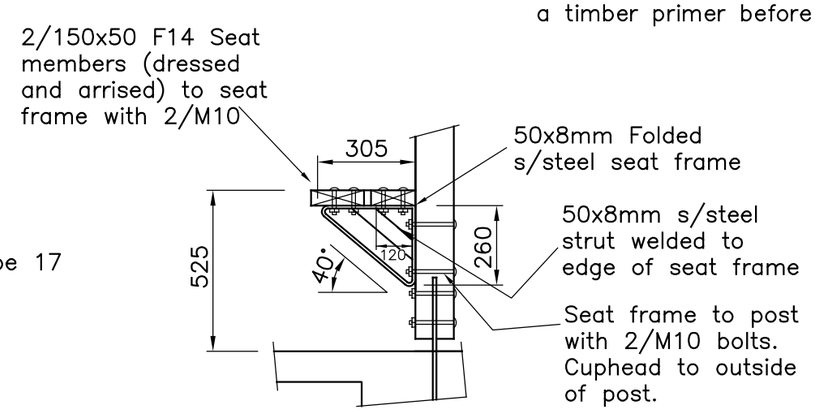
HANDRAIL DETAIL
Scale 1:20

DETAIL 4
Scale 1:10

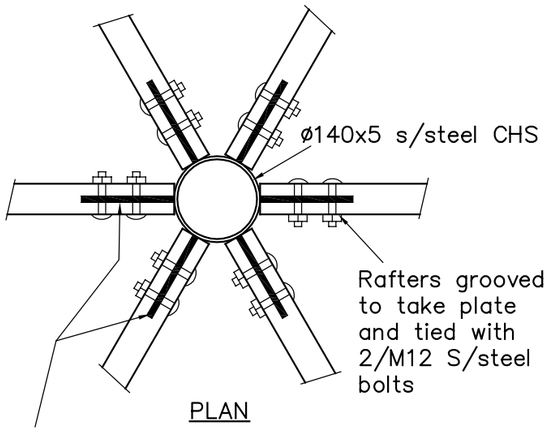


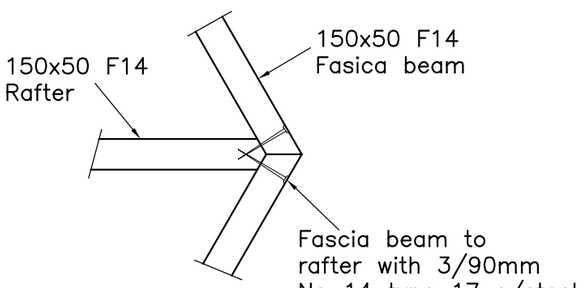
DETAIL 2
Scale 1:10

NOTES
1. All timber to be F14.
2. Where structure is to be constructed in an area greater than 2km from coastline, all stainless steel fittings should be replaced with galvanized fittings.
3. Posts, slats and rails to be painted in colour "Mossvale Sand". Roof members, seats and fascia beam to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of exterior acrylic paint.
4. Where structure is located within 2km of coastline, "XSE" grade roofing is to be used (colour "Jubilee Jade"), and is to be fixed with "Zac screws".
5. Termite treatment is to be provided in accordance with AS3660–1.
6. 200um Vapour barrier to be placed under slab.
7. Where s/steel bolts are used, a tack weld is to be provided to end of bolt to prevent nut removal.
8. Any rough sawn timber to be given minor sanding to remove any splinters from surface.
9. Ends of timber slats and any rebates in timber to be coated with a timber primer before assembly.

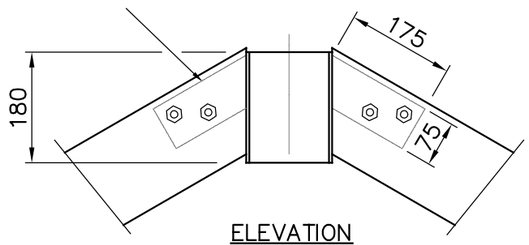


DETAIL 5
Scale 1:20





DETAIL 1
Scale 1:10



DETAIL 3
Scale 1:10

Scales: 1:20 (0 0.2 0.4 0.6m)		drawn	Org signed by BDF 09/98
		checked	
		designed	
Sheet A3 , Datum: A.H.D.	Revisions	checked	

BURNETT SHIRE COUNCIL

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General Manager of Engineering Operations

GAZEBO SHELTER
TYPE 2 - SHEET 2 OF 2

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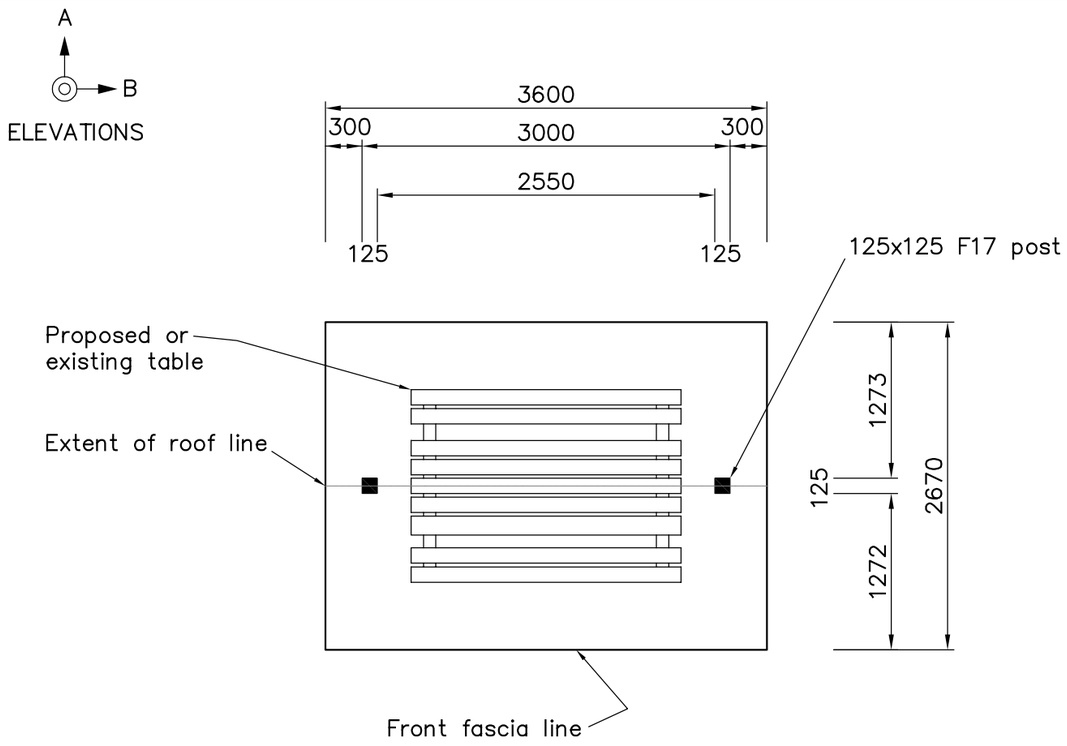
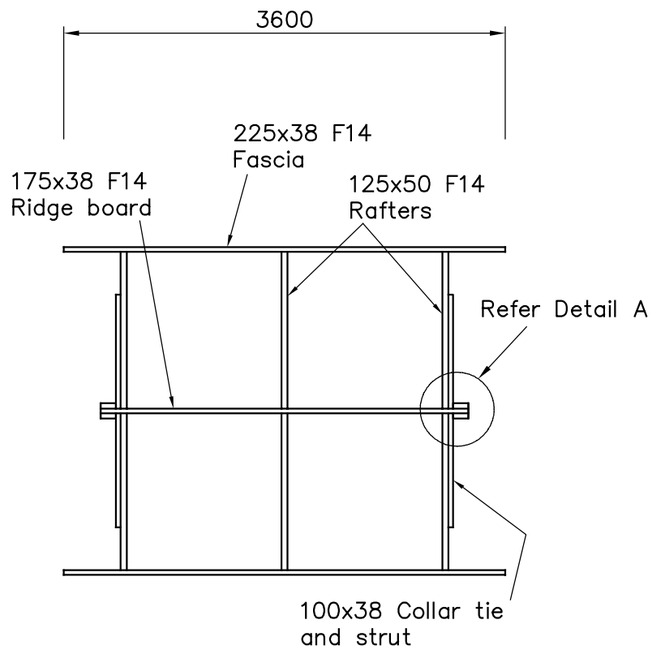
Drawing No.
P306-2



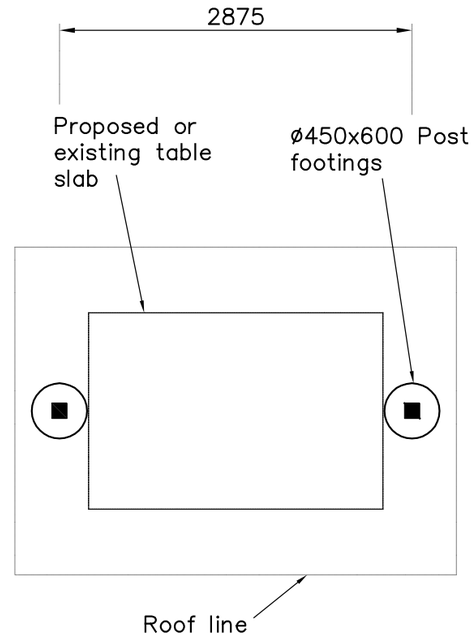
PLAN

Scale 1:50



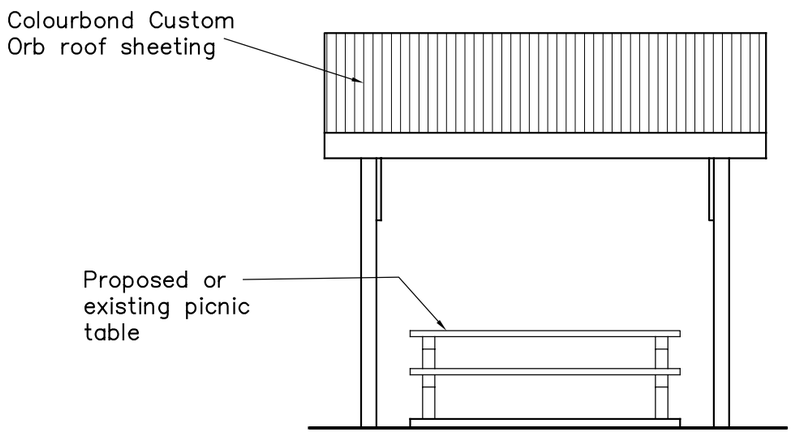
ROOF FRAMING PLAN

Scale 1:50



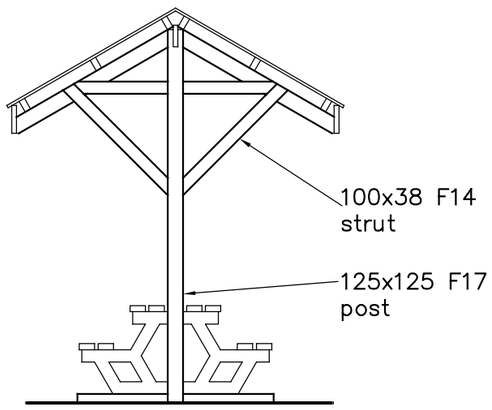
FOUNDATION PLAN

Scale 1:50



ELEVATION - VIEW A

Scale 1:50



ELEVATION - VIEW B

Scale 1:50

Scales: 1:50

0 0.5 1.0 1.5m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 09/98
		checked	
		designed	
Revisions		checked	

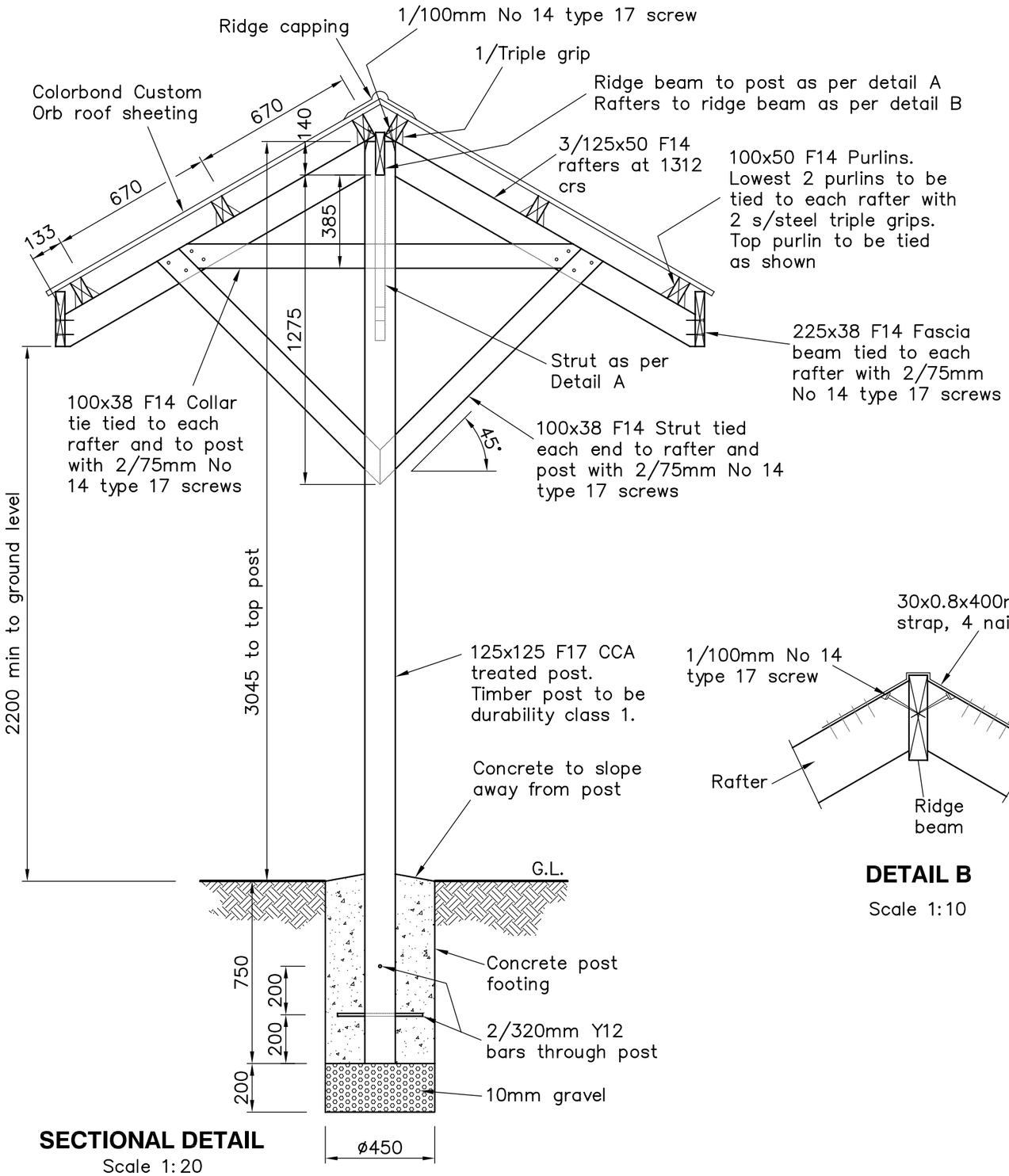
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

PICNIC TABLE SHELTER
TYPE 1 - SHEET 1 OF 2

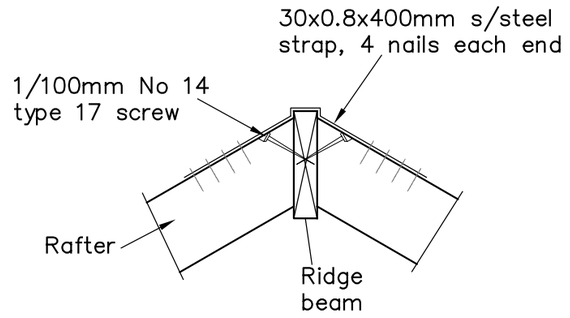
H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P307-1.dwg, 09/11/2004 4:28:08 PM

Drawing No.
P307-1



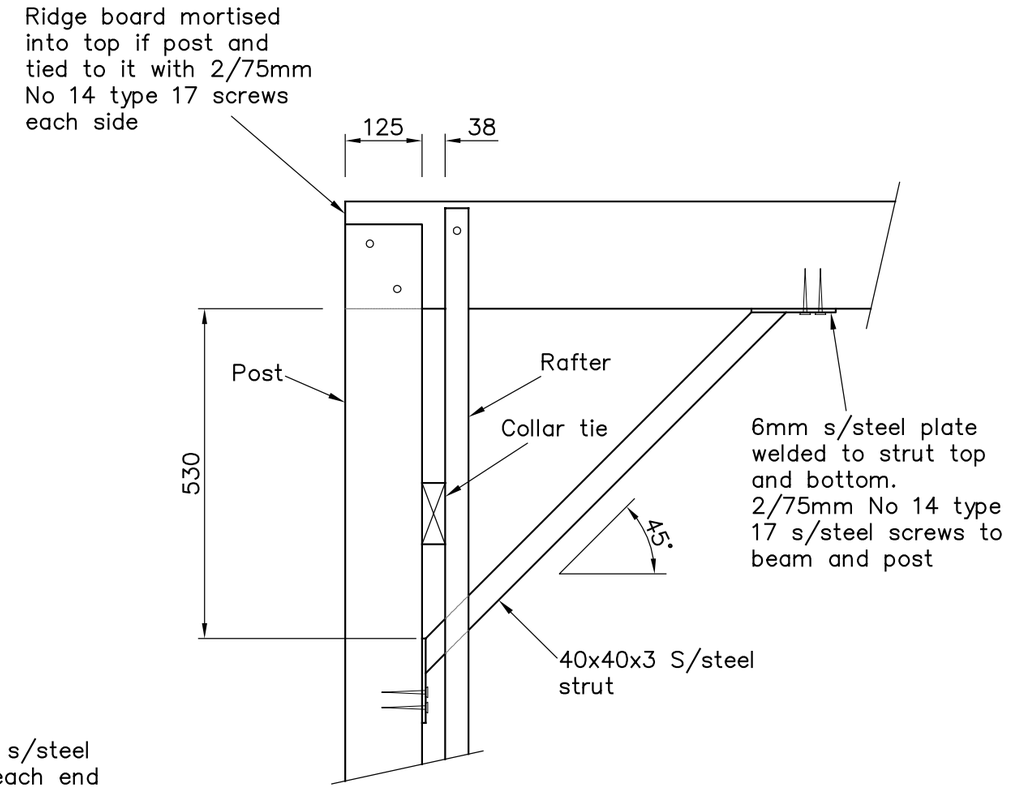
SECTIONAL DETAIL

Scale 1:20



DETAIL B

Scale 1:10



DETAIL A

Scale 1:10

NOTES

1. All timber to be F14 unless otherwise stated.
2. Where structure is to be constructed in an area greater than 2km from coastline, all stainless steel fittings should be replaced with galvanized fittings.
3. Posts, struts and collar ties to be painted in colour "Mossvale Sand". Roof members, and fascia beam to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of exterior acrylic paint.
4. Where structure is located within 2km of coastline, "XSE" grade roofing is to be used (colour "Jubilee Jade"), and is to be fixed with "Zac screws".
5. Termite treatment is to be provided in accordance with AS3660–1.
6. Where s/steel bolts are used, a tack weld is to be provided to end of bolt to prevent nut removal.
7. Any rough sawn timber to be given minor sanding to remove any splinters from surface.
8. Any rebates in timber to be coated with a timber primer before assembly.

Scales:
1:20
0 20 40 60m
0 2 4 6m
1:10
Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 09/98
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		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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PICNIC SHELTER
TYPE 1 - SHEET 2 OF 2

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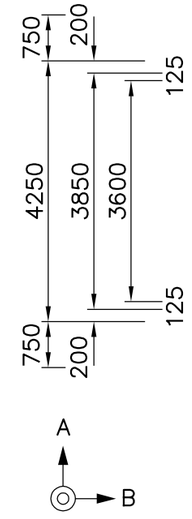
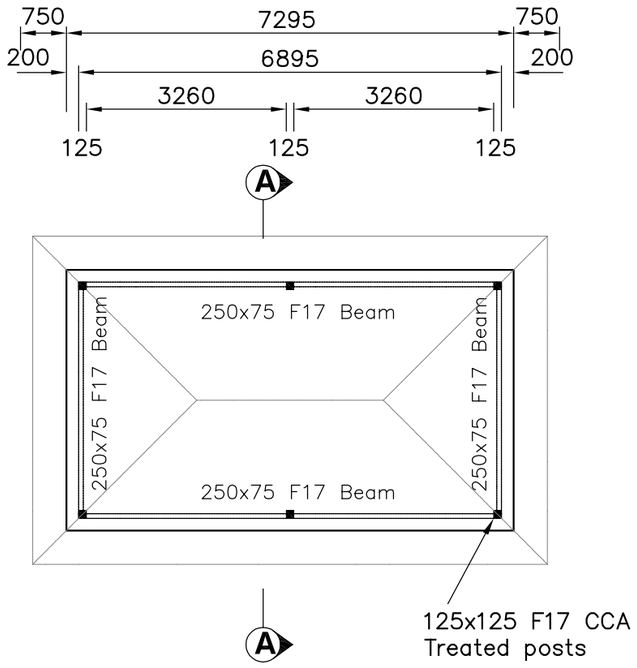
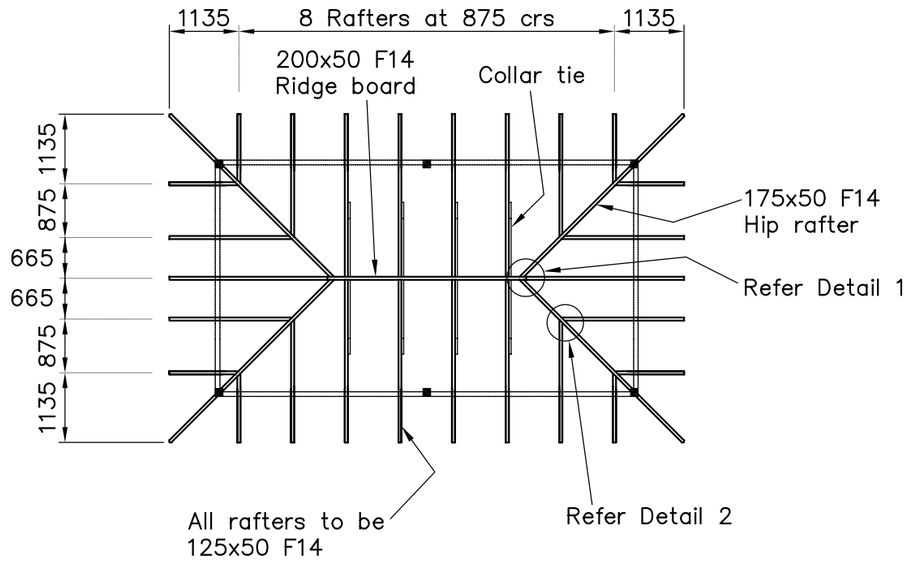
Drawing No.
P307-2



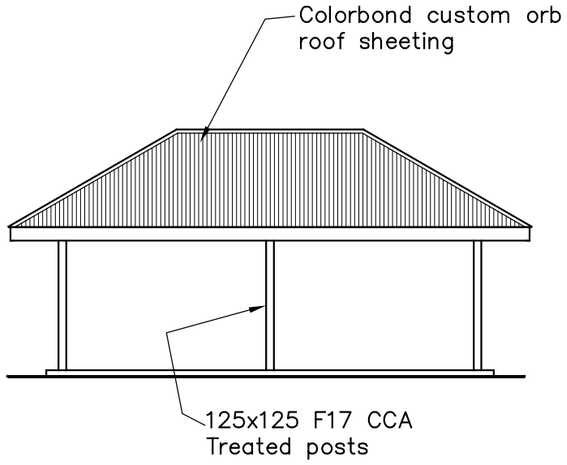
ELEVATIONS



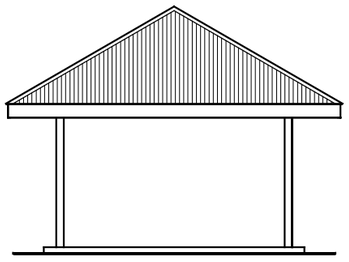
PLAN VIEW
Scale 1:100



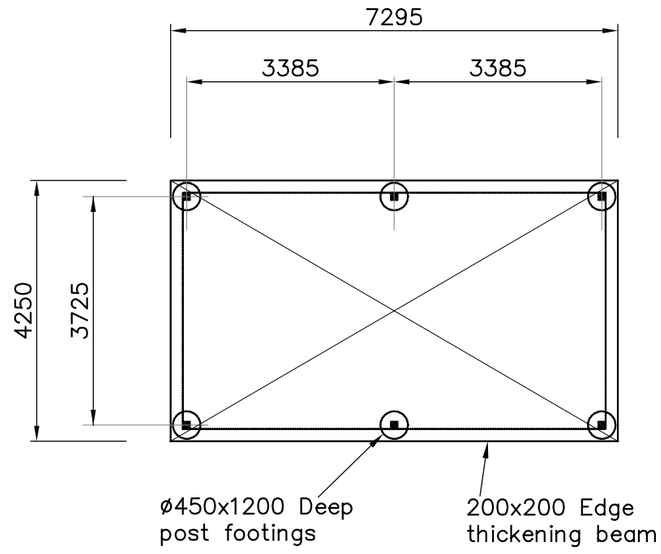
ROOF FRAMING PLAN
Scale 1:100



ELEVATION - VIEW A



ELEVATION - VIEW B



FOUNDATION PLAN
Scale 1:100

Scales: 1:100 (0 1 2 3m)		drawn	Org signed by BDF 09/98
		checked	
		designed	
Sheet A3 , Datum: A.H.D.	Revisions	checked	

BURNETT SHIRE COUNCIL

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RECTANGULAR SHELTER - TYPE 2
SHEET 1 OF 2

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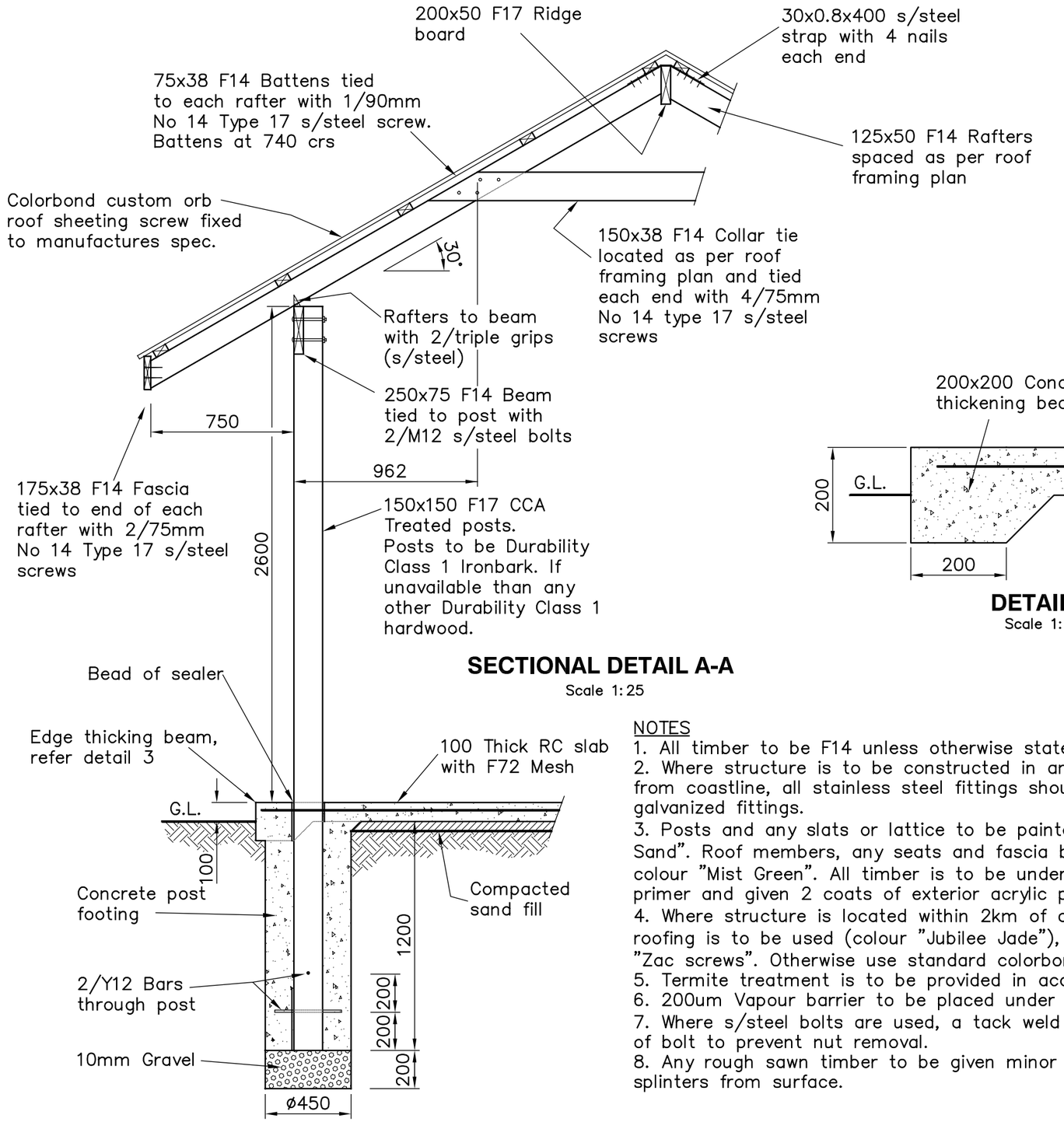
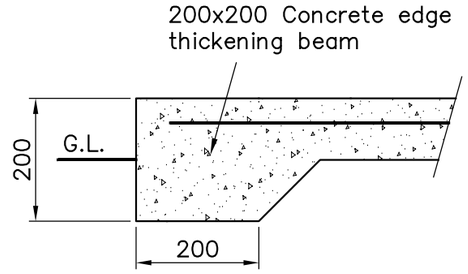
Drawing No.
P308-1



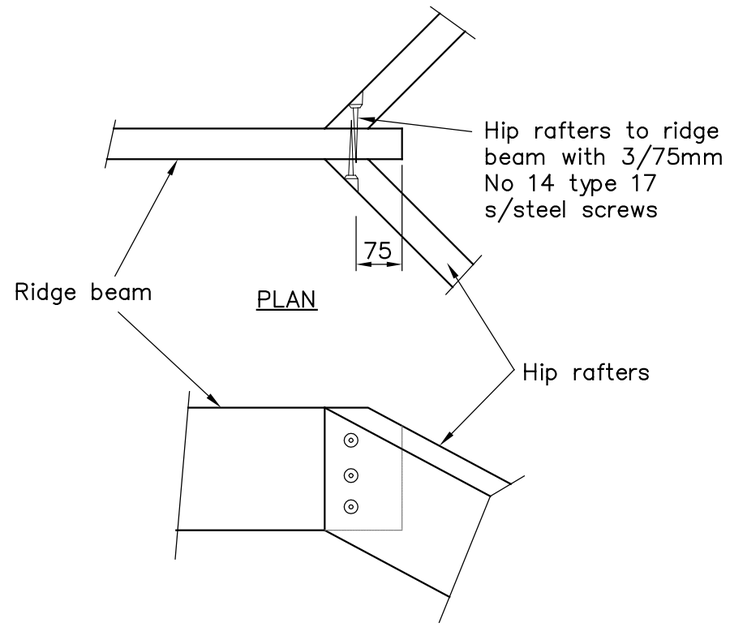
SECTIONAL DETAIL A-A

Scale 1:25



DETAIL 3

Scale 1:10



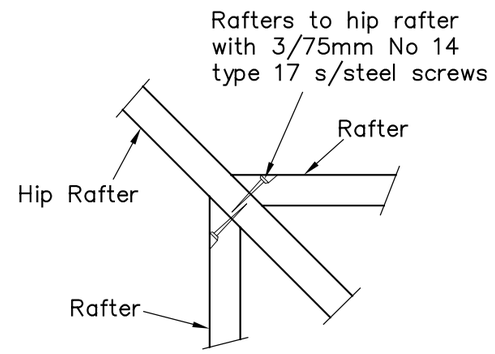
ELEVATION

DETAIL 1

Scale 1:10

NOTES

1. All timber to be F14 unless otherwise stated.
2. Where structure is to be constructed in an area greater than 2km from coastline, all stainless steel fittings should be replaced with galvanized fittings.
3. Posts and any slats or lattice to be painted in colour "Mossvale Sand". Roof members, any seats and fascia beam to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of exterior acrylic paint.
4. Where structure is located within 2km of coastline, "XSE" grade roofing is to be used (colour "Jubilee Jade"), and is to be fixed with "Zac screws". Otherwise use standard colorbond in "Mist Green".
5. Termite treatment is to be provided in accordance with AS3660–1.
6. 200um Vapour barrier to be placed under slab.
7. Where s/steel bolts are used, a tack weld is to be provided to end of bolt to prevent nut removal.
8. Any rough sawn timber to be given minor sanding to remove any splinters from surface.



DETAIL 2

Scale 1:10

Scales: 1:25
0 0.25 0.5 0.75m
0 0.1 0.2 0.3m
1:10

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 09/98
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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RECTANGULAR SHELTER - TYPE 2
SHEET 2 OF 2

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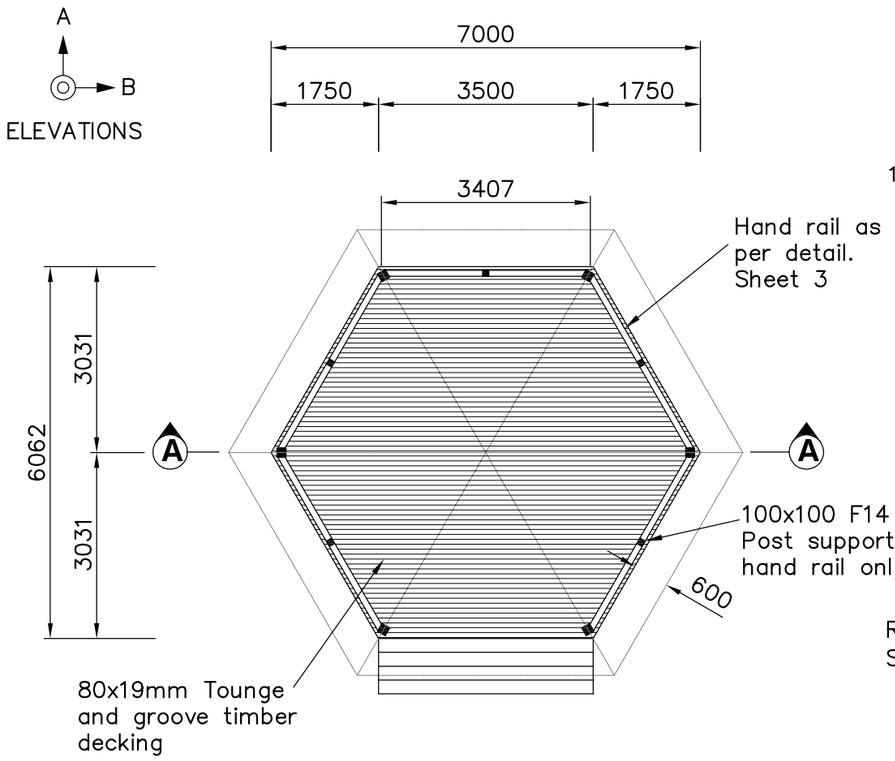
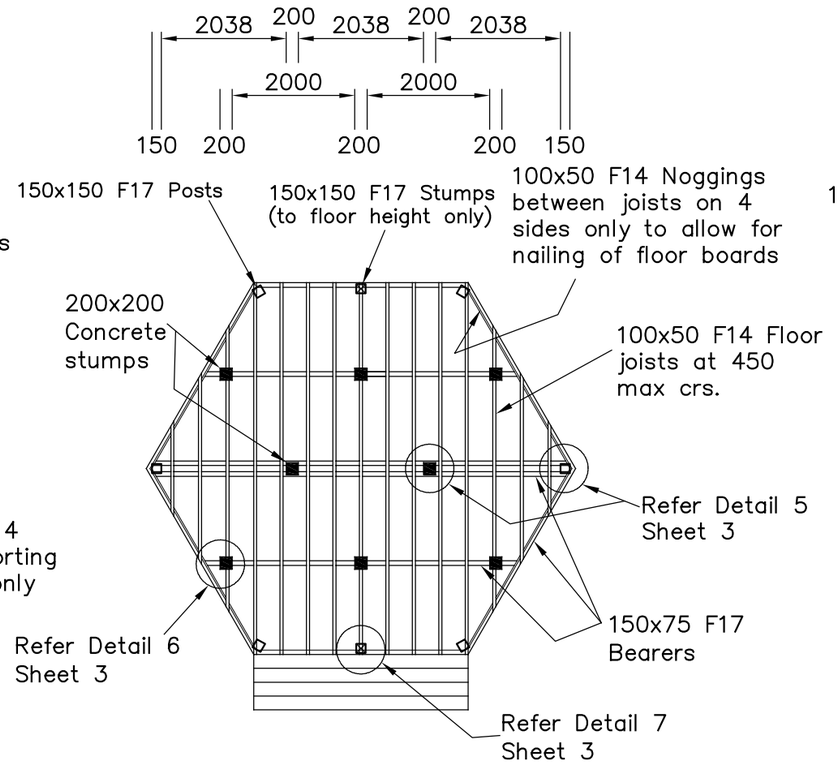
Drawing No.
P308-2



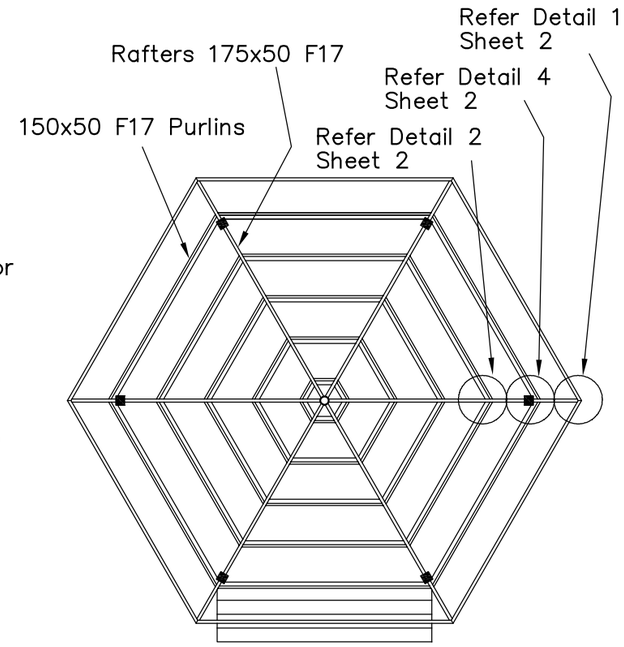
PLAN VIEW

Scale 1:100



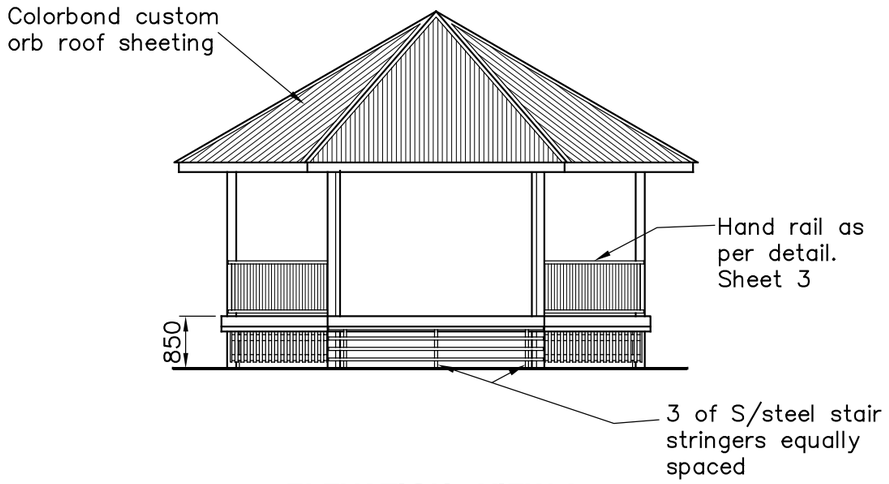
FLOOR FRAMING PLAN

Scale 1:100



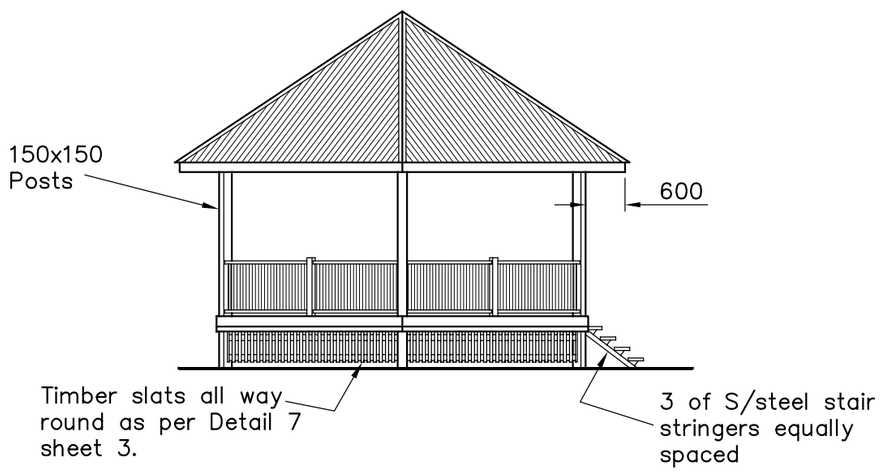
ROOF FRAMING PLAN

Scale 1:100



ELEVATION - VIEW A

Scale 1:100



ELEVATION - VIEW B

Scale 1:100

Scales: 1:100

0 1 2 3m

Sheet A3 , Datum: A.H.D.

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Revisions

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ROTUNDA - TYPE 1
SHEET 1 OF 3

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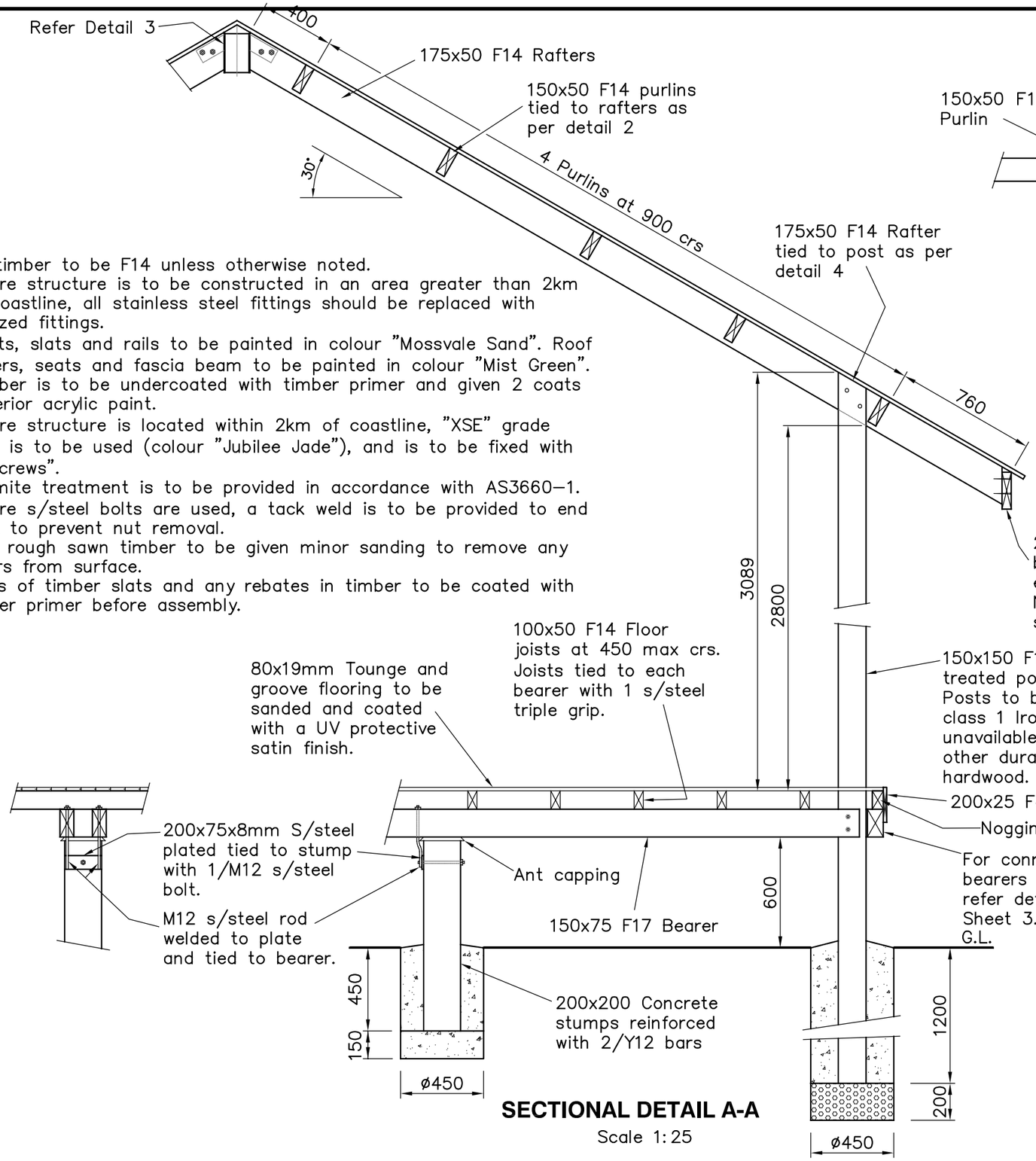
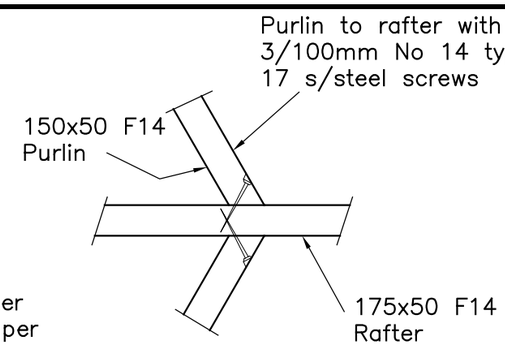
Drawing No.
P309-1

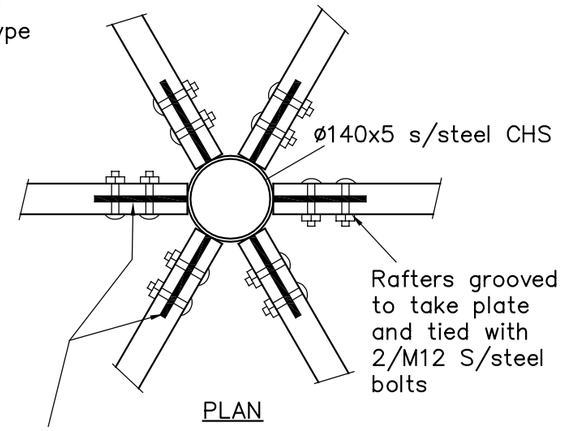


SECTIONAL DETAIL A-A
Scale 1:25

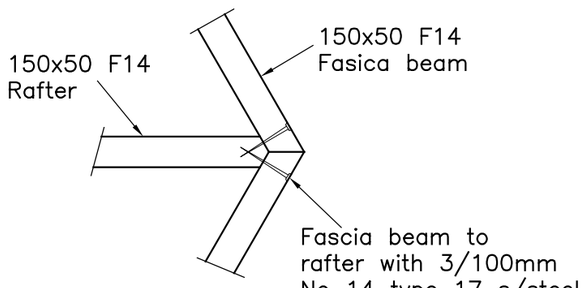
NOTES
1. All timber to be F14 unless otherwise noted.
2. Where structure is to be constructed in an area greater than 2km from coastline, all stainless steel fittings should be replaced with galvanized fittings.
3. Posts, slats and rails to be painted in colour "Mossvale Sand". Roof members, seats and fascia beam to be painted in colour "Mist Green". All timber is to be undercoated with timber primer and given 2 coats of exterior acrylic paint.
4. Where structure is located within 2km of coastline, "XSE" grade roofing is to be used (colour "Jubilee Jade"), and is to be fixed with "Zac screws".
5. Termite treatment is to be provided in accordance with AS3660–1.
6. Where s/steel bolts are used, a tack weld is to be provided to end of bolt to prevent nut removal.
7. Any rough sawn timber to be given minor sanding to remove any splinters from surface.
8. Ends of timber slats and any rebates in timber to be coated with a timber primer before assembly.



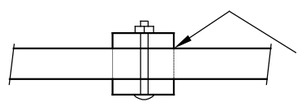
DETAIL 2
Scale 1:10



DETAIL 3
Scale 1:10



DETAIL 1
Scale 1:10



Rafter rebated into top of post and tied to it with 2/M10 s/steel bolts

DETAIL 4
Scale 1:10

Scales: 1:25 (0 0.25 0.5 0.75m); 1:10 (0 0.1 0.2 0.3m)		drawn	Org signed by BDF 09/98
Sheet A3 , Datum: A.H.D.	Revisions	checked	
		designed	
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ROTUNDA - TYPE 1
SHEET 2 OF 3

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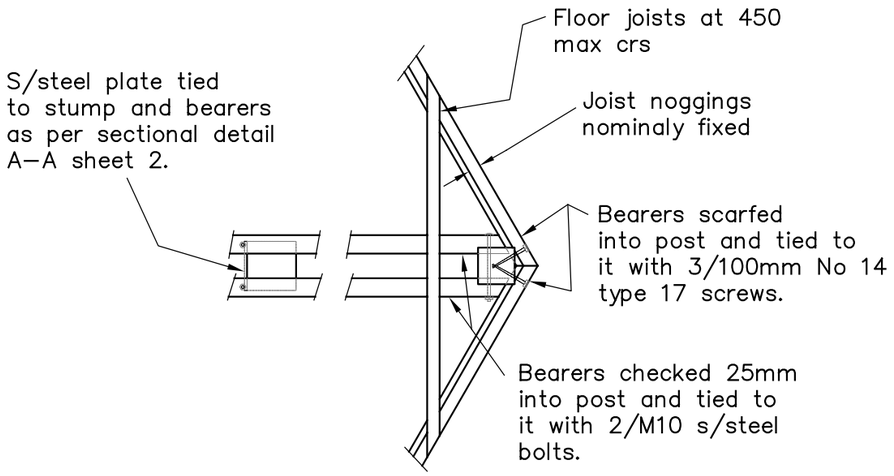
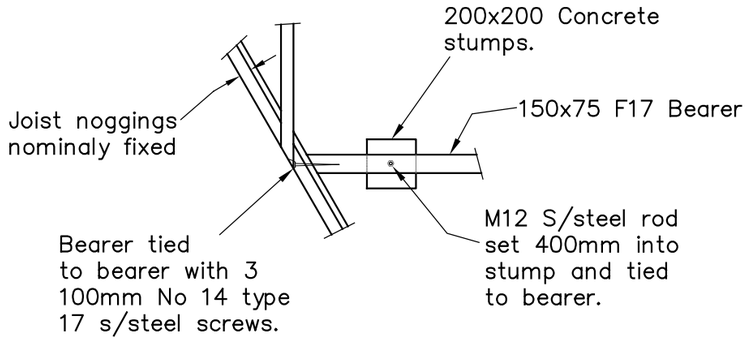
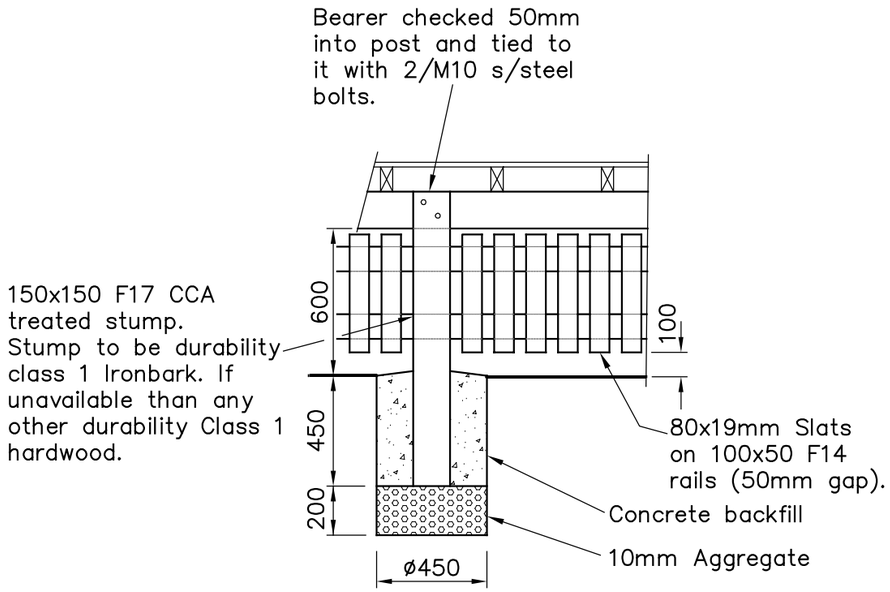
Drawing No.
P309-2



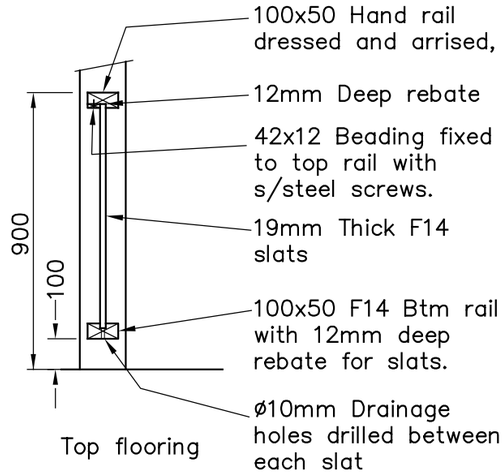
DETAIL 5
Scale 1:25



DETAIL 6
Scale 1:25



DETAIL 7
Scale 1:25



HANDRAIL DETAIL
Scale 1:20

Scales:
1:25
0 0.25 0.5 0.75m
0 0.2 0.4 0.6m
1:20
Sheet A3 , Datum: A.H.D.

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Revisions		checked	

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ROTUNDA - TYPE 1
SHEET 3 OF 3

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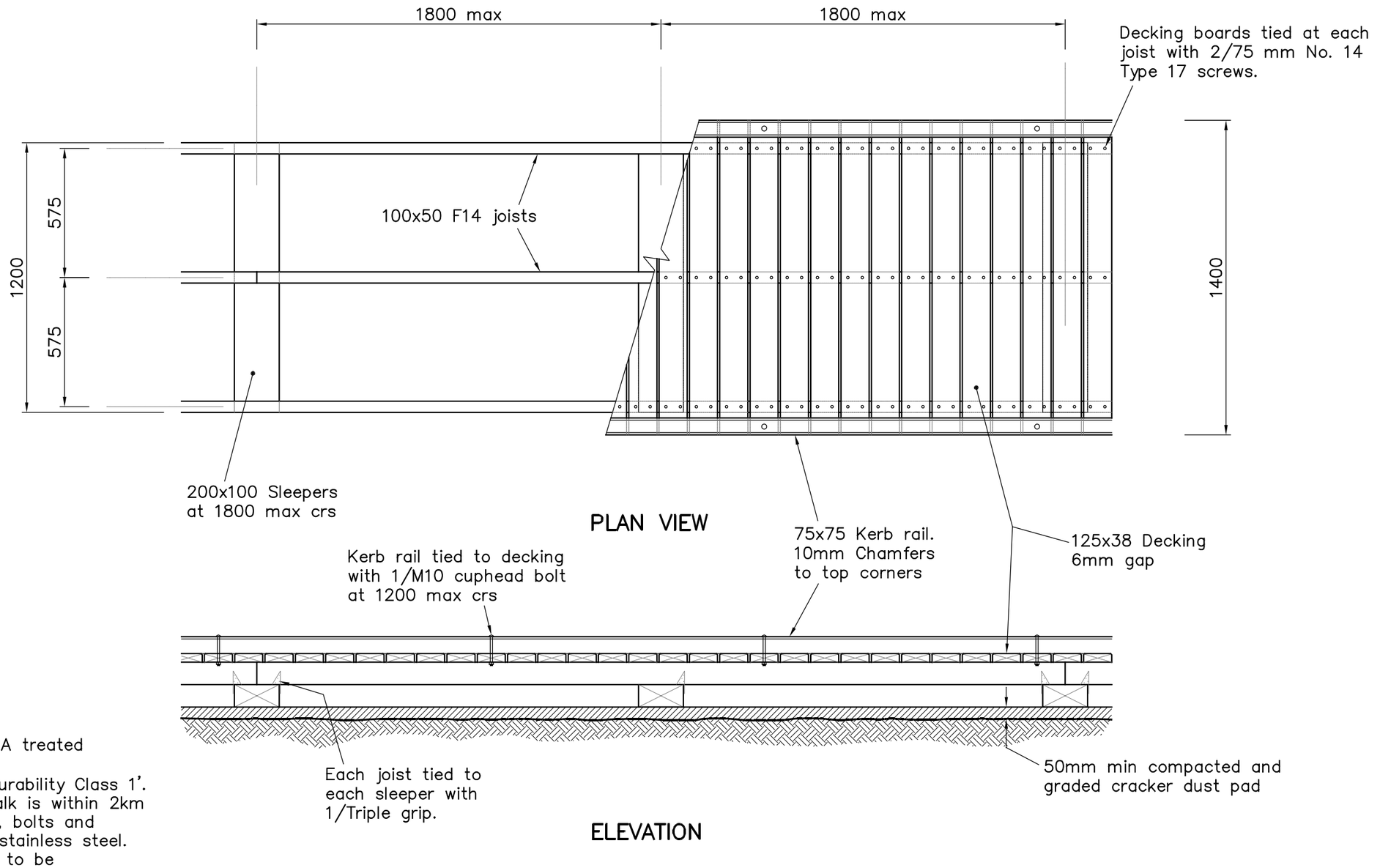
Drawing No.
P309-3



PLAN VIEW

ELEVATION

NOTES

1. All timber to be CCA treated hardwood.
2. All Timber to be 'Durability Class 1'.
3. If proposed boardwalk is within 2km of coastline all screws, bolts and triple grips are to be stainless steel. Otherwise all hardware to be galvanised.
5. Where stainless steel is used; a tack weld is to be placed on the end of all bolts to prevent nut removal. **Nut is to remain free for future tightening.**
6. All grass and any organic material to be removed from surface before placement of cracker dust pad.

Scales: 1:20(mm)

0 200 400 600

Sheet A3 , Datum: A.H.D.

Revisions			
		drawn	Org signed by BDF 09/98
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		designed	
		checked	

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1.4M WIDE LOWSET BOARDWALK ON SLEEPERS

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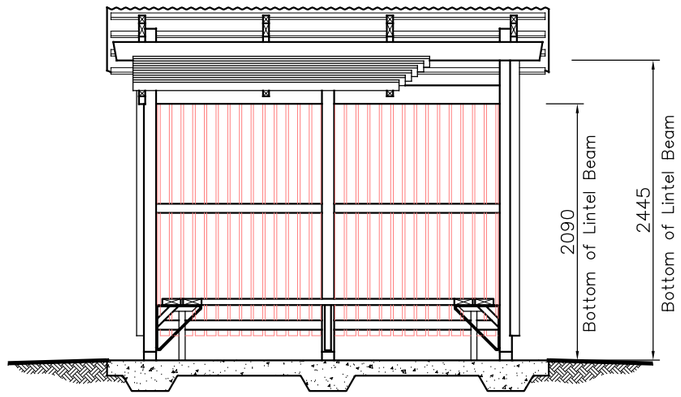
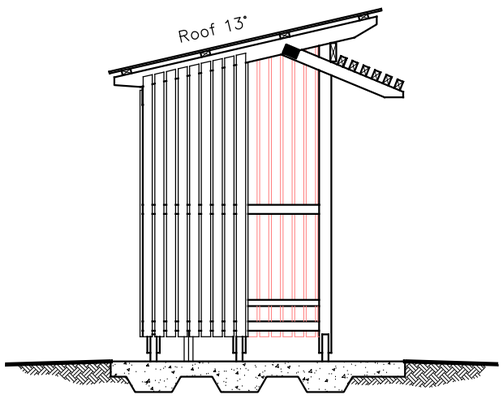
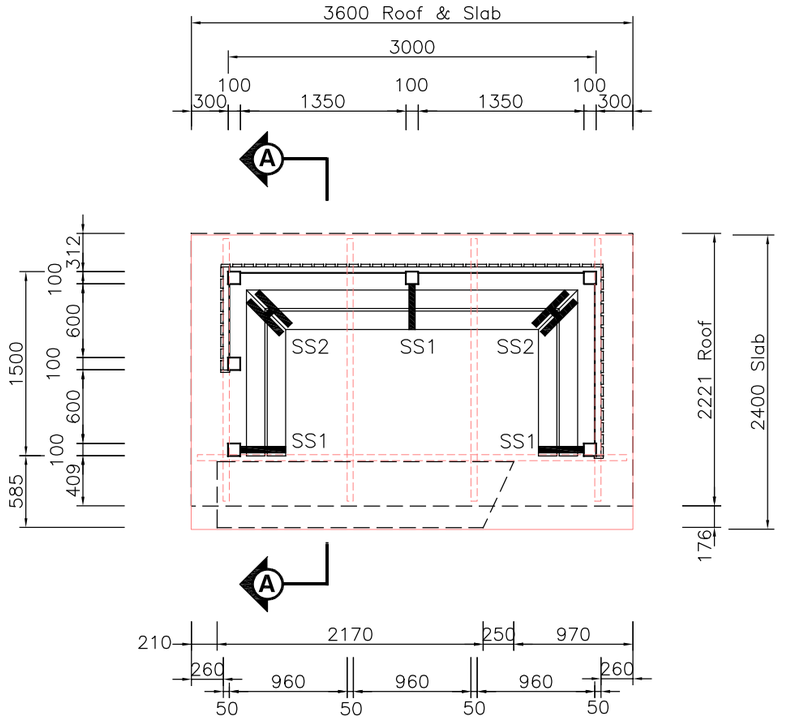
Drawing No.
P310



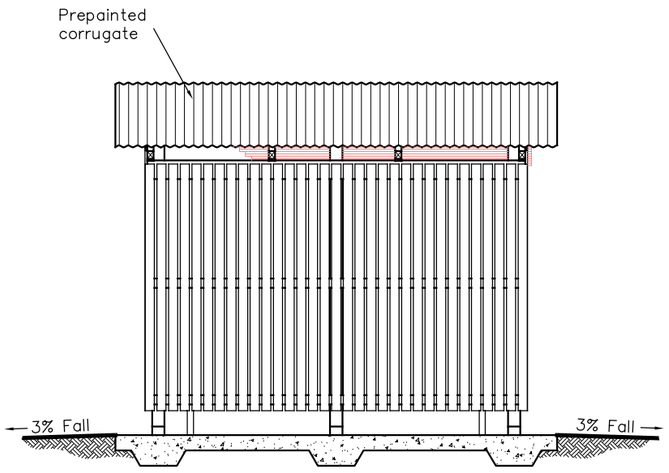
FRONT ELEVATION
SCALE 1:50



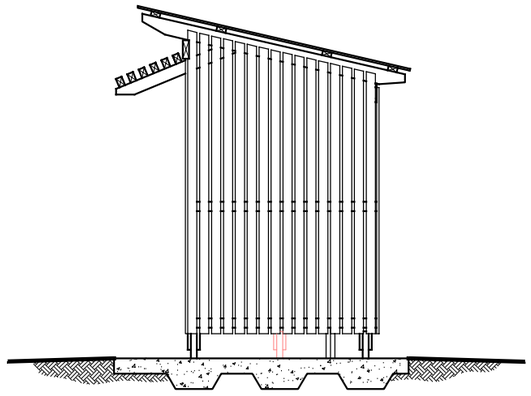
LEFT ELEVATION
SCALE 1:50



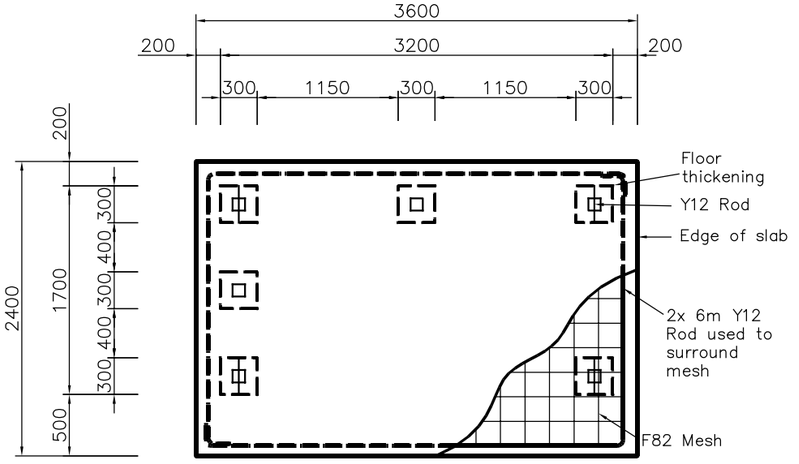
FLOOR PLAN
SCALE 1:50



REAR ELEVATION
SCALE 1:50



RIGHT ELEVATION
SCALE 1:50



FOUNDATION PLAN
SCALE 1:50

Scale: 1:50
0 0.5 1 1.5m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by DG 6/03
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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BUS SHELTER - TYPE 3
SHEET 1 of 2
ELEVATIONS AND FLOOR PLANS

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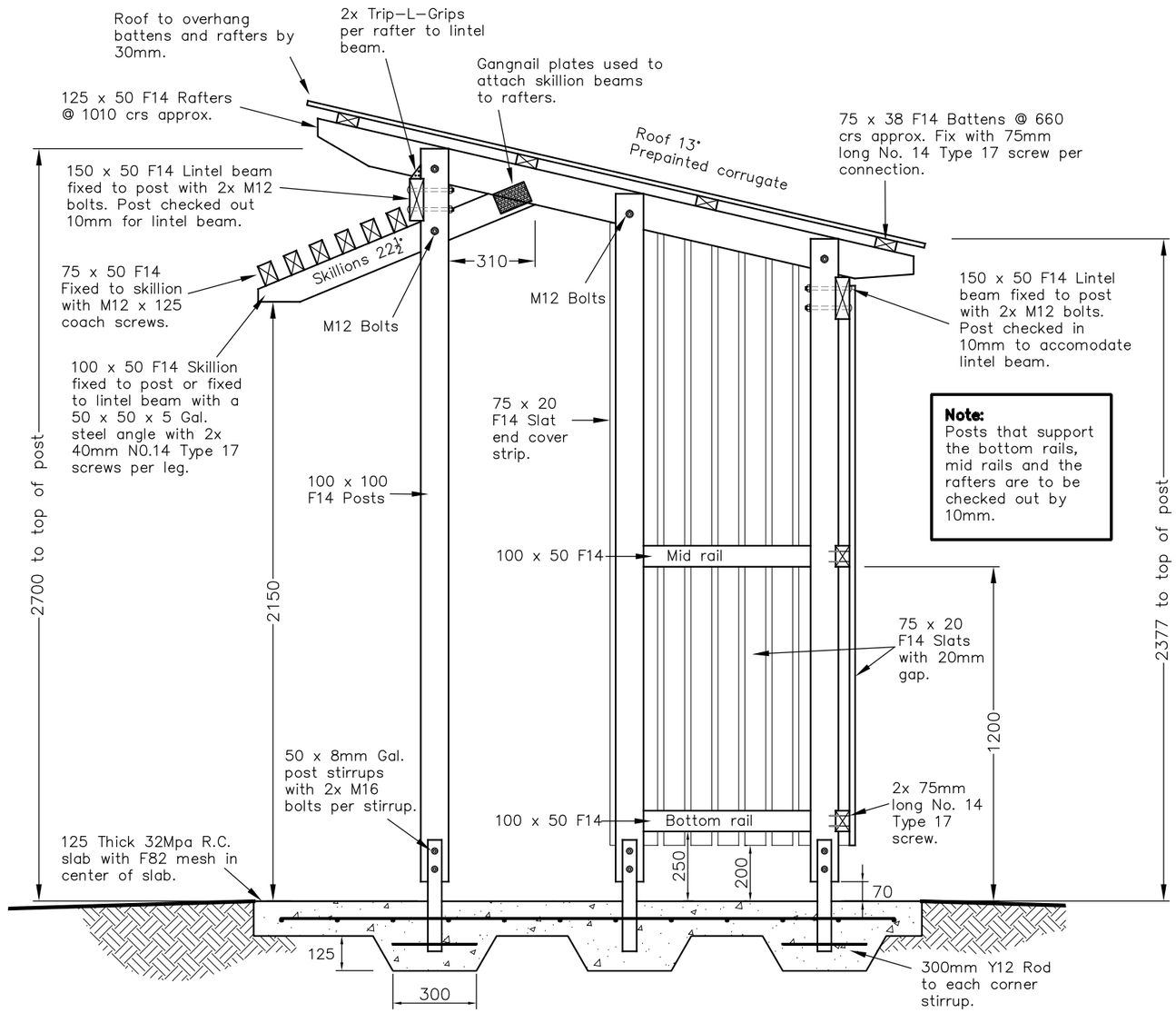
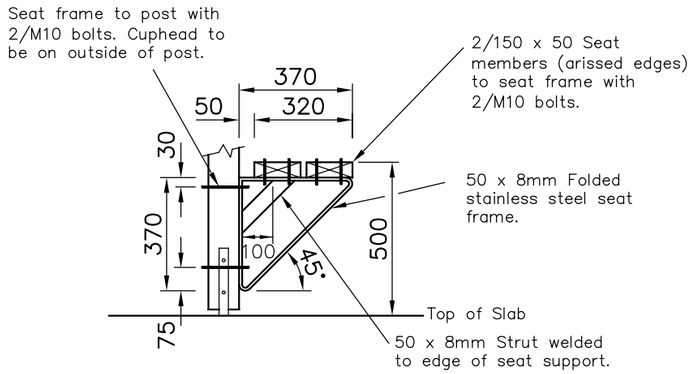
Drawing No.
P311-1

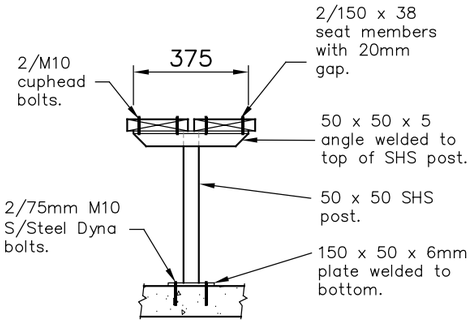


Note:
Posts that support the bottom rails, mid rails and the rafters are to be checked out by 10mm.

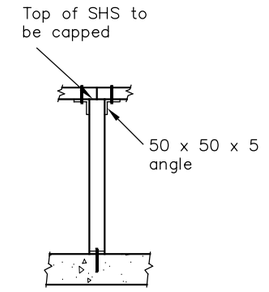
SECTION A-A
SCALE 1:20



Seat Support SS1



Front Elevation Seat Support SS2



Side Elevation Seat Support SS2

DETAIL B - SEAT SUPPORTS
SCALE 1:20

NOTES FOR SHELTERS WITHIN 500m FROM COAST

1. If the structure is within 500m from the coastline then all steel bolts, screws, nail plates, steel angles, post stirrups & nails shall be Stainless Steel at marine grade 316.

2. Seat supports to be stainless steel (316).

3. Roof sheeting to be prepainted 'ULTRA' or G7 corrugate with "ZAC4" roof screws to suit. Colour to be "Wilderness". Batten Srews to be stainless steel.

4. All bolts to be stainless steel cuphead (min grade 304).

5. Skillion battens to be coated with Intergrain product "UVC" to manufacturer's specs. including four final coats of "UVC".

NOTES:
1. All timber is to be F14 H3 treated unless noted otherwise.

2. All timber edges are to be arissed. Rough sawn timber to be given minor sanding to remove splinters from timber surface.

3. Posts, slats and rails to be painted in Dulux colour "Mossvale Sand". Rafters, skillions, lintel beams and roof battens to be painted in Colorbond colour "Wilderness". All timber except skillion battens are to be undercoated with timber primer and given two coats of external acrylic paint. Skillion battens are to be coated with intergrain "UVC" according to manufacturer's specifications.

4. Prepainted corrugate to be colour "Wilderness" or equal.

5. Termite treatment provided in accordance with AS3660–1.

6. 200um Vapour barrier to be placed under slab.

7. All bolts,nails, screws, steel angles, seat supports and post stirrups are to be galvanized.

8. Structure & slab designed to be relocatable by removing top structure, inserting M16 bolts in each corner stirrup and with a D–shackle connection, lift slab using the corner stirrups. Before structure is removed, brace the front & left sides at the base to ensure stability.

Scale:
1:20
0 0.2 0.4 0.6m
Sheet A3

		drawn	Org signed by DG 6/03
		checked	
		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

BUS SHELTER - TYPE 3
SHEET 2 of 2
SECTION AND DETAILS

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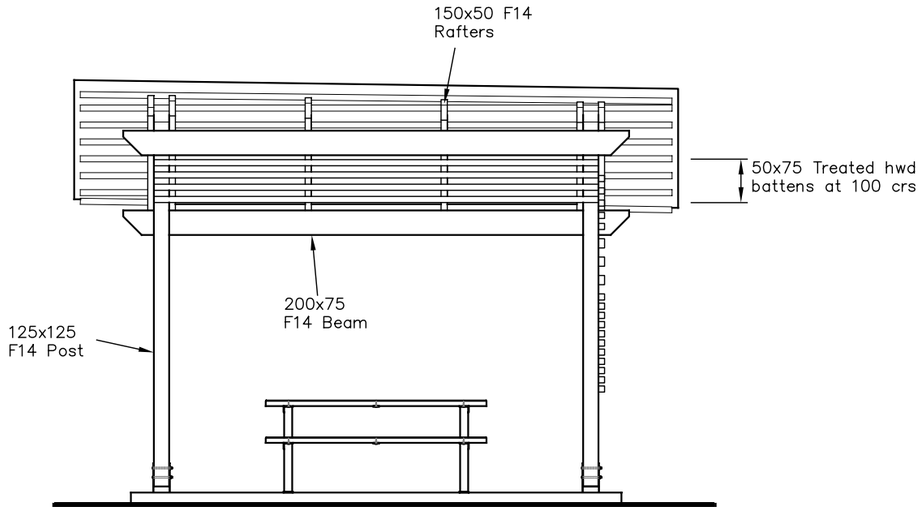
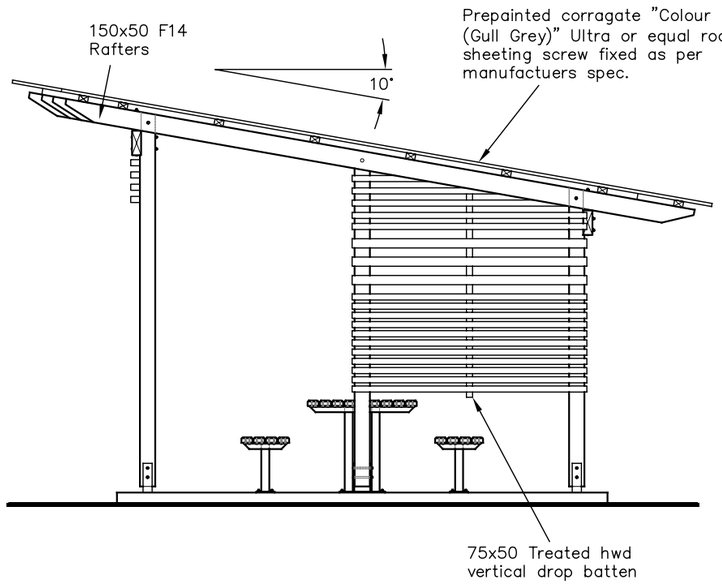
Drawing No.
P311-2



ELEVATION - VIEW B

SCALE 1:50



ELEVATION - VIEW A

SCALE 1:50

NOTES

CONCRETE WORK

1. All concrete work is to be executed in accordance with the current edition of :
   AS 3600 – SAA concrete structures code.
   AS 1379 – Ready mixed concrete.
2. Characteristic compressive strength of the concrete (F'C) must not be less than 32 MPa at 28 days u.n.o.
3. The maximum size of aggregate shall be 20mm.
4. Concrete slump shall be 80mm ± 15.
5. All concrete to be vibrated.
6. Plastic chairs to be used to support reinforcement and give the correct concrete cover.
7. All top soil and upper strata containing organic matter is to be removed. 'D' class pad to be placed and compacted to 95 M.M.D.D. in accordance with AS 1289 E 2.1.
8. Area below slab to be treated in accordance with AS 3660 for termite protection.
9. Council's electrician John Kennedy Ph. (07)41505587 is to be contacted in regard to possible conduit placement prior to pouring of any concrete.

STRUCTURE

1. Roof sheeting to be equivalent to "Ultra" Colorbond custom orb colour ("Gull Grey") fixed with roofing screws to manufacturers specification.
2. All fixings including nails, screws, bolts, straps, brackets, post stirrups and grab rails to be stainless steel. All stainless steel to be marine grade 316 (except for roof sheeting screws).

TIMBER

1. All timber to be F14 unless noted otherwise on plans.
2. All timber to be H3 treated.
3. All cuts, end grains and joins in timber must be sanded and primed before joining.
4. All visible timber to be arrissed including end cuts on purlins and beams.
5. All timber to have sanded edges.

ELECTRICAL

1. Electrical work will be carried out by council electrician contact John Kennedy (07) 41505587.

PAINTING

1. Bearers to be painted in colour Dulux "Wedgewood".
2. Posts to be painted in colour Dulux "Corio Blue".
3. Roof battens to be painted in colour Dulux "Anoteck XT Silver Grey".
4. Rafters and Fearure Battens to be painted in colour Dulux "Seared Earth".
5. Picnic table frames to remain unpainted. Timber tops and seats to be painted "Corio Blue".
6. All timber is to be undercoated with timber primer and given 2 coats of external acrylic paint.

Scales: 1 : 50

0 0.5 0.1 1.5m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by MLP 01/05
		checked	
		designed	Org signed by RMC 01/05
Revisions		checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

SKILLION ROOF PICNIC SHELTER
TYPE 3 ELEVATIONS SHEET 1 OF 4

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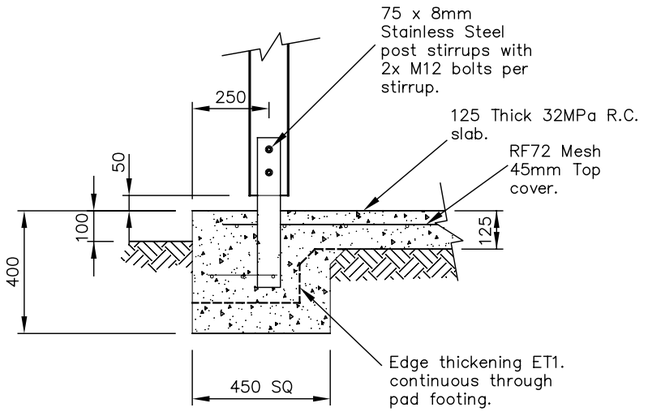
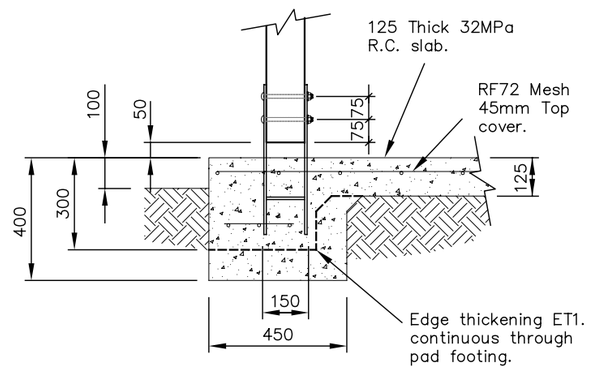
Drawing No.
P312-1



SECTION C-C

C

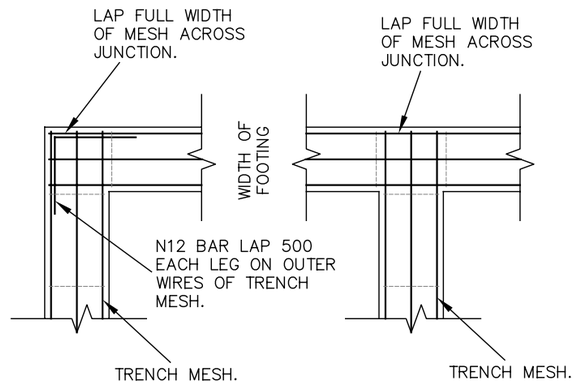
SCALE 1:20



SECTION B-B

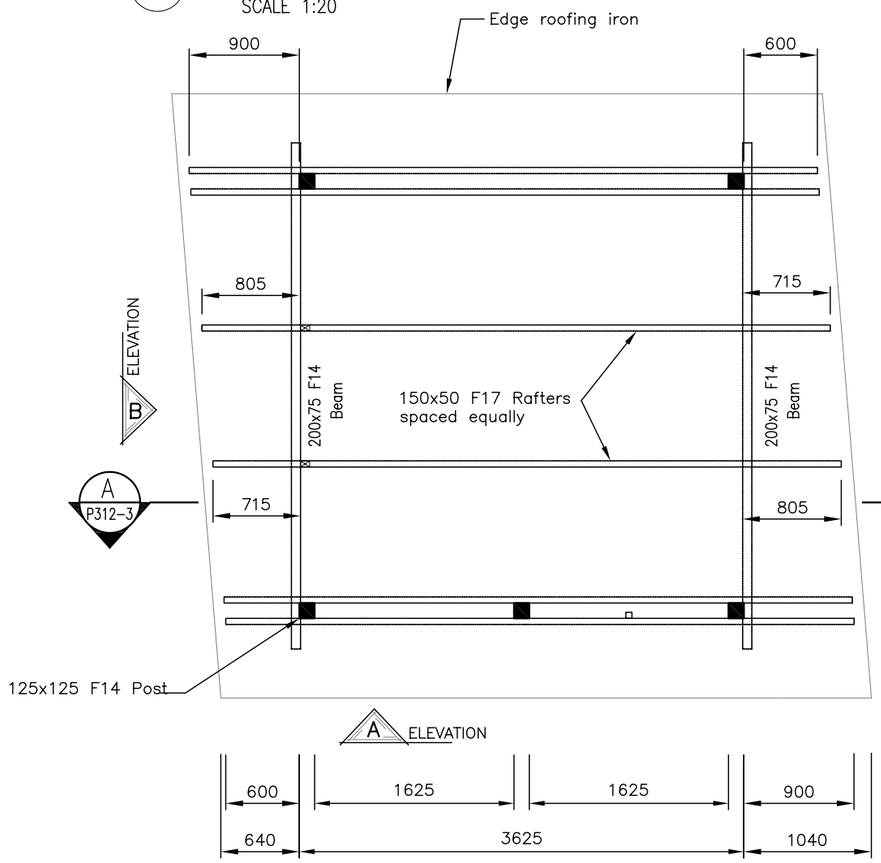
B

SCALE 1:20



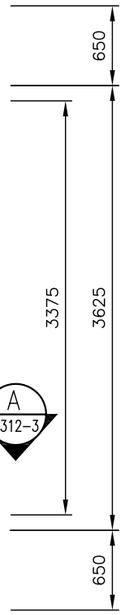
TYPICAL CORNER & T-JUNCTION DETAIL

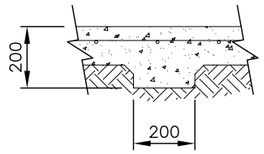
NOT TO SCALE



PLAN VIEW

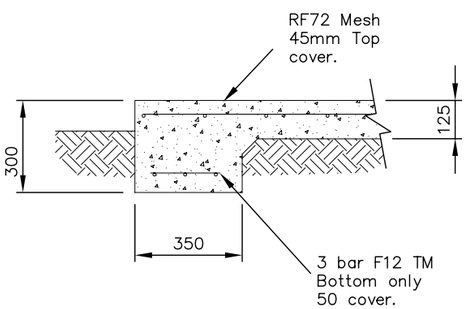
SCALE 1:50





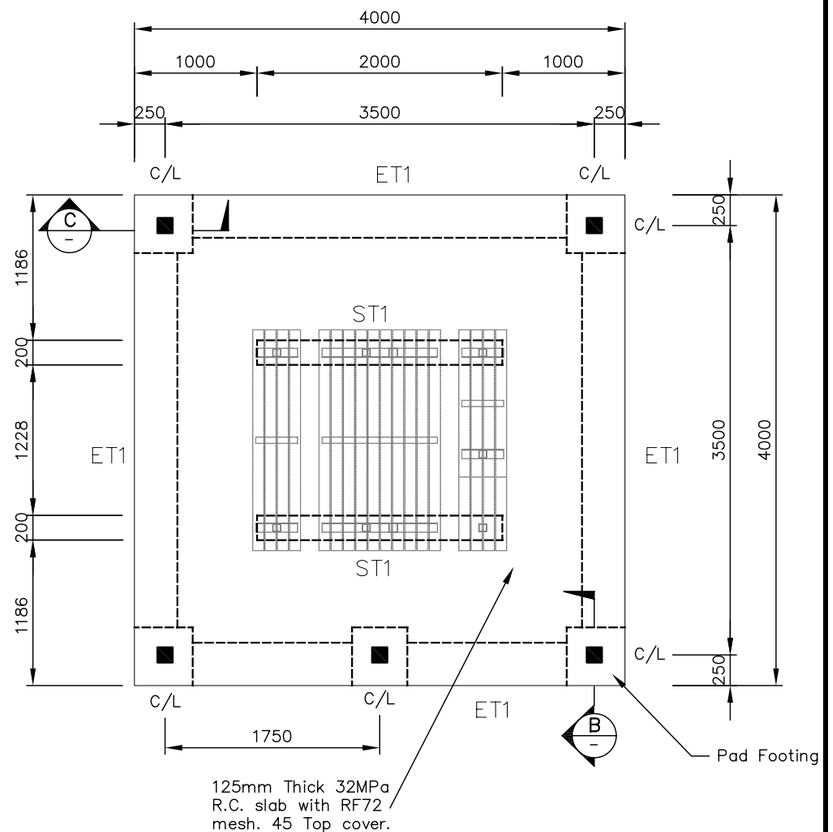
SLAB THICKENING ST1

SCALE 1:20



EDGE THICKENING ET1

SCALE 1:20



FOUNDATION PLAN

SCALE 1:50

Scales: 1 : 50 (0 0.5 0.1 1.5m) (0 0.2 0.4 0.6m) 1 : 20		drawn	Org signed by MLP 01/05
Sheet A3 , Datum: A.H.D.	Revisions	checked	
		designed	Org signed by RMC 01/05
		checked	

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SKILLION ROOF PICNIC SHELTER
TYPE 3 FOUNDATION AND PLAN VIEW
SHEET 2 OF 4

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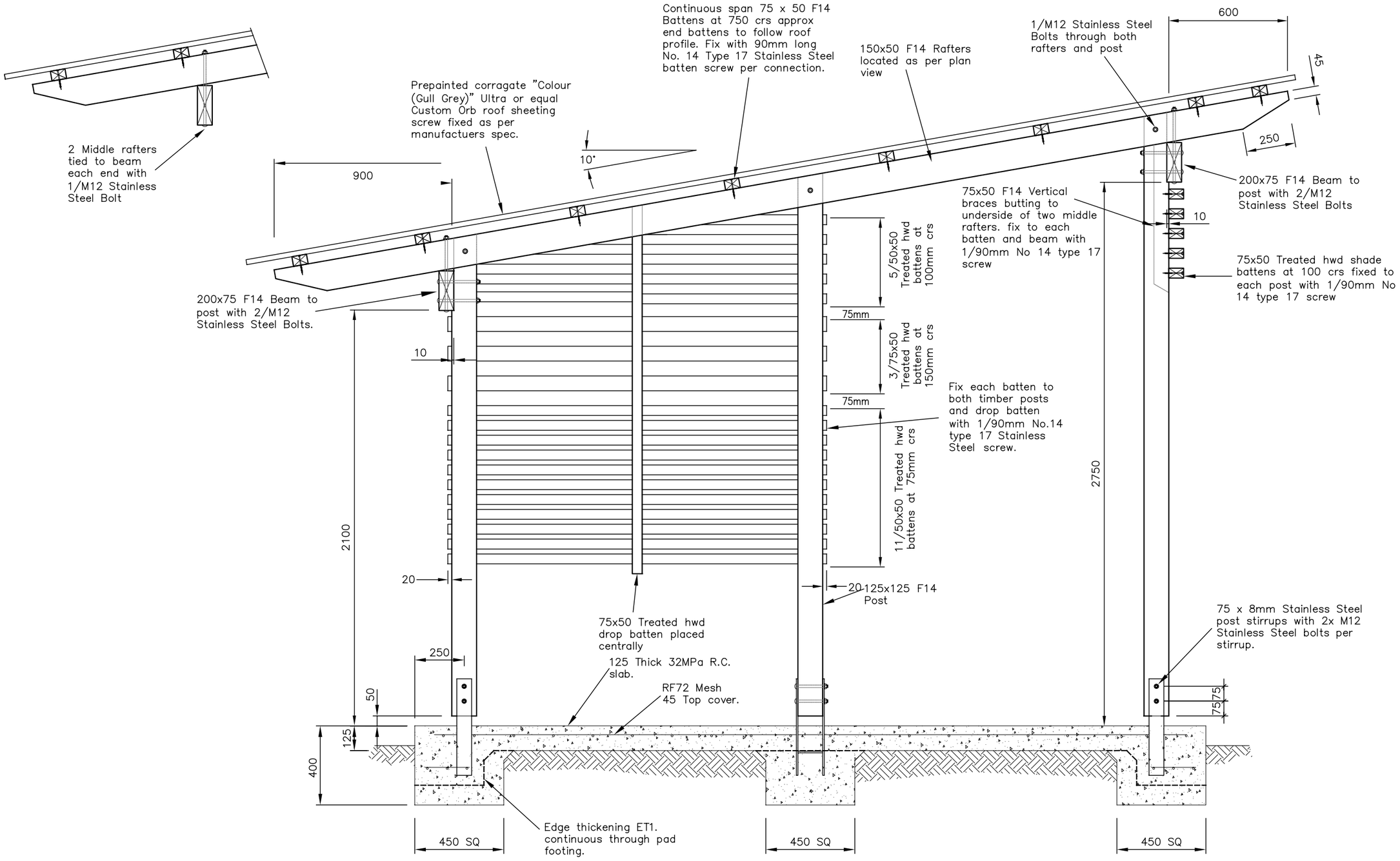
Drawing No.
P312-2



SECTION A-A

A –

SCALE 1:20

NOTE: All nails, bolts, nuts, washers, screws and brackets to be Stainless Steel Grade 316.

Scales: 1 : 20		drawn	Org signed by MLP 01/05
0 0.5 0.1 1.5m		checked	
		designed	Org signed by RMC 01/05
Sheet A3 , Datum: A.H.D.	Revisions	checked	

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SKILLION ROOF PICNIC SHELTER
TYPE 3 SECTIONS SHEET 3 OF 4

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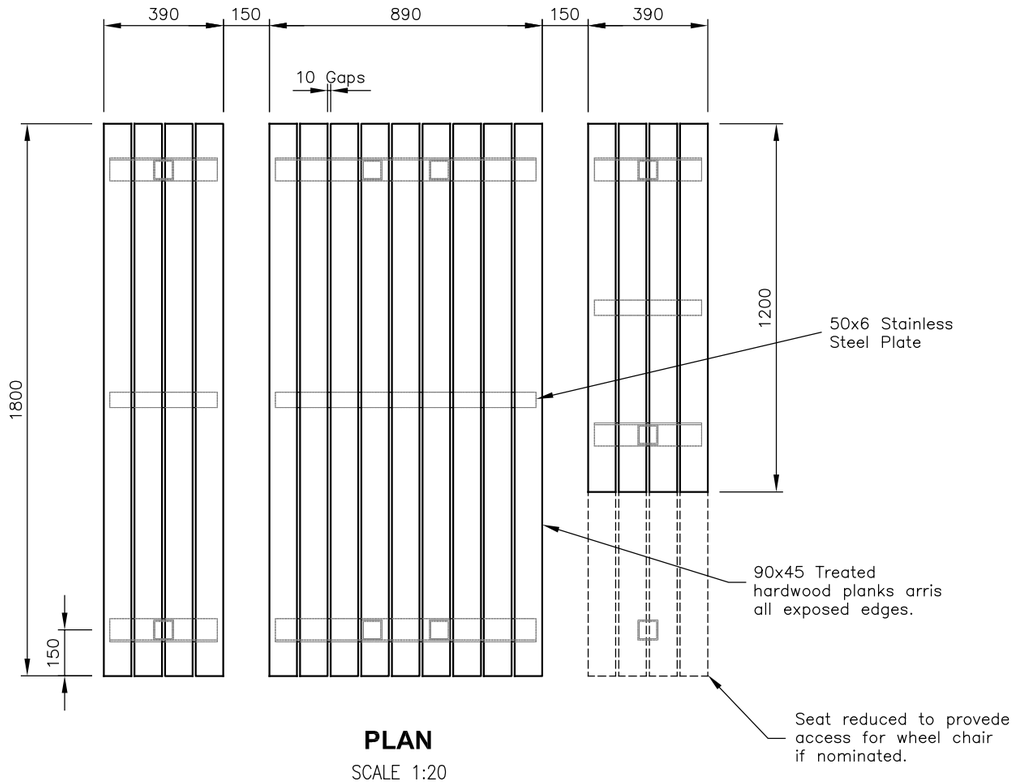
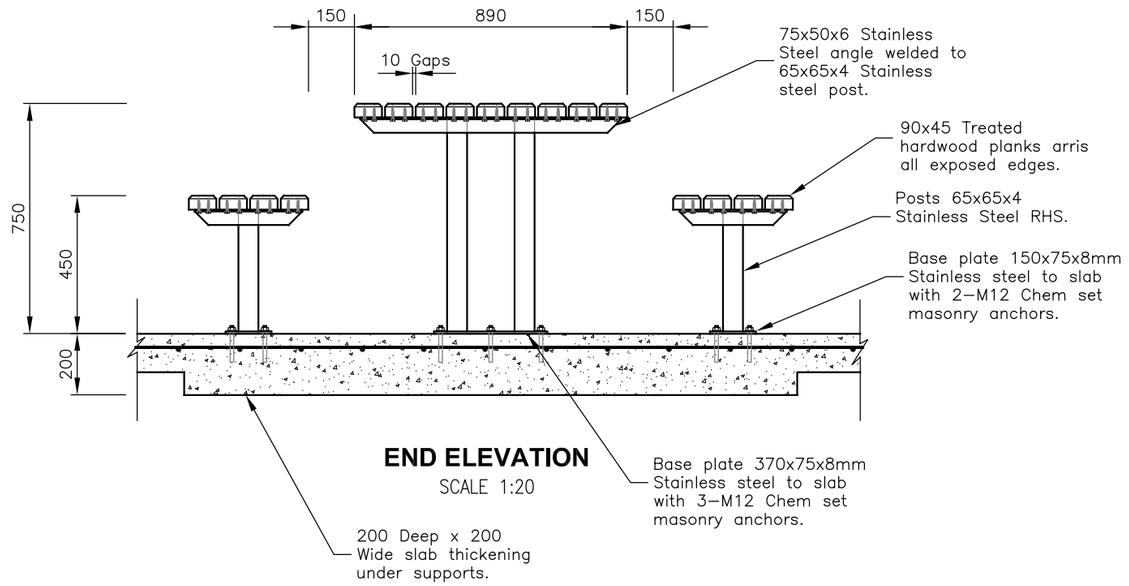
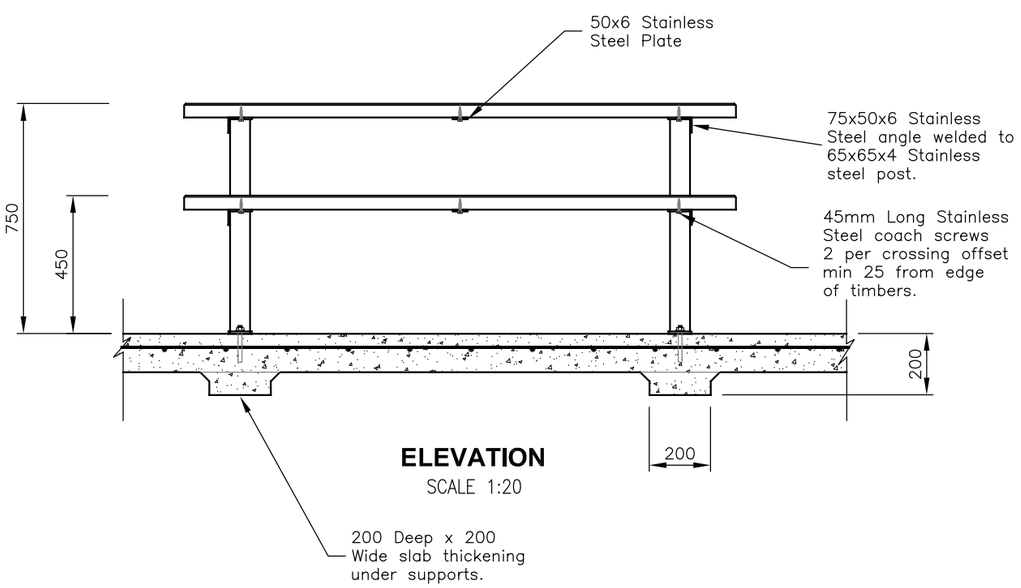
Drawing No.
P312-3



PLAN
SCALE 1:20



END ELEVATION
SCALE 1:20



ELEVATION
SCALE 1:20

Scales: 1 : 20

0 0.5 0.1 1.5m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by MLP 01/05
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		designed	Org signed by RMC 01/05
Revisions		checked	

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SKILLION ROOF PICNIC SHELTER
TYPE 3 PICNIC TABLE AND CHAIRS
SHEET 4 OF 4

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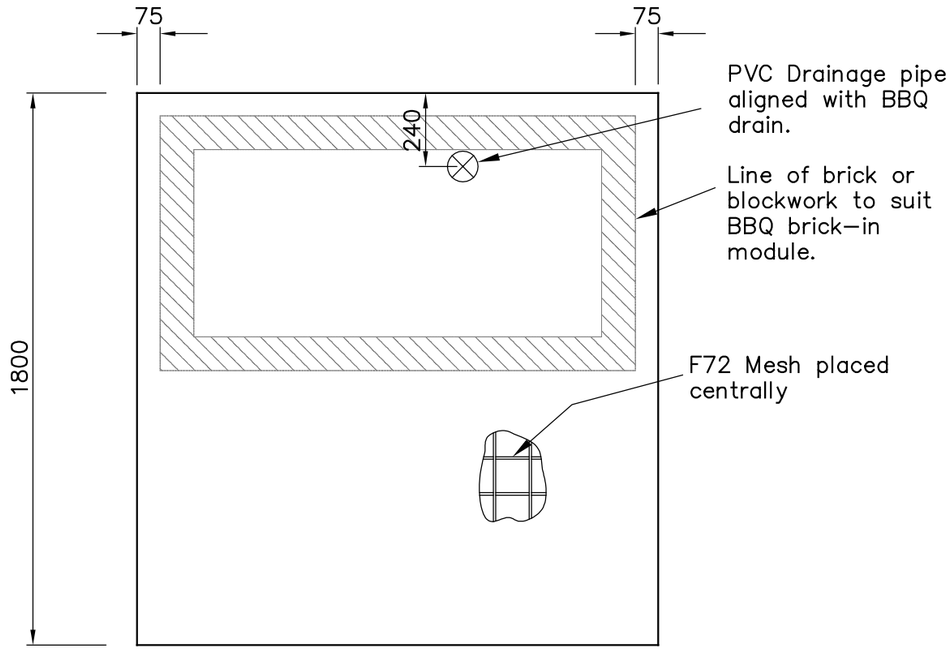
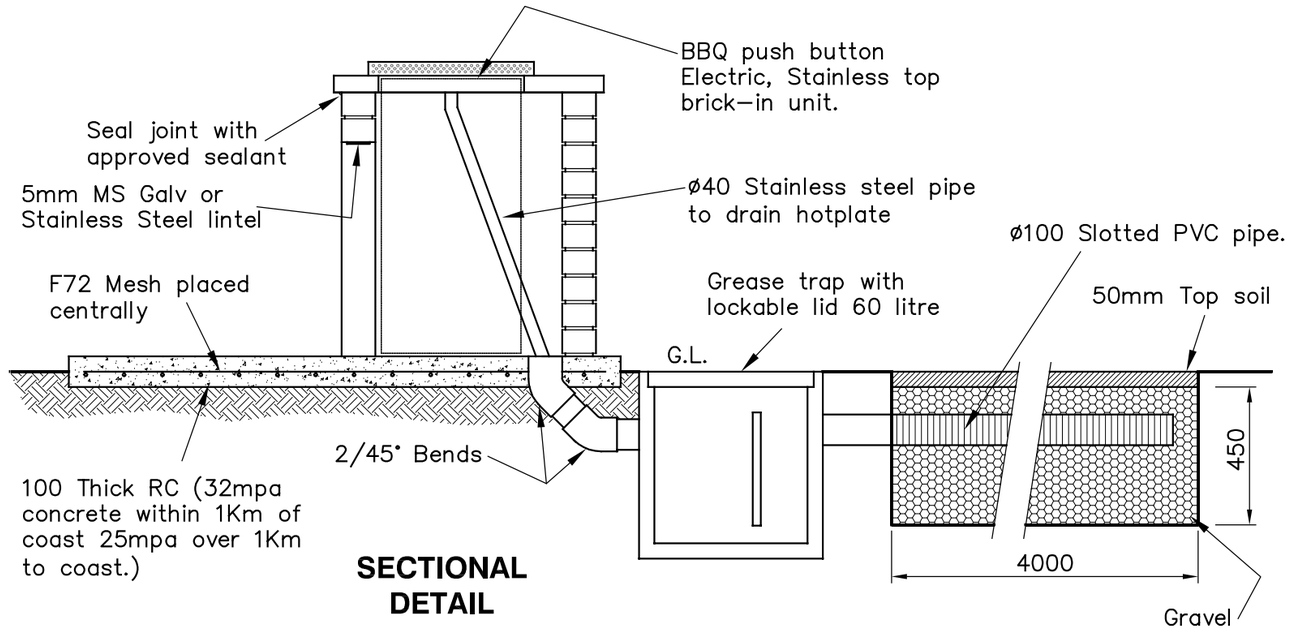
Drawing No.
P312-4



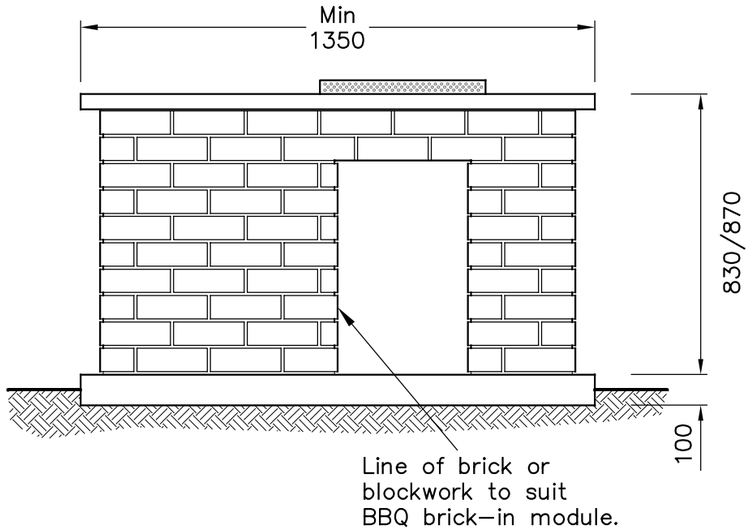
FLOOR SLAB PLAN



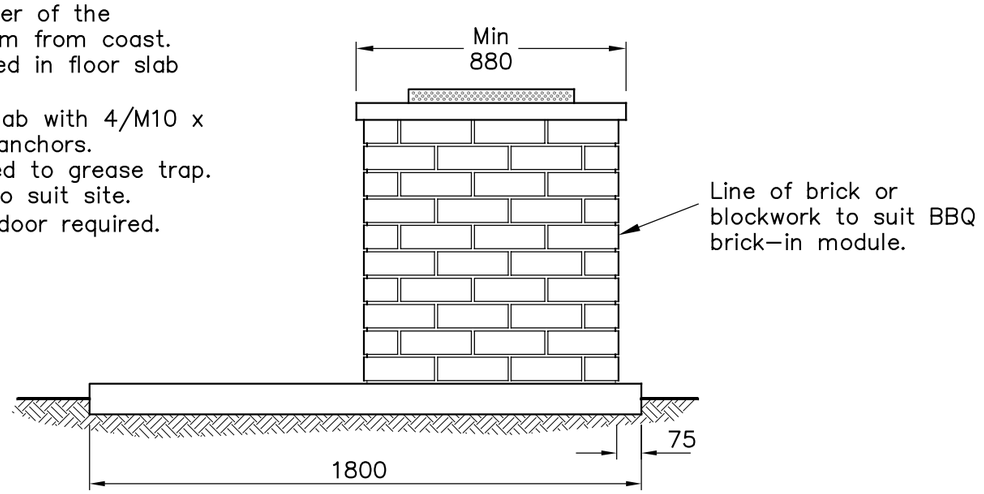
SECTIONAL DETAIL

NOTES

1. Stainless Steel tops to all BBQs. Fully weld & all joints polished.
2. BBQ units and frame must be Grade 316 Stainless Steel if within 1 Kilometer of the coastline or Galvanized if over 1Km from coast.
3. Electrical conduit to be provided in floor slab adjacent to BBQ unit.
4. Fix BBQ module to concrete slab with 4/M10 x 50 long Stainless Steel masonry anchors.
5. BBQ unit fat tray to be drained to grease trap.
6. Disposal system may change to suit site.
7. Lockable access/maintenance door required.



FRONT ELEVATION



SIDE ELEVATION

Scales: 1:20

0 0.2 0.4 0.6m

Sheet A3 , Datum: A.H.D.

A	Change to S/steel Top brick–in module	MLP 4/05	drawn	Org signed by BDF 11/98
			checked	
			designed	
	Revisions		checked	

BURNETT SHIRE COUNCIL

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BRICK BBQ WITH CONCRETE TOP SINGLE HOTPLATE TYPE

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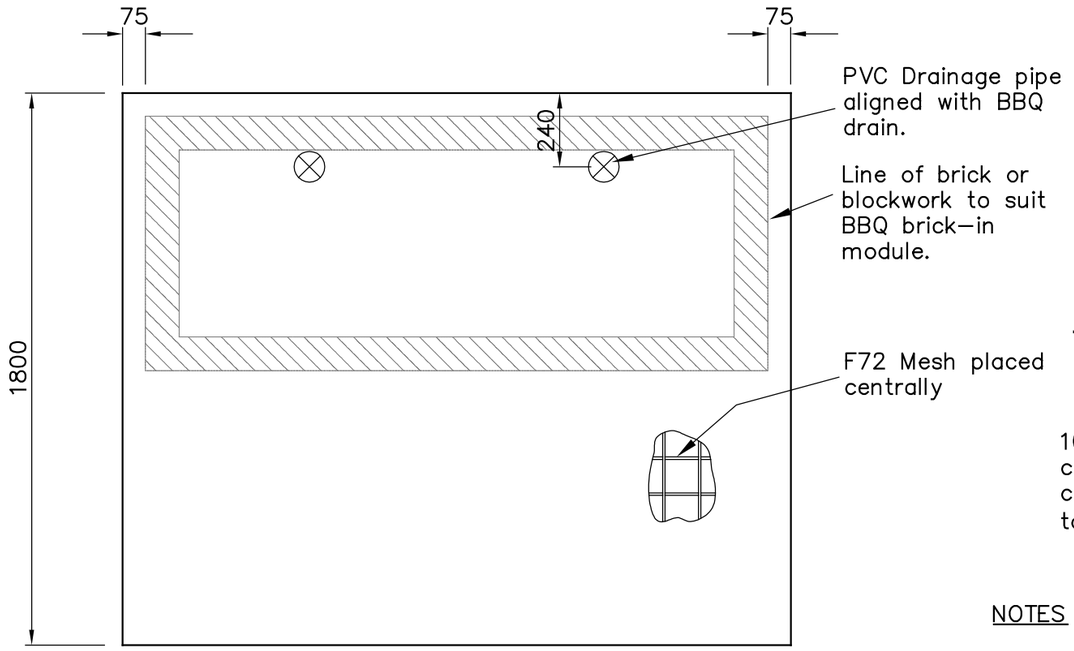
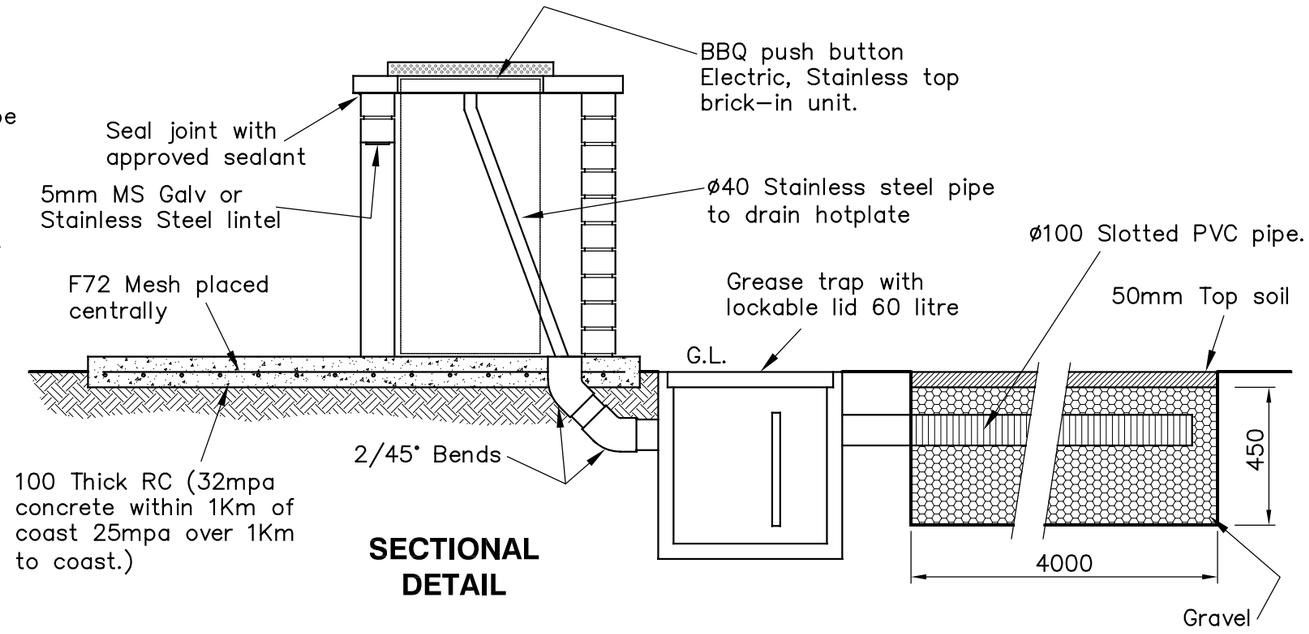
Drawing No. P320

A



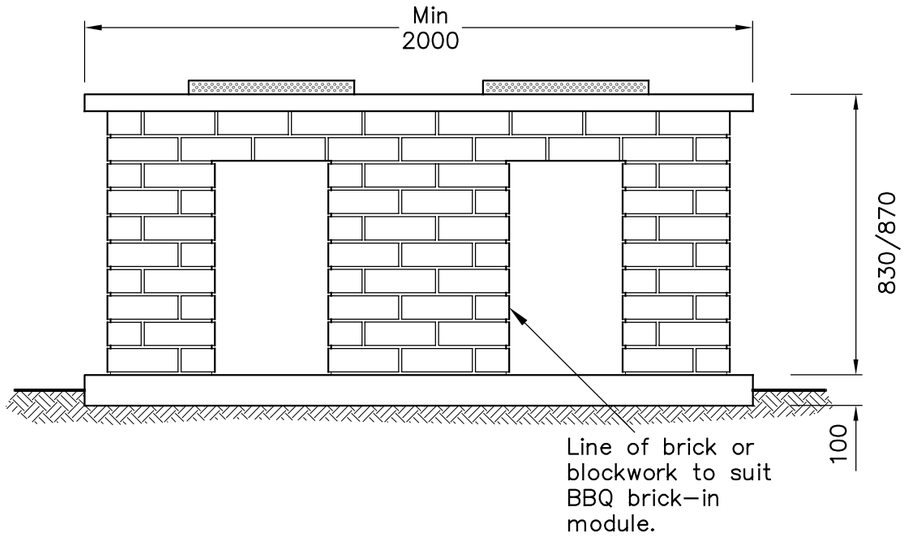
FLOOR SLAB PLAN



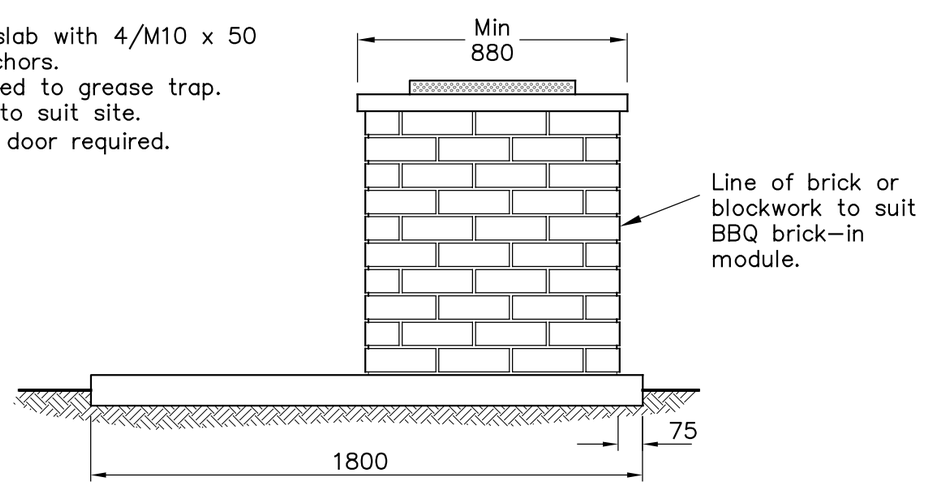
SECTIONAL DETAIL

NOTES

1. Stainless Steel tops to all BBQs. Fully weld & all joints polished.
2. BBQ units and frame must be Grade 316 Stainless Steel if within 1 Kilometer of the coastline or Galvanized if over 1Km from coast.
3. Electrical conduit to be provided in floor slab adjacent to BBQ unit.
4. Fix BBQ module to concrete slab with 4/M10 x 50 long Stainless Steel masonry anchors.
5. BBQ unit fat tray to be drained to grease trap.
6. Disposal system may change to suit site.
7. Lockable access/maintenance door required.



FRONT ELEVATION



SIDE ELEVATION

Scales: 1:20

0 0.2 0.4 0.6m

Sheet A3 , Datum: A.H.D.

A	Change to S/steel Top brick–in module	MLP 4/05	drawn	Org signed by BDF 11/98
			checked	
			designed	
	Revisions		checked	

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BRICK BBQ WITH CONCRETE TOP TWIN HOTPLATE TYPE

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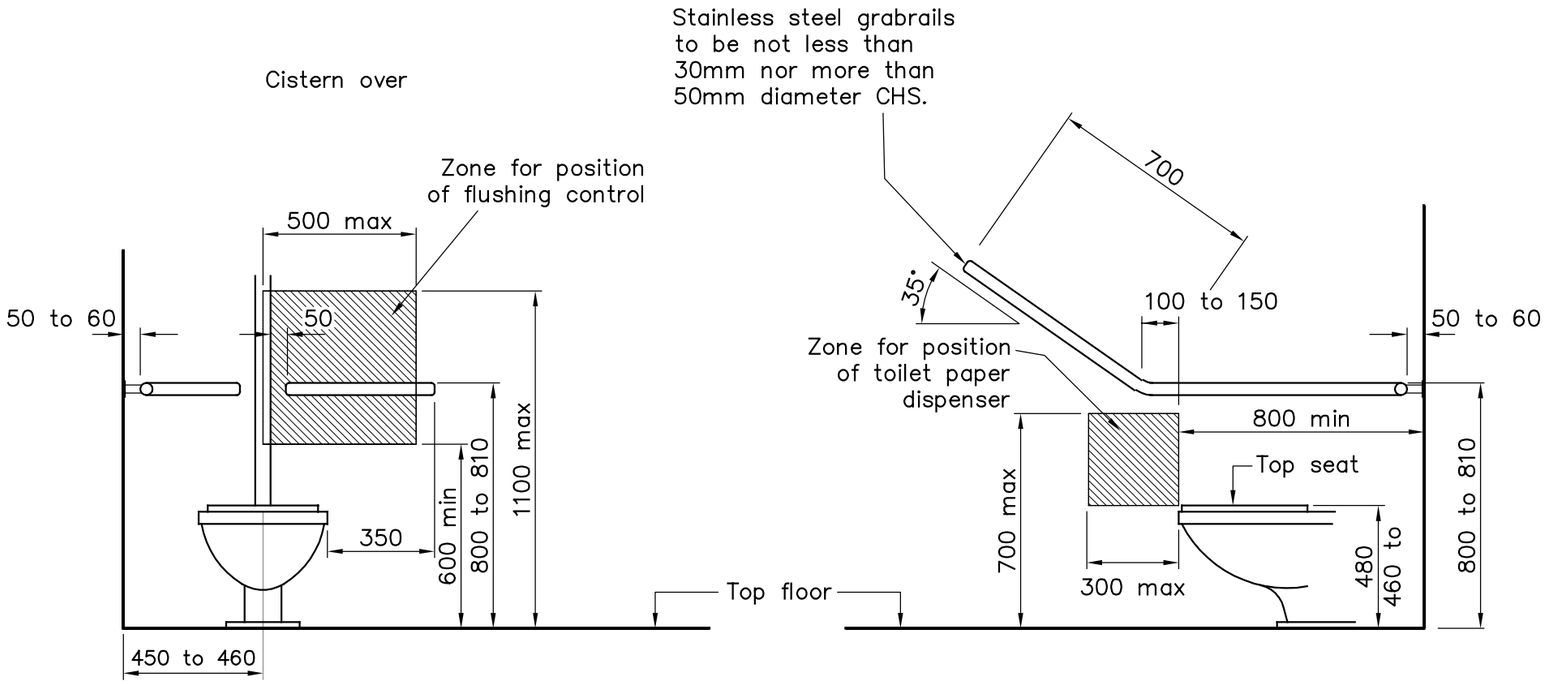
Drawing No. P321

A



WC FRONT ELEVATION

WC SIDE ELEVATION

Note : Details and dimensions for toilet in opposite corner to that shown to be mirror reversed.

Scales: 1:20

0 0.2 0.4 0.6m

Sheet A3 , Datum: A.H.D.

Revisions

drawn — Org signed by BDF 06/99

checked

designed

checked

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TOILET FIXTURE LOCATIONS FOR DISABLED PERSON'S TOILET

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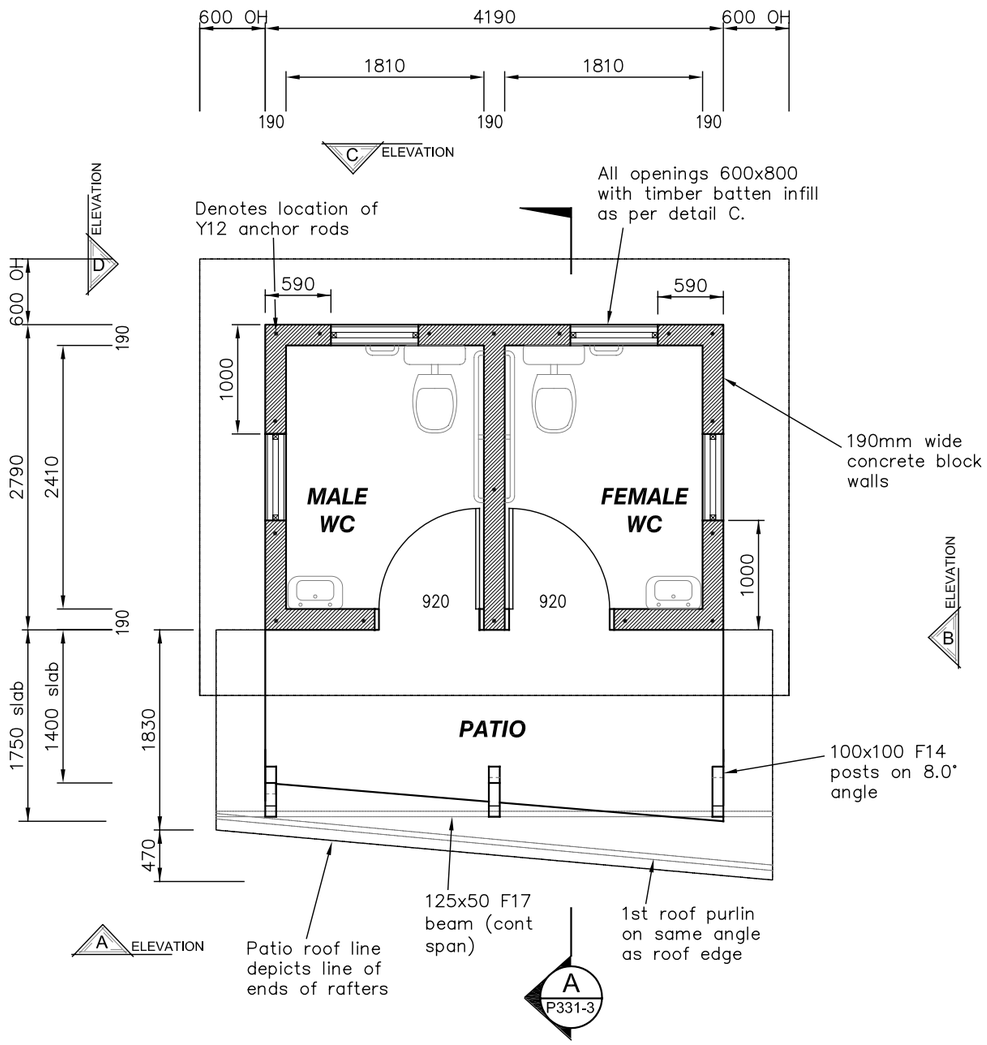
Drawing No. P330



PLAN VIEW

SCALE 1:50

W50C

Bracing calculations

A

Wind force in direction a = 11.3 kN

Racking resistance supplied by 190mm wide reinforced concrete block wall = 47.6 kN

B

Wind force in direction b = 13 kN
racking resistance supplied by reinforced concrete block walls = 32.2kN

Note:
All cores containing anchor rods to be filled with 15 MPa grout.

BRACING CALCULATIONS

ASSOCIATED PLAN NUMBERS
P331-1 TO P331-6

Scales: 0 0.5 1 1.5m, 1:50		drawn	Org signed by BGC 11/04
		checked	
		designed	Org signed by RMC 11/04
Sheet A3 , Datum: A.H.D.	Revisions	checked	

BURNETT SHIRE COUNCIL

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MALE/FEMALE AMENITIES BLOCK - TYPE 1
FLOOR PLAN
SHEET 1 of 6

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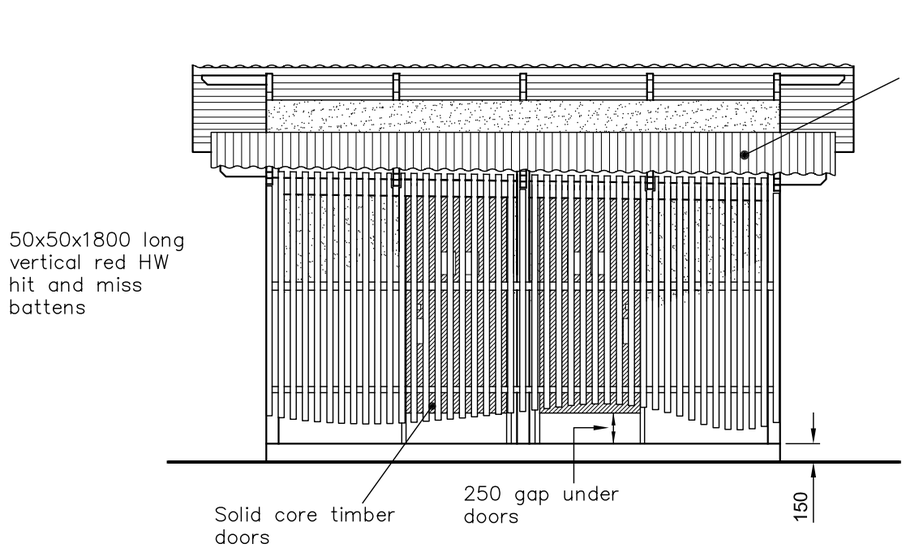
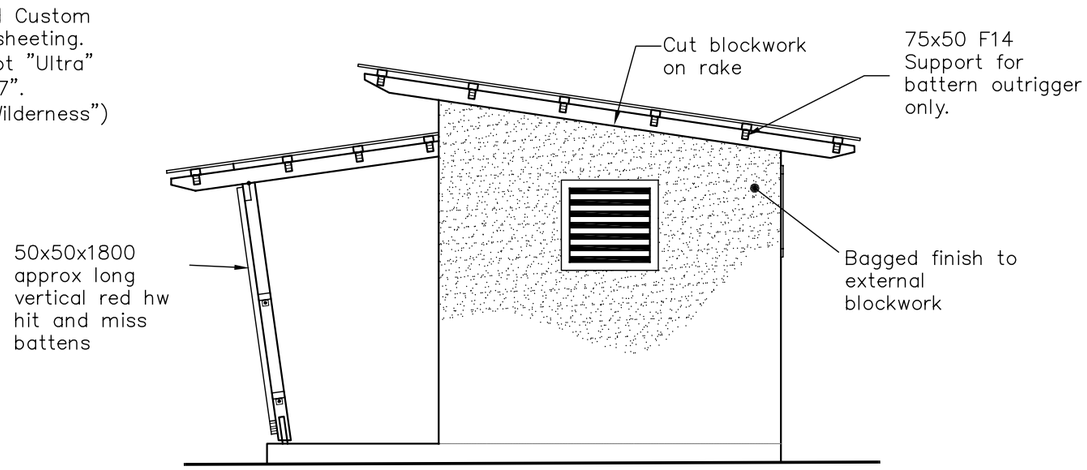
STANDARD DRAWING

Drawing No.
P331-1



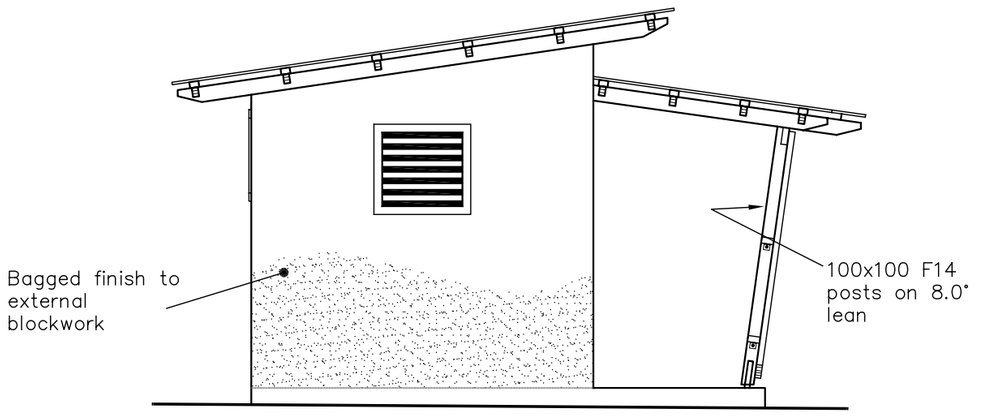
ELEVATION - VIEW A

SCALE 1:50



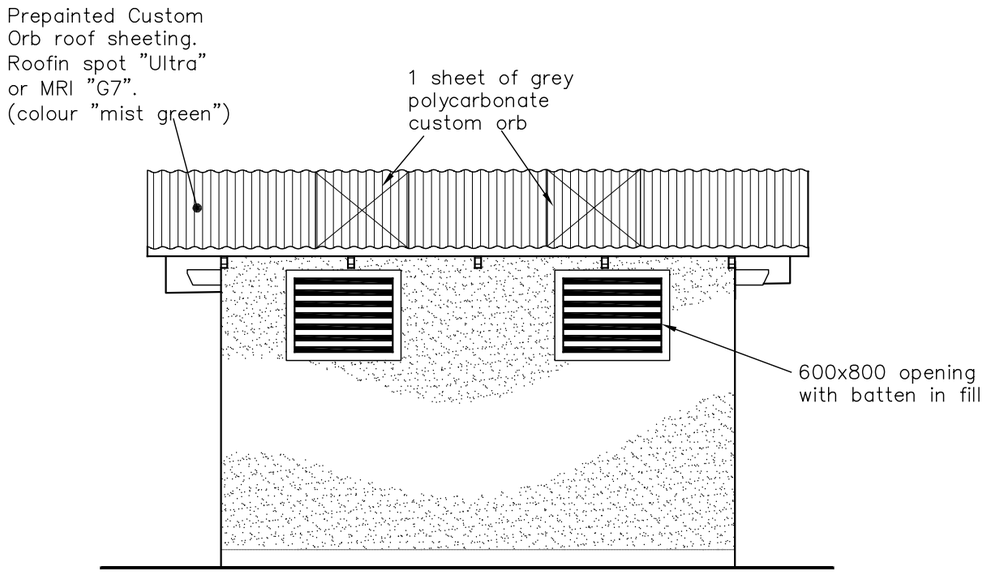
ELEVATION - VIEW B

SCALE 1:50



ELEVATION - VIEW D

SCALE 1:50



ELEVATION - VIEW C

SCALE 1:50

ASSOCIATED PLAN NUMBERS
P331-1 TO P331-6

Scales:

0 0.5 1 1.5m

1:50

Sheet A3 , Datum: A.H.D.

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			designed	Org signed by RMC 11/04
Revisions			checked	

BURNETT SHIRE COUNCIL

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MALE/FEMALE AMENITIES BLOCK - TYPE 1
ELEVATIONS
SHEET 2 of 6

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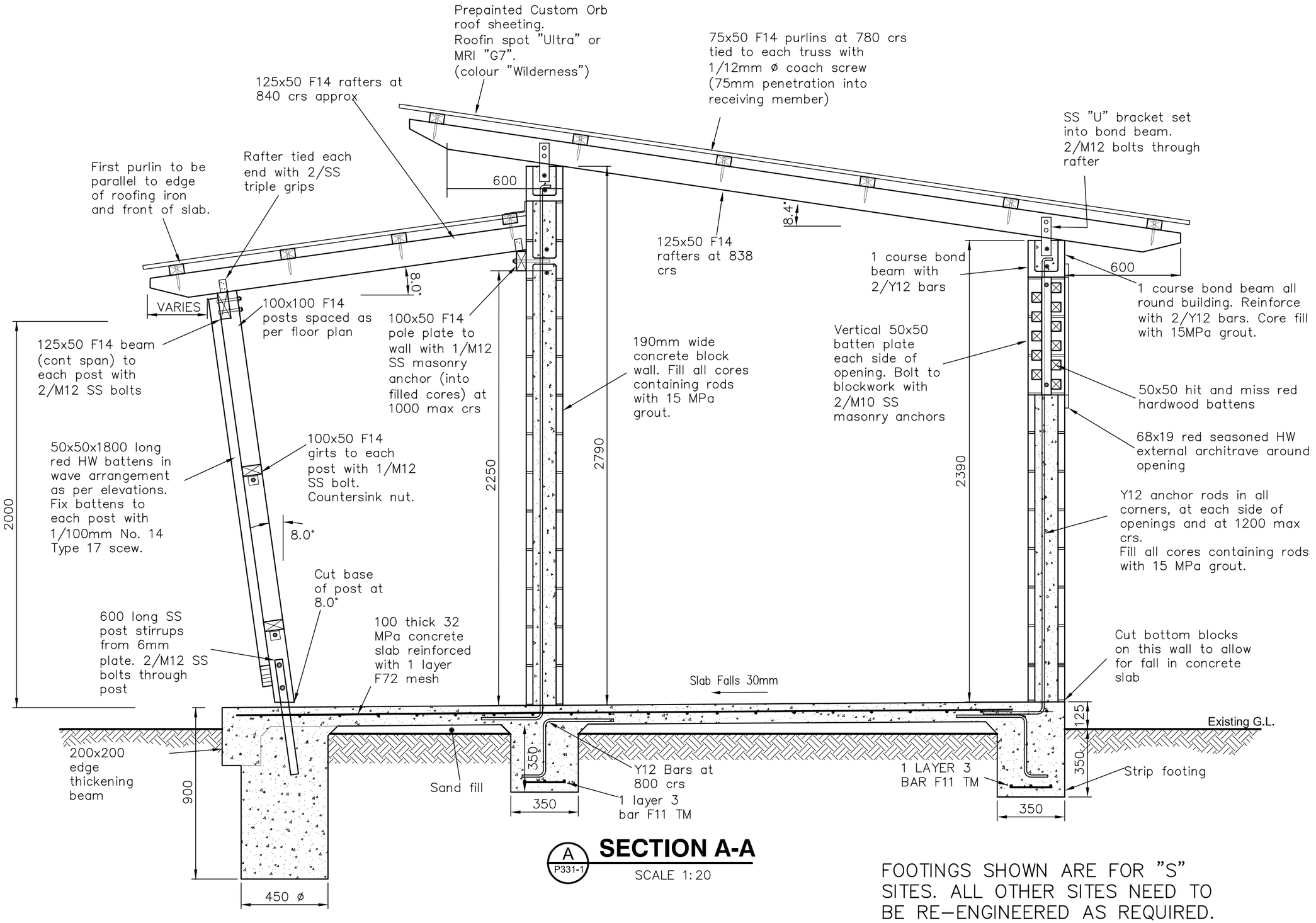
STANDARD DRAWING

Drawing No.
P331-2



A P331-1 SECTION A-A

SCALE 1:20

FOOTINGS SHOWN ARE FOR "S" SITES. ALL OTHER SITES NEED TO BE RE-ENGINEERED AS REQUIRED.

ASSOCIATED PLAN NUMBERS
P331-1 TO P331-6

Scales:
0 0.2 0.4 0.6m
1:20
Sheet A3 , Datum: A.H.D.

Revisions				
			drawn	Org signed by BGC 11/04
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			designed	Org signed by RMC 11/04
			checked	

BURNETT SHIRE COUNCIL

Original signed by
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MALE/FEMALE AMENITIES BLOCK - TYPE 1
SECTION A-A
SHEET 3 of 6

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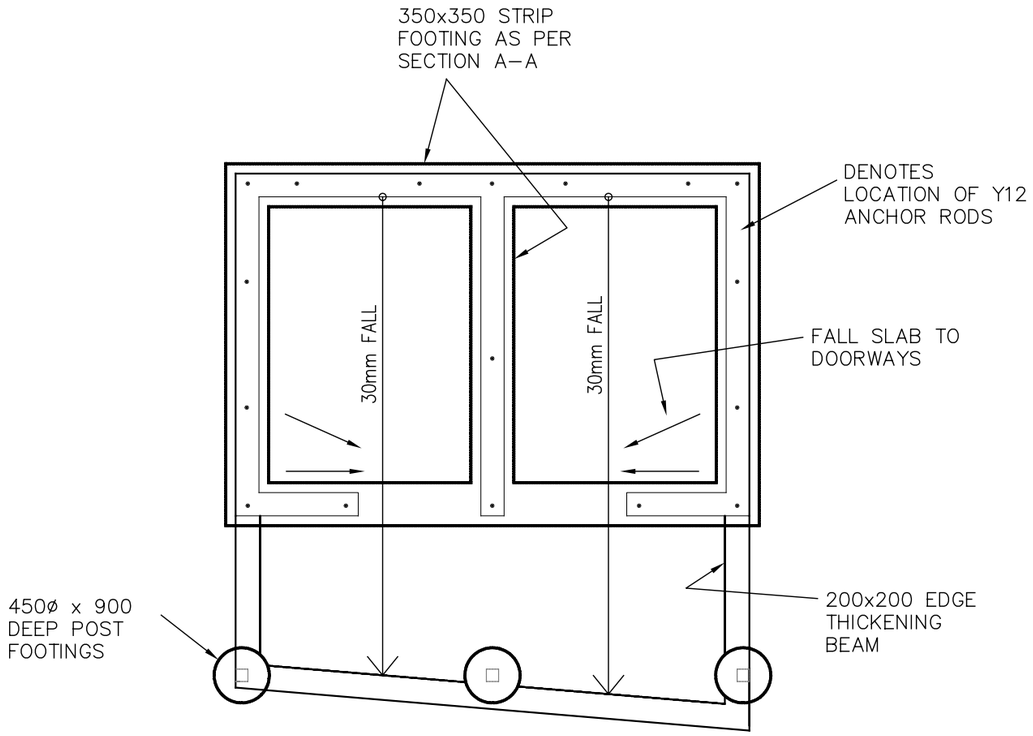
STANDARD DRAWING

Drawing No.
P331-3



FOUNDATION PLAN

SCALE 1:50

ASSOCIATED PLAN NUMBERS
P331–1 TO P331–6

Scales:

0 0.5 1 1.5m

1:50

Sheet A3 , Datum: A.H.D.

Revisions				
			drawn	Org signed by BGC 11/04
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			designed	Org signed by RMC 11/04
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BURNETT SHIRE COUNCIL

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MALE/FEMALE AMENITIES BLOCK - TYPE 1
FOUNDATION PLAN
SHEET 4 of 6

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STANDARD
DRAWING

Drawing No.
P331-4

NOTES

Plumbing fixtures - signs - fittings

1. Wall basins – Concorde 500, 1 tap hole white with D200 brackets.
2. Tapware – ram easyclean ceramic disc with lever handle.
3. Toilet suites (disabled) – Concorde care pan white. Concorde mid–level cistern with extended flush pipe. Paramount single flap toilet seat white.
4. Toilet roll holders (2 in total) are available from council and hung by builder.
5. Signs to be supplied by council and hung by builder on doors. Signs include : 1 x 'mens', 1 x 'ladies', 2 x disabled persons.
6. Door indicator locks (refer DWG. No. P336) will be supplied by council and fitted by builder.

Note – plumbing fixtures are as specified from tradelink plumbing supplies for disabled persons. Fittings equal to those specified are required if another supplier is used.

Concrete work

1. All concrete work is to be executed in accordance with the current edition of :
   AS 3600 – SAA concrete structures code.
   AS 1379 – Ready Mixed Concrete.
2. Characteristic compressive strength of the concrete (F'c) must not be less than 32 MPa at 28 days U.N.O.
3. The maximum size of aggregate shall be 20mm.
4. The concrete shall slump test at not less than 25mm and not more than 100mm.
5. All concrete to be vibrated.
6. Plastic chairs to be used to support reinforcement and give the correct concrete cover.
7. All top soil and upper strata containing organic matter is to be removed. 'D' class pad to be placed and compacted to 95 M.M.D.D. In accordance with AS 1289 E 2.1.
8. Area below slab to be treated in accordance with as 3660 for termite protection.
9. Floor slab to fall as indicated on drawing No. 80023.
10. Council's electrician is to be contacted in regard to possible conduit placement prior to pouring of any concrete.

Structure

1. All external walls to be 190mm wide concrete blockwork. Blockwork to have bagged finish.
2. Roof sheeting to be colorbond "ultra" custom ORB or MRI "G7" (colour 'Wilderness') fixed with zac screws to manufacturers specification. Note: roofing may require an order lead time of approximately 3 weeks.
2. All fixings including nails, screws, bolts, straps, brackets, post stirrups and grab rails to be stainless steel. All stainless steel to be marine grade 316.

Timber

1. All timber to be F14 unless noted otherwise on plans.
2. All timber to be H3 treated.
3. All cuts, end grains and joins in timber must be primed or sealed before joining.
3. Doors to be solid timber. All doors to have stainless steel indicator bolts as specified by a council design office representative. Self closing stainless steel hinges to be placed on doors (ie., hold door in closed position when not in use).
5. All visible timber to be arrissed including end cuts on purlins and beams.
6. Small rubber adhesive pads to be fixed to door jamb to reduce noise from slamming doors.

Painting

1. All blockwork to bagged and painted with 1 coat of sealer/undercoat and two top coats of gloss acrylic in the following colours:

* Dulux 'Mary Janes' – external block walls.
* Dulux 'Mossvale Sand' – all interior walls.
* Colourbond colour 'Wilderness' – rafters, beam, doors and posts.
* all feature battens, external window architraves and purlins to be finished in one of the following coating systems:

(i) wash all timber with "Intergrain Timber Restorer", prime timber with one saturation coat of "Intergrain Dimension 4" all round (including all cuts, end grains, etc.) and finish with three top coats of "Intergrain DWD".

Or

(ii) wash all timber with "Woodmans Wood Wash", prime timber with one saturation coat of "Woodmans Prime–all" all round (including all cuts, end grains, etc.) and finish with three top coats of "Woodmans Decks".

Plumbing / drainage

1. Sewerage to be treated through a sand filtration system using a 6000 litre concrete primary tank with outlet filtration. System to be capable of sustaining a 1260 (averaged over a 7 day period) litres per day treatment.
2. All plumbing and drainage to comply with the sewerage and water supply act, sewerage and water law, australian standards 3500 and council requirements.
3. No hot water will be supplied to amenities block.
4. One external keyed tap is to be fitted to outside of building as directed by design office.

Electrical

1. Electrical work to carried out or directed by council electrician.

ASSOCIATED PLAN NUMBERS
P331–1 TO P331–6

Scales:
0 0.5 1 1.5m
1:50
Sheet A3 , Datum: A.H.D.

			drawn	Org signed by BGC 11/04
			checked	
			designed	Org signed by RMC 11/04
Revisions			checked	

BURNETT SHIRE COUNCIL

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General Manager of Engineering Operations

MALE/FEMALE AMENITIES BLOCK - TYPE 1
NOTES
SHEET 5 of 6

H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\P331-1 to 6.dwg, 16/11/2004 3:18:56 PM

STANDARD DRAWING

Drawing No.
P331- 5

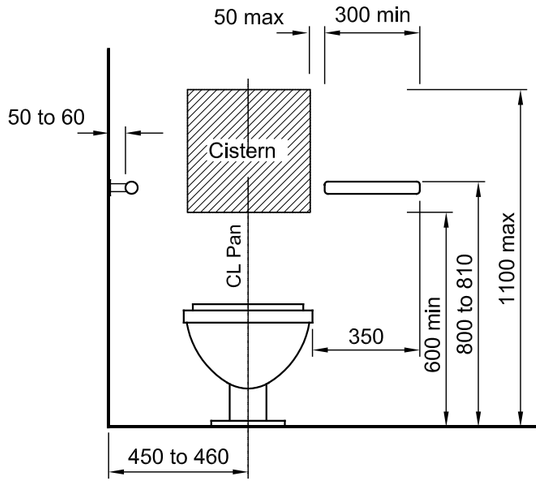
NOTES

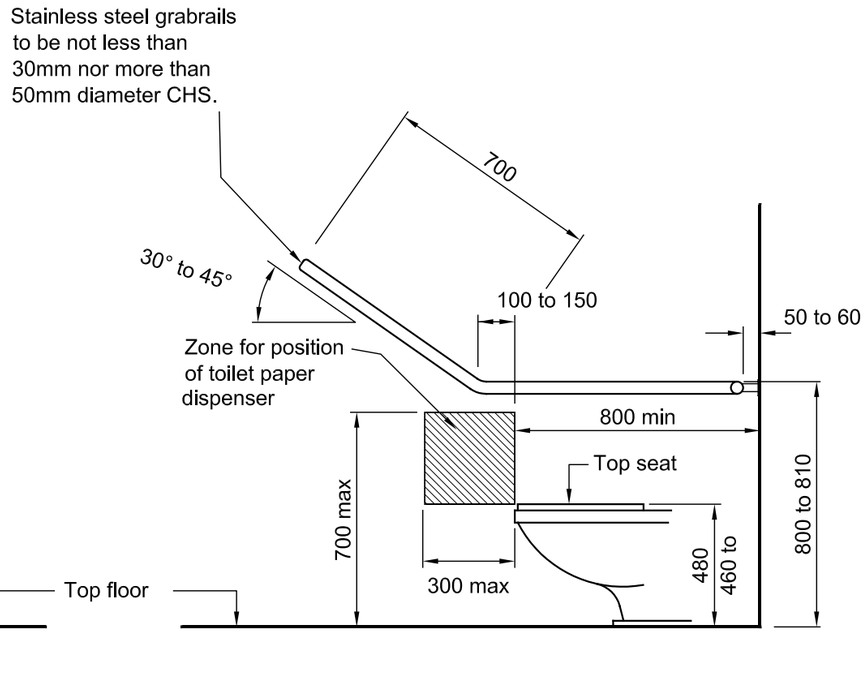
1. Any light switches, power points or door handles in disabled persons toilet to be 900 to 1100 above finished floor level.

2. Front of hand basin to be 770 to 800 to top of basin above finished floor level.

3. Lever type tap handle to be used in disabled persons hand basin.

4. Clear space of 290mm min is to be provided between finished floor level and underside of pipework (below basin).





WC FRONT ELEVATION **WC SIDE ELEVATION**

FEMALE TOILET FIXTURES LAYOUT

MIRROR REVERSE FOR MALE TOILET

ASSOCIATED PLAN NUMBERS
P331-1 TO P331-6

Scales:
0 0.5 1 1.5m
1:50
Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BGC 11/04
		checked	
		designed	Org signed by BGC 11/04
Revisions		checked	

BURNETT SHIRE COUNCIL

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MALE/FEMALE AMENITIES BLOCK - TYPE 1
TOILET FIXTURES LAYOUT
SHEET 6 of 6

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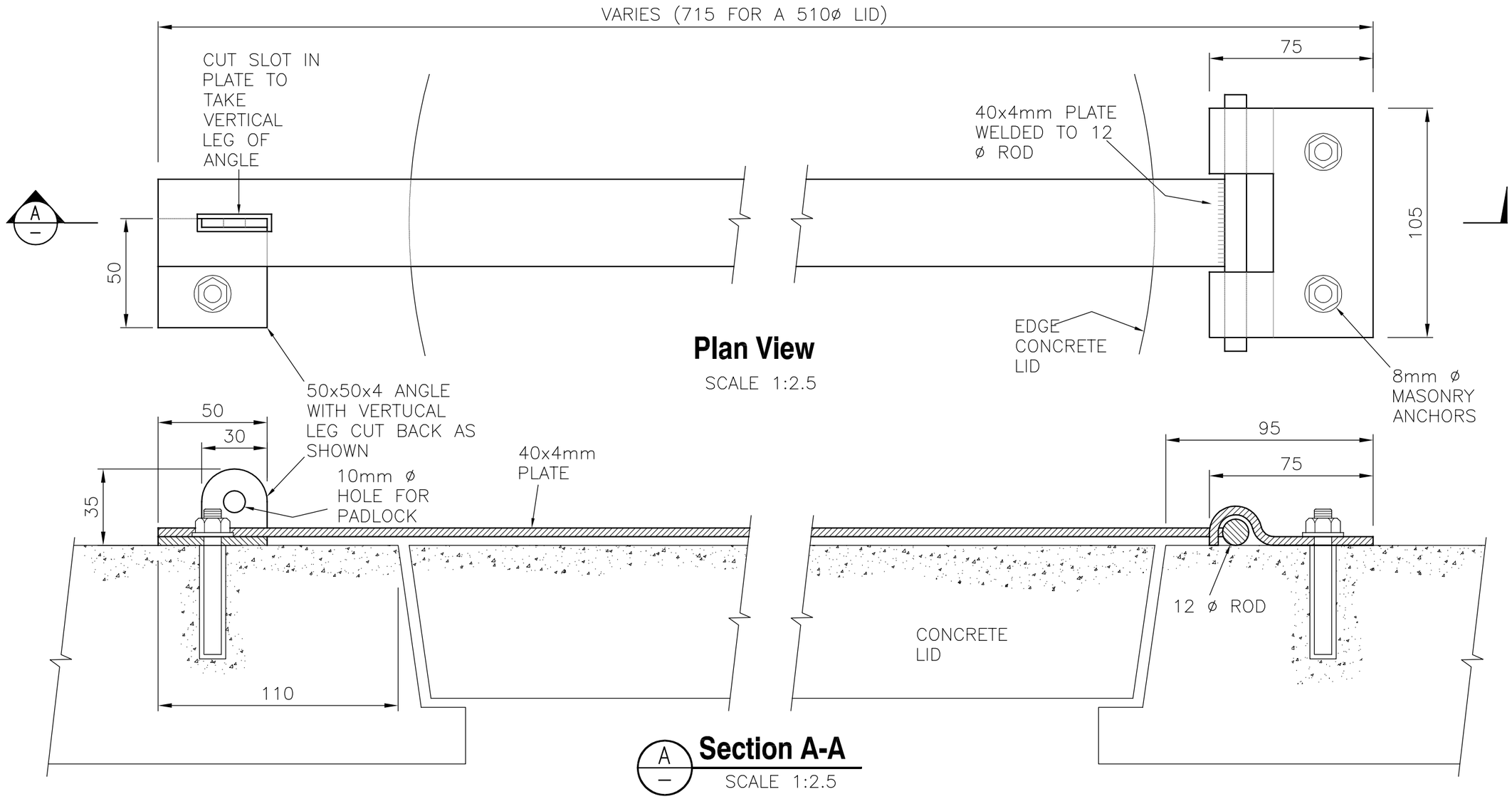
STANDARD DRAWING

Drawing No.
P331- 6



Plan View

SCALE 1:2.5

Section A-A

SCALE 1:2.5

NOTE:
If structure is to be within 2km of coast line, than all steel & bolts are to be stainless steel grade 316.
* Hinge to be only used in areas that are restricted access area to the public.

Scales: 1:2 (mm)

0 20 40 60m

Sheet A3 , Datum: A.H.D.

		drawn	Org signed by BDF 06/01
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		designed	
Revisions		checked	

BURNETT SHIRE COUNCIL

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HINGED LOCKING PLATE FOR CONCRETE SEPTIC TANK LID

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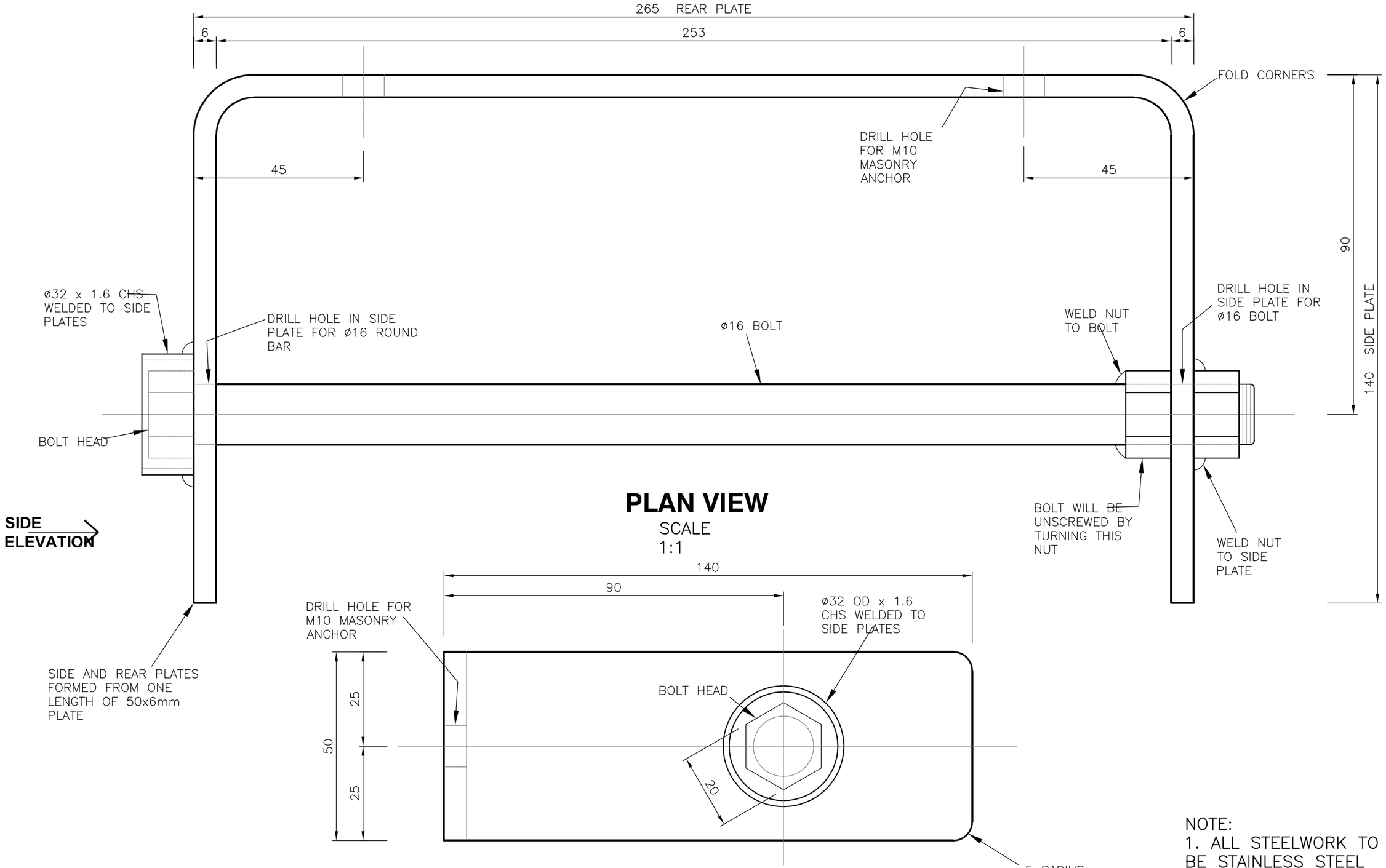
Drawing No.
P335



NOTE:
1. ALL STEELWORK TO BE STAINLESS STEEL GRADE 316.
2. ALL MEASUREMENTS ARE IN MILLIMETRES.

Scales: 1:1 0 10 20 30mm Sheet A3 , Datum: A.H.D.	Revisions	drawn	Org signed by BDF 02/02
		checked	
		designed	
		checked	

BURNETT SHIRE COUNCIL

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DOUBLE TOILET ROLL HOLDER

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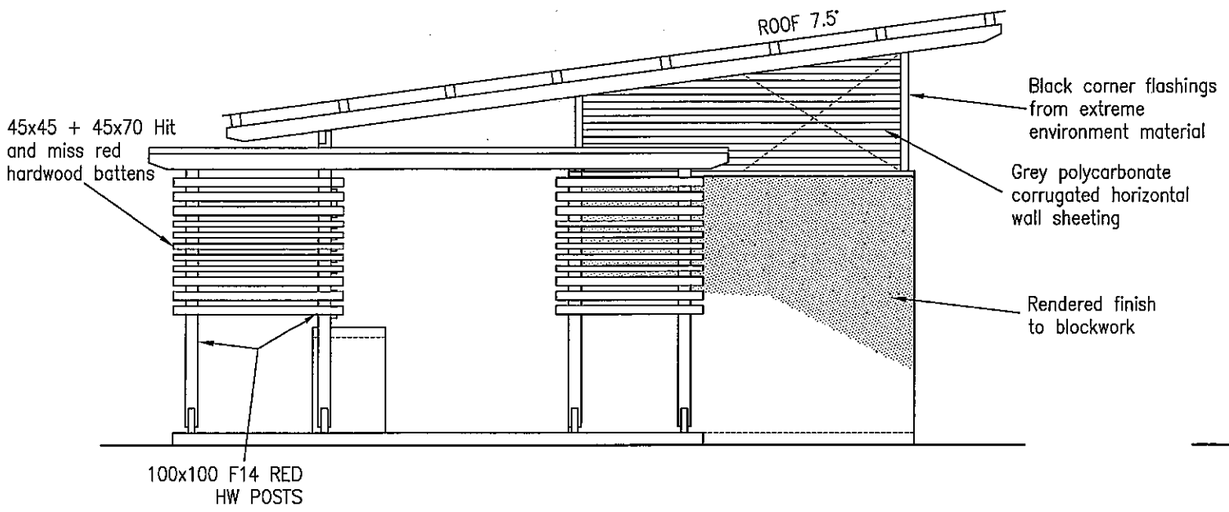
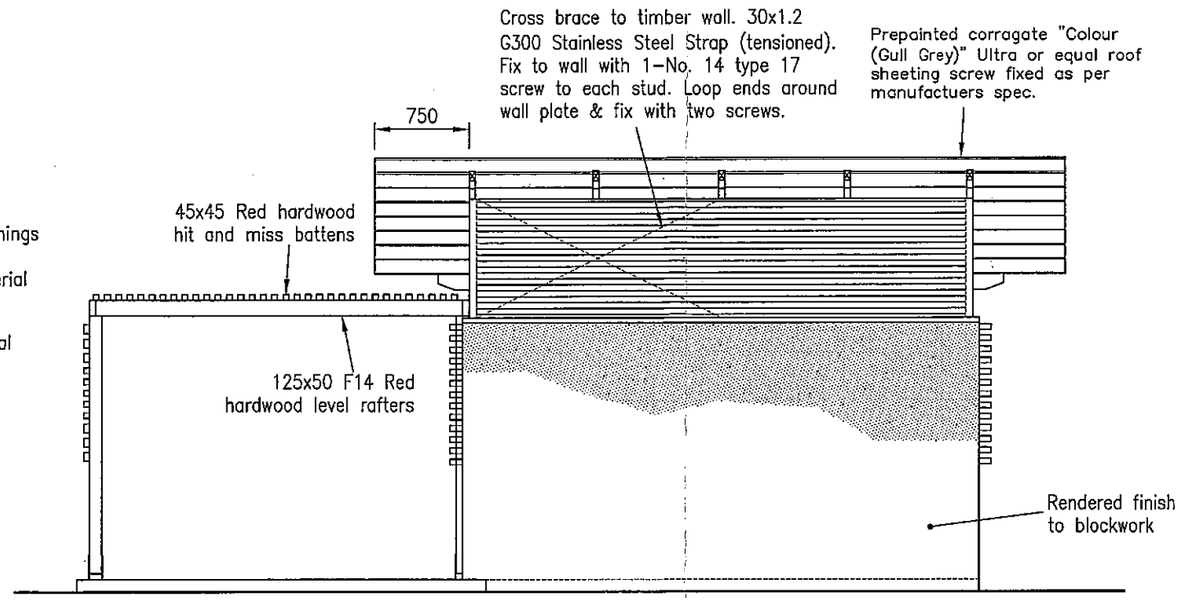
Drawing No.
P337



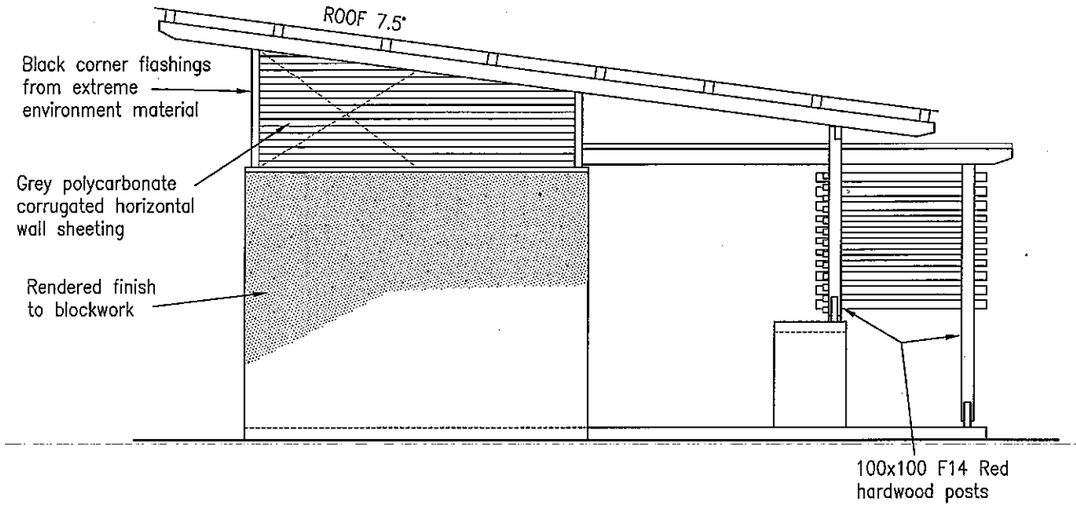
ELEVATION - VIEW B

SCALE 1:50



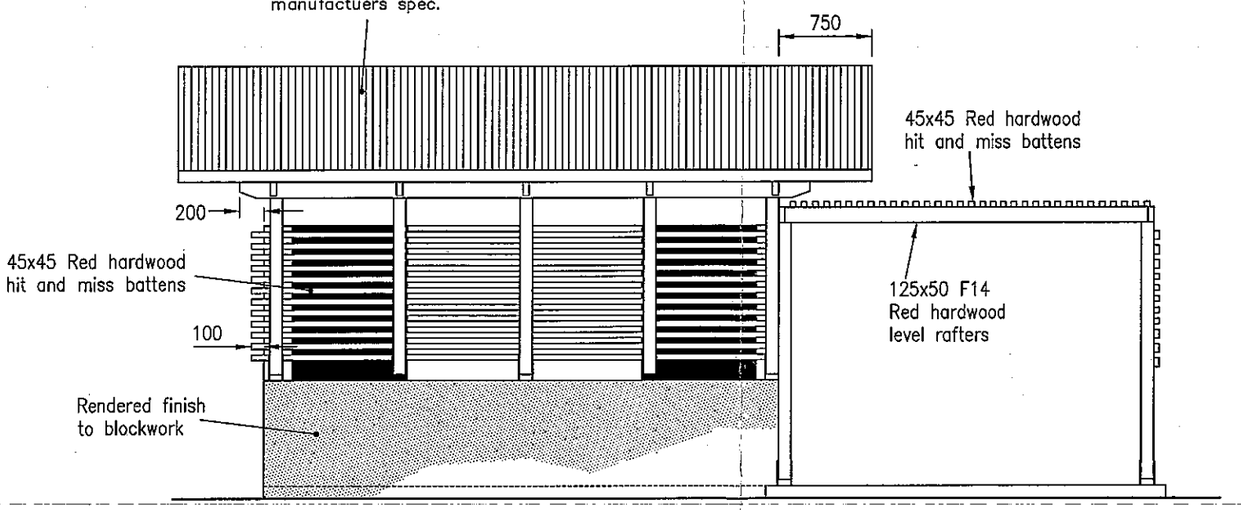
ELEVATION - VIEW A

SCALE 1:50



ELEVATION - VIEW D

SCALE 1:50



ELEVATION - VIEW C

SCALE 1:50

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C78 29-11-05

Scales:
0 0.5 1 1.5m
1:50
Sheet A3 , Datum: A.H.D.

			drawn	Org signed by MLP 08/05
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			designed	Org signed by RMC 08/05
Revisions			checked	

BURNETT SHIRE COUNCIL

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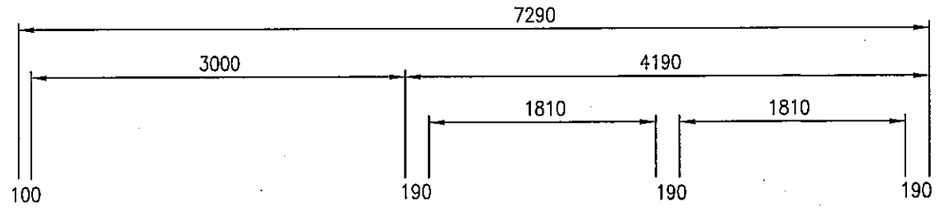
STANDARD PLANS
AMENITIES BUILDING
ELEVATIONS

ASSOCIATED PLAN NUMBERS
P338-1 to P331-8

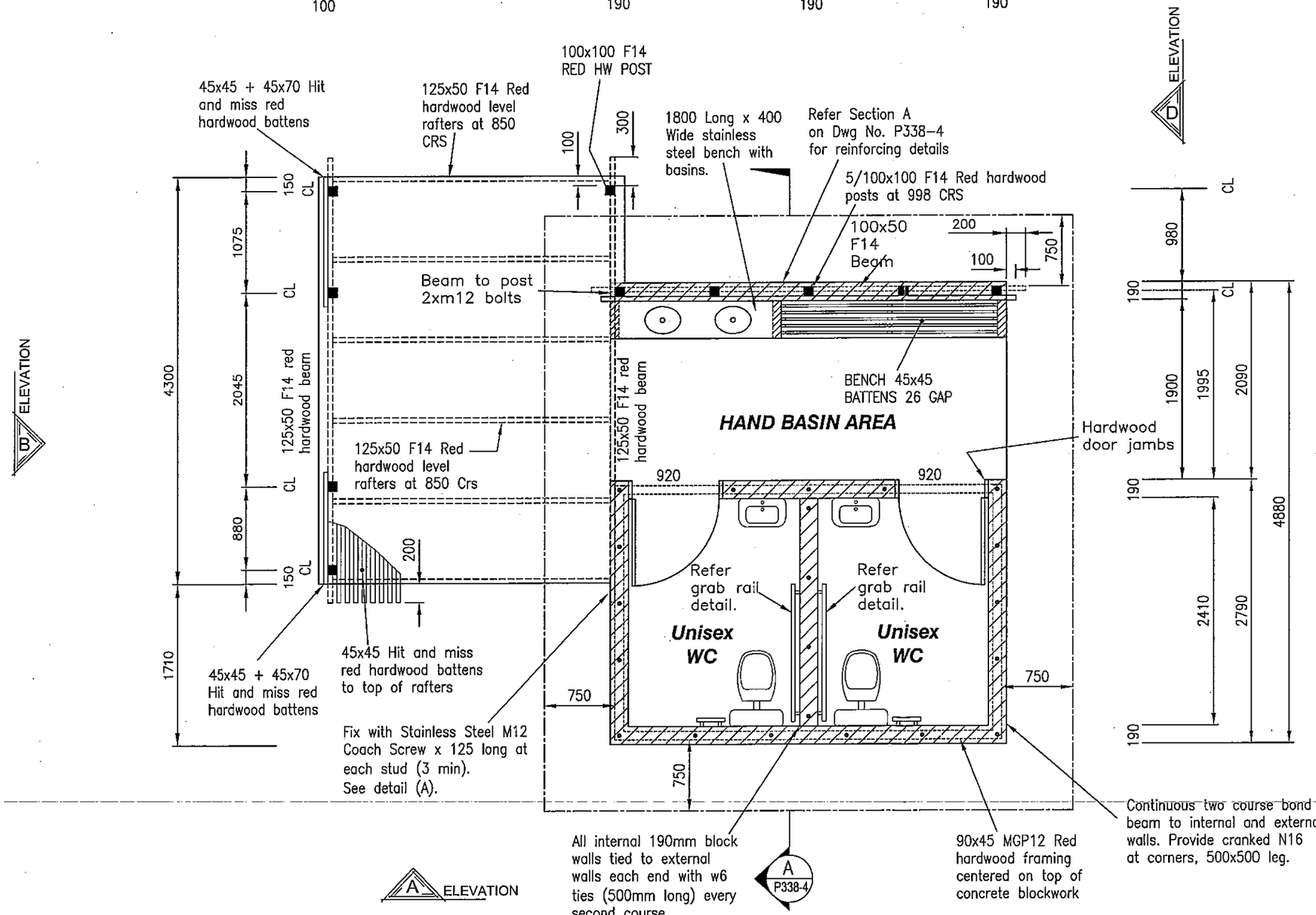
Drawing No.
P338 - 1

C ELEVATION

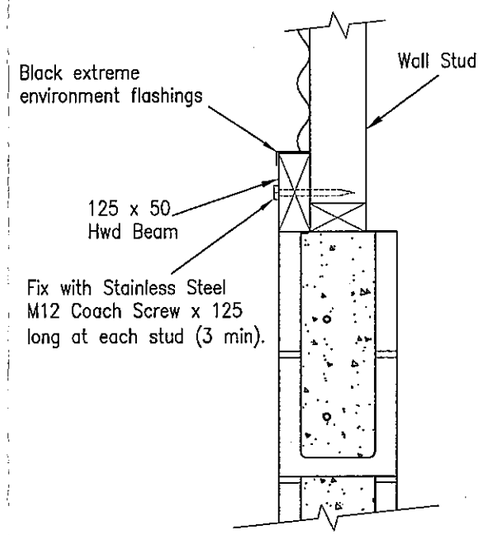


LEGEND

•	N12 Vertical reinforcing bar (800 MAX CRS)
	190mm Wide concrete block wall. fill all cores containing rods with 15MPa Min grout.
	90mm Concrete block wall. fill all cores with 15MPa Min grout.



D ELEVATION



Detail (a)

SCALE 1:10

B ELEVATION

A ELEVATION

FLOOR PLAN

SCALE 1:50

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Scales:

0 0.5 1 1.5m

1:50

Sheet A3 , Datum: A.H.D.

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			designed	Org signed by RMC 05/05
			checked	
Revisions				

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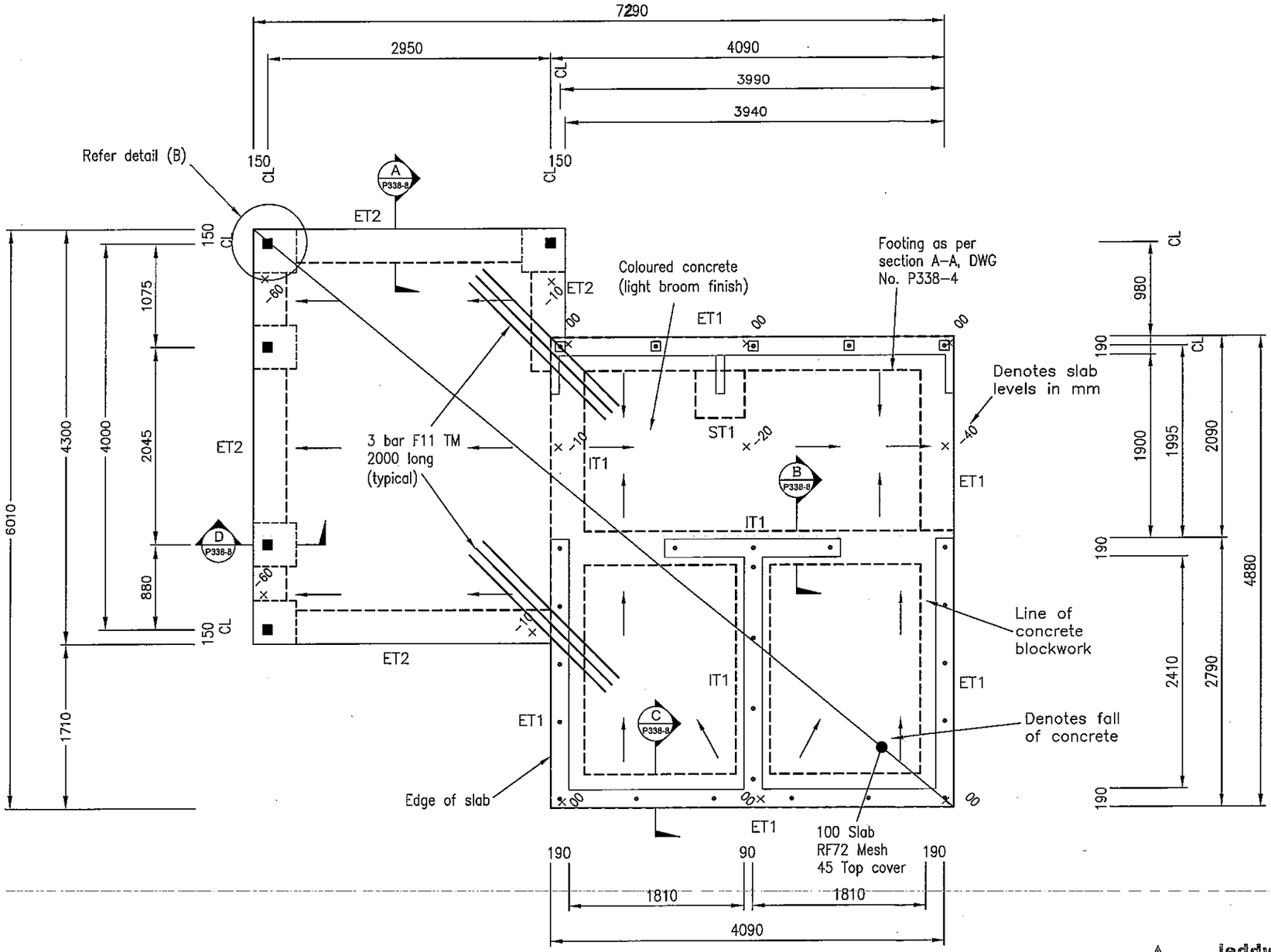
STANDARD PLAN
AMENITIES BUILDING
FLOOR PLAN

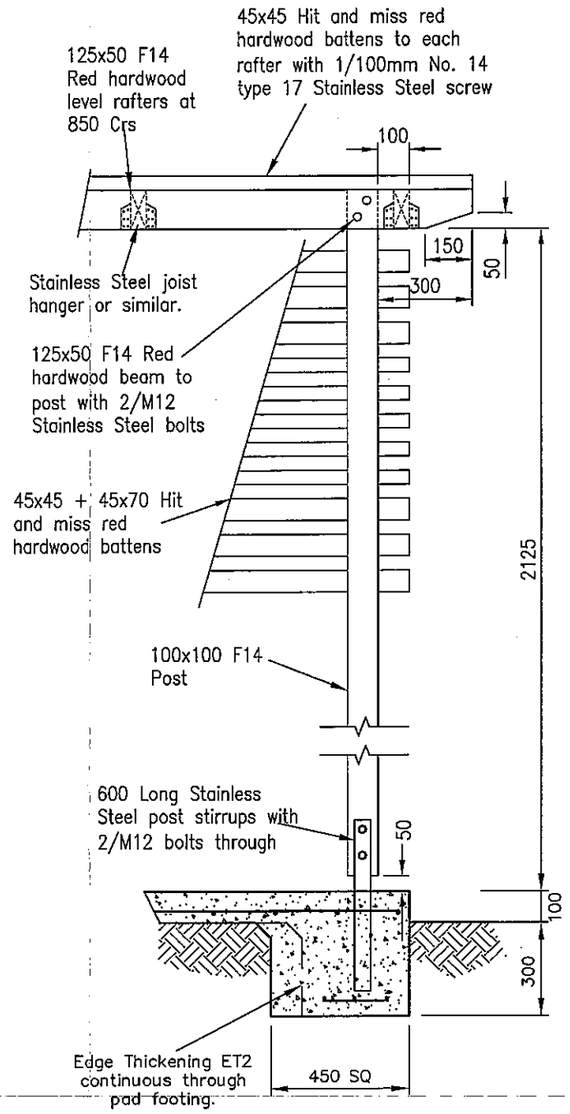
ASSOCIATED PLAN NUMBERS
P338-1 to P331-8

Drawing No.
P338 - 2



FOUNDATION PLAN

SCALE 1:50



Detail (B)

SCALE 1:20

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Scales: 1:20
0 0.2 0.4 0.6m
0 0.5 1 1.5m
1:50
Sheet A3 , Datum: A.H.D.

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			designed	Org signed by RMC 05/05
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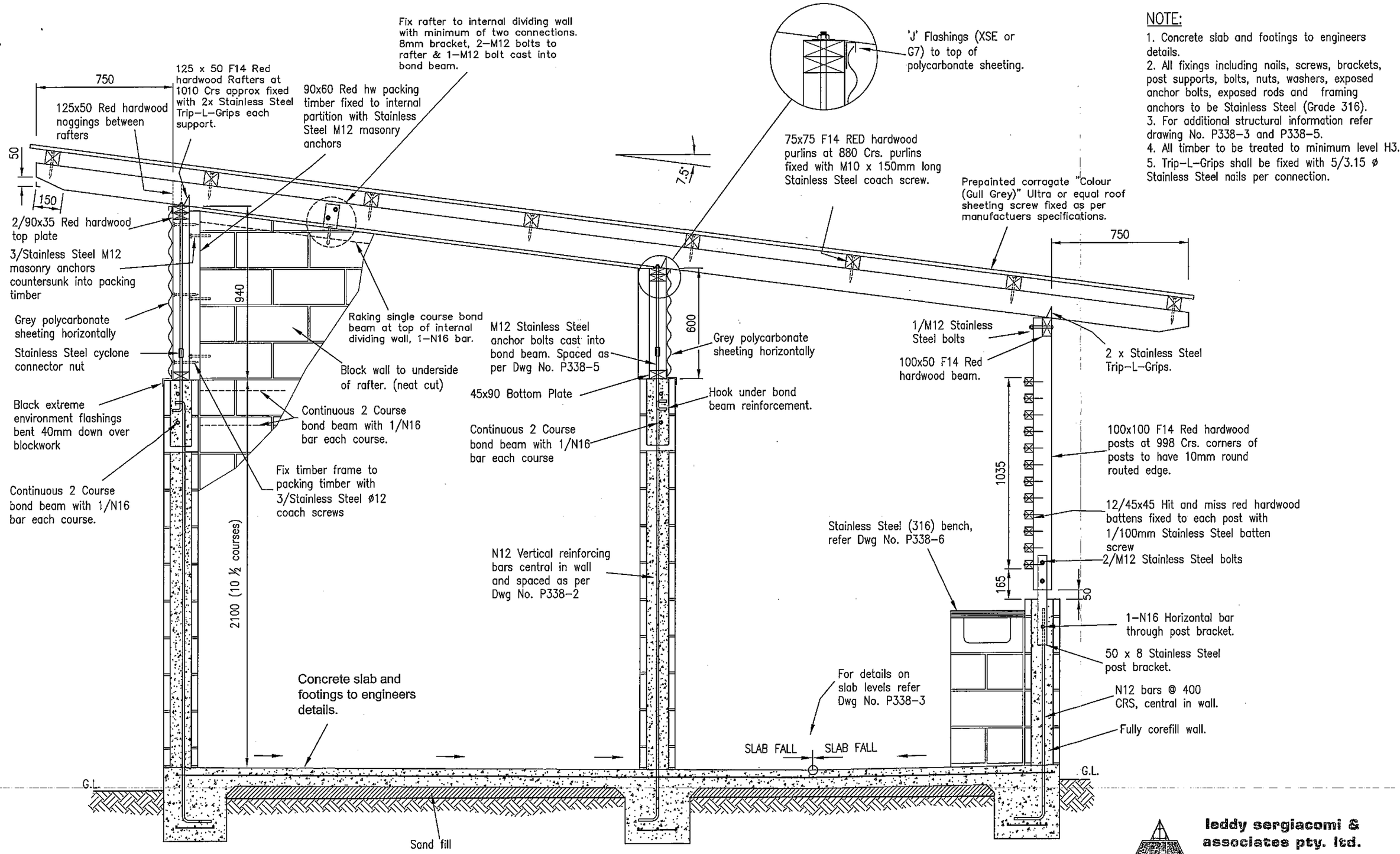
STANDARD PLAN
AMENITIES BUILDING
FOUNDATION PLAN

ASSOCIATED PLAN NUMBERS
P338–1 to P331–8

Drawing No.
P338 - 3



NOTE:

1. Concrete slab and footings to engineers details.
2. All fixings including nails, screws, brackets, post supports, bolts, nuts, washers, exposed anchor bolts, exposed rods and framing anchors to be Stainless Steel (Grade 316).
3. For additional structural information refer drawing No. P338–3 and P338–5.
4. All timber to be treated to minimum level H3.
5. Trip–L–Grips shall be fixed with 5/3.15 ø Stainless Steel nails per connection.

A P338-2 SECTION A-A

SCALE 1:20

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Scales:
0 0.2 0.4 0.6m
1:20
Sheet A3 , Datum: A.H.D.

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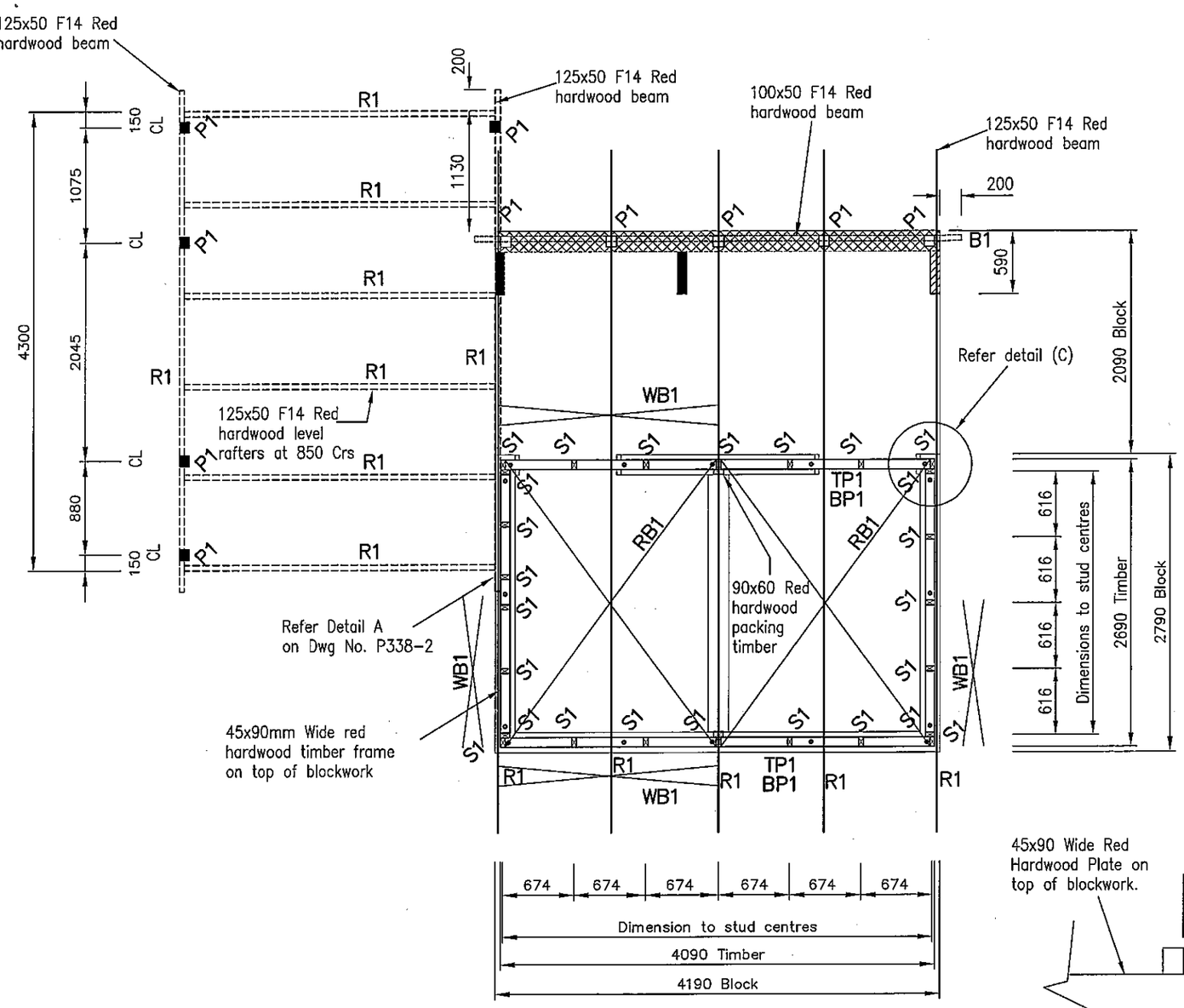
STANDARD PLAN AMENITIES BUILDING CROSS SECTION PLAN

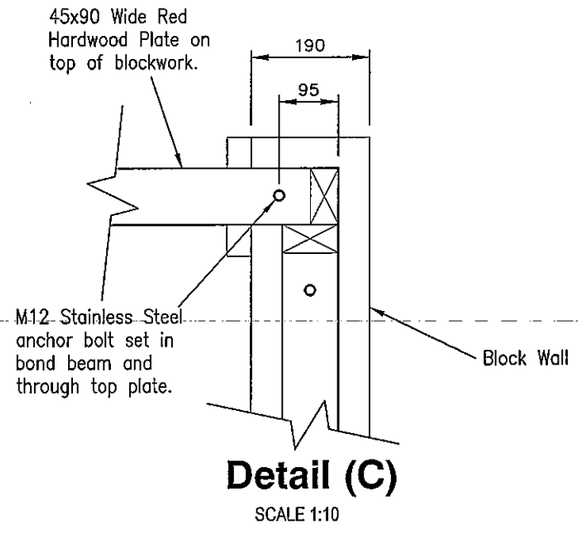
ASSOCIATED PLAN NUMBERS
P338–1 to P331–8

Drawing No.
P338 - 4



FRAMING PLAN

SCALE 1:50



Detail (C)

SCALE 1:10

TOILET BLOCK FRAMING LEGEND

MARK	MEMBER
R1	125x50 F14 Rafters
B1	100x50 F14 Beam
P1	100x100 F14 Post.
S1	45x90 Red Hardwood Studs
TP1	35x90 Red Hardwood Top Plate X 2
BP1	45x90 Red Hardwood Bottom Plate
RB1	Roof Brace See legend below
WB1	Wall Brace See legend below

LEGEND

- 90x45 Red hardwood studs
- M12 Stainless Steel anchor bolt set in bond beam and through top plate.
- 4 ½ Course 90mm concrete block wall
- 4 Course 90mm concrete block wall
- 4 ½ Course 190mm concrete block wall
- Cross brace to timber wall & roof. 30x1.2 Stainless Steel Strap (tensioned). Fix to wall with 1–No. 14 type 17 screw to each stud. Loop ends around wall plate & fix with two screws.

NOTE:
All 90mm concrete block walls to be filled with 20 MPa grout.

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29-11-05

Scales:
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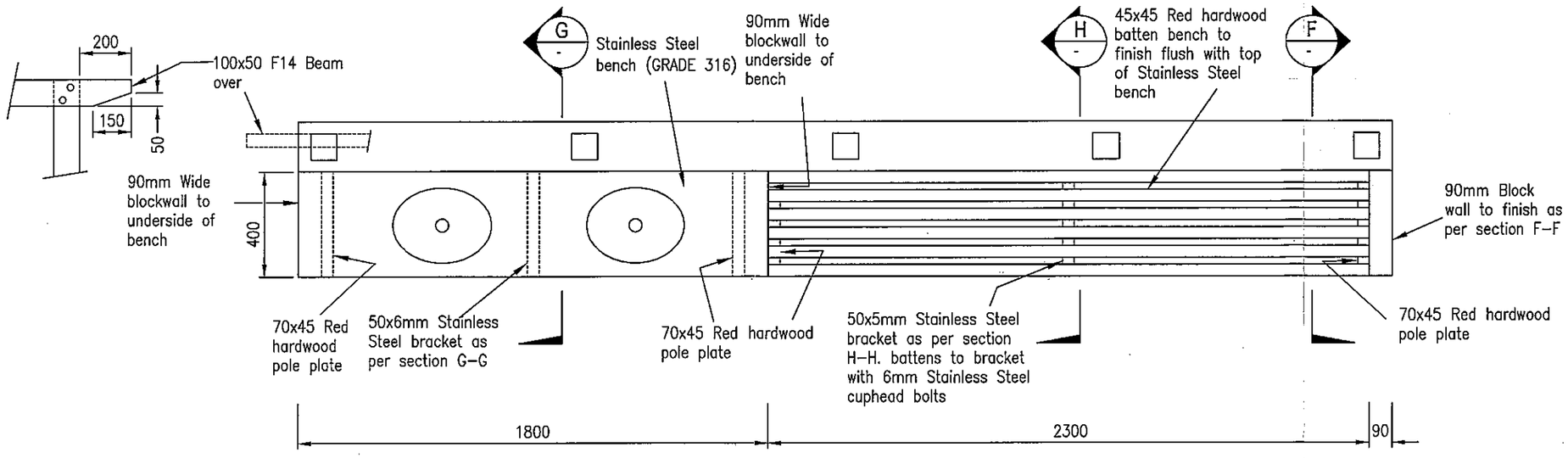
STANDARD PLAN
AMENITIES BUILDING
FRAMING PLAN

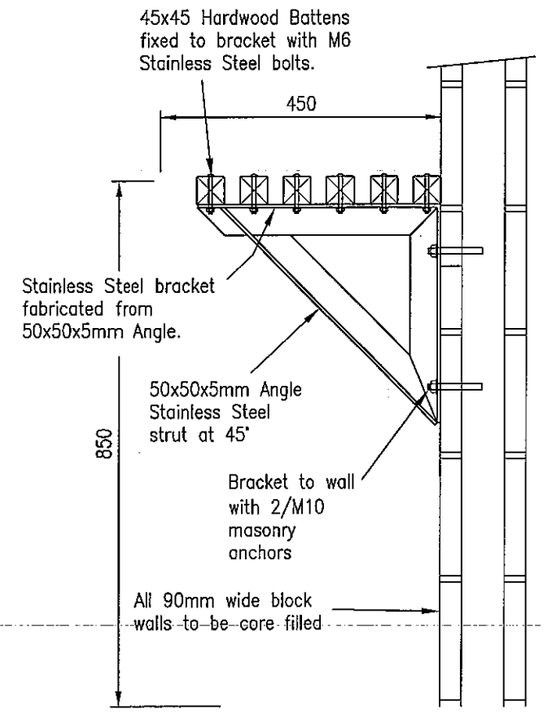
ASSOCIATED PLAN NUMBERS
P338-1 to P331-8

Drawing No.
P338 - 5



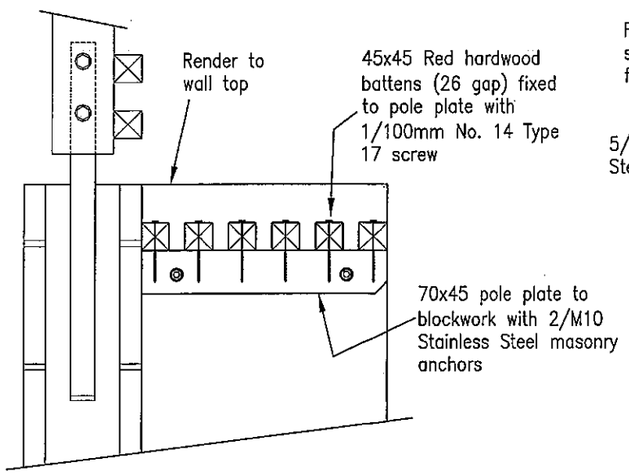
BENCH & SINK PLAN

SCALE 1:20



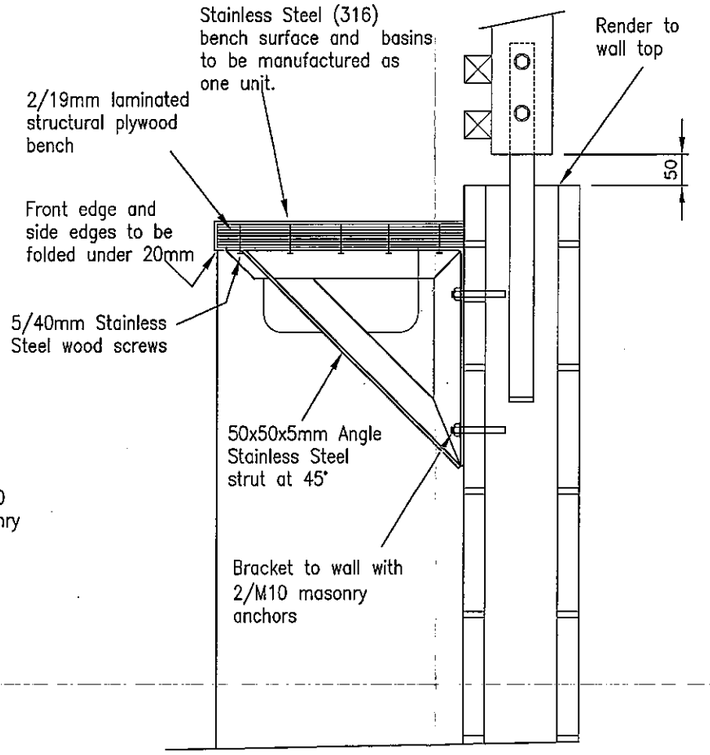
H — SECTION H-H

SCALE 1:10



F — SECTION F-F

SCALE 1:10



G — SECTION G-G

SCALE 1:10

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09-11-05

Scales: 1:10
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0 0.2 0.4 0.6m
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Sheet A3 , Datum: A.H.D.

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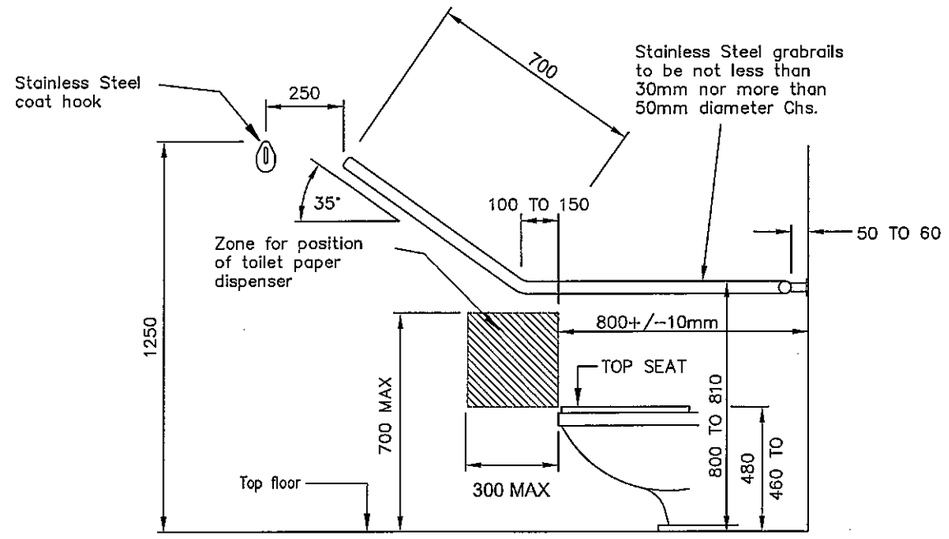
STANDARD PLAN
AMENITIES BUILDING
BENCH DETAILS

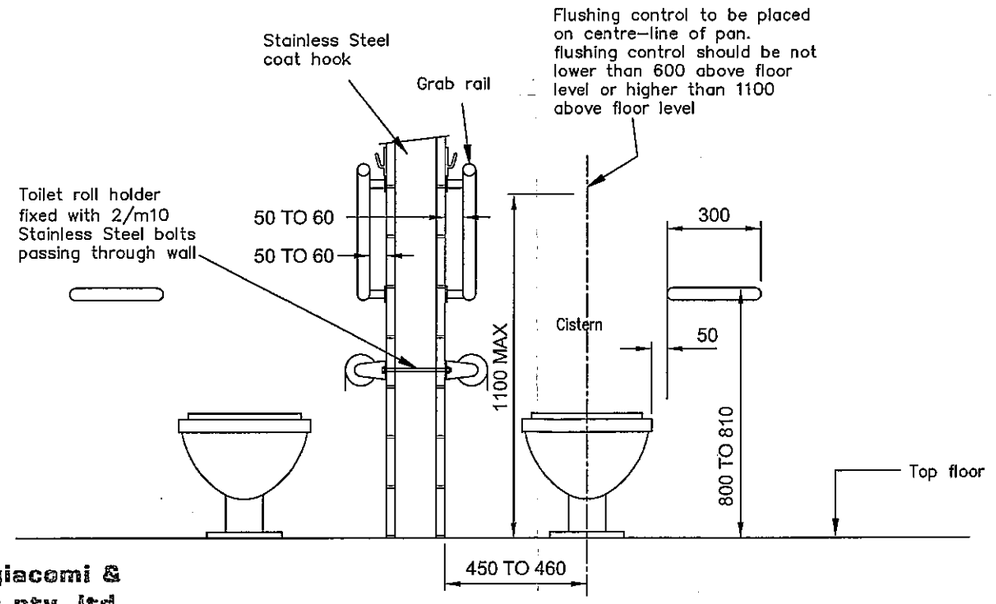
ASSOCIATED PLAN NUMBERS
P338–1 to P331–8

Drawing No.
P338 - 6



WC SIDE ELEVATION

GRAB RAIL
Scale 1:20



WC FRONT ELEVATION

GRAB RAIL
Scale 1:20

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PROJECT MANAGERS & PLANNERS
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29-11-05

Plumbing fixtures and fittings

1. Wall basins Concorde 500, 1 Tap hole white with D200 brackets.
2. The clearance under the washbasins when fitted in the confines of the unisex cubicle must conform with AS1428.1—2001 Figure 23. Front of hand basin to be 770 to 800 to top of basin above finished floor level.
3. Tapware Ram Easyclean ceramic disc with lever handle.
4. Toilet suites Concorde care pan white. Concorde mid—level cistern with extended flush pipe. Paramount single flap toilet seat white.
5. Toilet roll holders will be supplied by Council and hung by builder. Holders to be fixed with 2/M10 stainless steel bolts that pass through 90mm concrete block wall.
6. Stainless steel (grade 316) benches and basins to be manufactured as one unit. Each basin to have 1 tap hole and 1 spout hole.

NOTE — Plumbing fixtures are as specified from Tradelink Plumbing Supplies. Fittings equal to those specified are required if another supplier is used.

Concrete Work

1. Before placement of slab, builder to confer with project manager in relation to placement of any pipework or conduit for pump room.
2. All concrete work is to be executed in accordance with the current edition of :
   AS 3600 — SAA Concrete Structures Code.
   AS 1379 — Ready Mixed Concrete.
3. Characteristic compressive strength of the concrete (F'c) must not be less than 32 MPa at 28 days U.N.O.
4. The maximum size of aggregate shall be 20mm.
5. The concrete shall slump test at not less than 25mm and not more than 100mm.
6. All concrete to be vibrated.
7. Plastic chairs to be used to support reinforcement and give the correct concrete cover.
8. All top soil and upper strata containing organic matter is to be removed. Crusher dust pad to be placed and compacted to 95 M.M.D.D. in accordance with AS 1289 E 2.1.
9. Area below slab to be treated in accordance with AS 3660 for termite protection.
10. Floor slab to fall as indicated on Drawing No. (P338—3).
11. WC CONCRETE FLOORS TO BE BROOM FINISHED WITH LIGHT NYLON BROOM.
12. Hand basin area/walkway slab to be light broom finished coloured concrete (CCS colour "Biscuit" mixed into concrete by concrete supplier).

Structure

1. All external walls to be 190mm wide concrete blockwork. Blockwork to have rendered finish.
2. Roof sheeting to be Corrugated Zincalume for extreme environment (Metal Roofing Industries 'G8' or BHP 'XSE'). Sheeting to be fixed with screws to manufacturers specification.
NOTE: Extreme environment roofing may require an order lead time of approximately 3 weeks.
3. All flashings to be extreme environment standard (Metal Roofing Industries 'G8' or BHP 'XSE').
4. All fixings including nails, screws, bolts, nuts, washers, exposed anchor bolts and rods, grab rails and framing anchors to be stainless steel. All stainless steel to be marine grade 316.

Timber

1. All timber to be F14 unless noted otherwise on plans.
2. All timber to be treated to a minimum Level of H3.
3. All cuts, end grains and joins in timber MUST be primed before joining.
3. All timber to be belt sanded to remove splinters.
4. All timber to be arrised including all exposed end cuts.
5. Doors to be solid timber. All doors to have stainless steel indicator bolts. Self closing stainless steel hinges to be placed on doors (i.e.., hold door in closed position when not in use).
6. Door jambs to be hardwood.

Painting

1. All external blockwork including seat base to have a light textured rendered finish and painted with 1 coat of sealer/undercoat and two top coats of gloss acrylic (Bristol colour "Golden Fleece").
2. Internal blockwork to be painted with 1 coat of sealer/undercoat and two top coats of gloss acrylic (Bristol colour "Ice Cap").
3. Rafters, purlins, posts, beams, stud framing and batten screens to have either of the following timber treatments:
   * wash all timber with "Intergrain Timber Restorer", prime timber with one saturation coat of "Intergrain Dimension 4" all round (including all cuts, end grains, etc.) and finish with three top coats of "Intergrain DWD".
   OR
   * wash all timber with "Woodmans Wood Wash", prime timber with one saturation coat of "Woodmans Prime—all" all round (including all cuts, end grains, etc.) and finish with three top coats of "Woodmans Decks".

4. Doors, seat timber and bench timber to have one coat of timber primer and two top coats of gloss acrylic (Bristol colour "Night Tide").

Drainage and Water Connection

1. All plumbing and drainage to comply with the Sewerage and Water Supply Act, Sewerage and Water Law, Australian Standards 3500 and council requirements.
2. No hot water will be supplied to amenities block.

Electrical

1. Electrical work to carried out by council electrician (Ph. 0438 505587) .
2. Council electrician to be notified by builder prior to placement of slab so as to be aware of any required electrical conduit placement.

Access and Mobility

1. All construction fixtures and fittings must comply with AS1428.1—2001
2. The door in—use indicator should be fitted between 900mm and 1100mm from the plane of the finnished floor (AS1428.1—2001 Clause 11.1.2(a). Door catches to be Hafele Indicator Bolt ILC Reference NO 81.56.009 or similar.

Signs

1. The signage positioning for the left and right—hand unisex toilets should be in accordance with The Building Code Of Australia Part D3.6 paragraph 2.1(a)(i).
Signs to be supplied by Council and hung by builder.
Signs include : 2 x 'UNISEX'.
2. For supply of signs and toilet roll holders, contact Parks Supervisor, on Ph. 41505585 or Mob. 0414 529703.

Scales: 1:10
0 0.1 0.2 0.3m
0 0.2 0.4 0.6m
1:20
Sheet A3 , Datum: A.H.D.

Revisions			
		drawn	Org signed by MLP 05/05
		checked	
		designed	Org signed by RMC 05/05
		checked	

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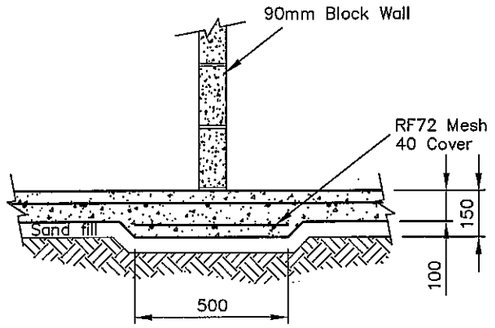
General Manager of Engineering Operations

STANDARD PLAN
AMENITIES BUILDING
FIXTURES LAYOUT DETAILS

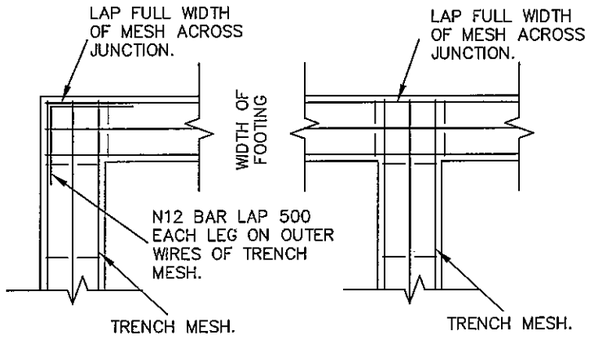
ASSOCIATED PLAN NUMBERS
P338—1 to P331—8

Drawing No.
P338 - 7



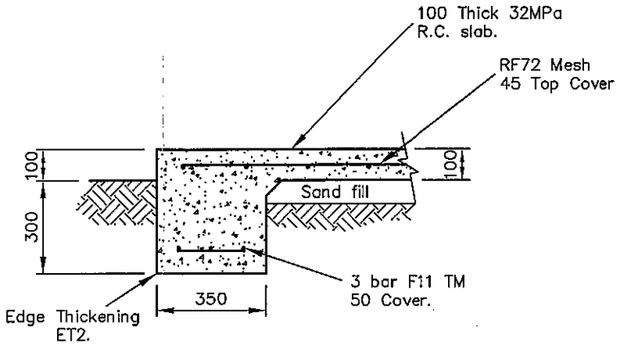
SLAB THICKENING - ST1

SCALE 1:20



TYPICAL CORNER & T-JUNCTION DETAIL

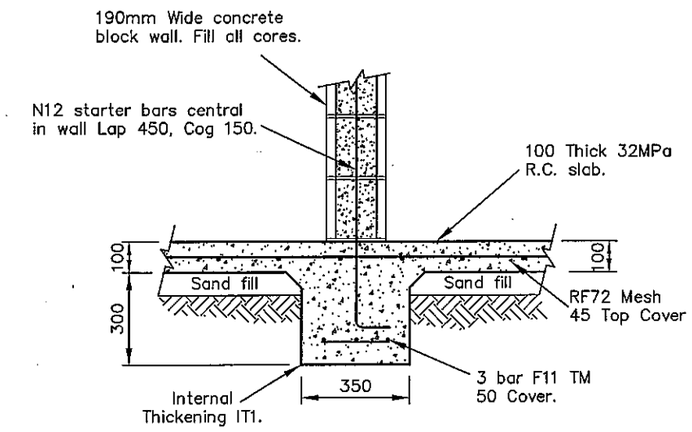
NOT TO SCALE



A — SECTION A-A

SCALE 1:20

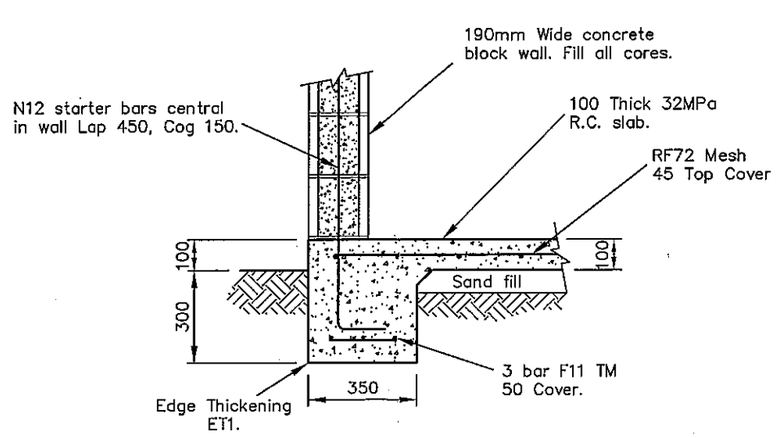
ET2



B — SECTION B-B

SCALE 1:20

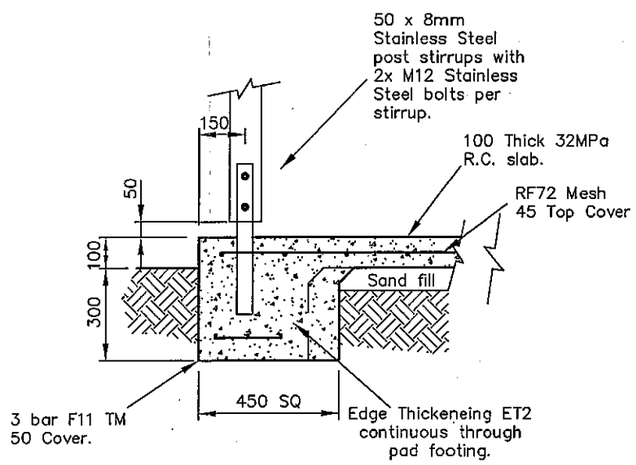
IT1



C — SECTION C-C

SCALE 1:20

ET1



D — SECTION D-D

SCALE 1:20

leddy sergiacomi & associates pty. ltd.
ENGINEERING & ENVIRONMENTAL CONSULTANTS
PROJECT MANAGERS & PLANNERS
PO Box 712 Bundaberg Qld 4670

29-11-05

Scales: 1:20

0 0.2 0.4 0.6m

Sheet A3 , Datum: A.H.D.

Revisions			
		drawn	Org signed by MLP 11/05
		checked	
		designed	Org signed by GB 11/05
		checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

AMENITIES BUILDING FOOTINGS PLAN SITE CLASSIFICATION "S"

ASSOCIATED PLAN NUMBERS
P338-1 to P331-8

Drawing No.

P338 - 8

BURNETT SHIRE COUNCIL STANDARD DRAWINGS

ROADS

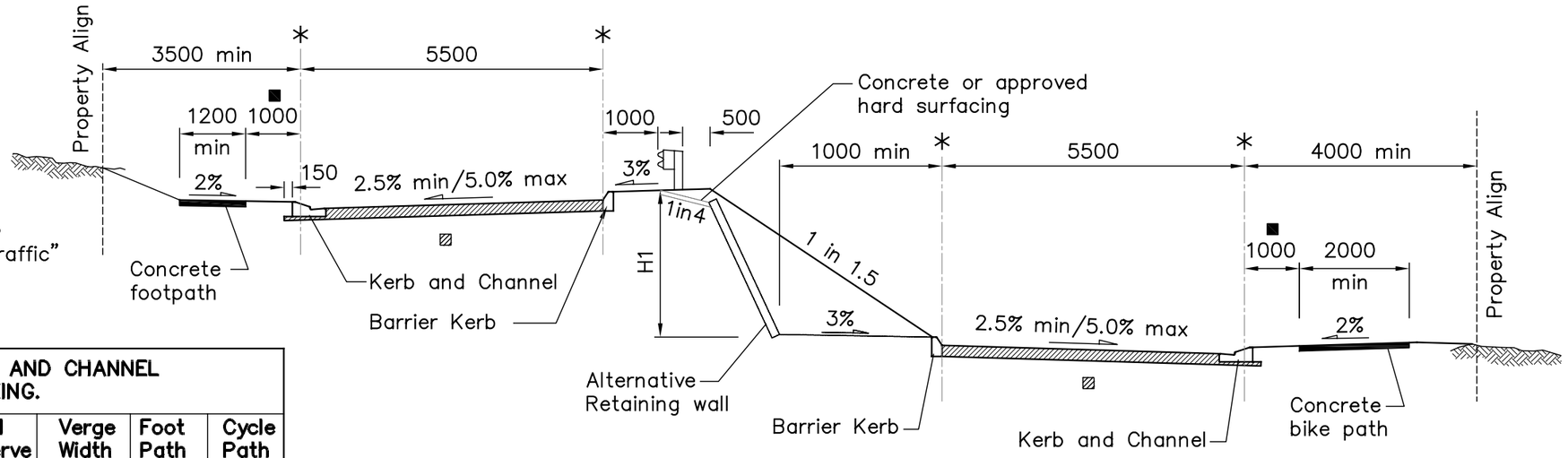
Number	Title /Topic
	Type Cross Sections
R101	Residential, Rural Residential and Split Level Roads.
R102	Rural Roads.
R103	Verge Profiles.
R104	Industrial Access Road and Commercial Laneway.
	Driveways
R111	Residential Slabs and Tracks.
R112	Commercial Slab - Two Way Access.
R113-1	Rural and Urban Accesses Requiring Culverts.
R113-2	Rural and Urban Accesses.
R114	Standard Details Invert Crossing.
	Floodways
R115	Flood Gauge Post
	Footpaths
R116	Concrete Strip Footpaths for Unstable Site (H) or Greater.
R116-1	Concrete Strip Footpaths Stable Site.
	Kerb and Channel
R121	Kerbs, Channels and Inverts - Profiles and Dimensions.
R122	Invert Crossing Layout Details For Kerb Types KC1 And KC2.
R124	Kerb Ramp.
	Public Utilities
R131	Typical Service Conduit Sections.
R152	Conduit / Service Road - Crossing Details

ROADS (continued)

Number	Title /Topic
	Road Edge Guide Posts
R136	Road Edge Guide Posts Types And Spacings.
	Signs
R117	Location Plan of Rural Addressing Number Post
R141	Street Name Sign And Post.
R142	Sign Footings And Locations.
R143	Arrangement of Warning Signs At Detours.
R144	Bus Stop Sign Details.
R145	Arrangement of Warning Signs At Side Tracks.
R146	Arrangement of Warning Signs At Traffic Through Work Site.
R147	Arrangement of Warning Signs Where Roadworks Are In Centre Of Carriageway.
R148	Arrangement of Warning Signs Where Roadwork Is On Road Shoulder.
R149	Arrangement of Speed Limit Signs At Roadworks.
	Subsurface Drainage
R151	Side Drains, Mitre Drains And Seepage Drains Under Road Pavement.

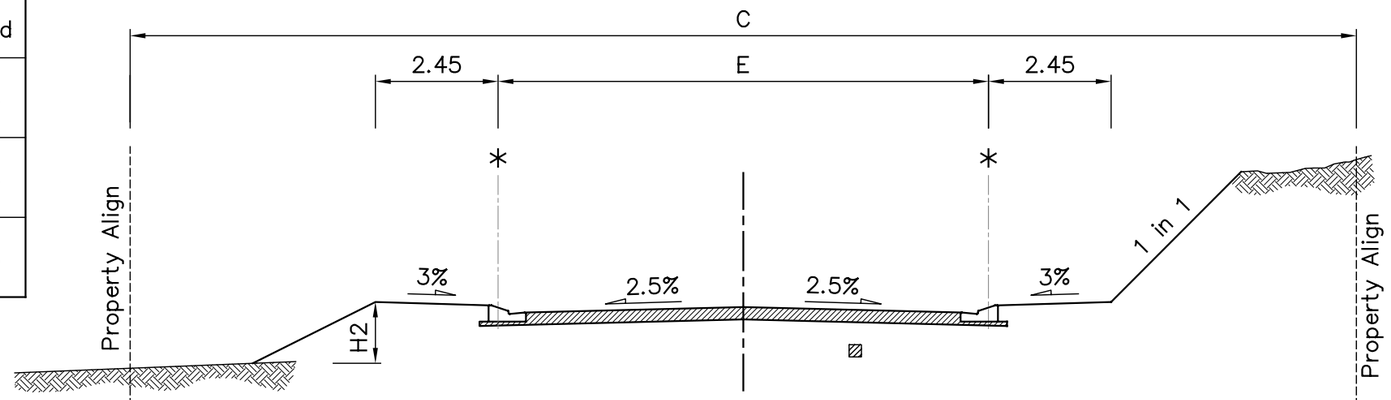
LEGEND

- ● Road reserve may be 20m if all services can be accomodated.
- ✳ Nominal kerb line.
- ■ Unless otherwise specified.
- ▨ Pavement design in accordance with "Austroads APRG–Rpt–21 A Guide to the Design of Pavements for Light Traffic"



SPLIT LEVEL RESIDENTIAL STREET

URBAN RESIDENTIAL ROADS WITH KERB AND CHANNEL INCLUDING ON STREET PARKING.								
Road Class	**Daily Traffic Typical**	**Access Control**	**Design Speed**	**Nom. Road Width E**	**Road Reserve Width C Min**	**Verge Width Min.**	**Foot Path**	**Cycle Path**
Principal Shire Roads	<6,000	Yes	80	12	27	7.5	With Bike way	Off Road
Trunk Collector Streets	<6,000	Yes	60	12	25	6.0	With Bike way	Off Road
Collector Street	<3,000	No	50	10.5	25●	4.475	Yes	No
Access Street	<1,000	No	50	9	20	5.5	Yes	No
Access Place	<250	No	40	7	15	4.0	No	No



URBAN ROAD

WITH KERB AND CHANNEL.
FOR RURAL RESIDENTIAL ROADS WITHOUT KERB AND CHANNEL, REFER STANDARD DRAWING NO. R102.

NOTES

1. One access point to be constructed to each lot at a maximum grade of 1 in 6 See R111 for details.
2. Where H2 is less than 0.5 the batter slope (S) is to be 1 in 4 max. Where H2 is greater than or equal to 0.5 the batter slope (S) is to be 1 in 2 max.
3. Extra earthworks may be advisable at driveways to provide better visibility.
4. All dimensions are in metres.
5. An approved guardrail shall be installed when H1 (top of kerb to top of kerb) exceeds 1.5m.
6. Carriage way widths may be altered if off road parking is provided.

Scales: 1 : 100

0 1 2 3m

Sheet A3 , Datum: A.H.D.

A	Revision to details	MLP 8/04	drawn	Org signed by BDF 05/98	
B	Revision to details	MLP 4/05	checked		
			designed		
			checked		
Revisions					

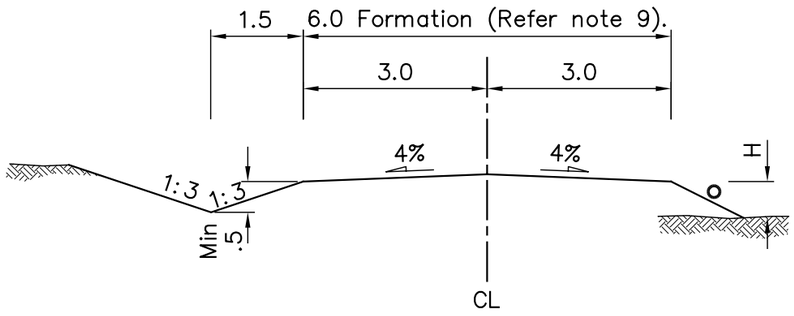
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

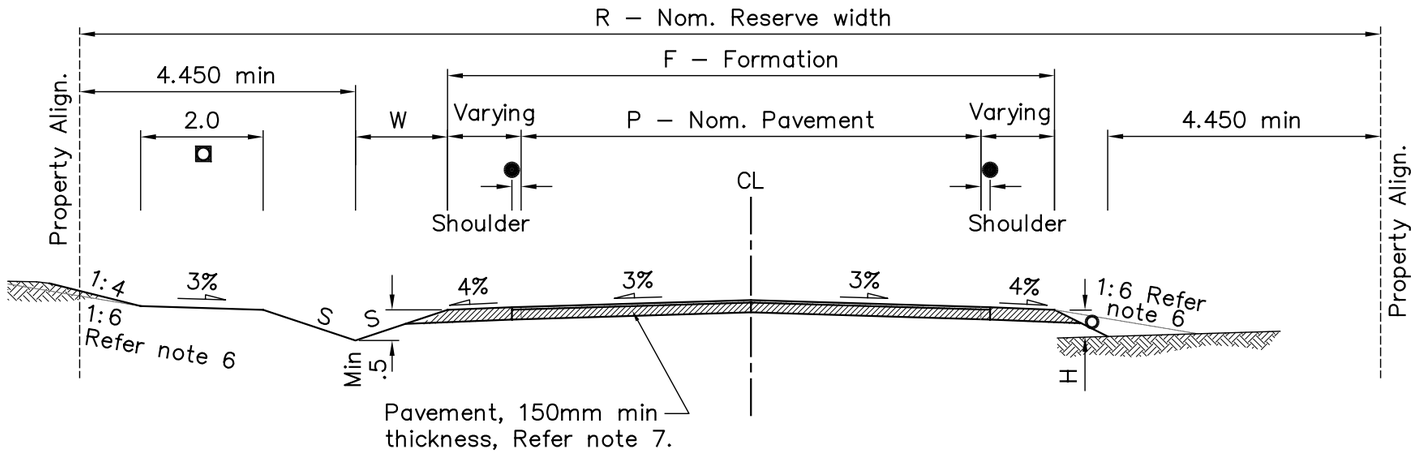
TYPE CROSS SECTIONS URBAN ROADS AND SPLIT LEVEL ROADS

Drawing No. R101

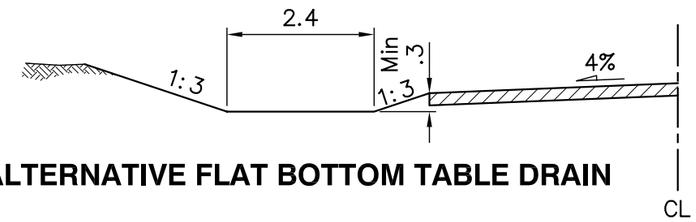
A B



FORMED ACCESS



RURAL ACCESS/CONNECTOR/PRINCIPAL ROAD



ALTERNATIVE FLAT BOTTOM TABLE DRAIN

Road Classification	Nominal A.A.D.T.	Design Speed	P	F	R	W Width	S Slope
Access	–	–	Gravel	6	15	1.5	1 in 3
Access Road	50–250	80	6.1	8.1	25 ■	1.5	1 in 3
Connector Road	250–750	100	7.1	8.1	25 ■	2.0	1 in 4
Principal Road	>750	100	9	9	30	2.0	1 in 4

LEGEND

- ● 150mm min pavement overlap.
- o Where H is smaller than 0.5m batter is to slope 1 in 6. Where H is greater than or equal to 0.5m batter is to slope 1 in 3.
- ■ Road reserve may be 20m if all services can be accommodated.
- ◘ Berm for services where specified.
- ▨ Pavement design in accordance with "Austroads APRG–Rpt–21 A Guide to the Design of Pavements for Light Traffic"

NOTES

1 Table drains steeper than 5% (1:20) should have erosion protection measures installed.
2. Cut batter slopes may be varied on site to ensure long term stability of batters.
3. Minimum logitudinal slope of table drain inverts shall be 0.3% (1 in 333).
4. Floodways shall be constructed with cross road drainage as per contract documents.
5. Unsealed roads shall be designed using parameters set out in AUSTROADS "Unsealed 6. Roads Manual" unless noted otherwise in project drawings. One access point to be constructed to each lot in accordance with
7. Standard Drawings R113–1 & R113–2. For pavement design requirements refer project drawings.
8. All dimensions are in metres unless shown otherwise. 8. Final dimensions for formed access road to be determined by Councils Engineer
10. Table drain may be varied from "V" drains to flat bottom with min width of 2.4m & side slopes of 1 in 3 as directed by Councils Engoneer..

Scales: 1 : 100

0 1 2 3m

Sheet A3 , Datum: A.H.D.

A	Revision to details	MLP 8/04	drawn	Org signed by BDF 05/98
B	Revision to details	MLP 4/05	checked	
			designed	
			checked	
Revisions				

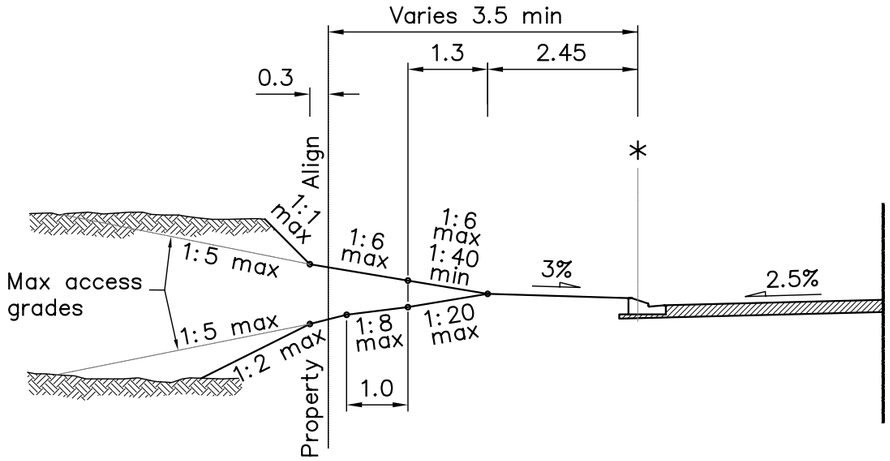
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

TYPE CROSS SECTIONS RURAL ROADS

Drawing No. R102

A B



STANDARD VERGE WITHOUT PATHWAYS

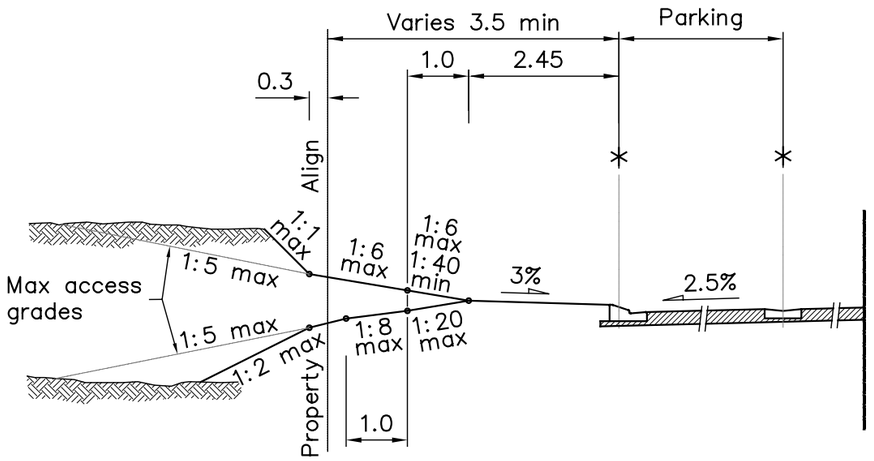
LEGEND

* Nominal kerb line.

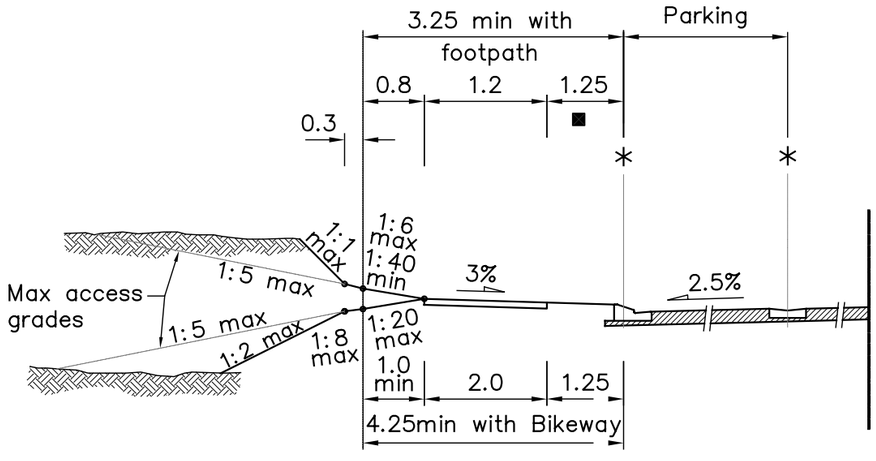
■ Unless otherwise specified.

NOTE

1. All dimensions in metres.



VERGE AT PARKING BAYS



VERGE WITH PARKING BAYS AND PATHWAYS

Scales: 1 : 100

0 1 2 3m

Sheet A3 , Datum: A.H.D.

A	Revision to details	MLP 8/04	drawn	Org signed by BDF 05/98
B	Revision to details	MLP 3/05	checked	
			designed	
			checked	
Revisions				

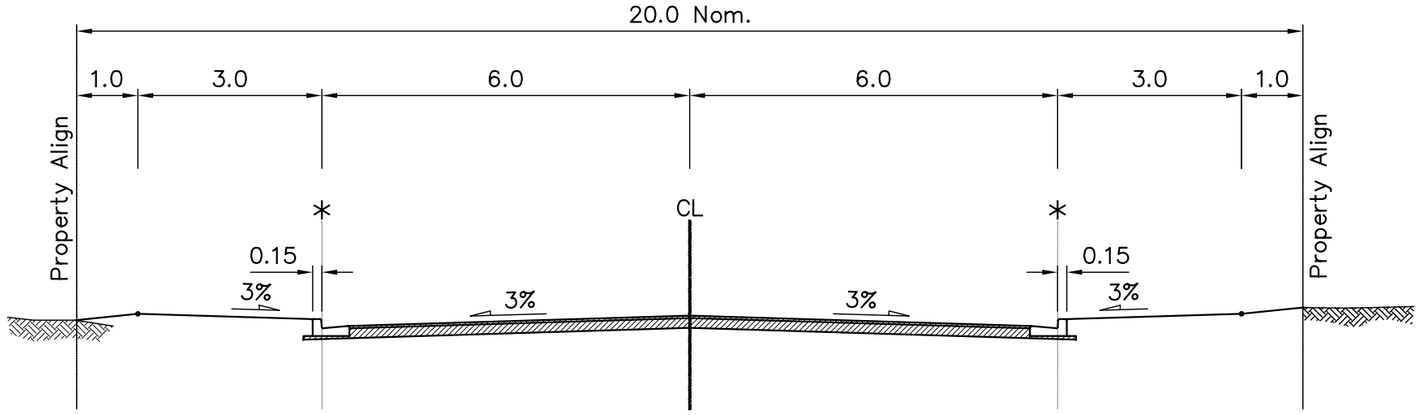
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

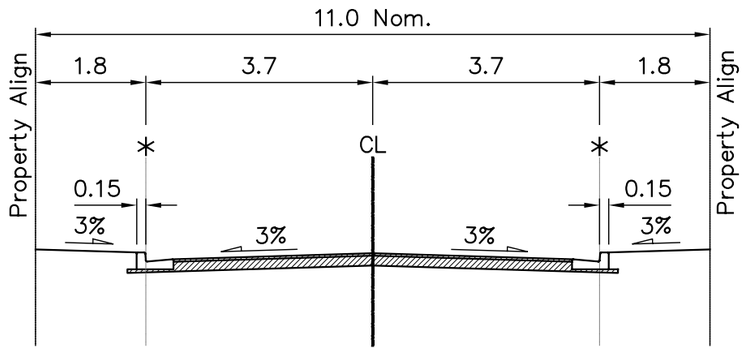
TYPE CROSS SECTIONS
VERGE PROFILES

Drawing No.
R103

A | B



INDUSTRIAL ACCESS ROAD



COMMERCIAL SERVICE LANEWAY

LEGEND

∗ Nominal kerb line.

NOTES

1. For pavement design requirements refer project drawings.
2. All dimensions are in metres.

Scales: 1 : 100

0 1 2 3m

Sheet A3 , Datum: A.H.D.

A	Revision to details	MLP 8/04	drawn	Org signed by BDF 05/98	
B	Revision to details	MLP 3/05	checked		
			designed		
			checked		
Revisions					

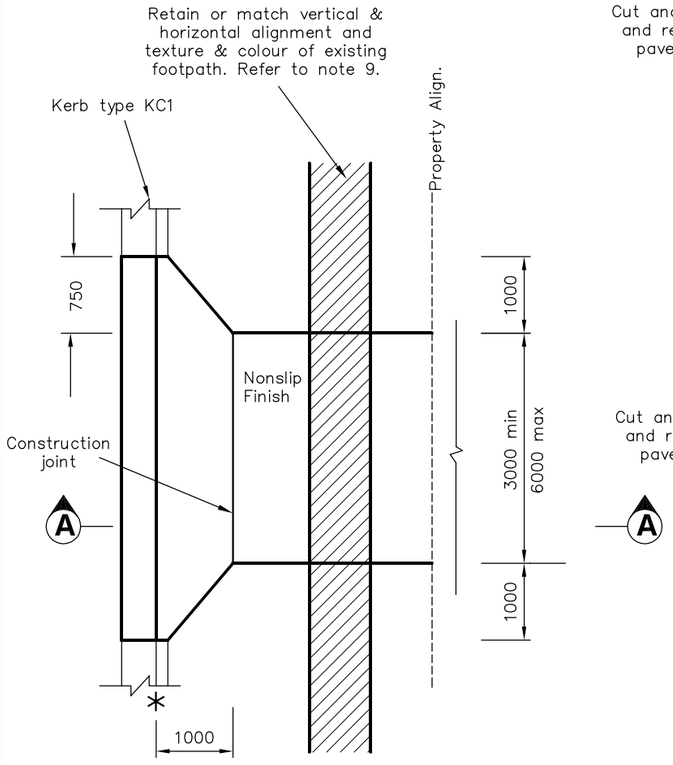
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

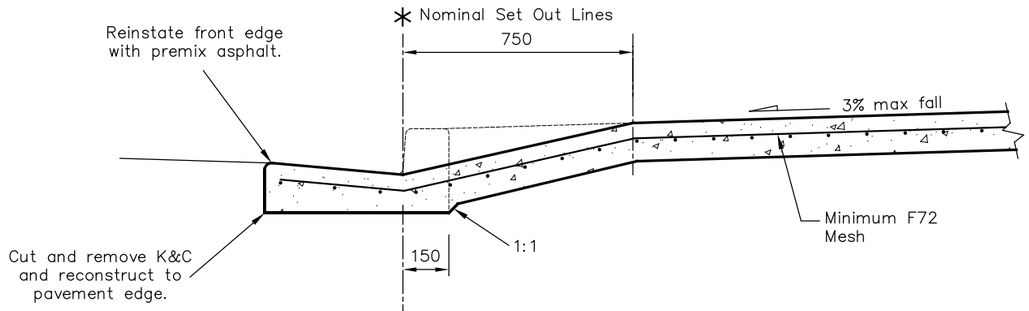
TYPE CROSS SECTIONS INDUSTRIAL ACCESS ROAD AND COMMERCIAL LANEWAY

Drawing No. R104

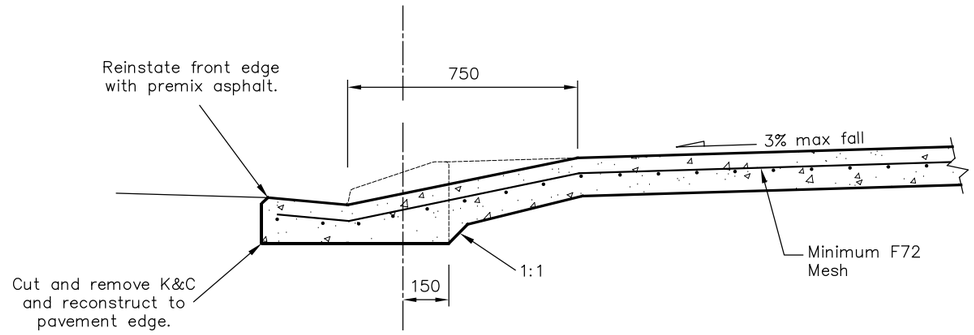
A B



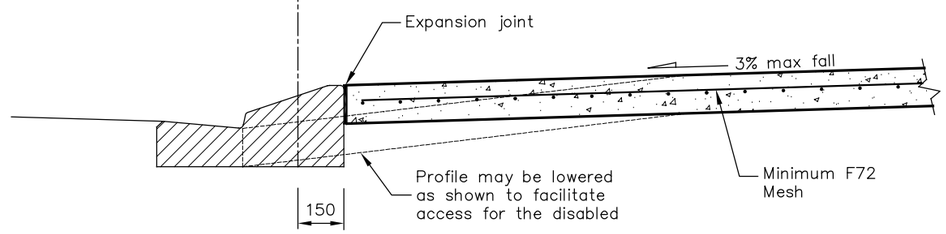
SLAB ABUTTING KERB TYPE KC1



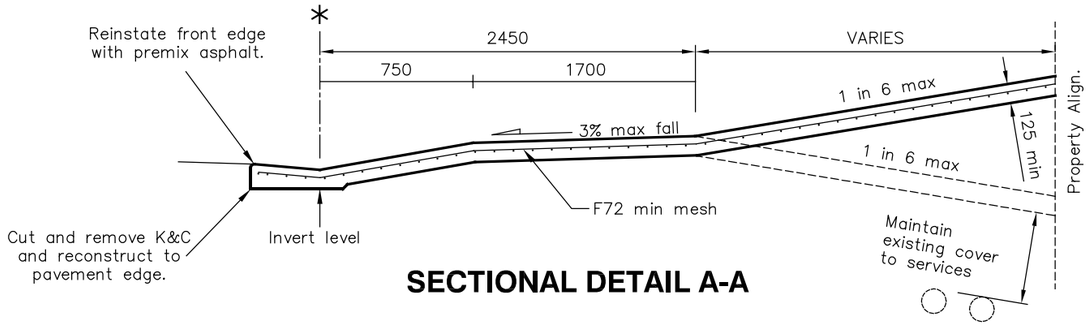
SLAB TO KERB TYPE KC1-BREAKOUT



SLAB TO KERB TYPE KC2 OR KC3-BREAKOUT



SLAB TO BACK OF KERB TYPE KC2 OR KC3



SECTIONAL DETAIL A-A

LEGEND

*	Nominal kerb line.

NOTES

1. Crossings are not designed for commercial vehicles.

2. Footpath section to vary where necessary to match concrete footpaths and verge profiles. Footpath earthworks adjoining concrete must be well compacted.

3. Concrete surface tolerance to be over 3 metre sections. +5mm −0mm

4. Concrete N25 in accordance with AS 1379 and AS 3600.

5. Reinforcement mesh to AS 1304, 50 top and and edge cover. Lap mesh 250.

6. Expansion joints to be 10 thick, full depth closed cell cross linked polyethelene foam (85 – 150 kg/m3).

7. All dimensions in millimetres.

8. Driveways to have a construction joint at property boundary.

9. Council will not guarantee reinstatement on non–standard concrete finishes if council need to access infrastructure under driveway (eg. pipes, etc) or provide concrete footpath across driveway.

10. Should concrete footpaths exist or be required in the area, then the the concrete footpath will be continuos through the proposed driveway access. Construction to conform to other details shown on this plan & AS1428.1–2001

11. For driveway work in sandy areas. Council may permit the existing kerb & channel be saw cut at the invert or nominal kerb line and removal of the kerb.

12. Refer BSC R114 for Standard plan details.

Scales:

NOT TO SCALE

E	Revision to details	MLP 8/04	drawn	Org signed by BDF 4/98
B	General Revisions	CNP 1/03	checked	
C	General Revisions	PC 9/03	designed	
D	General Revisions	DG 2/04	checked	
Revisions				

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

RESIDENTIAL DRIVEWAY SLABS

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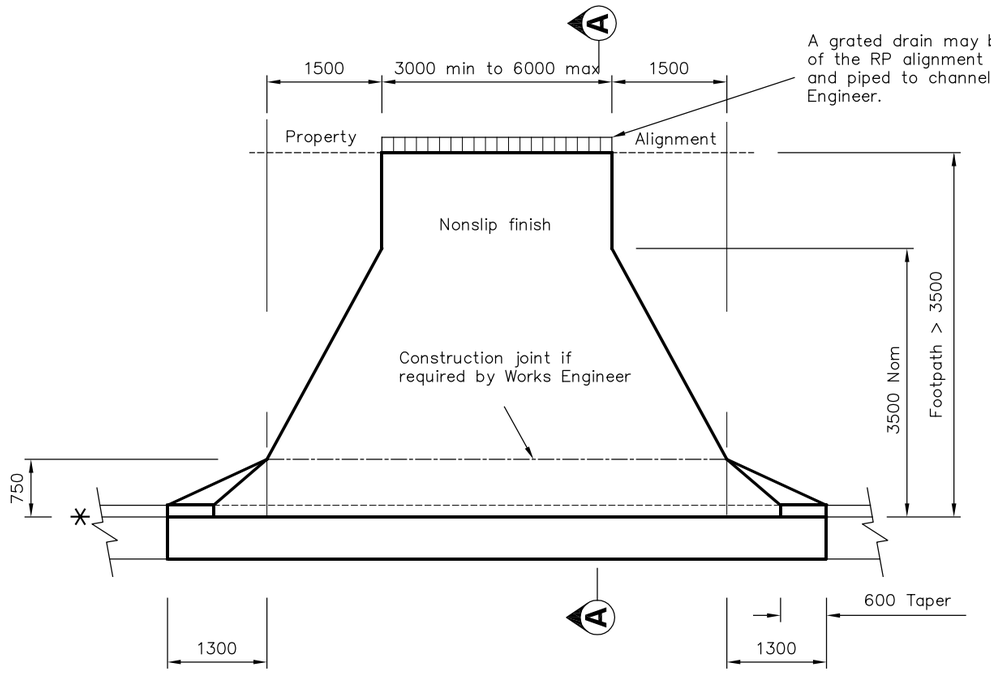
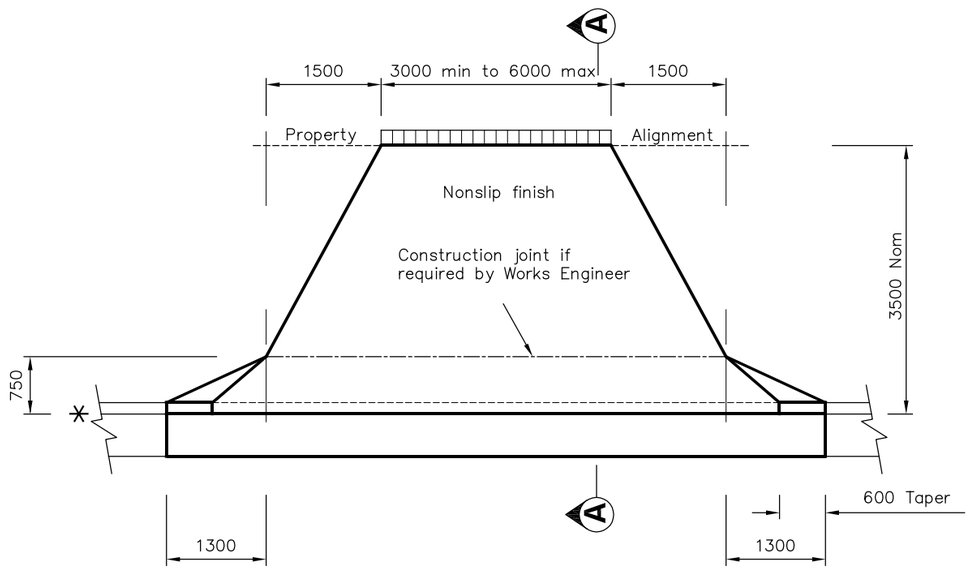
Drawing No. R111

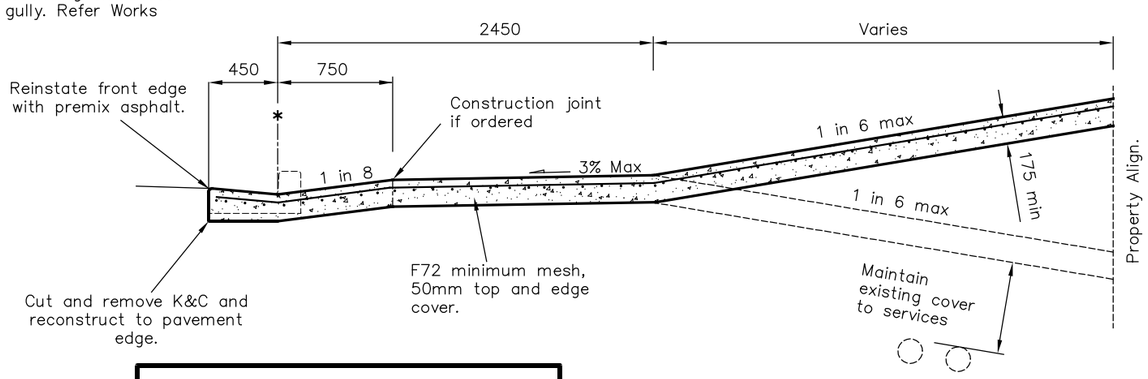
E B C D



PLAN - WIDE VERGE



PLAN - 3.5m WIDE VERGE



SECTIONAL DETAIL A-A

LEGEND

* Nominal kerb line.

NOTES

1. Concrete N32 in accordance with AS1379 and AS3600.
2. Reinforcing mesh to AS1304. Lap mesh 250mm.
3. Depths of concrete and reinforcing steel shown are the minimum requirements for good foundation conditions, and average traffic loading. Where this does not apply, depths of concrete and reinforcing shall be increased to suit specific conditions.
4. Design of crossings may vary with the approval of Council. Refer project drawings.
5. Reprofile adjacent footpath to match driveway. Footpath earthworks adjoining concrete must be well compacted.
6. Existing footpath profile to be maintained where possible.
7. Compaction for subgrade 95% standard to AS1289.5.1.1.
8. Where subgrade is less than CBR 5, excavate and provide imported material to the satisfaction of the Works Engineer.
9. Driveway to be concrete with a construction joint at the property boundary unless otherwise approved.
10. All dimensions in millimetres.
11. Council will not guarantee reinstatement on non–standard concrete finishes if council need to access infrastructure under driveway(eg. pipes, etc) or provide concrete footpath across driveway.
12. Should concrete footpaths exist or be required in the area, then the concrete footpath will be continous through the proposed driveway access. Construction to conform to other details shown on this plan & AS1428.1–2001.

Scales:

NOT TO SCALE

Sheet A3 , Datum: A.H.D.

E	General Revisions	MLP 8/04	drawn	Org signed by BDF 8/98
B	General Revisions	PC 9/03	checked	
C	General Revisions	DG 2/04	designed	
D	General Revisions	DG 3/04	checked	
Revisions				

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General Manager of Engineering Operations

INDUSTRIAL AND COMMERCIAL DRIVEWAY SLAB TWO WAY ACCESS

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Drawing No. R112

E B C D

NOTES

1. The Council Representative shall be notified before work commences to grant permission to perform works on the road reserve.

2. The pipe or box culvert size under the access shall be fixed by a Council Representative. If the table drain is too shallow for a culvert, a concrete invert maybe required (see R113–2).

3. The contractor should determine the depth of pavement to suit work area after excavation. However the minimum depth of pavement is to be 150mm of CBR 60. Should Bitumen sealing be required, it shall be a two coat hot or cold seal with 16mm & 10mm aggregate to Council standards.

4. For Traffic control and safety, the minimum requirements from the Manual of Uniform Traffic Control Devices (MUTCD) must be in place before work commences.

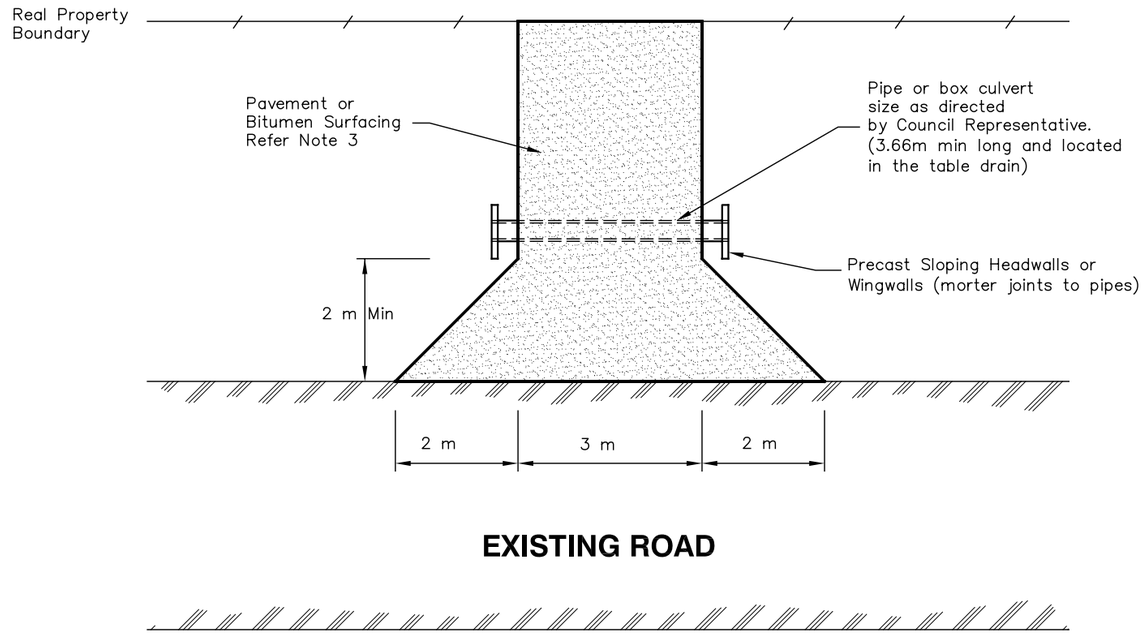
5. No point of the completed access shall be no higher then edge of bitumen road less 50mm.

6. Rural pipe crossings shall have precast endwalls or 'Sloping' type headwalls for single/mulitiple pipes where directed. Where precast headwalls are not available, use wingwalls cast in situ as per Main Roads drawings 1304, 1305 & 1306.

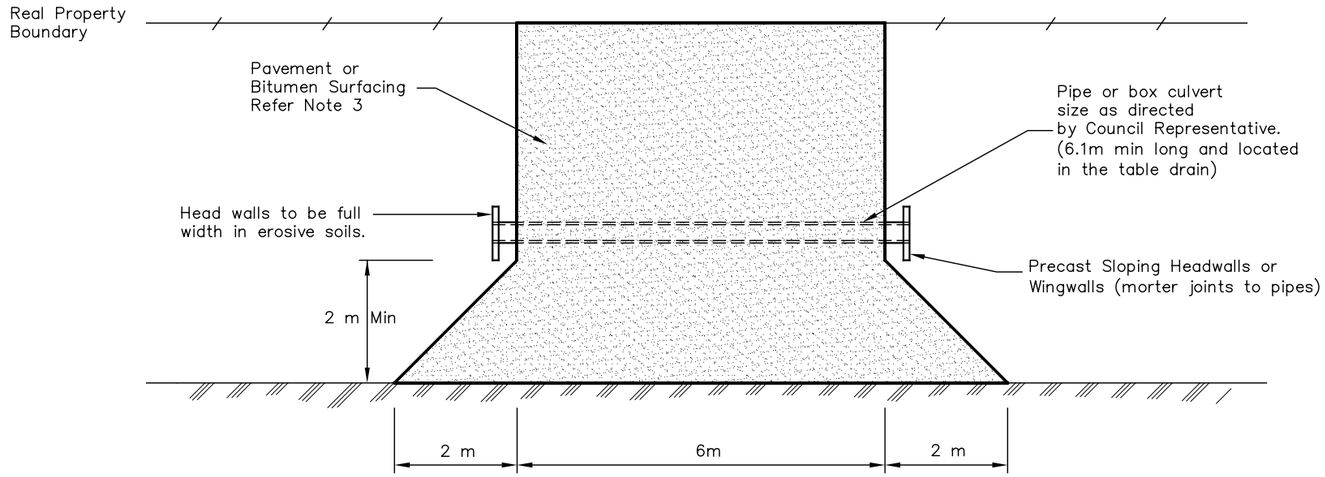
7. Urban pipe crossings shall have precast headwalls with wings (or equal to CSR Humes Headwalls) for single/multiple pipes or a cast in situ endwall as per Main Roads drawings 1304, 1305 & 1306.

8. Council may however direct the use of sloping headwalls if required in lieu of the above rural/urban pipe crossing headwall.

PROPERTY	RECOMMENDED SIZE	AUTHORISED



TYPE A - SINGLE ACCESS WITH CULVERT



TYPE B - DOUBLE ACCESS WITH CULVERT

Scales: NOT TO SCALE

Sheet A3

A	General Revisions	CNP 1/03	drawn	Org signed by BDF 4/98
B	General Revisions	RMC 5/04	checked	
C	General Revisions	MLP 8/04	designed	
			checked	
Revisions				

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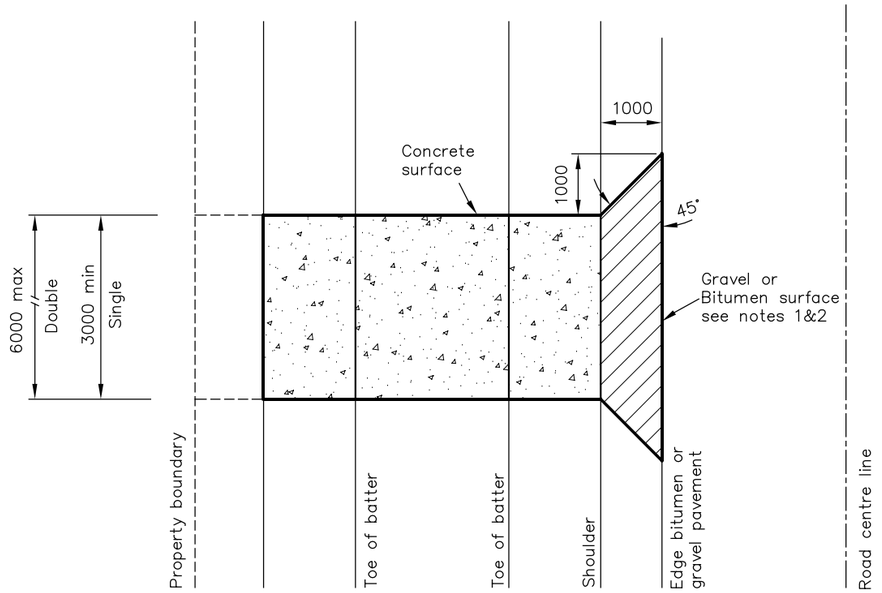
General Manager of Engineering Operations

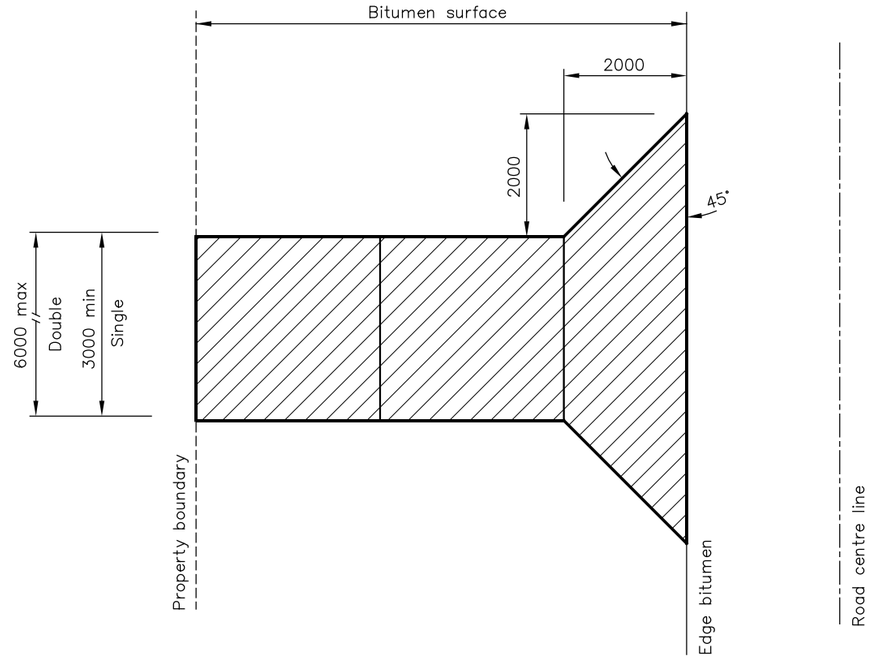
RURAL AND URBAN ACCESSES REQUIRING CULVERTS NO KERB AND CHANNEL

Drawing No. R113-1

A B C



PLAN VIEW TYPE C - ACROSS TABLE DRAIN



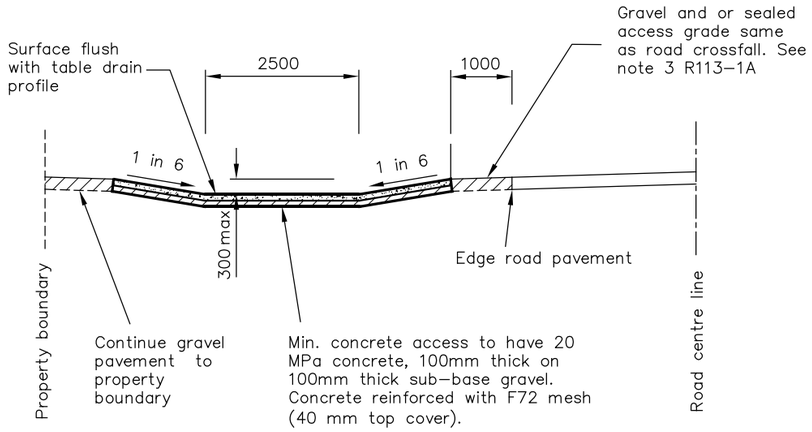
PLAN VIEW TYPE D - FALLING FROM ROAD EDGE

Type C - Notes:

1. Subgrade preparation as per roadworks specification. The contractor should determine the depth of pavement to suit work area after excavation. However the minimum depth of pavement is to be 150mm of CBR 60.

2.Broom finish to concrete surface.

3. Finished concrete (or gravel) surface to be flush with table drain profile.



TYPICAL SECTION - TYPE C

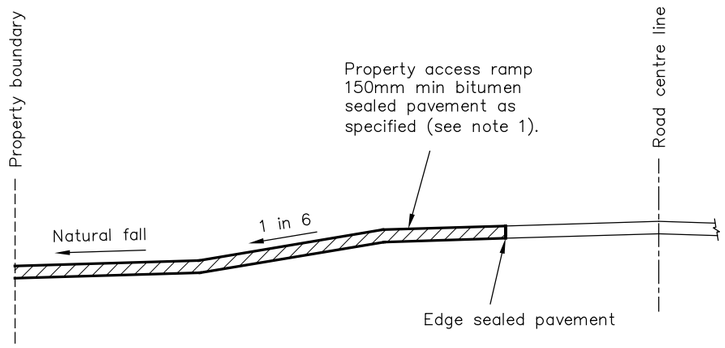
Type D - Notes:

1. The contractor should determine the depth of pavement to suit work area after excavation. However the minimum depth of pavement is to be 150mm of CBR 60. Bitumen sealing shall be a two coat hot or cold seal with 16mm & 10mm aggregate to Council standards.

2. Bitumen seal required as access off existing bitumen roads.

3. Match & shape to existing batters over Min 5 meters.

4. For Traffic control and safety, the minimum requirements from the Manual of Uniform Traffic Control Devices (MUTCD) must be in place before work commences.



TYPICAL SECTION - TYPE D

Scales:					
NOT TO SCALE	A	Amended	7–01	drawn	Org signed by BDF 2/99
	B	General Revisions	CNP 1/03	checked	
	C	General Revisions	MLP 8/04	designed	
Sheet A3 , Datum: A.H.D.		Revisions		checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

RURAL AND URBAN ACCESSES NO KERB AND CHANNEL

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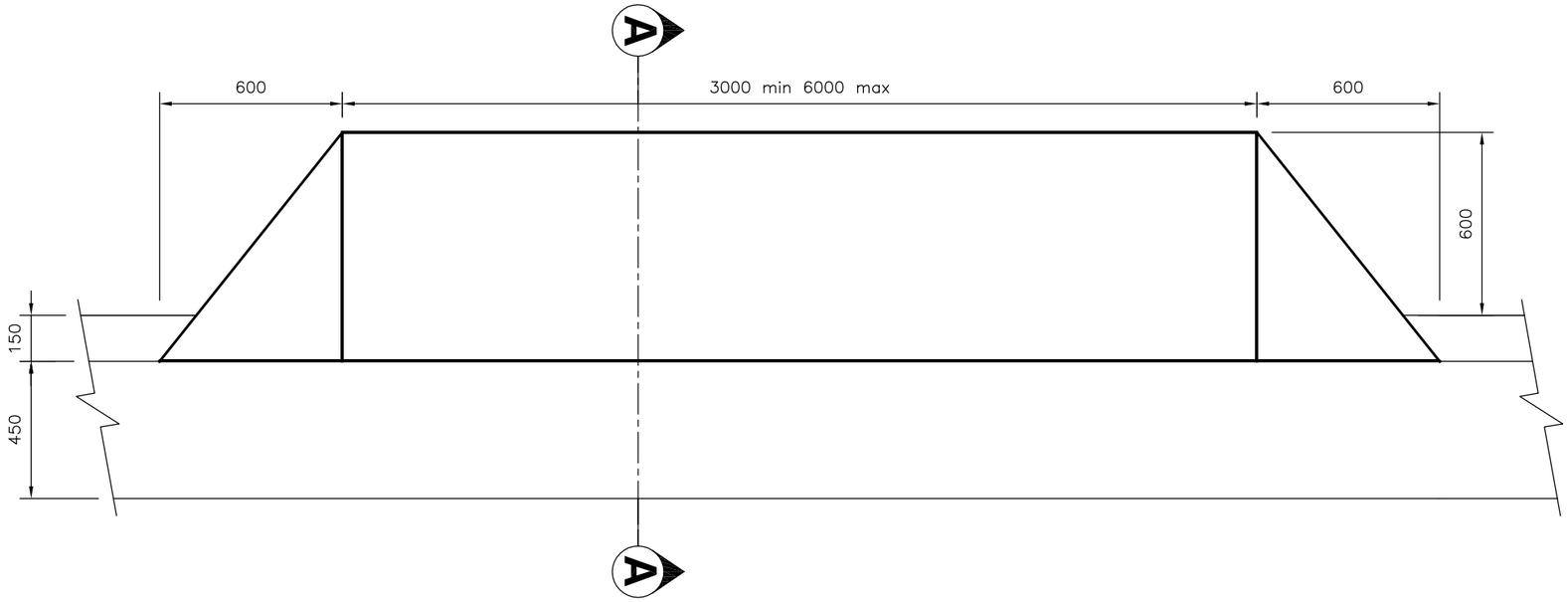
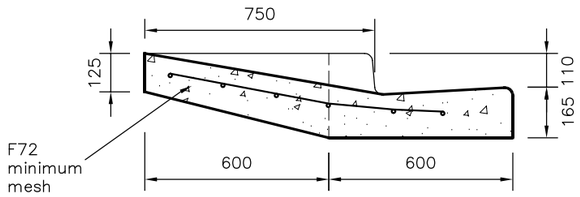
Drawing No. R113-2

A B C



PLAN
(Standard K&C)



SECTION A-A (DOMESTIC)
(Standard K&C)

NOTES

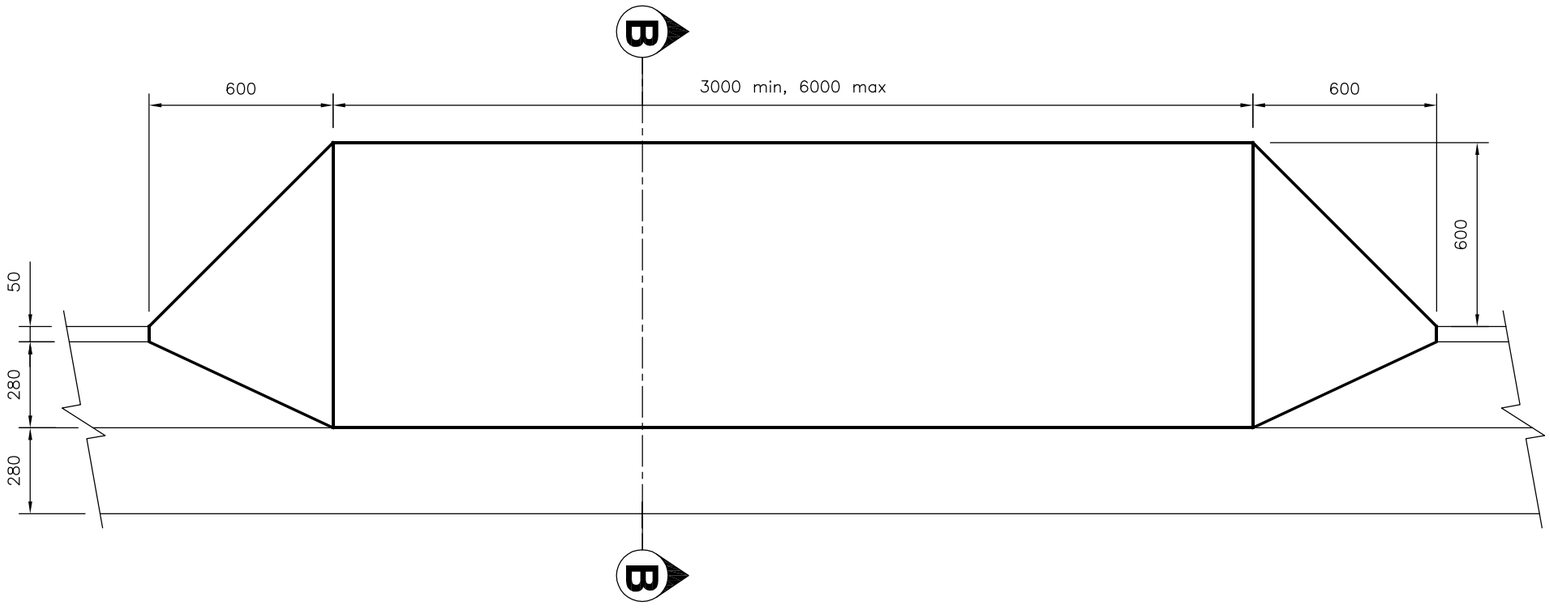
1. Footpath section to vary where necessary to match concrete footpaths and verge profiles. Footpath earthworks adjoining concrete must be well compacted.

2. Council will not guarantee reinstatement on non–standard concrete finishes if council need to access infrastructure under driveway (eg. pipes etc) and install concrete footpaths to Council standards.

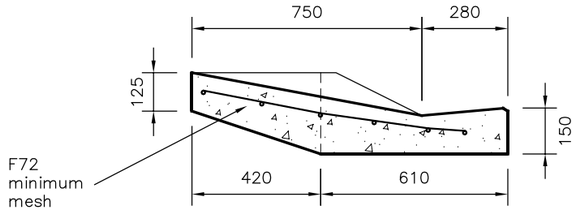
3. For Sectional Details on footpath/driveway access see Burnett Shire Council Plan R111.

4. Residential crossings can be 3m min. to 6m max.

5. All dimensions in millimetres.



PLAN
(Layback K&C)



SECTION B-B (DOMESTIC)
(Layback K&C)

Scales:					
NOT TO SCALE	A	General Revisions	CNP 1/03	drawn	Org signed by BDF 4/98
	B	General Revisions	MLP 8/04	checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

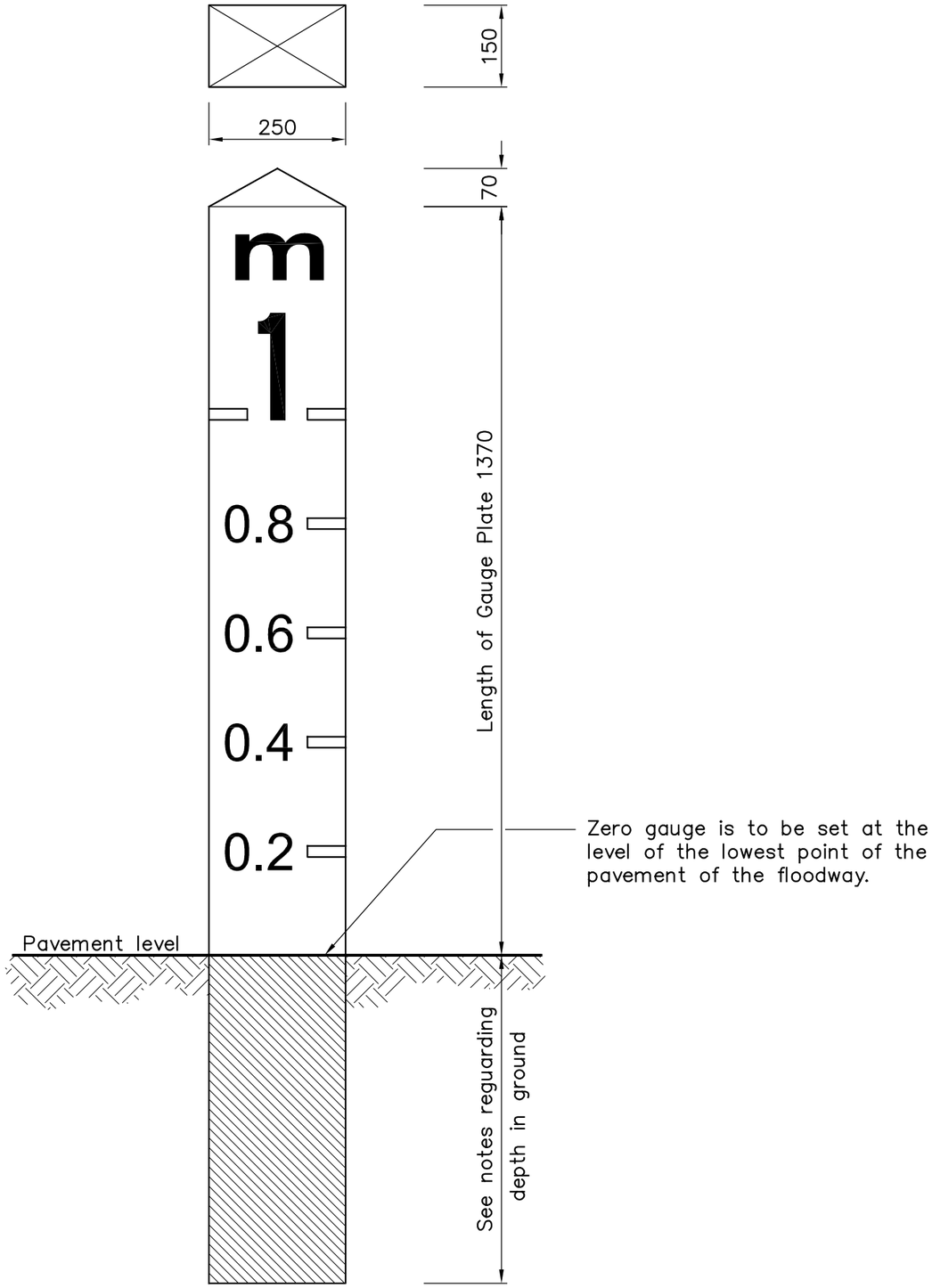
Original signed by
General Manager of Engineering Operations

STANDARD DETAILS
DOMESTIC INVERT CROSSINGS
(LAYBACK & STANDARD KERB & CHANNEL)

H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\R114B.dwg, 09/11/2004 3:52:26 PM

Drawing No.
R114

A | B



NOTES

1. Flood Gauge Posts are to be erected adjacent to the upstream shoulder of the road at the stations specified or as directed by the Works Engineer.
2. The posts shall be timber, as specified, to each of which is attatched two standard "depth indicator" plates, one on each side.
3. The post shall be erected vertical, with the broad face at right angles to the road centre line, and sunk firmly not less than 600mm into solid original ground.
4. When 2m high gauge plates are to be attatched, the post shall be 1m longer above the zero point and sunk firmly not less than 1m into solid ground.
5. The post shall be treated "H5" and painted in the manner specified. Each gauge plate is to be secured to the broad face with 6. not less than 12/40mm x 2.8mm Dia galvanised clouts.

Scales: 1 : 10

0 0.1 0.2 0.3m

Sheet A3 , Datum: A.H.D.

A	General Revisions	MLP 8/04	drawn	Org signed by BDF 09/98
			checked	
			designed	
	Revisions		checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

FLOOD GUIDE POST

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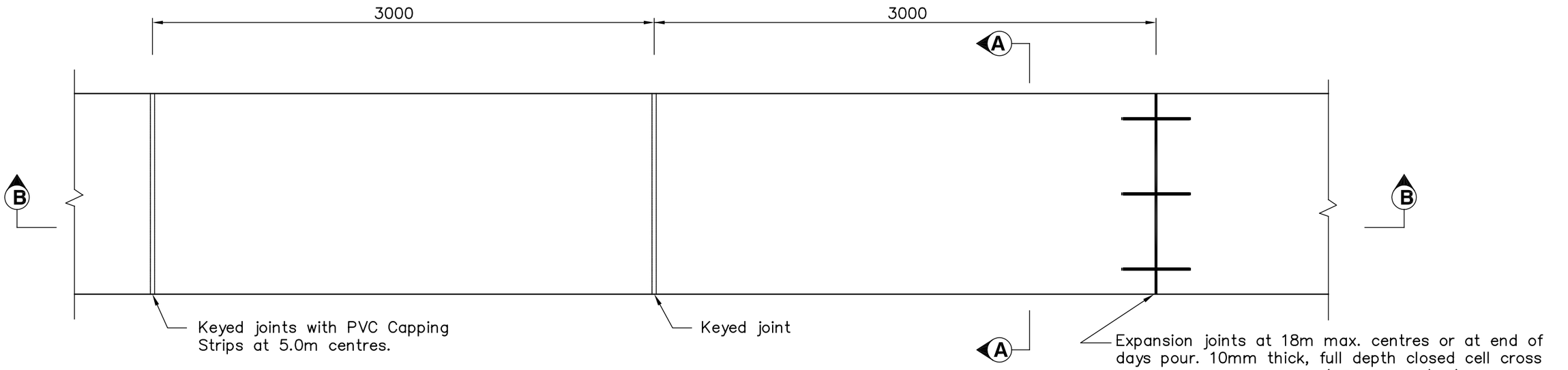
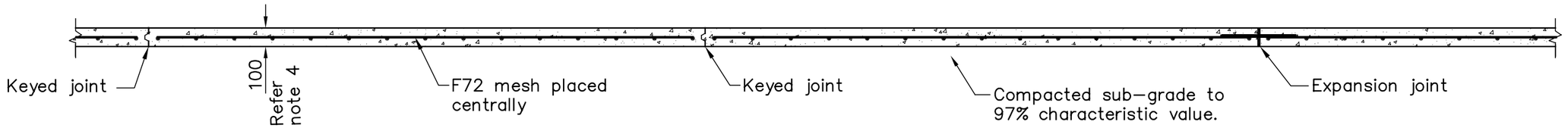
Drawing No. R115

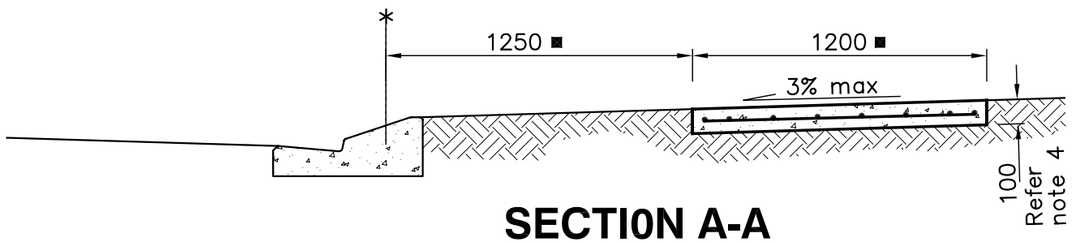
A



PLAN

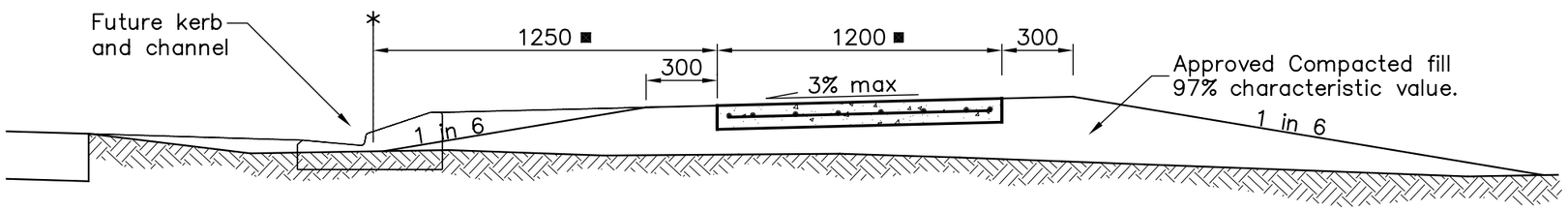


SECTI0N B-B



SECTI0N A-A

(Where kerb and channel exists)



SECTI0N A-A

(Where no kerb and channel exists)

LEGEND

* Nominal kerb line.

■ Unless otherwise specified

NOTES

1. Concrete N25 in accordance with AS1379 and AS3600. (N32 in works within 200m of the coast).
2. All concrete to be broom finished.
3. Keyed joints, 3m max spacing.
4. Thickness to be increased to 150mm at residential vehicular crossings. Provide a key joint at both ends of thickened section.
5. Concrete footpaths, adjoining existing driveways are to be transitioned over a minimum 5m length.
6. All dimensions are in millimetres.
7. After construction topsoil to be applied to footpath to finish flush with concrete path.

Scales: 1:25 (0 0.25 0.5 0.75m)

Sheet A3 , Datum: A.H.D.

A	Key, foam and construction joints	BDF 10/99	drawn	Org signed by BDF 4/98
B	Reinforcing added, notes amended	DG 4/03	checked	
C	General changes.	MLP 8/04	designed	
D	General changes.	MLP 3/05	checked	
Revisions				

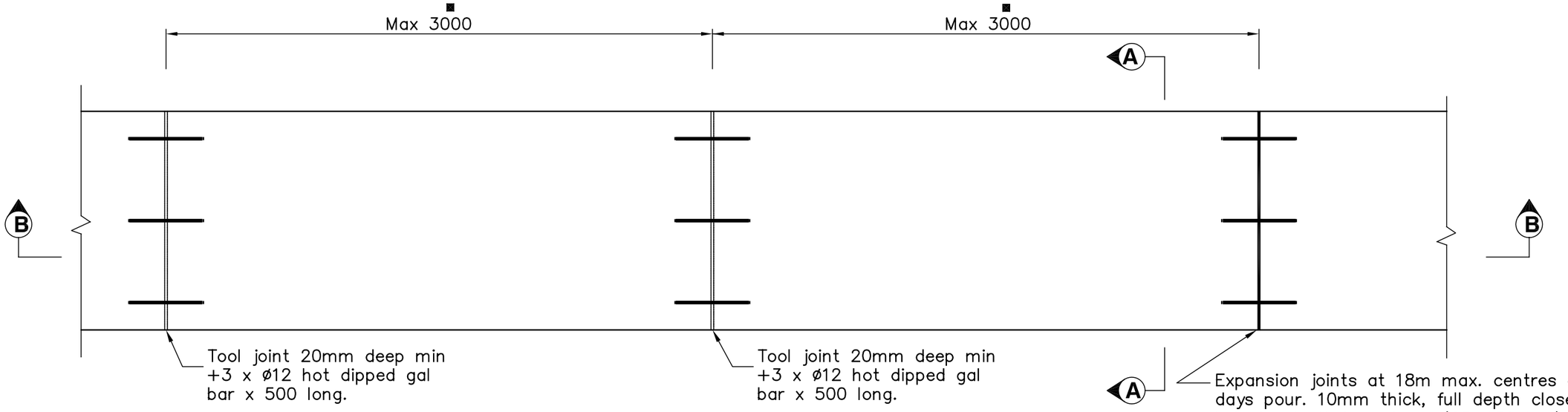
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

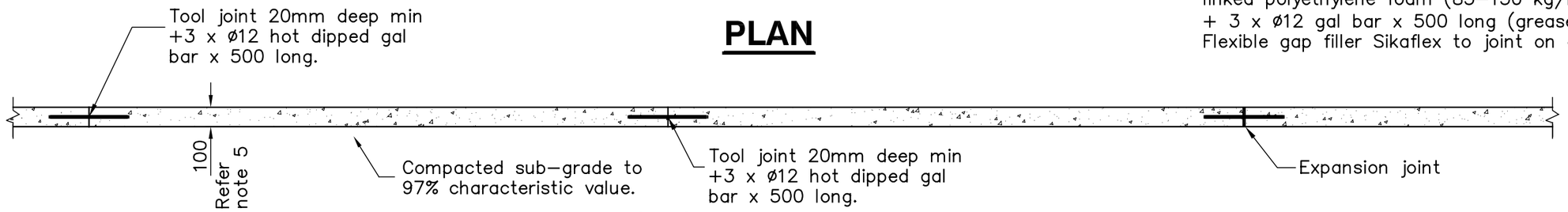
CONCRETE STRIP FOOTPATHS UNSTABLE SITE (H) OR GREATER

Drawing No. R116

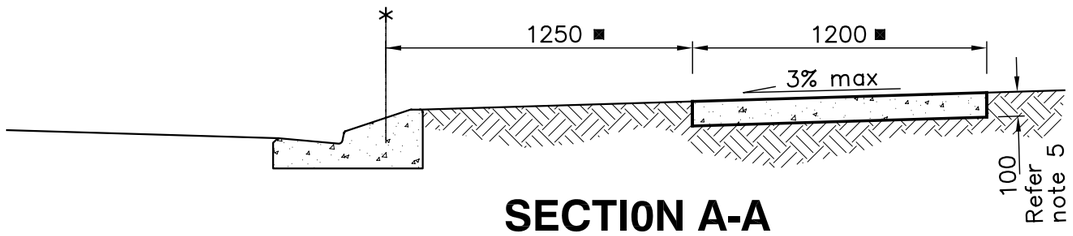
A B C D



PLAN

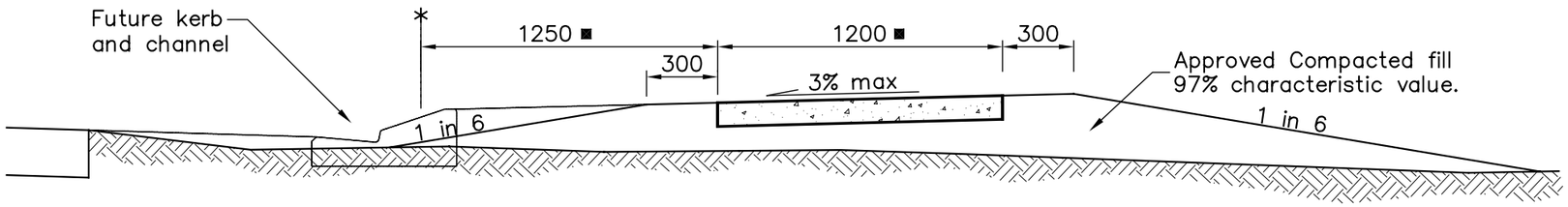


SECTI0N B-B



SECTI0N A-A

(Where kerb and channel exists)



SECTI0N A-A

(Where no kerb and channel exists)

LEGEND

* Nominal kerb line.

■ Unless otherwise specified

NOTES

1. Concrete N25 in accordance with AS1379 and AS3600.
2. All concrete to have Grace MicroFiber or equivalent at the min rate of 600g/m3.
3. All concrete to be broom finished.
4. Tool joints 20mm deep, 3m max spacing. (2.5m spacing for (H) or higher reactive soils).
5. Thickness to be increased to 150mm at residential vehicular crossings. Provide a tool joint at both ends of thickened section.
6. 100mm Crusher dust bed may be requested by works Engineer.
7. Concrete footpaths, adjoining existing driveways are to be transitioned over a minimum 5m length.
8. All dimensions are in millimetres.
9. After construction topsoil to be applied to footpath to finish flush with concrete path.

Scales: 1:25
0 0.25 0.5 0.75m

Sheet A3 , Datum: A.H.D.

A	General changes.	MLP 3/05	drawn	Org signed by MLP 8/04
			checked	
			designed	
Revisions			checked	

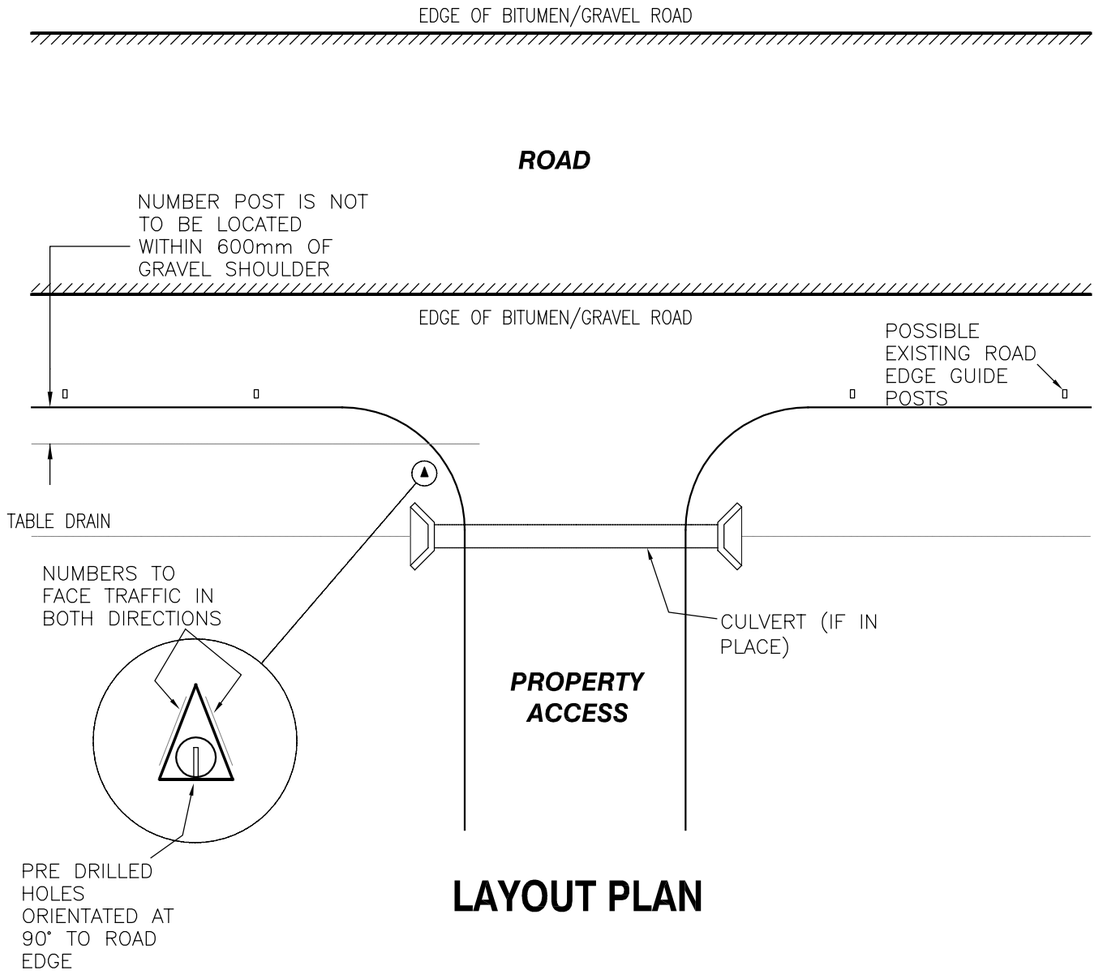
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

CONCRETE STRIP FOOTPATHS STABLE SITE

Drawing No. R116-1

A



LAYOUT PLAN

LOCATION

1. The number post shall be placed at the property access point.
2. If possible, number posts should be placed between 1 and 2 metres outside the edge of the road shoulder or line of guide posts.
3. Number posts should be placed at least 1 metre above ground for maximum visibilty.
4. Consideration should be given to positioning of the post so it does not interfere with slasher mowing, maintenance of drains and culverts and vehicles using the access.
5. Align the number so it is clearly visible for traffic travelling along the road.
6. Posts are commonly placed adjacent to the property's letter box.

INSTALLATION

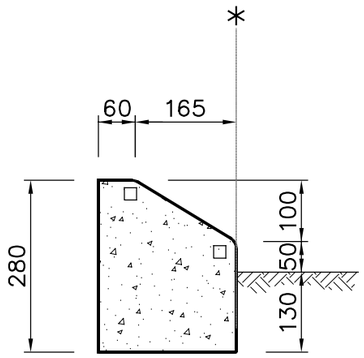
1. The rural address post comes as a round galvanized post, a plastic number module and stick on numbers.
2. To install, drive the galvanized post into the ground until it is firm. ensure that pre drilled hole in the post faces the property and is square to the road.

WARNING – Check that there are no underground services in the area before installing the post.

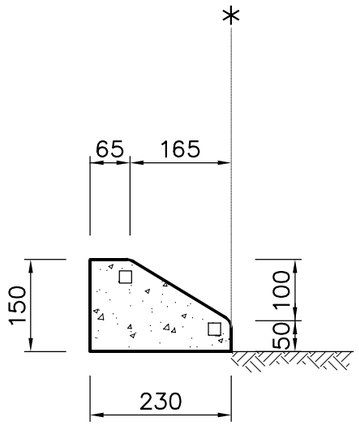
3. Once post is installed place plastic module over the post and fix with the self tapping screw provided.

Scales: NOT TO SCALE		drawn	Org signed by BDF 02/01	**BURNETT SHIRE COUNCIL**
Sheet A3 , Datum: A.H.D.	Revisions	checked		Original signed by General Manager of Engineering Operations
		designed		**LOCATION PLAN OF RURAL ADDRESSING NUMBER POST**
		checked		H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\R117.dwg, 10/11/2004 10:31:50 AM

Drawing No. R117



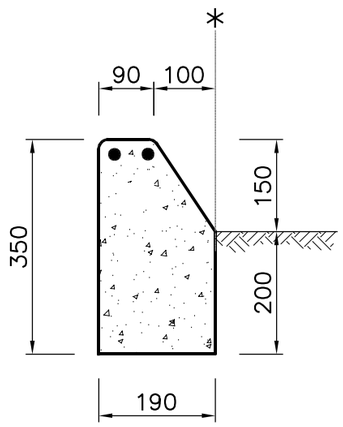
SM1



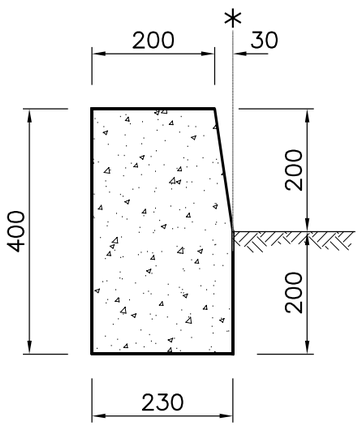
SM2

SEMI-MOUNTABLE KERB

NOTE
1. Refer. R111, R112, R113–2 and R114 for access crossing details.
2. Refer this page or specifications for bed preparation requirements.
3. Concrete for slipform min. N25.
4. Concrete for reinforced inverts min. N35.
5. For construction & expansion joints, refer Auspec. C244.12.5&6.

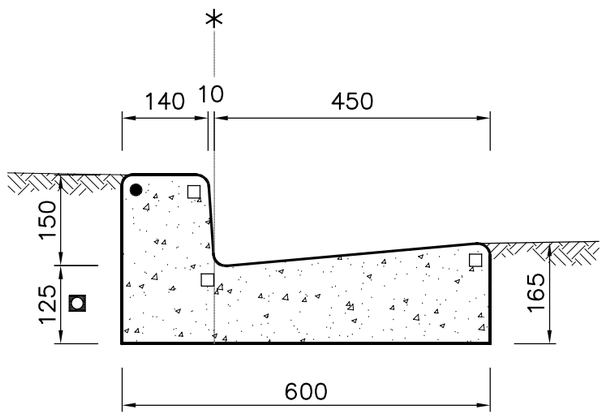


B1

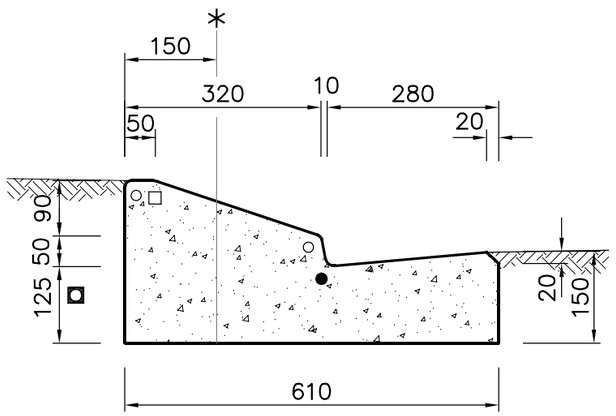


B2

BARRIER KERB

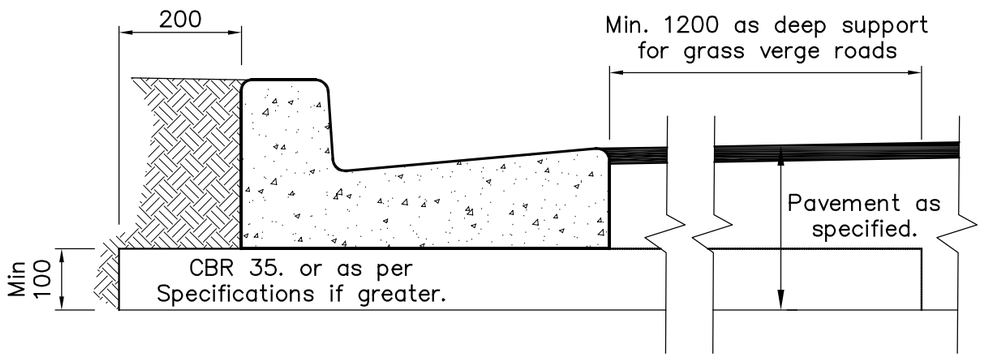


KC1



KC2

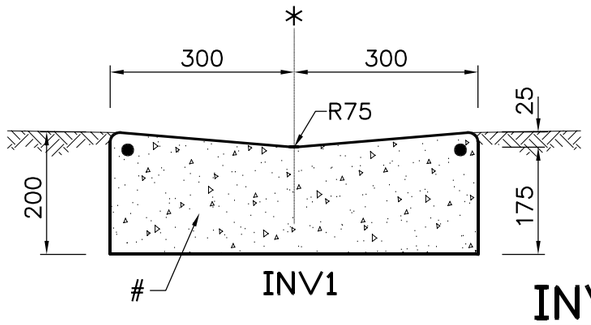
CHANNEL KERB



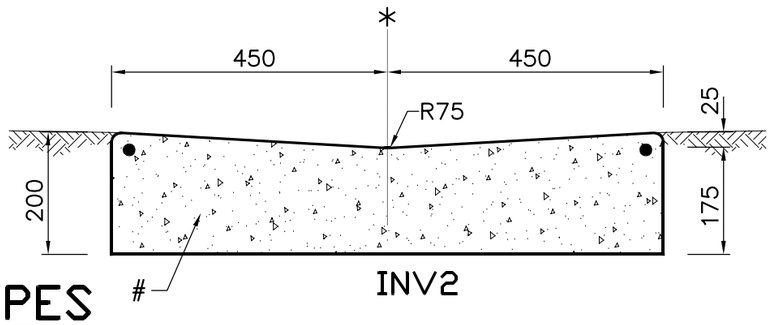
TYPICAL MINIMUM REQUIREMENTS KERB/KREB & CHANNEL BED PREPARATION

LEGEND

- ✳ Nominal kerb line for setting out.
- □ R20 Radius.
- ● R15 Radius.
- ○ R10 Radius.
- ◩ R50 Radius.
- ◘ 150 on request for heavy duty crossings.
- # Provide F72 mesh in intersections (refer. R122)



INV1



INV2

INVERT TYPES

Scales:					
NOT TO SCALE	A	Provide bed preperation add notes.	MLP 8/04	drawn	Org signed by BDF 09/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

Original signed by General Manager of Engineering Operations

KERBS, CHANNELS AND INVERTS PROFILES AND DIMENSIONS

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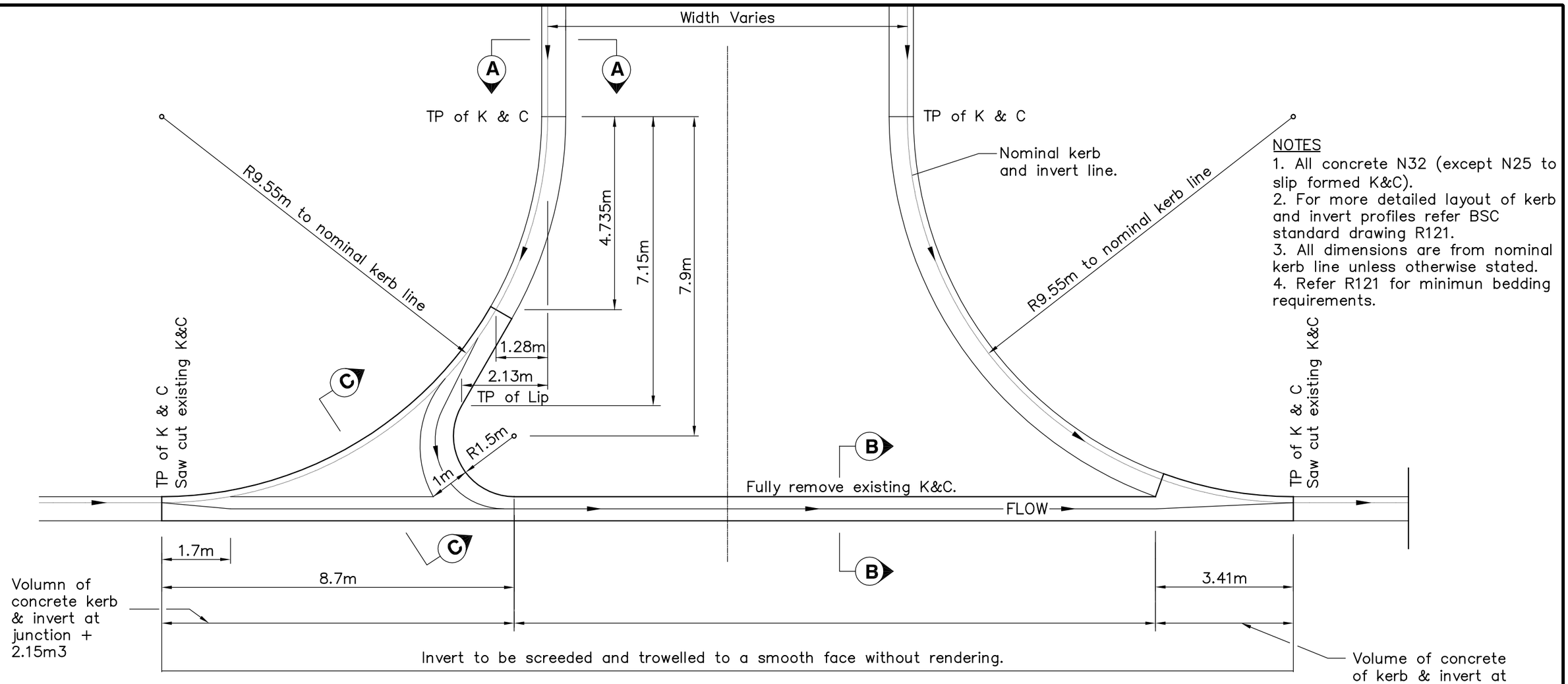
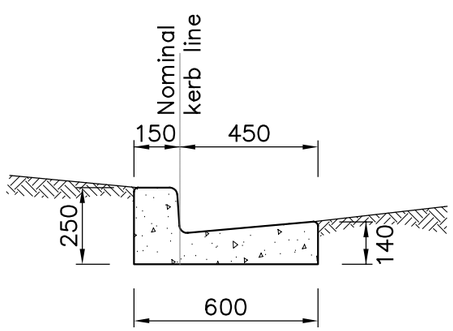
Drawing No. R121

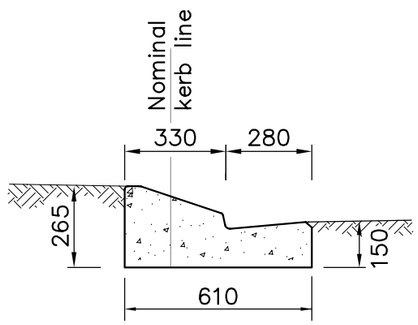
A



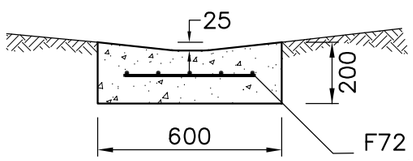
PLAN



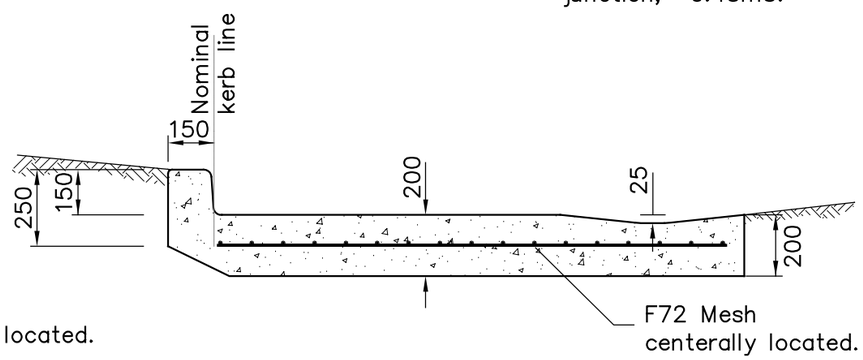
SECTION A-A
KERB TYPE KC1



SECTION A-A
KERB TYPE KC2



SECTION B-B
INVERT CROSSING TYPE INV1



SECTION C-C

Scales: NOT TO SCALE	A	Add KC2 and change notes.	MLP 08/04	drawn: Org signed by BDF 04/98
Sheet A3 , Datum: A.H.D.				checked
				designed
	Revisions			checked

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

INVERT CROSSING LAYOUT DETAILS FOR KERB TYPES KC1 & KC2

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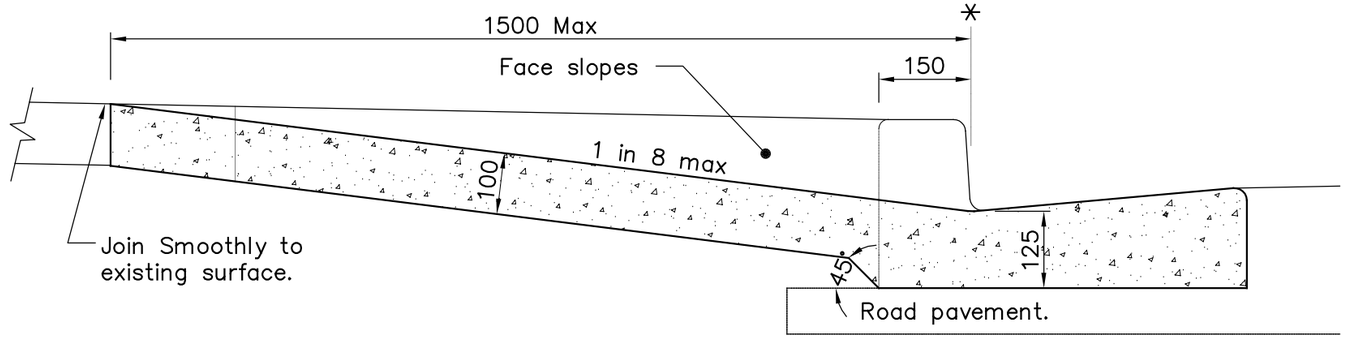
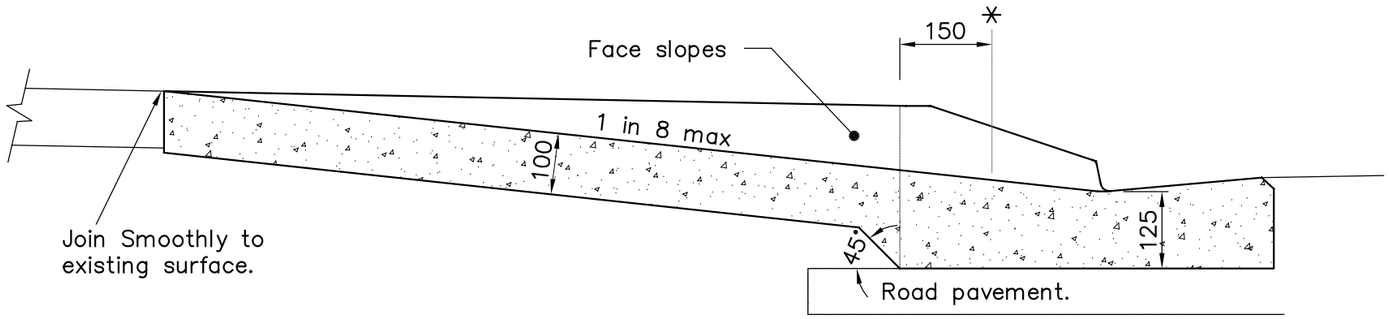
Drawing No. R122

A



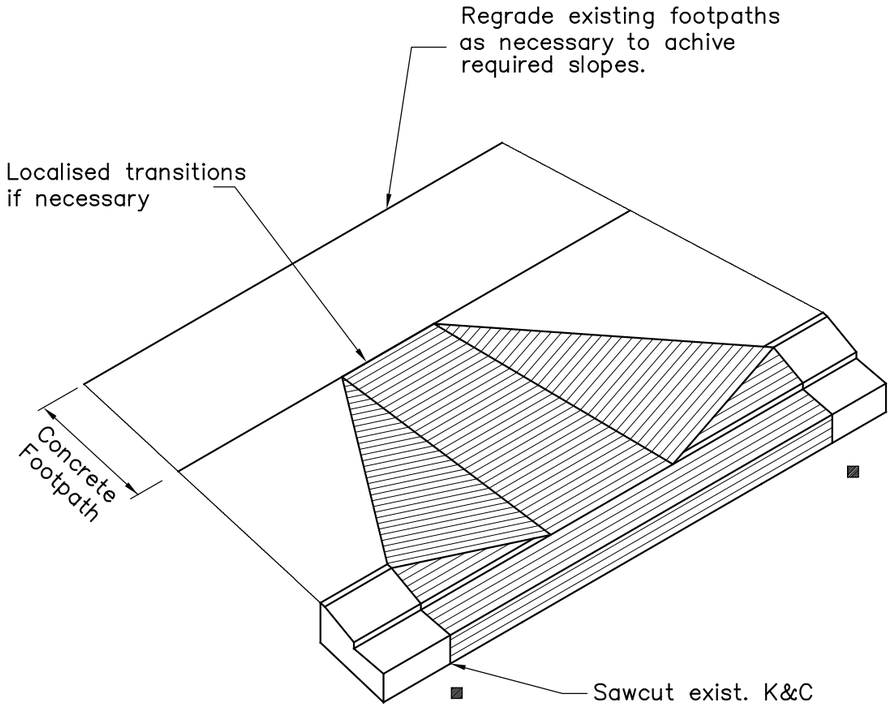
SECTION AT KERB TYPE KC1

Scale 1 : 10



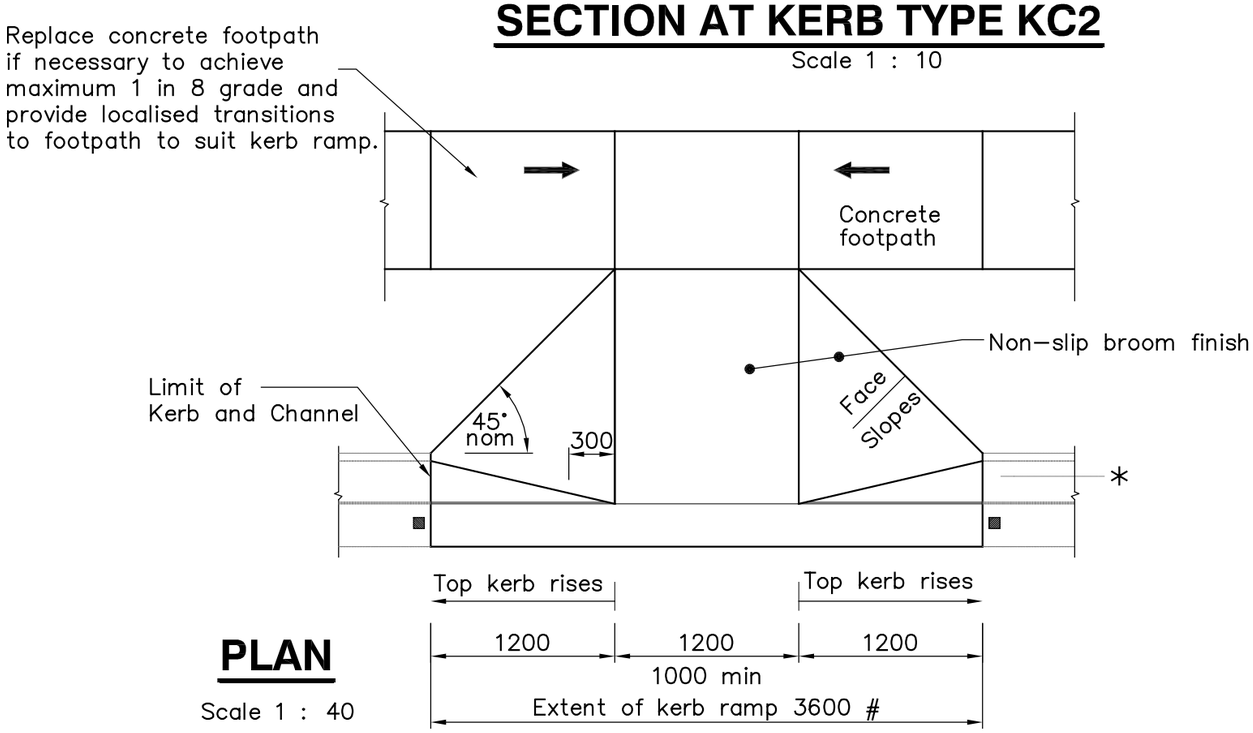
SECTION AT KERB TYPE KC2

Scale 1 : 10



PERSPECTIVE VIEW

N.T.S.



PLAN

Scale 1 : 40

NOTES

1. For kerb ramp location, refer project drawings.
2. Concrete N25 in accordance with AS1379 and AS3600.
3. All concrete to have Grace MicroFiber or equivalent at the min rate of 600g/m3.
4. Kerb ramp to be cast monolithically, no construction joints will be allowed.
5. Designed to AS1428.1. Ramp colour to contrast with adjoining surfaces.
6. All dimensions in millimetres.
7. All dimensions to be in Accordance with AS1428.1.
8. Tactile indicators as per AS1428–4.

LEGEND

* Nominal Kerb Line.

■ Saw cut if path and/or kerb and channel exists.

\# May vary from site to site depending on location of footpath.

Scales: 1 : 10
0 0.1 0.2 0.3m
0 0.4 0.8 1.2m
1 : 40
Sheet A3 , Datum: A.H.D.

A	Change Thickness add Tactile Indicators	MLP 8/04	drawn	Org signed by BDF 04/98
			checked	
			designed	
Revisions			checked	

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General Manager of Engineering Operations

KERB RAMP

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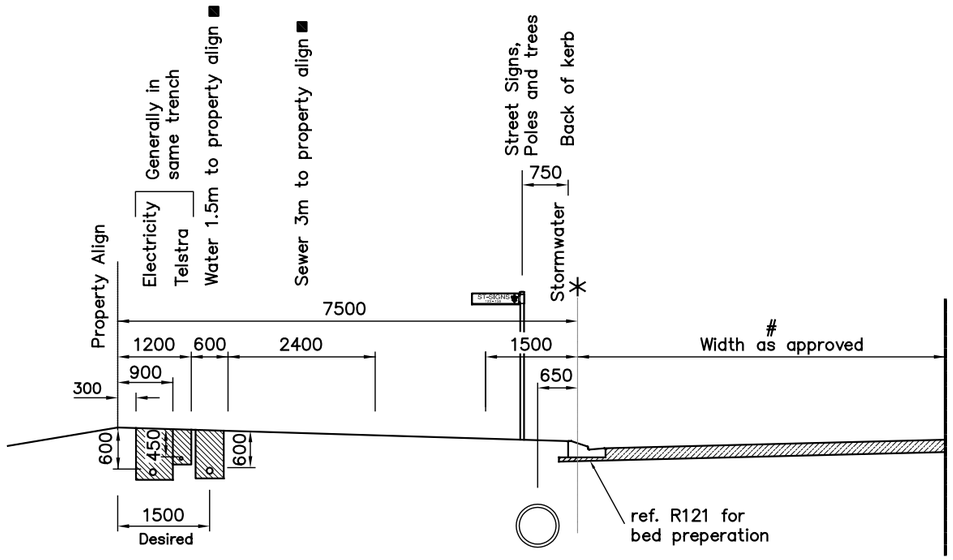
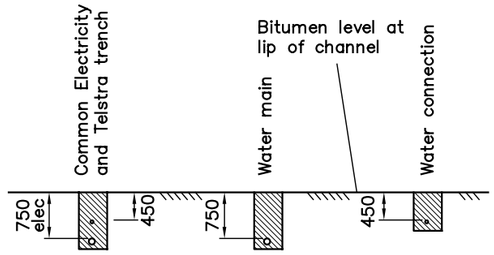
Drawing No. R124

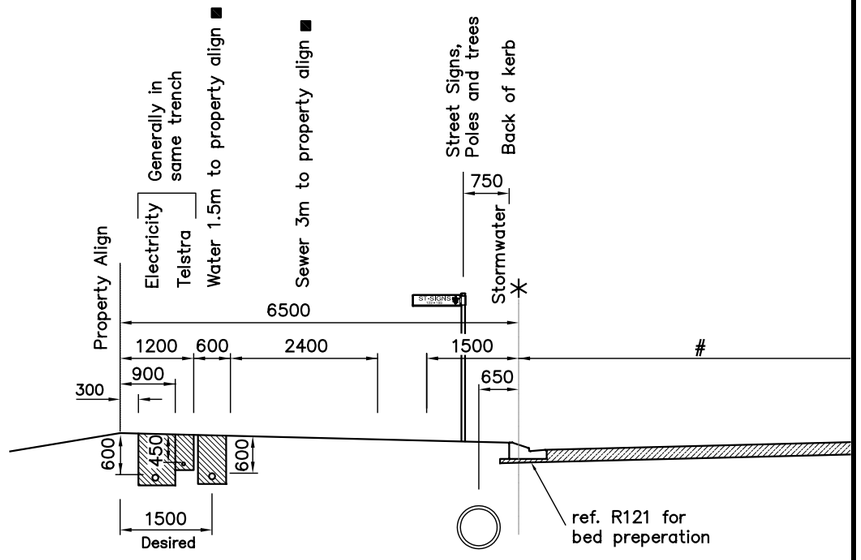
A



PRINCIPAL ROAD IN A 27m RESERVE



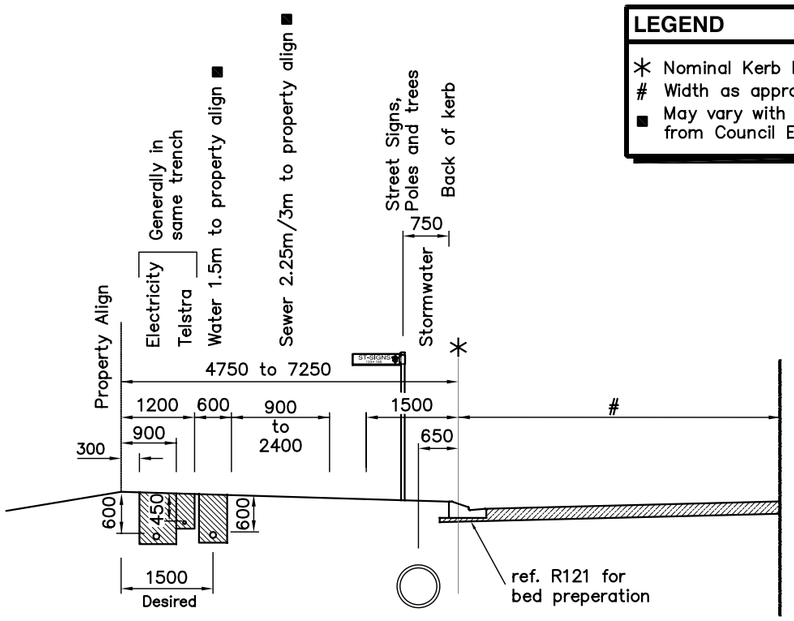
MINIMUM COVER AT ROAD CROSSINGS
Refer drawing R152 for details.



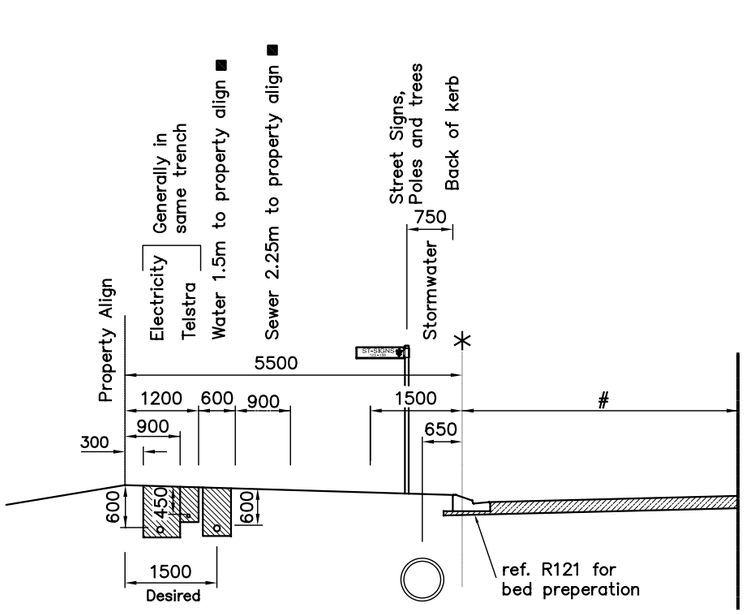
TRUNK COLLECTOR ROAD IN A 25m RESERVE

LEGEND

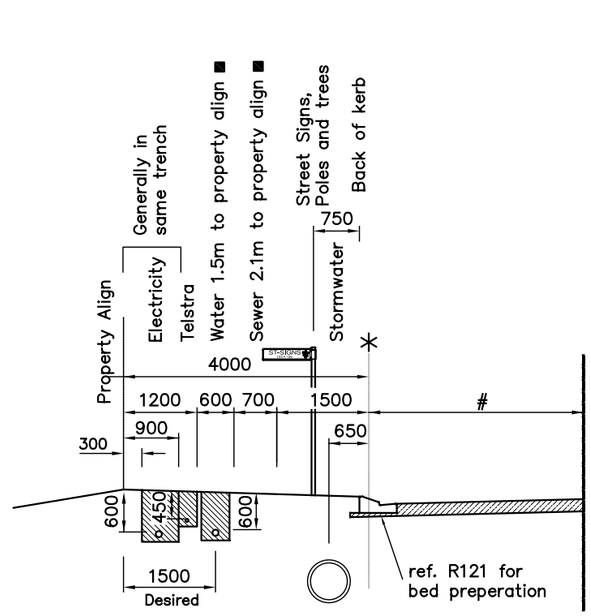
- ✳ Nominal Kerb Line.
- # Width as approved.
- ■ May vary with approval from Council Engineer.



COLLECTOR ROAD IN A 20 to 25m RESERVE



ACCESS ROAD IN A 20m RESERVE



ACCESS PLACE IN A 15m RESERVE

Scales: 1 : 75

0 0.75 1.50 2.25

Sheet A3 , Datum: A.H.D.

A	Change side drain details.	MLP 8/04	drawn	Org signed by BDF 09/98
B	Update Details	MLP 4/05	checked	
			designed	
	Revisions		checked	

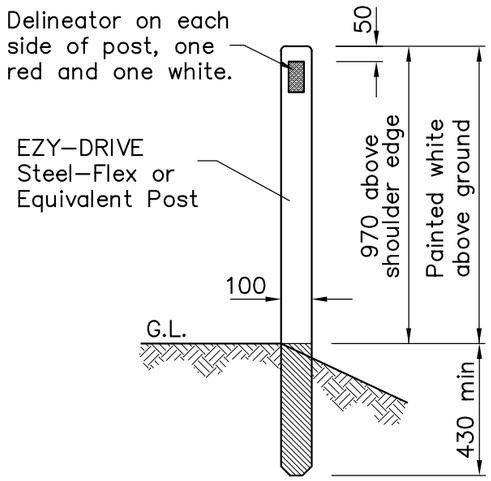
BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

PUBLIC UTILITIES TYPICAL SERVICE CONDUIT SECTIONS

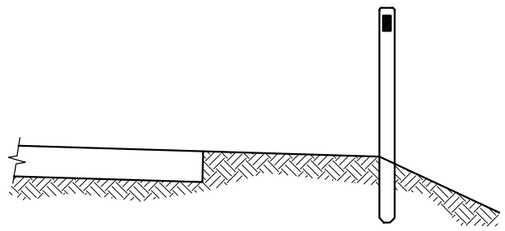
Drawing No. R131

A B



STEEL-FLEX GUIDE POST

N.T.S.



ROADWAY GENERALLY :

1. Inside face of post to be set in line with the shoulder edge.
2. The distance from the pavement edge should be uniform.
3. Posts should be set so that their tops are on a smooth grade.

INSTALLATION DETAILS

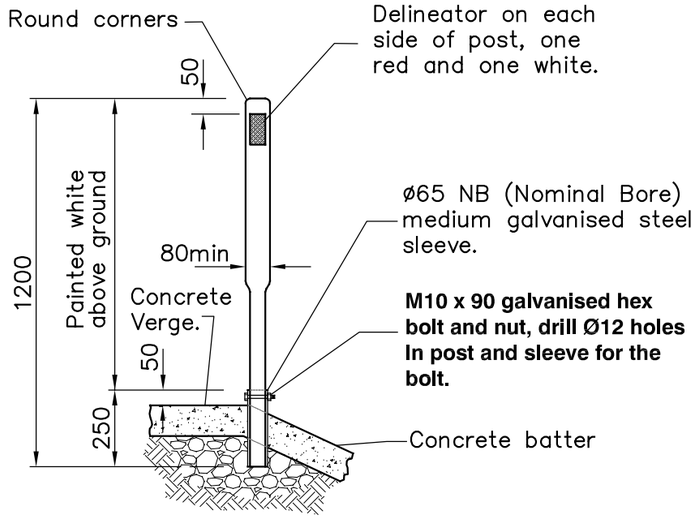
N.T.S.

NOTES

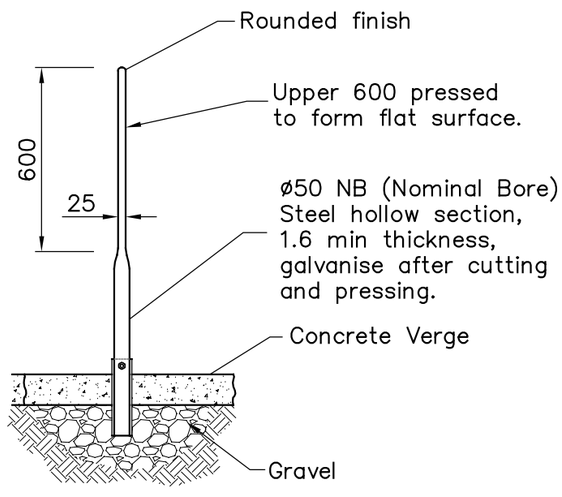
1. Guide posts other than those shown to be approved by works engineer before use. Guide posts to be installed to manufacturers specifications.
2. Delineators shall be the following reflectorised panels with the longer axis vertical in each case. Red delineators (100 x 50mm) shall be on the left hand side and white delineators (100 x 25mm) on the right hand side as seen by approaching drivers. Complying with Class 1A Material AS/NZS 1906.1.
3. POST SPACING : Where the location of road edge guide posts is not specified in the project drawings, then the spacing shall be in accordance with MUTCD 3.2.4.4.

GENERAL MUTCD NOTES

A. STRAIGHTS AND CURVES: with a radius greater than 2000m shall have spacing of 150m with the posts in pairs.
B. VERY LONG STRAIGHTS: on flat terrain may have spacing increased, where specified to 300m with the posts in pairs.
C. CIRCULAR CURVES: including circular portions of transitioned curves shall have spacing in accordance with Table 1.
D. CURVE TRANSITIONS: Spacing for the transition portion shall be the same as the spacing required for the circular portion of the curve (Refer Table 1.). The first posts shall be located at a point along the transition portion, which is one quarter of the transitional length, as measured from the tangent point at the straight. Where alignment plans are not supplied in the project documents, the first posts shall be located at the point where the curve just noticeably starts to deviate from the alignment of the straight.
E. CRESTS: (i) Located on straights, two pairs of delineators, minimum, are to be visible (beyond 40m) at all times for a driver's hight of 1.15m.
(ii) Located on or just before a horizontal curve, this only applies to the outside of the curve. Note 2C also apply.
F. AREAS SUBJECT TO FREQUENT FOGS: Spacing shall be reduced to 60m with posts in pairs.
G. BRIDGES AND CULVERTS: (i) Where the structure is greater than or equal to 5m in length as measured along the road centreline, four posts, one at each corner of the structure. (ii) Where the structure is less than 5m, two posts, one at each left hand approach.
H. FLOODWAYS: Tubular steel posts spaced at 25m in pairs.
I. DELINEATORS: ON GUARDRAILS are to be installed when road edge guide post locations fall adjacent to guardrail location. They are to be attached using guardrail delineator brackets.



Front View
CONCRETE VERGE/BATTER



Side View
CONCRETE VERGE/BATTER

TUBULAR STEEL GUIDE POST

N.T.S.

∗ Refer GENERAL MUTCD NOTES (F).

Curve Radius (m)	Spacing (m) outside of curve	Spacing (m) inside of curve
< 100	6	12
100–199	10	20
200–299	15	30
300–399	20	40
400–599	30	60
600–799	40	60
800–1199	60	60
1200–2000	90 ∗	90∗
> Including straights	150 ∗	150∗

TABLE 1 : GUIDE POST SPACING ON CURVES
Posts on inside of curve are to be located opposite a post on the outside of the curve where possible.

Scales: NOT TO SCALE	A	Now Steel–Flex Guide Posts	MLP 8/04	drawn: Org signed by BDF 04/98
				checked
				designed
Sheet A3 , Datum: A.H.D.	Revisions			checked

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

ROAD EDGE GUIDE POSTS TYPES AND SPACINGS

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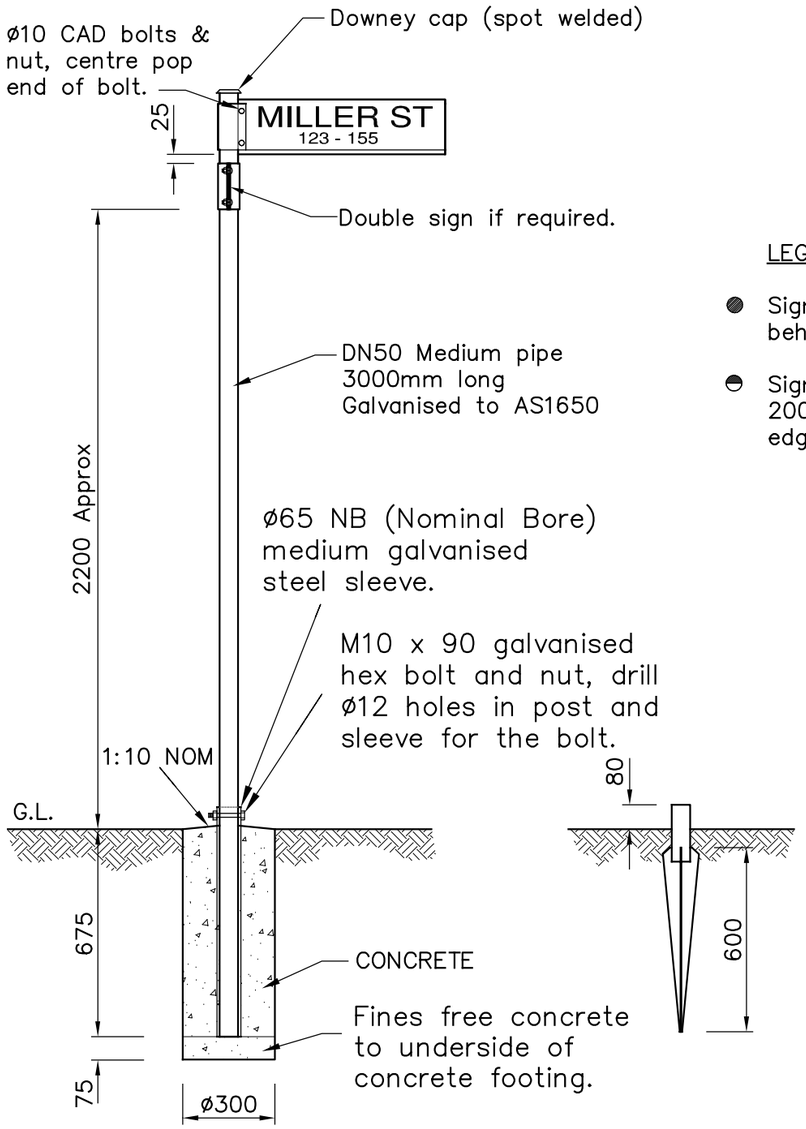
Drawing No. R136

A



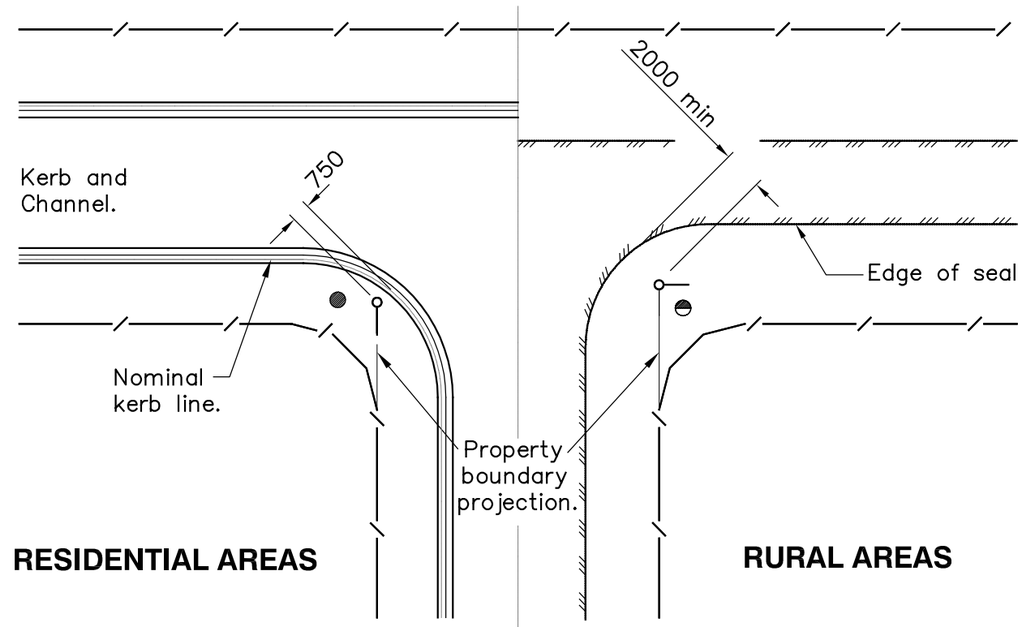
CONCRETE FOOTING

LEGEND

- Sign to be located 750mm behind nominal kerb line.
- Sign post is to be located 2000 min to 4000 max from edge of seal.

Table of Abbreviations	
Avenue	AV
Court	CT
Cresent	CR
Drive	DR
Esplanade	ESP
Lane	LA
Parade	PDE
Road	RD
Street	ST
Terrace	TCE

SPIKE
(Where Approved by Works Engineer)

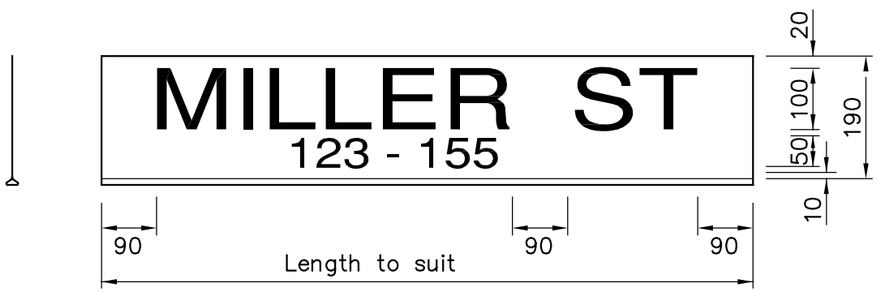


SIGN LOCATIONS

NOTES :

1. Street names must be approved by Council.
2. Name Plates: Anti–vandal section, 200mm wide and 3mm thick extruded aluminium or polypropylene section. * (Paid for by Developer & Installed by Council).
3. Bracket: Standard 200mm wide and 3mm thick extruded aluminium (including 2 x ø6 CAD bolts and nuts). CAD bolts and nuts to AS 1897. * (Paid for by Developer & Installed by Council).
4. Letters and Numbers: All lettering to be Freeway Green, Reflective Class 2. Background to be White Relective Class 1. Letters to be 100mm high, Series B, medium spacing. Numbers to be 50mm high, Series C, narrow spacing. All text to AS1744. * (Paid for by Developer & Installed by Council).
5. Posts supplied and installed by Developer.
6. Signs to be positioned on the side of street/road that provides best visability.
7. Concrete N20 in accordance with AS 1379 and AS 3600.
8. All dimensions in millimetres.

SIGN DETAILS



Scales:					
NOT TO SCALE	A	Add Sleeve & update text	MLP 08/04	drawn	Org signed by BDF 04/98
	B	Remove Crest	MLP 04/05	checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

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STREET NAME SIGN AND POST

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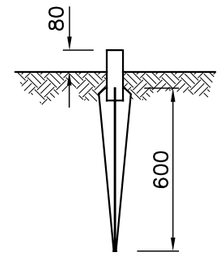
Drawing No. R141

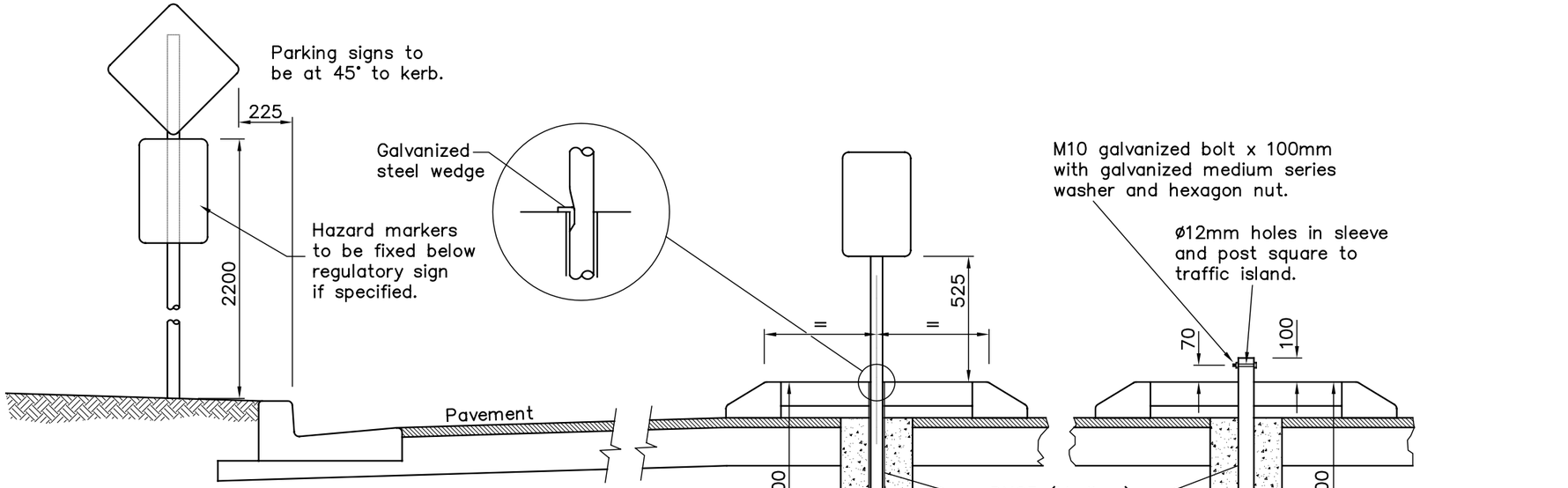
B

LEGEND

#	On footpaths
*	On medians
⊖	As directed by Works Engineer

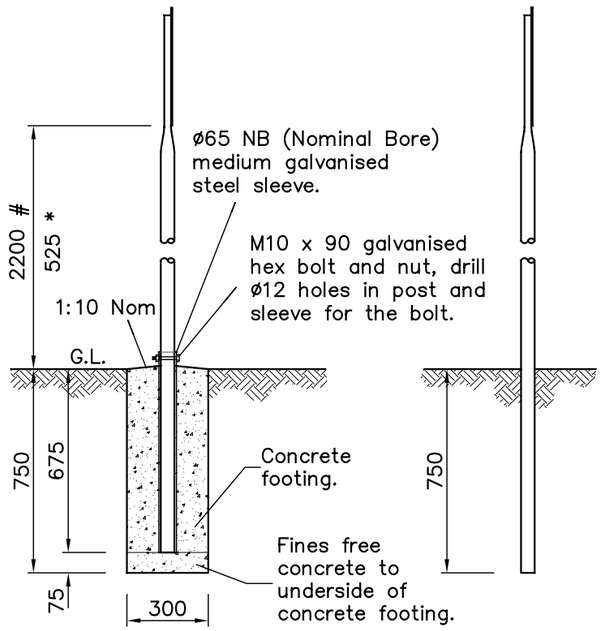


RURAL ROADS
SPIKE ALTERNATIVE ⊖



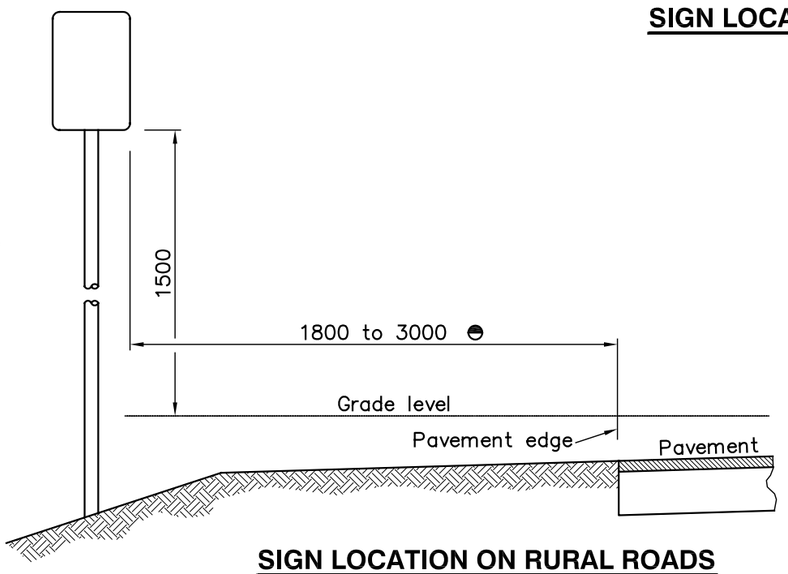
TYPE 1 SIGN FIXING

TYPE 2 SIGN FIXING



STREETS **RURAL ROADS**

SIGN POST FOOTING



SIGN LOCATION ON RURAL ROADS

SIGN LOCATION ON RESIDENTIAL STREETS

NOTES

1. All signs to be reflectorised Class 1 to AS1743 unless noted otherwise.
2. Size and sign type as per project drawings. Special standards are to be provided at large signs when indicated in project drawings.
3. Where signs are to be erected in streets where footpaths are not constructed to permanent levels levels the Rural Road type shall be adopted.
4. Signs shall be out of aluminium or aluminium alloy not less than 2mm thick to AS 2848.
5. The DN65 sleeve and spike shall only be used on medians.
6. All pipes to be galvanized. Steel pipe to AS 1074. Galvanizing to AS 1650.
7. Concrete N20 in accordance with AS 1379 and AS 3600.
8. Hexagonal head bolts to AS 1111, Nuts to AS 1112, Washers to AS 1237, Galvanizing to AS 1214.
9. The finished plate shall comply in all respects to the require–ments of the Queensland Transport Manual of Uniform Traffic Control Devices (1995).

Scales:

NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Add Spike alternative & Sleeve	MLP 08/04	drawn	Org signed by BDF 09/98
			checked	
			designed	
	Revisions		checked	

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SIGNAGE FOOTINGS AND LOCATIONS

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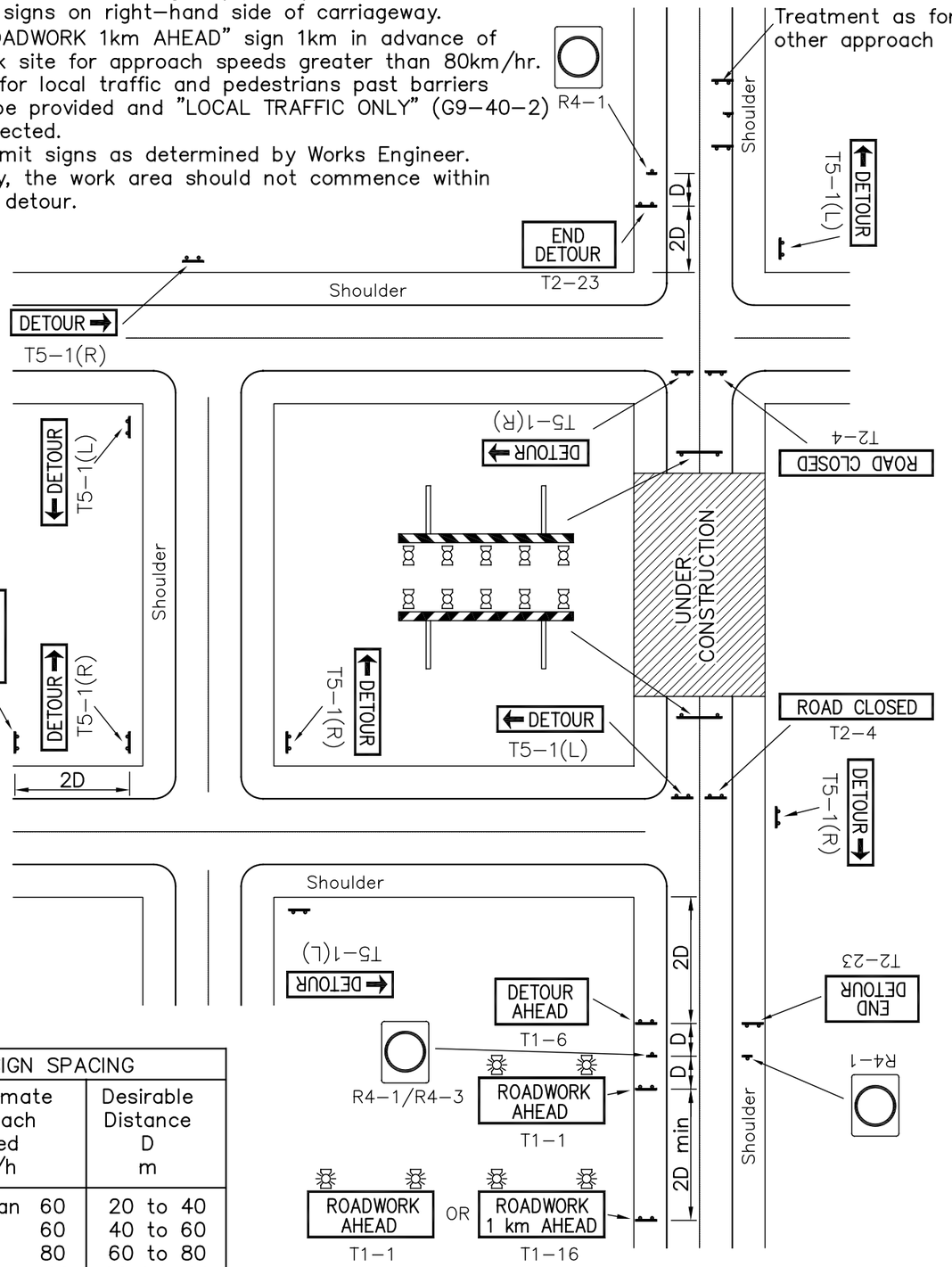
Drawing No. R142

A

NOTES

1. High traffic volumes may require duplication of advance warning signs on right–hand side of carriageway.
2. Use "ROADWORK 1km AHEAD" sign 1km in advance of the work site for approach speeds greater than 80km/hr.
3. Access for local traffic and pedestrians past barriers should be provided and "LOCAL TRAFFIC ONLY" (G9–40–2) signs erected.
4. Speed limit signs as determined by Works Engineer.
5. Desirably, the work area should not commence within 30m of detour.

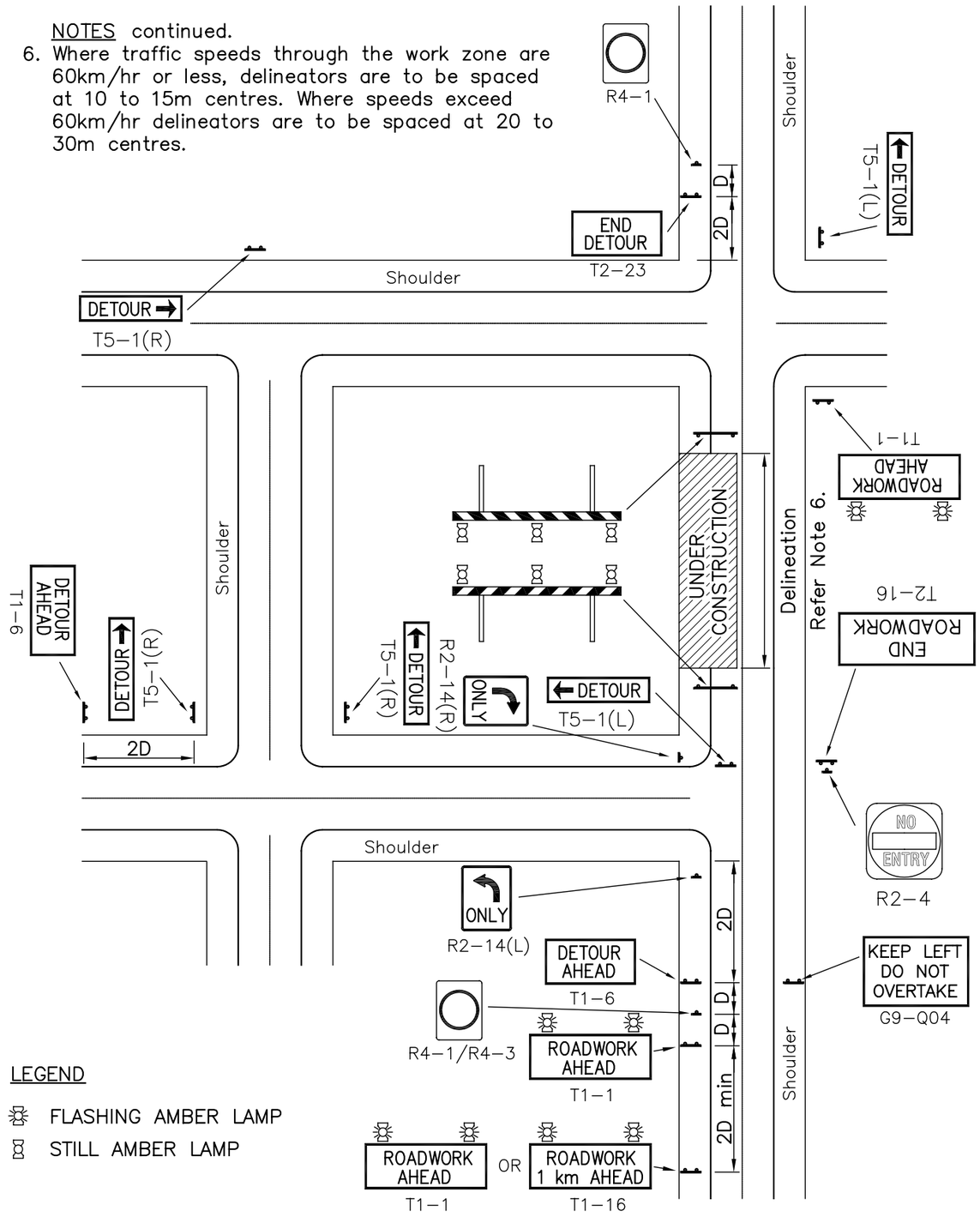


SIGN SPACING	
Approximate Approach Speed km/h	Desirable Distance D m
Less than 60	20 to 40
60	40 to 60
80	60 to 80
100	80 to 120
More than 100	120 to 140

CASE 1 - LONG TERM DETOUR OF ALL TRAFFIC ON TWO-WAY ROAD

NOTES continued.

6. Where traffic speeds through the work zone are 60km/hr or less, delineators are to be spaced at 10 to 15m centres. Where speeds exceed 60km/hr delineators are to be spaced at 20 to 30m centres.



LEGEND

FLASHING AMBER LAMP

STILL AMBER LAMP

CASE 2 - LONG TERM DETOUR OF TRAFFIC IN ONE DIRECTION ON A TWO-WAY ROAD

Scales: NOT TO SCALE			drawn	Org signed by BDF 09/98
			checked	
			designed	
Sheet A3 , Datum: A.H.D.	Revisions		checked	

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General Manager of Engineering Operations

ARRANGEMENT OF WARNING SIGNS AT DETOURS

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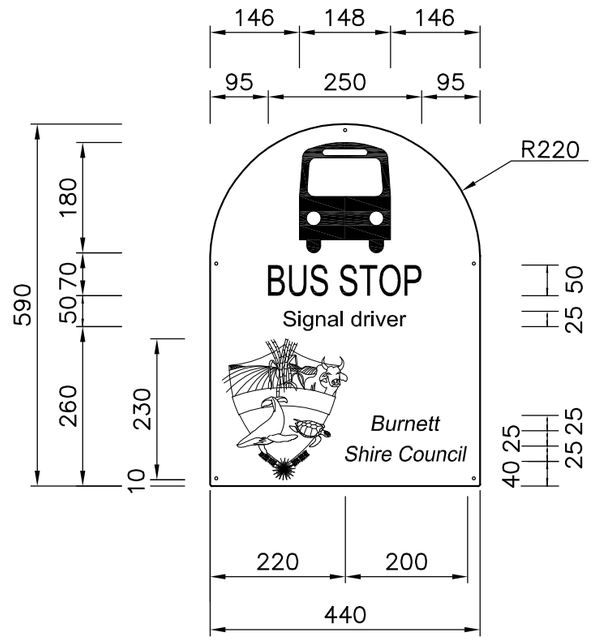
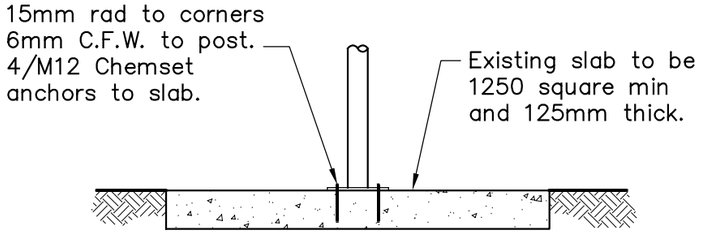
Drawing No. R143

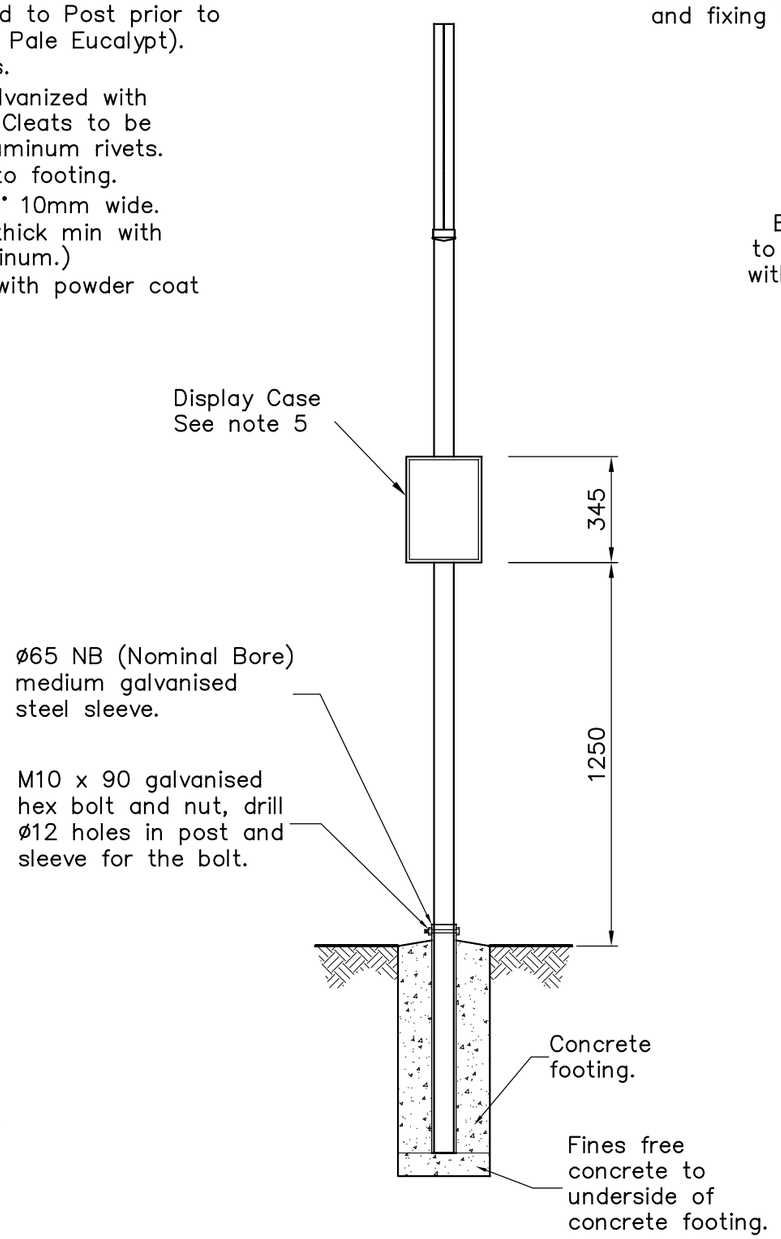
1. All signs to be reflectorised Class 1 to AS 1743 unless otherwise noted.
2. Background in reflective white, Bus decal and text in black.
   Council Emblem to Std colors.
3. A. 0 to 1 Kilometre from coast – 25x1.2mm cleats welded to Post prior to being hot dip Galvanized then powder coated. (Color – Pale Eucalypt). Fix Aluminum Sign plate to cleats with Aluminum rivets.
   B. 1 Kilometre or greater from coast – Post must be Galvanized with powder coat finish. (Color – Pale Eucalypt). Aluminum Cleats to be 40x25x3 fixed to the CHS. Fix Aluminum plate with Aluminum rivets.
4. Concrete N20 in accordance with AS 1379 and AS 3600 to footing.
5. Display case to have two sides and bottom folded up 135° 10mm wide.
   A. 0 to 1 Kilometre from coast – Aluminum plate 2mm thick min with powder coat finish color (yellow) (All rivets to be Aluminum.)
   B .1 Kilometre or greater from coast – Galvanized plate with powder coat finish color (yellow) to be used.
6. All dimensions are in millimeters.



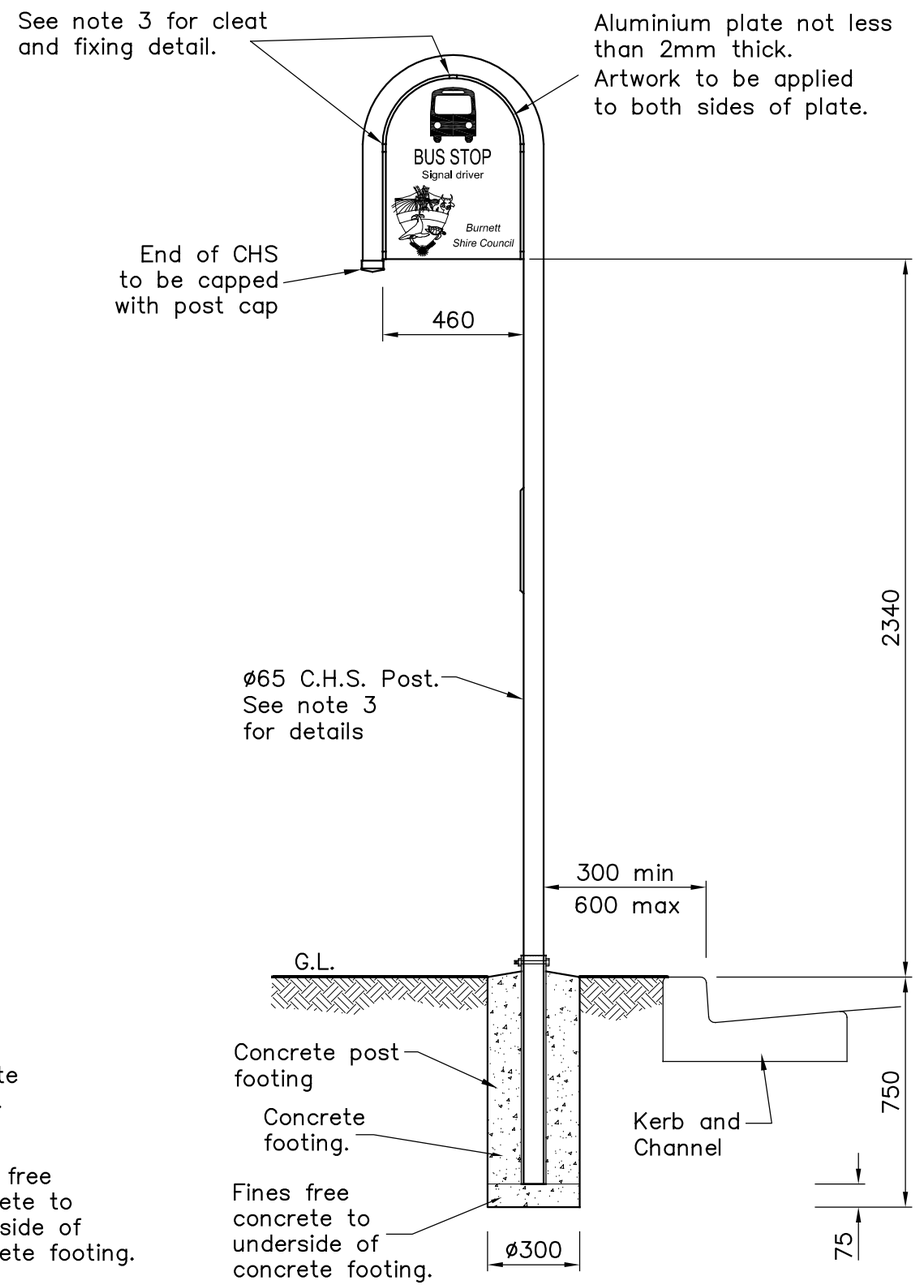
BUS STOP SIGN



ALTERNATIVE HOLDDOWN DETAIL ON EXISTING SLAB



ELEVATION AS VIEWED FROM FOOTPATH



SIDE ELEVATION

Scales: Not to scale	B	Shape Change	MLP 7/04	drawn	Org signed by BDF 06/04
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

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Original signed by
General Manager of Engineering Operations

BUS STOP SIGN DETAILS

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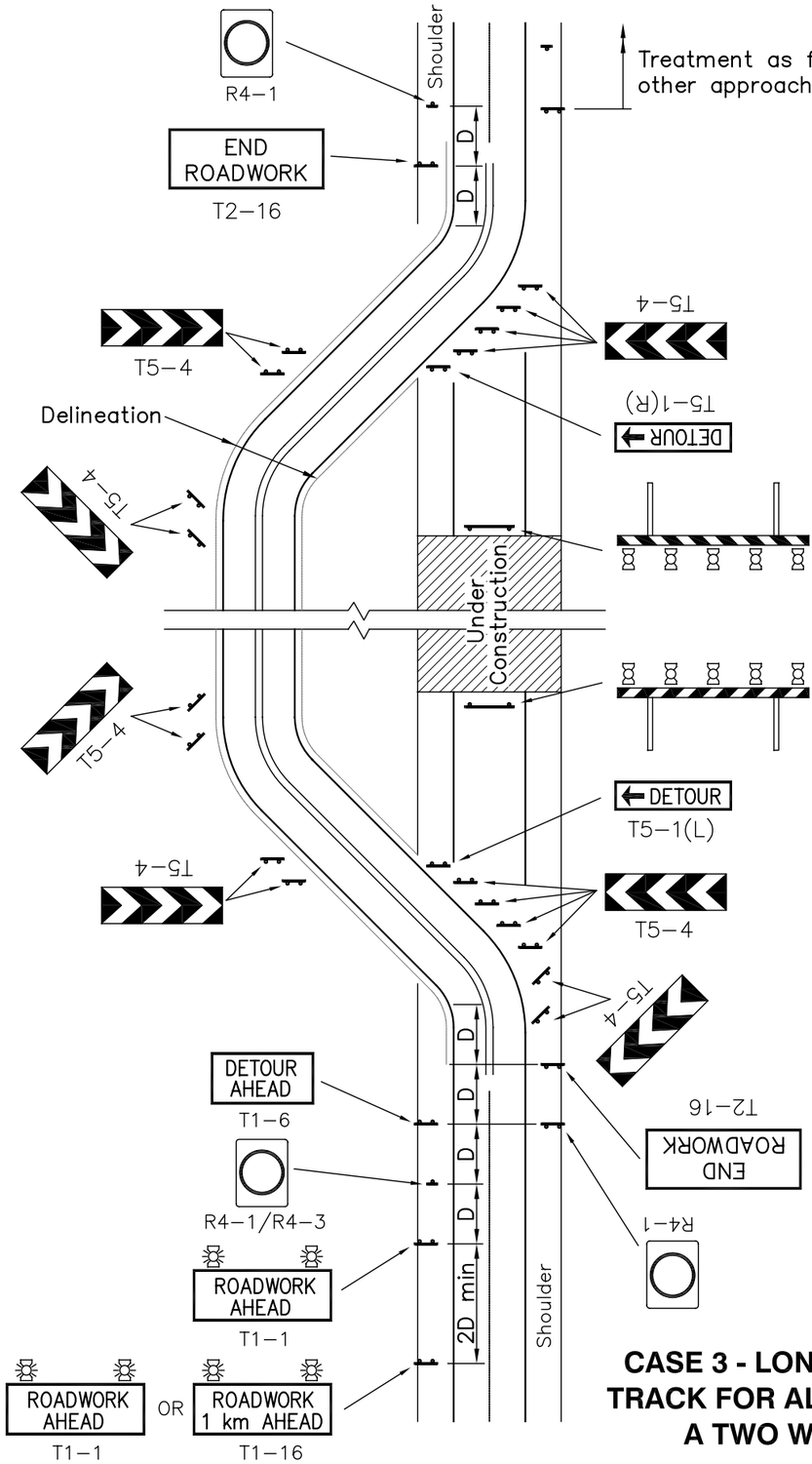
Drawing No. R144

B



CASE 3 - LONG TERM SIDE TRACK FOR ALL TRAFFIC ON A TWO WAY ROAD

NOTES

\# Refer to MUTCD Part 3 Works on Roads for other configurations.

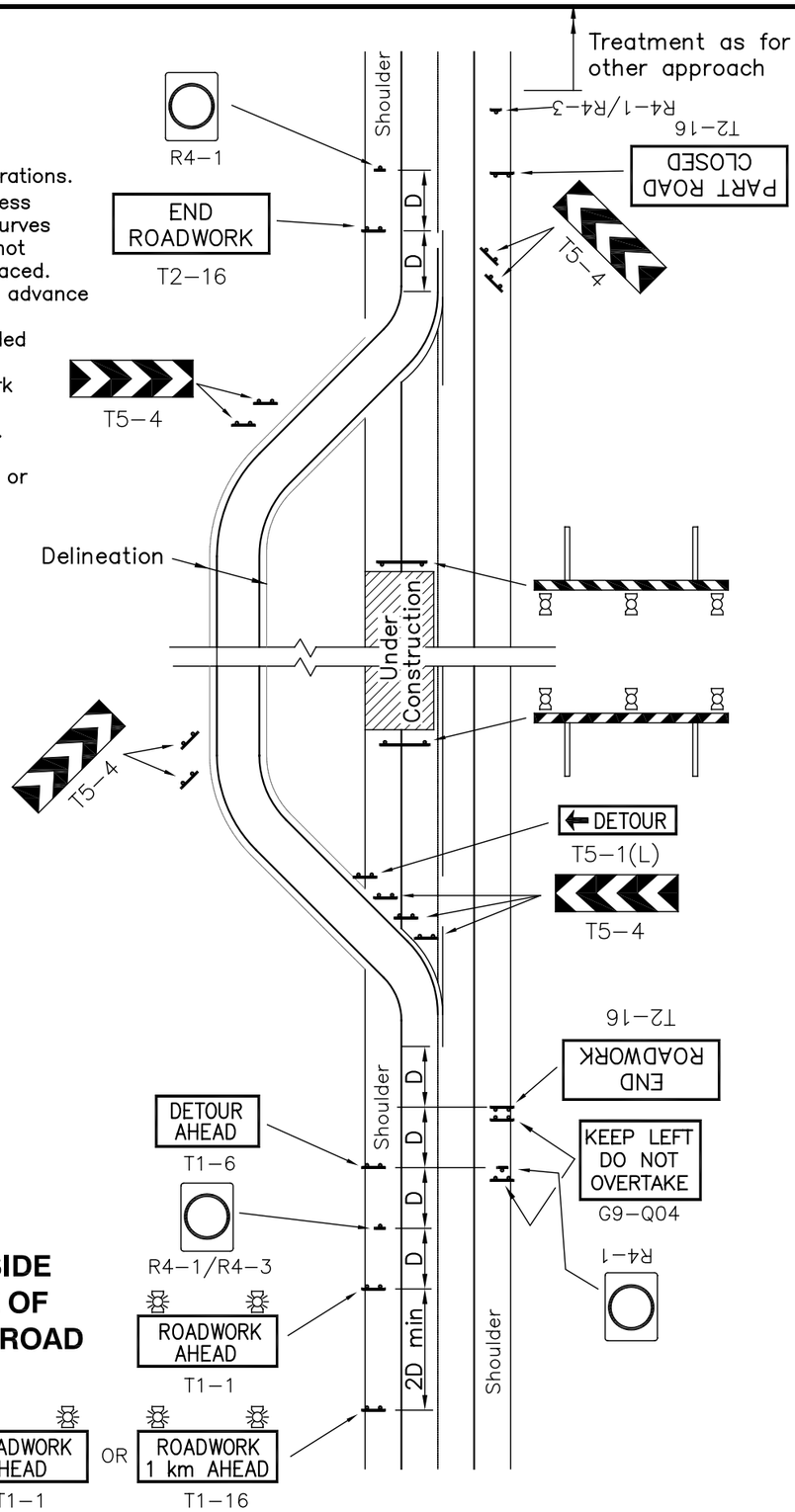
1. The width of side track for running lanes should not be less than 7m for 2 way side track or 3.5m for single lane. Curves should be constructed to suit approach speed. If this is not practicable, appropriate curve and advisory speed signs placed.
2. High traffic volumes may require duplication of temporary advance warning signs on right–hand side of carriageway
3. Means of access past temporary barriers should be provided for local traffic if necessary.
4. Use "ROADWORK 1km AHEAD" sign 1km in advance of work site for approach speeds greater than 80km/hr.
5. Work area should not commence within 30m of the taper.
6. Speed limits to be determined by Works Engineer.
7. Where traffic speeds through the work zone are 60km/hr or less, delineators are to be spaced at 20 to 30m centres.

LEGEND

FLASHING AMBER LAMP

STILL AMBER LAMP

SIGN SPACING	
Approximate Approach Speed km/h	Desirable Distance D m
Less than 60	20 to 40
60	40 to 60
80	60 to 80
100	80 to 120
More than 100	120 to 140



CASE 4 - LONG TERM SIDE TRACK FOR ONE LANE OF TRAFFIC ON A TWO WAY ROAD

Scales:					
NOT TO SCALE	A	Add MUTCD note.	MLP 08/04	drawn	Org signed by BDF 06/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

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General Manager of Engineering Operations

ARRANGEMENT OF WARNING SIGNS AT SIDE TRACK

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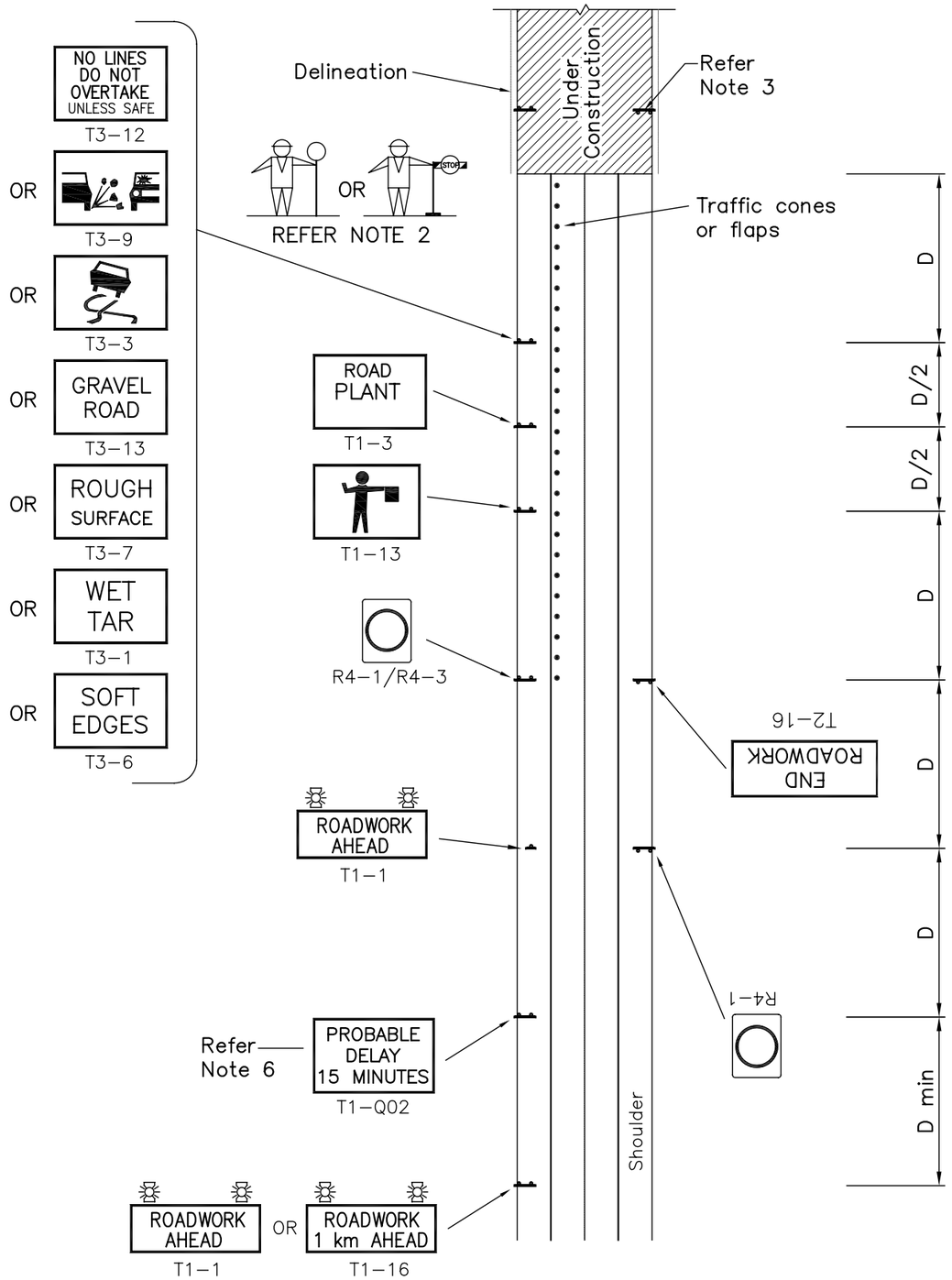
Drawing No. R145

A



CASE 5 - TRAFFIC THROUGH WORK AREA ON A TWO-LANE, tWO-WAY ROAD

NOTES

\# Refer to MUTCD Part 3 Works on Roads for other configurations.

1. This arrangement is most applicable to lightly trafficked roads and bituminous surfacing works. On heavily trafficked roads or bituminous surface priming, work should be undertaken part width at a time.
2. Traffic controllers and Traffic Controller ahead signs should always be used for bituminous surfacing operations where traffic volumes are less than 800 vehicles per day. Where traffic volumes are greater than 800 vehicles per day, consideration should be given to the use of a boom barrier in lieu of STOP/SLOW battens.
3. Appropriate signs are used and spaced as required and covered when not appropriate, where traffic is approaching a haul road.
4. Temporary delineation should be installed if permanent delineation is inadequate.
5. Where work is contained in a single lane only, traffic operating in the unobstructed lane may be controlled by using a "ROADWORK AHEAD" sign and speed limit sign on the approach to the works. At the other end of the works an "END ROADWORK" sign and appropriate speed limit sign should be used.
6. The "KEEP LEFT DO NOT OVERTAKE" sign should be used in advance of the boom barrier.
7. Traffic cones at 5–15m spacing may be used along the centreline with traffic controllers.
8. The Traffic Controller Ahead sign should only be used where traffic controllers are on duty. It should be covered or removed at all other times.
9. Use "ROADWORK 1km AHEAD" sign 1km in advance of the work site for approach speeds greater than 80km/h.
10. A maximum speed limit of 60 km/h shall be used. Cover or alter if inappropriate at night.
11. Use "PROBABLE DELAY 15 MINUTES" sign where expected delays are considerable.
12. The sign "PREPARE TO STOP" (T1–18) may be used where the PROBABLE DELAY 15 MINUTES sign is not used.

SIGN SPACING	
Approximate Approach Speed km/h	Desirable Distance D m
Less than 60	20 to 40
60	40 to 60
80	60 to 80
100	80 to 120
More than 100	120 to 140

LEGEND

Flashing amber lamp.

Still amber lamp.

Scales:					
NOT TO SCALE	A	Add MUTCD note.	MLP 08/04	drawn	Org signed by BDF 09/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

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Original signed by
General Manager of Engineering Operations

ARRANGEMENT OF WARNING SIGNS AT TRAFFIC THROUGH WORK SITE

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Drawing No. R146

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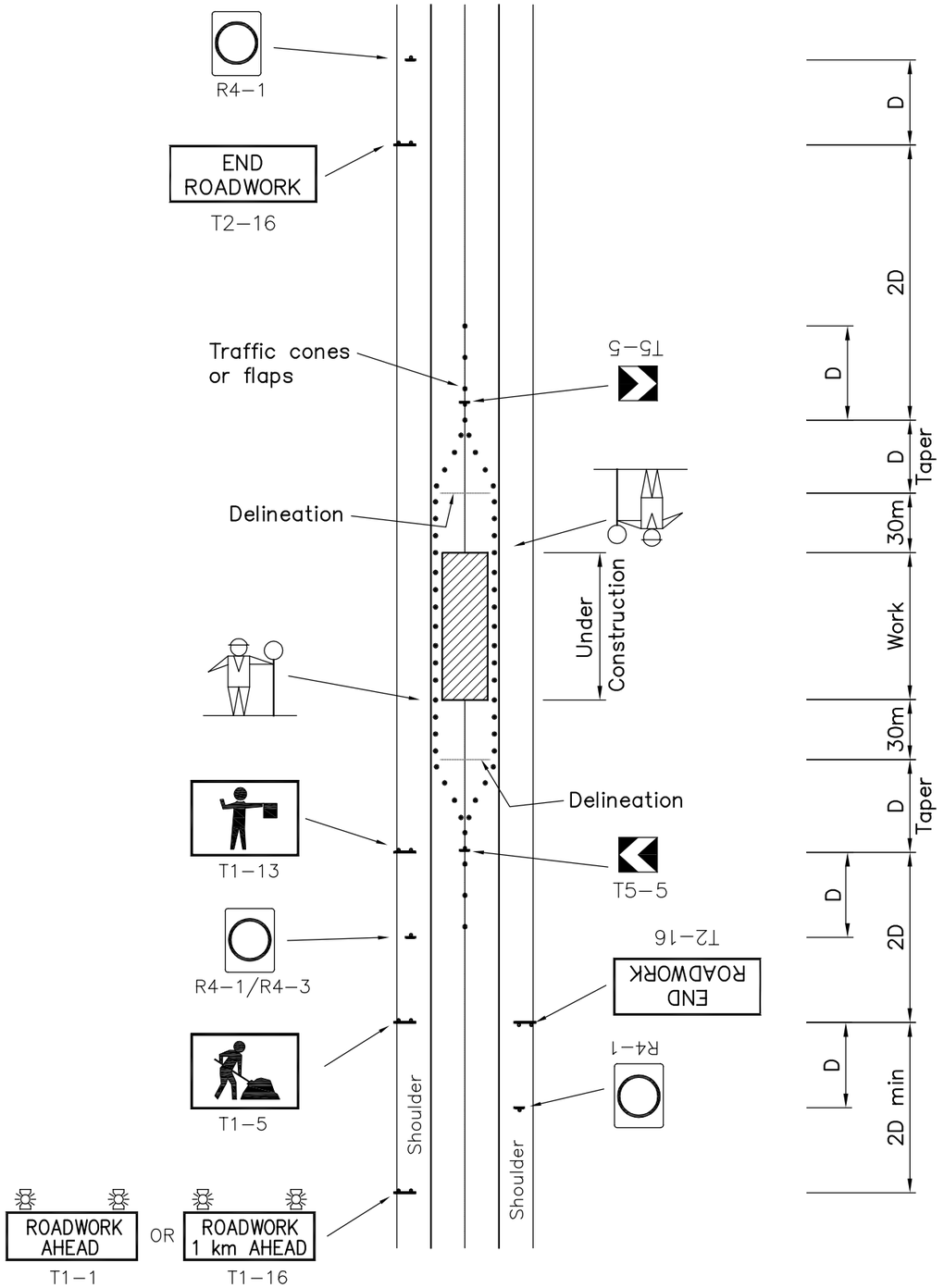

CASE 6 - SHORT-TERM ROADWORKS TO CENTRE OF CARRIAGEWAY ON TWO-WAY ROAD

NOTES

\# Refer to MUTCD Part 3 Works on Roads for other configurations.

1. Any vehicles should be parked off the carriageway, beyond the work area. A vehicle so parked should not display cab–mounted warning devices.

2. Additional advance warning signs should be placed on the right–hand side of approaching traffic on heavily trafficked roads.

3. Culverts or other obstructions should be clearly marked with delineation.

4. A maximum speed limit of 60km/h shall be used where traffic controllers are employed.

5. Use ROADWORK 1 km AHEAD sign 1 km in advance of the work site for approach speeds greater than 80 km/h. This sign may be omitted for work of short duration, unless presence of next advance warning sign would be unexpected.

6. Use traffic controllers with Traffic Controller Ahead sign while workers are in the work area and when machines or materials are being brought to the site.

7. Safety helmet and high visibility garment should be worn.

8. For continuous operations such as paint spotting, the traffic controller and lateral shift markers may be replaced with vehicles fitted with the appropriate cab–mounted warning devices and the delineation traffic cones omitted.

9. The Speed Restriction sign may be mounted together with the the END ROADWORK sign, where desired.

SIGN SPACING	
Approximate Approach Speed km/h	Desirable Distance D m
Less than 60	20 to 40
60	40 to 60
80	60 to 80
100	80 to 120
More than 100	120 to 140

LEGEND

Flashing amber lamp.

Still amber lamp.

Scales:					
NOT TO SCALE	A	Add MUTCD note.	MLP 08/04	drawn	Org signed by BDF 06/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

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Original signed by
General Manager of Engineering Operations

ARRANGEMENT OF WARNING SIGNS WHERE ROSDWORKS IS IN CENTRE OF CARRIAGEWAY

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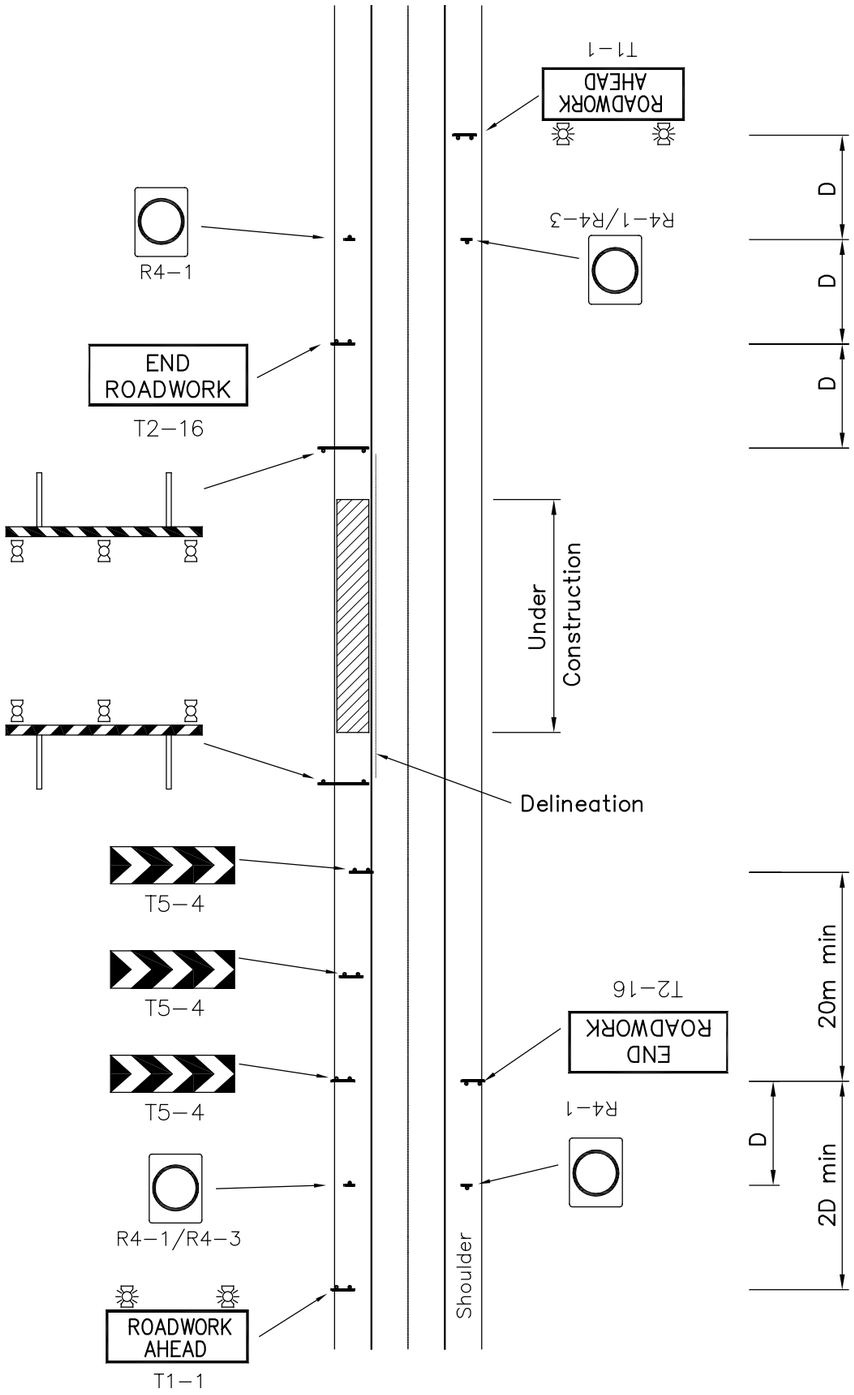
Drawing No. R147

A



NOTES

\# Refer to MUTCD Part 3 Works on Roads for other configurations.

1. In urban areas, access for pedestrians should be considered together with the appropriate signs.

2. Access for local traffic should be considered.

3. At night, or when no work is being carried out, barriers may be erected along the work site at right angles to traffic flow.

4. Work may encroach on traffic lane if AADT is less than 400 vehicles per day and sufficient width (5.5m) remains.

5. For work of short duration, barriers and lamps may be omitted and traffic cones at 5 to 15m spacings used in lieu of lateral shift markers.

6. For survey operations replace ROADWORK AHEAD sign with Workers Ahead sign; barriers and lamps may also be omitted and traffic cones at 5 to 15m spacings used in lieu of lateral shift markers.

7. Where traffic flow must be temporarily interrupted, traffic controllers with appropriate signing should be used.

SIGN SPACING	
Approximate Approach Speed km/h	Desirable Distance D m
Less than 60	20 to 40
60	40 to 60
80	60 to 80
100	80 to 120
More than 100	120 to 140

CASE 7 - SHOULDER CLOSURE - ALL ROADS

Scales: NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Add MUTCD note.	MLP 08/04	drawn	Org signed by BDF 06/98
			checked	
			designed	
Revisions			checked	

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Original signed by
General Manager of Engineering Operations

ARRANGEMENTN OF WARNING SIGNS WHERE ROADWORKS IS ON ROAD SHOULDER

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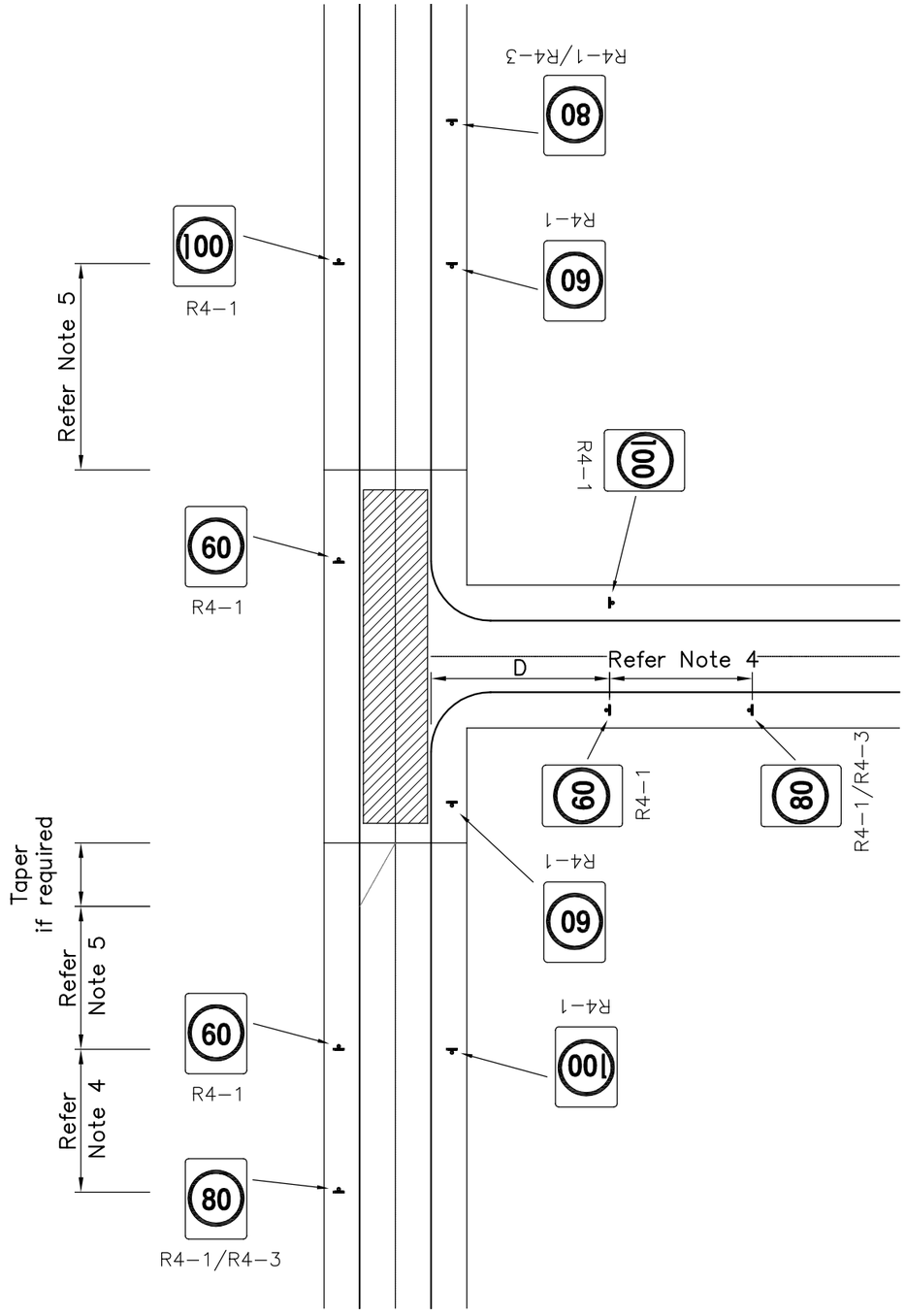
Drawing No. R148

A



NOTES

\# Refer to MUTCD Part 3 Works on Roads for other configurations.

1. Appropriate speed limits and the relevant speed limit signage should be first approved by Works Engineer before installation.

2. High traffic volumes, particularly on multi–lane roads, may require duplication of these signs on the right–hand side of the carriageway. Where a median is provided, erect these signs on median.

3. A maximum speed limit of 60 km/h shall be used where traffic controllers are on duty or where one or more lanes of a multi–lane road are closed to traffic

4. It is desirable to reduce speed limits in 20km/h steps, with approximately 500m intervals between successive signs.

5. Location of speed limit signs may vary on individual jobs depending on the arrangement of roadworks signage.

SIGN SPACING	
Approximate Approach Speed km/h	Desirable Distance D m
Less than 60	20 to 40
60	40 to 60
80	60 to 80
100	80 to 120
More than 100	120 to 140

TAPER LENGHT IN ONE LANE		
Approximate Approach Speed km/h	Recommended Taper, m	
	Two–lane Two–way	Multi–lane
Less than 60	60	90
60	80	110
80	100	150
100	120	190
More than 100	140	210

SPEED LIMIT SIGNAGE AT ROADWORKS

Scales:					
NOT TO SCALE	A	Add MUTCD note.	MLP 08/04	drawn	Org signed by BDF 06/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

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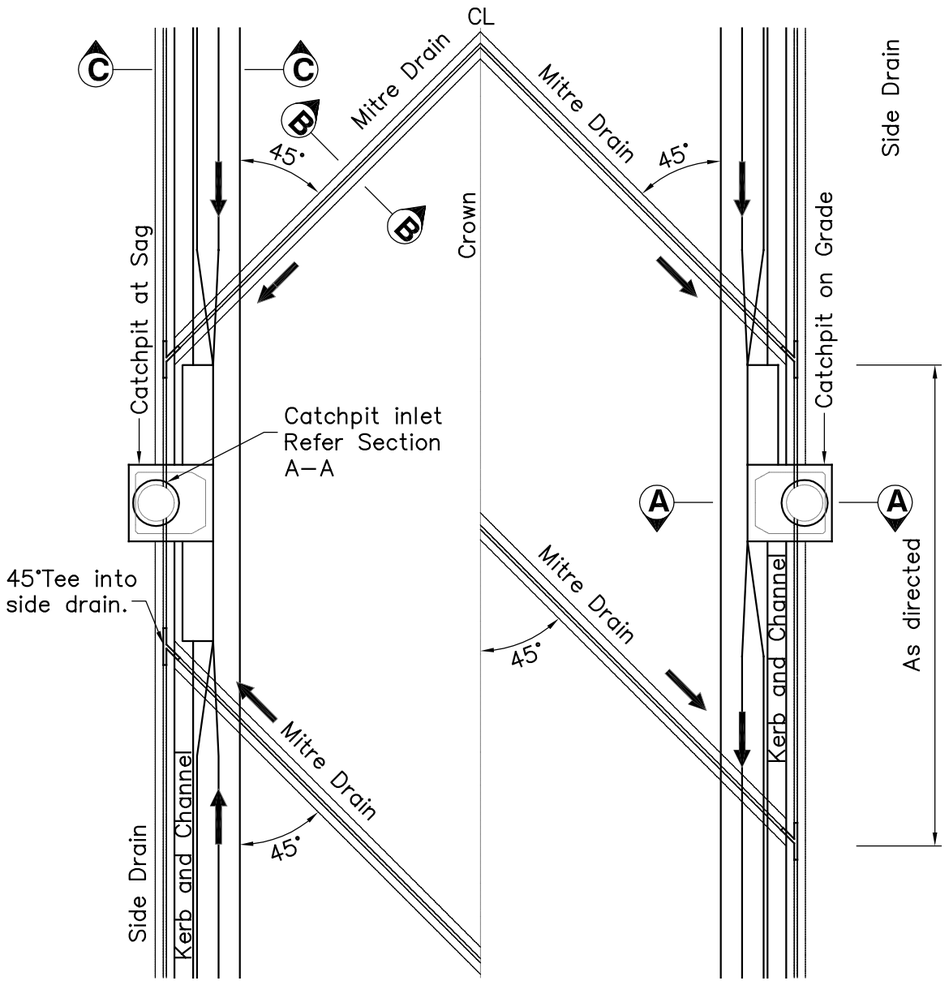
Original signed by
General Manager of Engineering Operations

ARRANGEMENT OF SPEED LIMIT SIGNS AT ROADWORKS

H:\11Acad_dwg\STANDARDS\Burnett Shire Council Standards\R149A.dwg, 09/11/2004 3:18:04 PM

Drawing No. R149

A



PLAN

LEGEND

E Trench width as specified on project drawings.

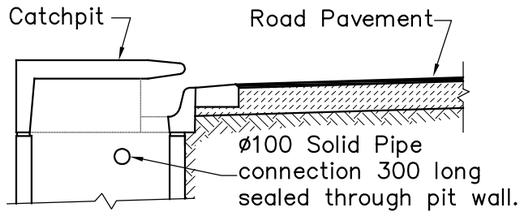
■ Dimension as shown unless otherwise specified on project drwaings.

Sand

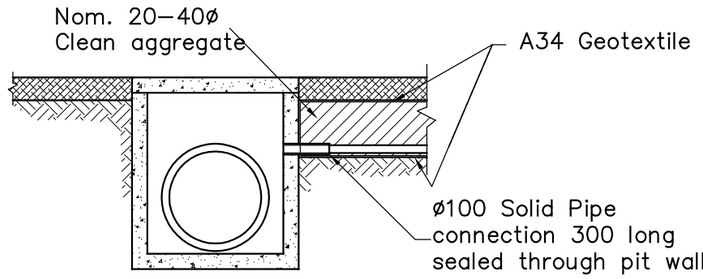
Gravel

Pavement

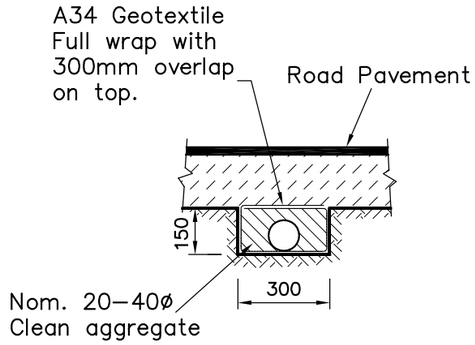
Spalls



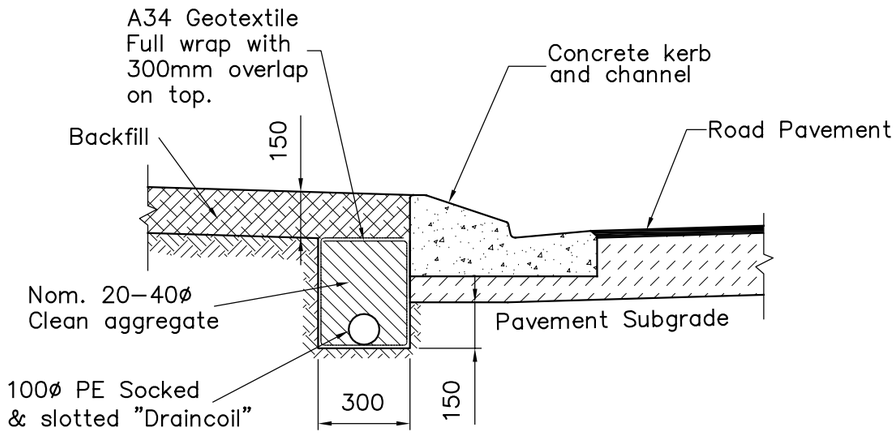
SECTION A-A CATCHPIT INLET



CONNECTION TO SW PIT DETAIL



SECTION B-B MITRE DRAIN



SECTION C-C SIDE DRAIN

NOTES

1. DRAIN LOCATION : The location of side drains and mitre Drains is typical only. Drains shall be located as directed on site by Works Engineer. Mitre Drains shall meet under crown of roadway where side drains are provided on both sides. Where only one Side Drain is provided Mitre Drains are to extend diagonally through the full width of pavement.

2. DRAINAGE PIPE : ø100 "socked slotted " PE "draincoil pipes are to be provided in all side and mitre drains unless directed otherwise by Works Engineer.

3. BUILDING PAPER : Ply tarred building paper or other approved impervious material shall be placed on top of the gravel fill in all drains. Building paper shall be 50mm wider than the trench for the underdrain, ie. for side drains 250mm wide the paper shall be 300mm wide.

4. CONSTRUCTION PROCEDURE : Trimming and rolling of the pavement box is to be completed and approved before Side Drains are commenced. The Side Drain shall then be excavated and the excavated material shall be placed on the footpath and not onto the pavement box.

5. CONDUIT PIPE CROSSINGS : Where Side Drains pass under Conduit Pipes, the Side Drains are to be deepened to allow for a minimum depth of gravel under the Conduit Pipe where no sub–soil pipe is provided and to allow for a 50mm minimum gravel between the Conduit Pipe and the Sub–soil Pipe where such is provided.
Where so deepened, Side Drains are to be geaded out to normal depth at a minimum grade of 1 in 200.

Scales:					
NOT TO SCALE	A	Change side drain details.	MLP 8/04	drawn	Org signed by BDF 09/98
				checked	
				designed	
Sheet A3 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

SIDE DRAINS, MITRE DRAINS AND SEEPAGE DRAINS

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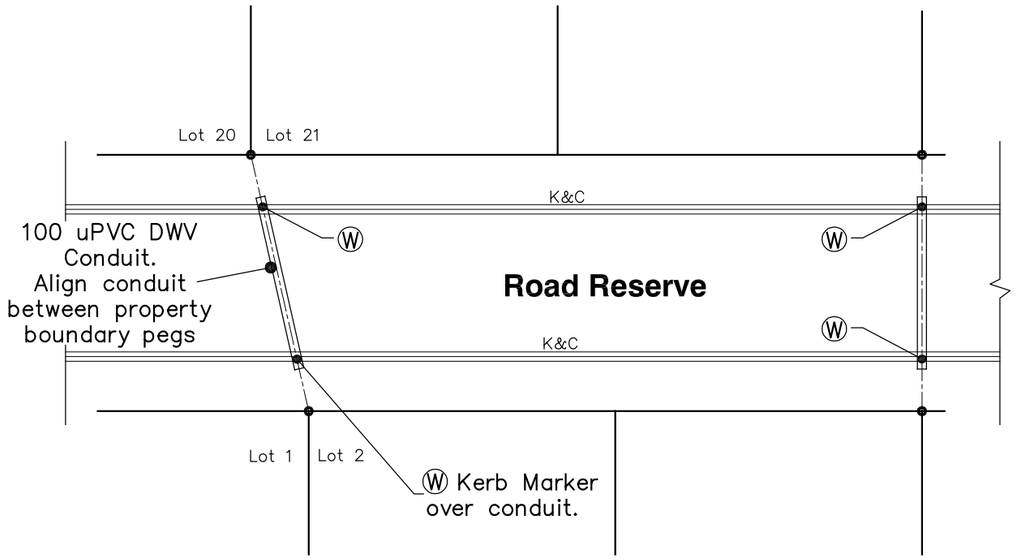
Drawing No. R151

A

LEGEND

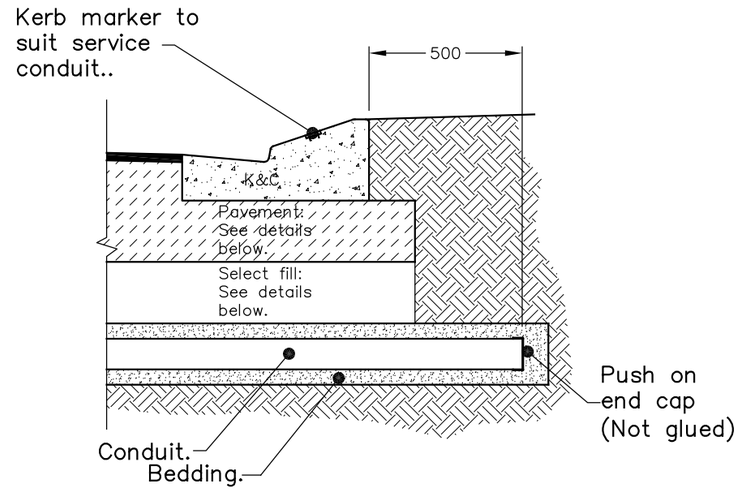
Min cover for conduits.

#	Telstra.	– 450
	Ergon.	– 750
	Water main.	– 750
	Water service	– 450



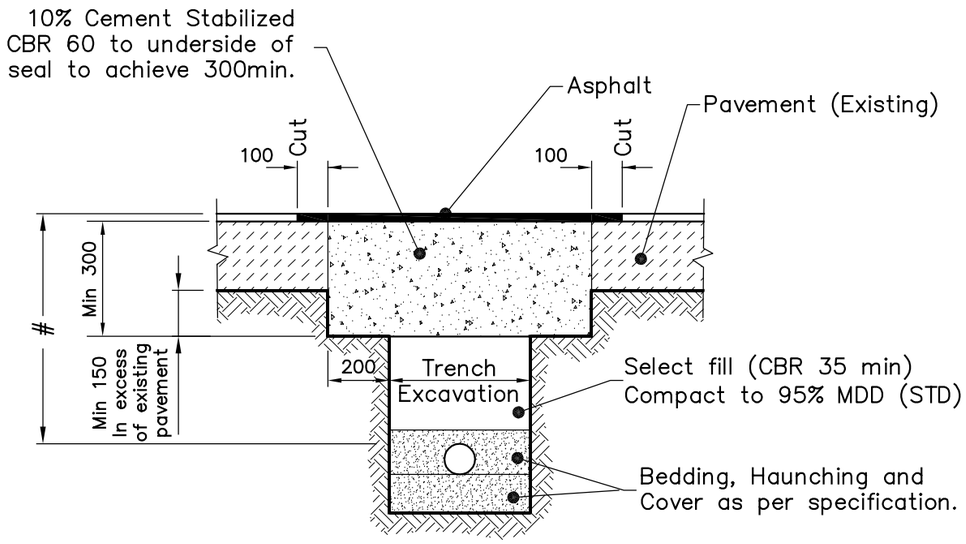
WATER SERVICE CONDUIT LOCATION PLAN

Not to scale

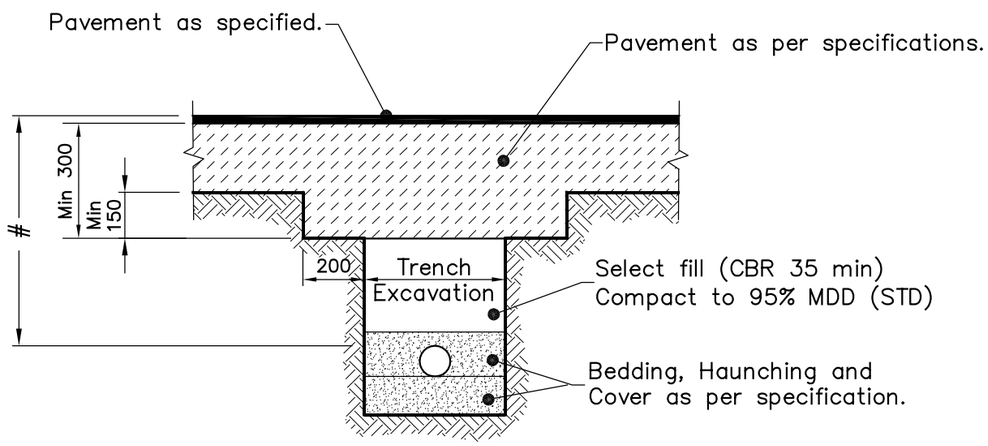


TYPICAL DETAIL AT KERB & CHANNEL

Not to scale



CONDUIT/SERVICE ROAD - CROSSING
TYPICAL DETAILS - EXISTING ROAD



CONDUIT/SERVICE ROAD - CROSSING
TYPICAL DETAILS - NEW ROAD

Scales: NOT TO SCALE Sheet A3 , Datum: A.H.D.	A	Add conduit note.	MLP 03/06	drawn: Org signed by MLP 08/04
				checked
				designed
				checked

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

CONDUIT/SERVICE ROAD - CROSSING DETAILS

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Drawing No. R152

A

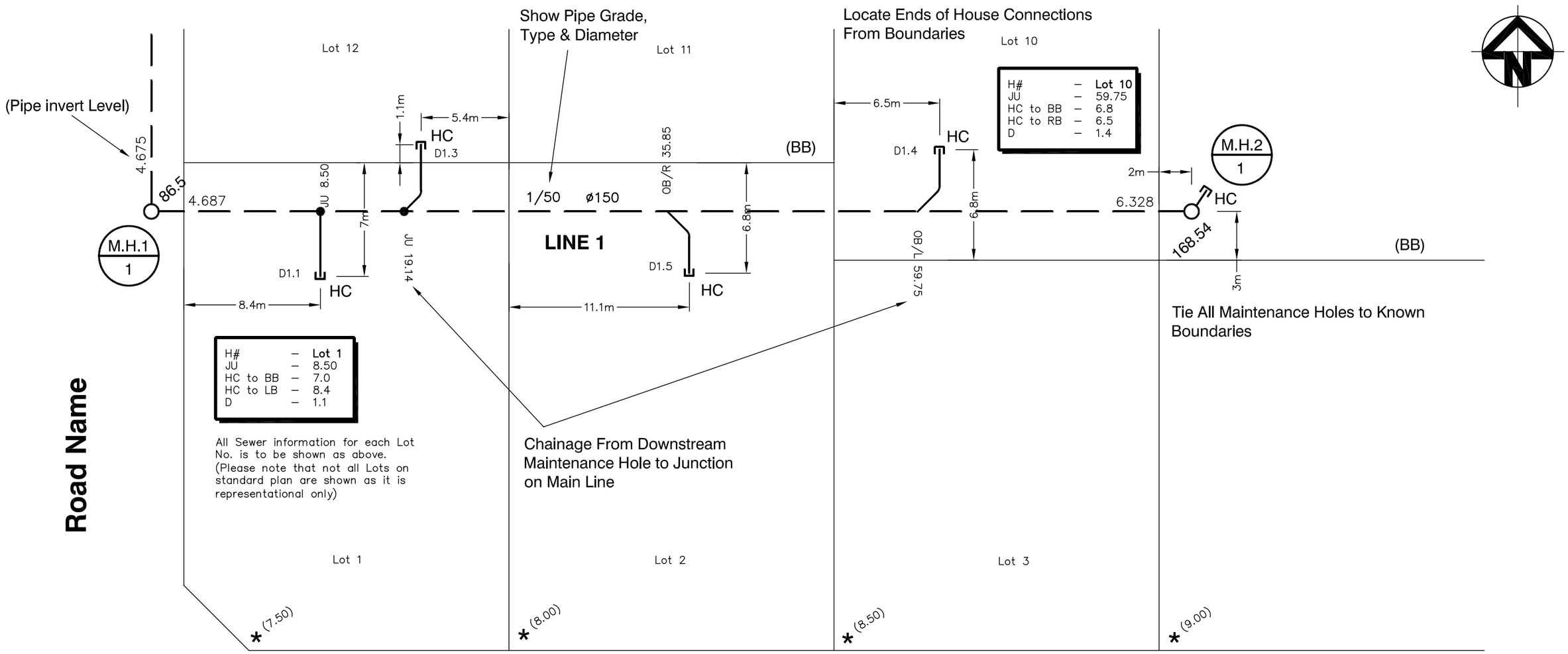
BURNETT SHIRE COUNCIL STANDARD DRAWINGS

SEWERAGE

Number	Title / Topic
	General
80524	Sewer Reticulation Typical Sewer Main Layout As Constructed Plans
S500	Access Chambers Cast Iron Cover and Frame C.I. Concrete Filled Cover Cast Iron Cover
S501	Access Chambers Cast Iron Cover and Frame Bolt Down
	2440 Diameter Sewage Pump Stations
100806	2440 Dia. Sewage Pump Station - Cover Sheet and Drawing Index
100807	2440 Dia. Sewage Pump Station - Site Layout Requirements
100808	2440 Dia. Sewage Pump Station - Electrical Requirements Plan
100809	2440 Dia. Sewage Pump Station - Civil Requirements Plan
100810	2440 Dia. Sewage Pump Station - Section A
100811	2440 Dia. Sewage Pump Station - Section B
100812	2440 Dia. Sewage Pump Station - Section C
100813	1830 Dia. Grit Collector Maintenance Hole - Details Sheet 1 of 3
100814	1830 Dia. Grit Collector Maintenance Hole - Details Sheet 2 of 3
100815	1830 Dia. Grit Collector Maintenance Hole - Details Sheet 3 of 3
100817	2440 Dia. Sewage Pump Station - Potable Water Details
100822	2440 Dia. Sewage Pump Station - Fabricated Mild Steel Headers
100832	1830 Dia. Grit Collector Maintenance Hole - Wall Pipe Detail
100833	Grit Collector Maintenance Hole - Inlet Valve General Arrangement
100834	Grit Collector Maintenance Hole - Inlet Valve Spindle Shaft Details
100835	Grit Collector Maint. Hole - Inlet Valve Bearing Support Details

SEWERAGE (continued)

Number	Title / Topic
100836	1830 Dia. Grit Collector Maint. Hole - Bar Screeen Detail Sheet 1 of 2
100837	1830 Dia. Grit Collector Maint. Hole - Bar Screeen Detail Sheet 2 of 2
101025	Chain and Bracket Details
101026	Pipe Support Bracket Details
101028	Hole Wall Pipe Details
100995	Typical Electrical Cubical Layout 6kw D.O.L.
101027	Typical Electrical Cubical Layout 30kw VF
100901	Standard Overflow Flap Valve Type 1 Chamber Details



Road Name

I HEREBY STATE THAT THE INFORMATION IS A TRUE AND ACCURATE INDICATION OF THE SEWER

ENGINEER

RPEQ No.

Date.....

NOTES:
1. All sewer pipes are ø150 unless shown otherwise, include type.
2. Sewer Layout Plan – scale to be 1:500
3. Longitudinal section scale – Horiz. 1:1000, Vert. 1:100
4. Ground spot levels at all corners of block and at changes of grade (AHD Datum).
5. Drawing presented on A3 sheet

Legend

*(9.99) As constructed Spot Level

HC – House Connection

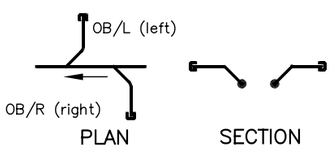
JU – Jump up on Sewer Main as measured from downstream maintenance hole

BB – Back Boundary (as observed from road)

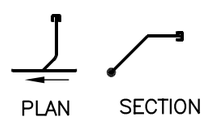
LB or RB – Left or Right Boundary (as observed from Road)

D – Depth from finished surface to HC Cap

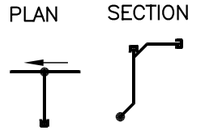
Type A



Type B



Type C
Jump up



Scales:

0 2 4 6m

Sheet A3 , Datum: A.H.D.

A	Amended Plan	DG 5/04	drawn	Org signed by DG 03/04
			checked	
			designed	Org signed by RMC 03/04
			checked	
Revisions				

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

SEWER RETICULATION
TYPICAL SEWER MAIN LAYOUT AS CONSTRUCTED PLANS

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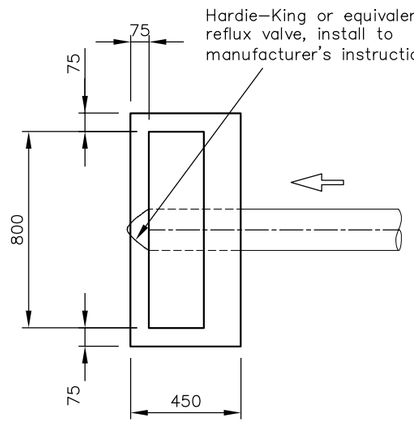
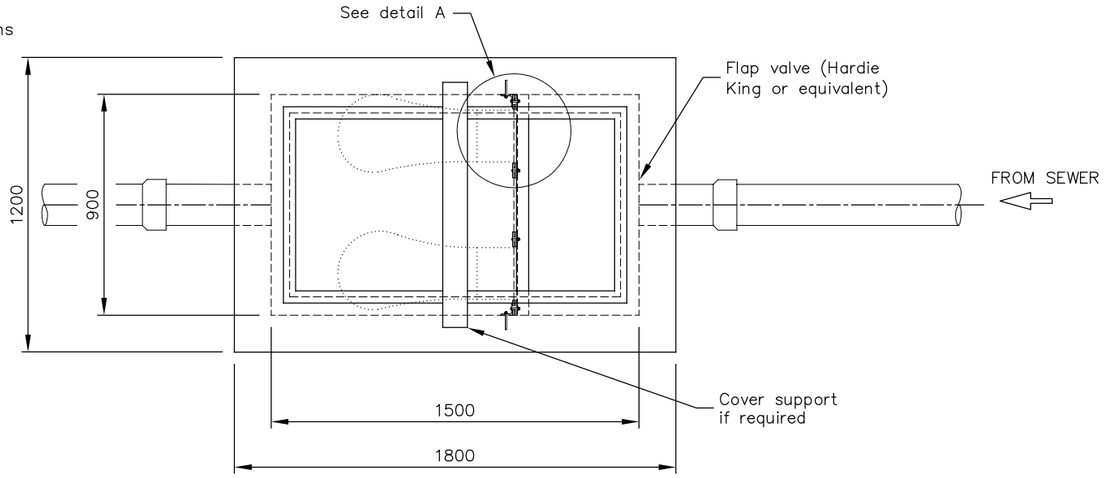
Drawing No. 80524

A

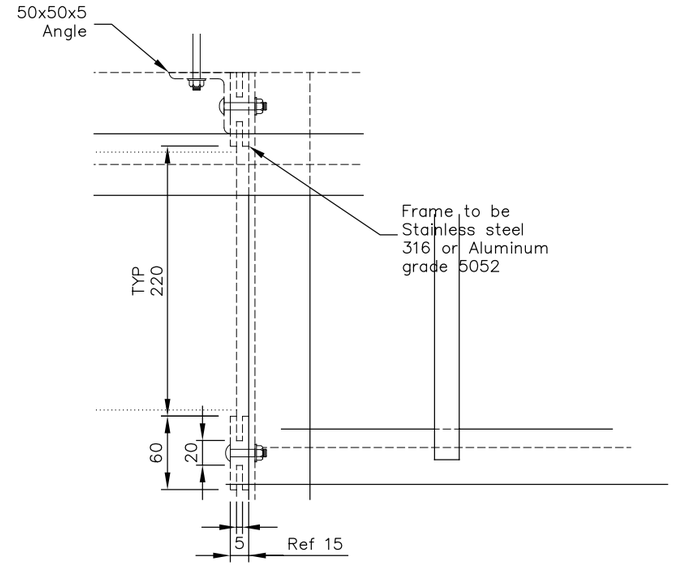




OVERFLOW CHAMBER

PLAN

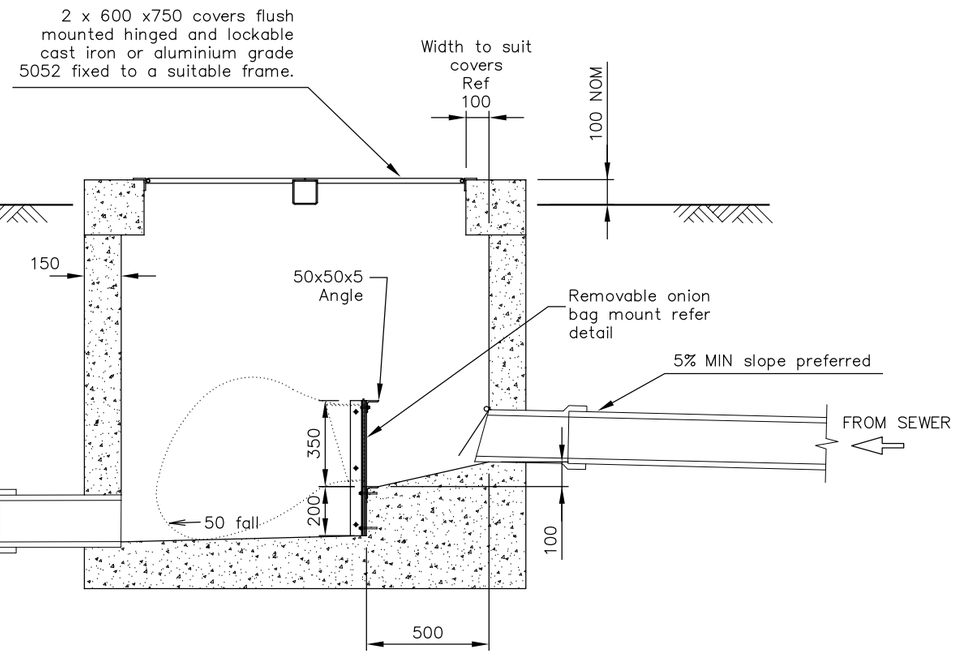
Scale 1:25



Detail A

Scale 1:5

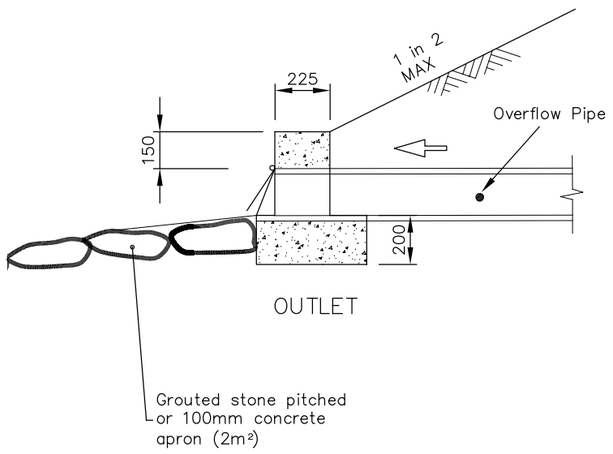
NOTES
1. Pipes shown are diagrammatic only, refer project drawings for layout and levels.
2. Concrete N32. in accordance with AS 1379 and AS 3600.
3. All steelwork hot dip galvanived to AS 1650 after fabrication.
4. All bars and angles Grade 250 to AS 3679 or Grade 5052 Aluminum.
5. All bolts, nuts and washers shall be Grade AS 2837/316 stainless steel with approved anti–galling compound.
6. All welds to AS 1554. All welding symbols comply with AS 1101.3.
7A. The covers shall be gastight similar to those produced by Hallco Engineering.
7B. All components of access covers and frames shall be fabricated from aluminium alloy 6061–T6, to AS 2848 or Cast steel covers with Stainless Steel frame.
7C. All embedded surfaces shall be painted with two coats of alkali resistant bitumous paint.
7D. The covers shall be designed as a platform in accordance with AS 1657.
7E. Fabrication details shall be submitted to Burnett Shire Councils Project Officer for approval prior to manufacture.
8. If covers are subject to vehicular loading, use appropriately rated C.I. covers.
9. All dimensions in millimetres.

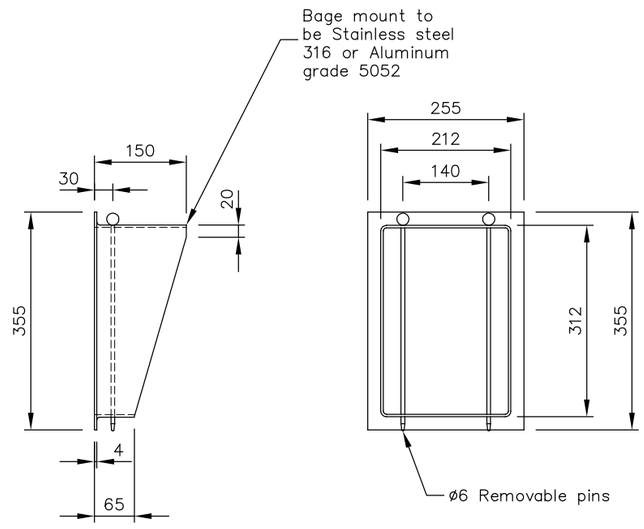


OVERFLOW CHAMBER

SECTIONAL ELEVATION

Scale 1:25





Removable "Onion Bag" Mount

Scale 1:10

Scales: 1 : 25 0 250 500 750mm; 0 50 100 150mm; 1 : 5			drawn	Org signed by MLP 8/05
Sheet A3 , Datum: A.H.D.		Revisions	checked	
			designed	
			checked	

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

STANDARD SEWERAGE PUMP STATION OVERFLOW

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Drawing No. 100991

B.S.C. STANDARD DRAWINGS FOR 2440 DIAMETER SEWAGE PUMP STATIONS

STANDARD DRAWING LIST

CIVIL AND MECHANICAL DRAWINGS

DWG N°.	TITLE
100806	STANDARD 2440 DIA. SEWAGE PUMP STATION - COVER SHEET AND DRAWING INDEX
100807	STANDARD 2440 DIA. SEWAGE PUMP STATION - SITE LAYOUT REQUIREMENTS
100808	STANDARD 2440 DIA. SEWAGE PUMP STATION - ELECTRICAL REQUIREMENTS PLAN
100809	STANDARD 2440 DIA. SEWAGE PUMP STATION - CIVIL REQUIREMENTS PLAN
100810	STANDARD 2440 DIA. SEWAGE PUMP STATION - SECTION A
100811	STANDARD 2440 DIA. SEWAGE PUMP STATION - SECTION B
100812	STANDARD 2440 DIA. SEWAGE PUMP STATION - SECTION C
100813	STANDARD 1830 DIA. GRIT COLLECTOR MAINTENANCE HOLE - DETAILS
100814	STANDARD 1830 DIA. GRIT COLLECTOR MAINTENANCE HOLE - DETAILS
100815	STANDARD 1830 DIA. GRIT COLLECTOR MAINTENANCE HOLE - DETAILS
SEW 1408	VENTILATION SYSTEMS EDUCT VENT
100817	STANDARD 2440 DIA. SEWAGE PUMP STATION - POTABLE WATER DETAILS
100822	STANDARD 2440 DIA. SEWAGE PUMP STATION - FABRICATED MILD STEEL HEADERS
100832	STANDARD 1830 DIA. GRIT COLLECTOR MAINTENANCE HOLE - WALL PIPE DETAIL
100833	GRIT COLLECTOR MAINTENANCE HOLE - INLET VALVE GENERAL ARRANGEMENT
100834	GRIT COLLECTOR MAINTENANCE HOLE - INLET VALVE SPINDLE SHAFT DETAILS
100835	GRIT COLLECTOR MAINTENANCE HOLE - INLET VALVE BEARING SUPPORT DETAILS
100836	STANDARD 1830 DIA. GRIT COLLECTOR MAINTENANCE HOLE - BAR SCREEEN DETAIL
100837	STANDARD 1830 DIA. GRIT COLLECTOR MAINTENANCE HOLE - BAR SCREEEN DETAIL
101025	STANDARD DRAWINGS FOR SEWERAGE PUMP STATION CHAIN AND BRACKET DETAILS
101026	STANDARD DRAWINGS FOR SEWERAGE PUMP STATION PIPE SUPPORT BRACKET DETAILS
101028	STANDARD 2440 DIA. SEWAGE PUMP STATION - HOLE WALL PIPE DETAIL

ELECTRICAL DRAWINGS

DWG N°.	TITLE
100995	SEWERAGE PUMP STATION CUBICAL LAYOUT (6Kw D.O.L.)
101027	SEWERAGE PUMP STATION TYPICAL CUBICLE LAYOUT (30Kw VF)

ADDITIONAL DRAWINGS

DWG N°.	TITLE
100991	STD SEWER PUMP STN OVERFLOW

THESE DRAWINGS CONTAIN BURNETT SHIRE COUNCIL'S MINIMUM REQUIREMENTS AND ARE TO BE USED AS A REFERENCE FOR PRODUCING THE DETAILED DESIGN OF PUMP STATIONS. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION.

Drawings adopted with permissions from Brisbane City Council by Burnett Shire Council 21/09/04

Scales: NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Update Plan Details	MLP 12/05	drawn	Org signed by MLP 9/04	
			checked	Org signed by	
			designed	Org signed by I C 9/04	
	Revisions		checked	Org signed by	

BURNETT SHIRE COUNCIL

Original signed by General Manager of Engineering Operations

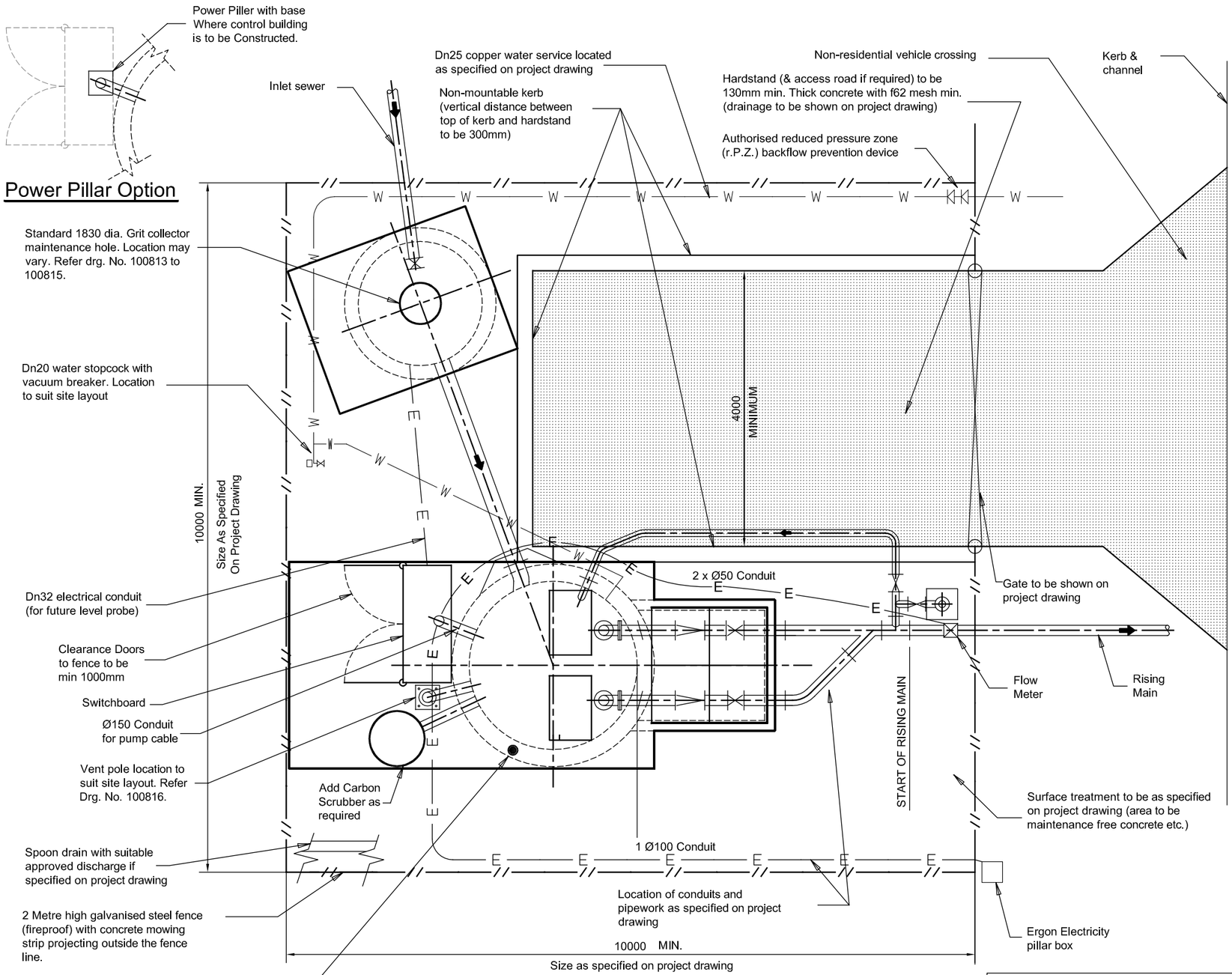
2440 DIAMETER SEWAGE PUMP STATIONS COVER SHEET AND DRAWING INDEX

Original No. 486/5/25–S20

Drawing No. 100806

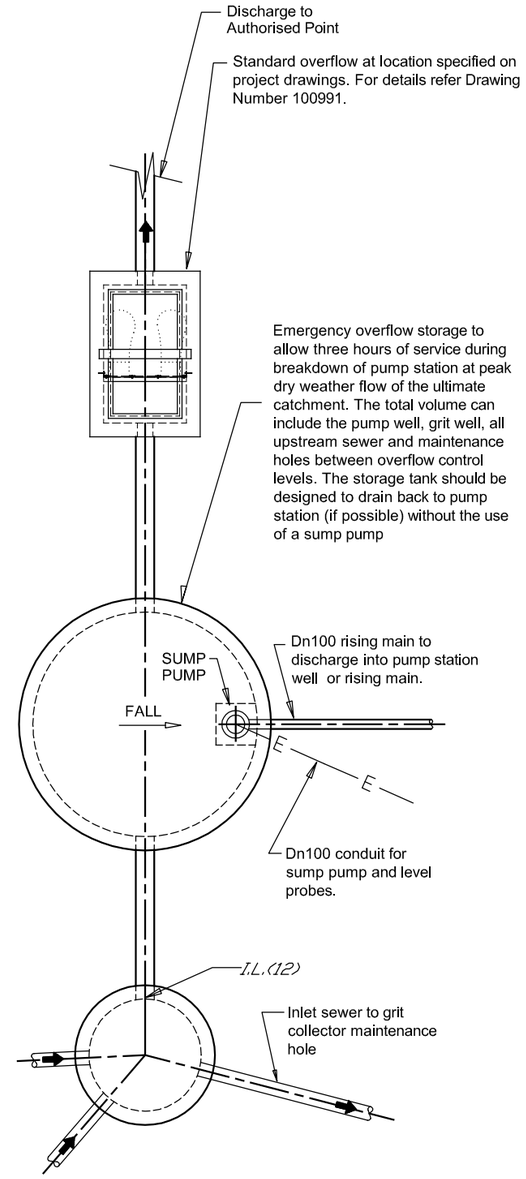
A

Power Pillar Option



Note.
1. Scrubber Conduit to well,
2. Vent to have Capacity to turn off.

TYPICAL SITE LAYOUT



TYPICAL OVERFLOW DETAIL

NOTE:-
REINFORCED CONCRETE WORK TO BE DESIGNED AND CERTIFIED BY RPEQ STRUCTURAL ENGINEER TO CURRENT STANDARDS AUSTRALIA CODES.

Drawings adopted with permissions from Brisbane City Council by Burnett Shire Council 21/09/04

Scales: NOT TO SCALE

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B	Update Plan Details	MLP 1/06	checked	Org signed by
			designed	Org signed by I C 9/04
	Revisions		checked	Org signed by

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

STANDARD 2440 DIAMETER SEWAGE PUMP STATION SITE LAYOUT REQUIREMENTS

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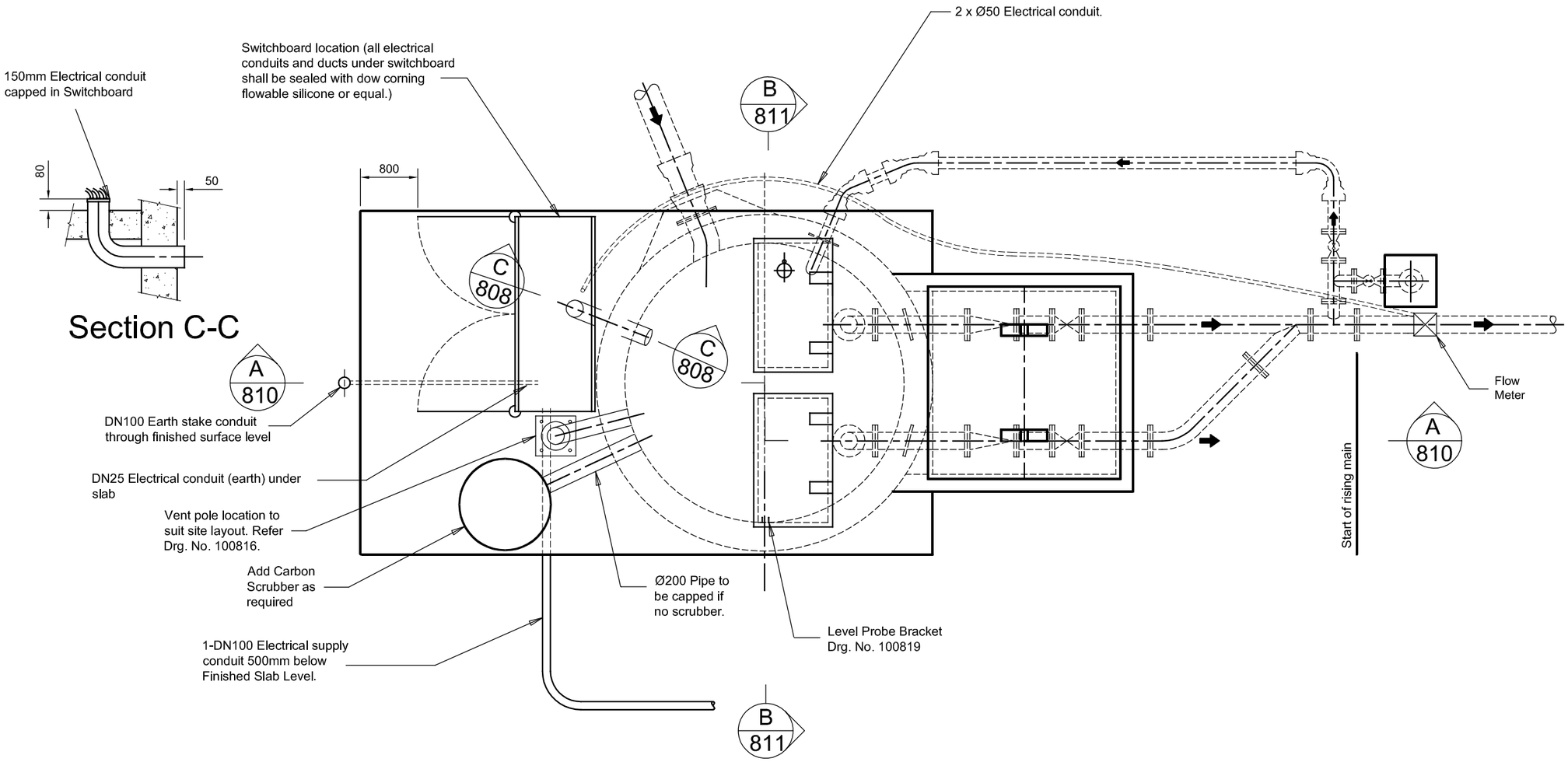
Original No. 486/5/25–S21

Drawing No. 100807

A | B



PLAN

NOTE:-
REINFORCED CONCRETE WORK TO BE DESIGNED AND CERTIFIED BY RPEQ STRUCTURAL ENGINEER TO CURRENT STANDARDS AUSTRALIA CODES.

Drawings adopted with permissions from Brisbane City Council by Burnett Shire Council 21/09/04

Scales: NOT TO SCALE	A	Update Plan Details	MLP 12/05	drawn: Org signed by MLP 9/04
				checked: Org signed by
				designed: Org signed by I C 9/04
Sheet A3 , Datum: A.H.D.	Revisions			checked: Org signed by

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

STANDARD 2440 DIAMETER SEWAGE PUMP STATION ELECTRICAL REQUIREMENTS PLAN

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Original No. 486/5/25–S22

Drawing No. 100808

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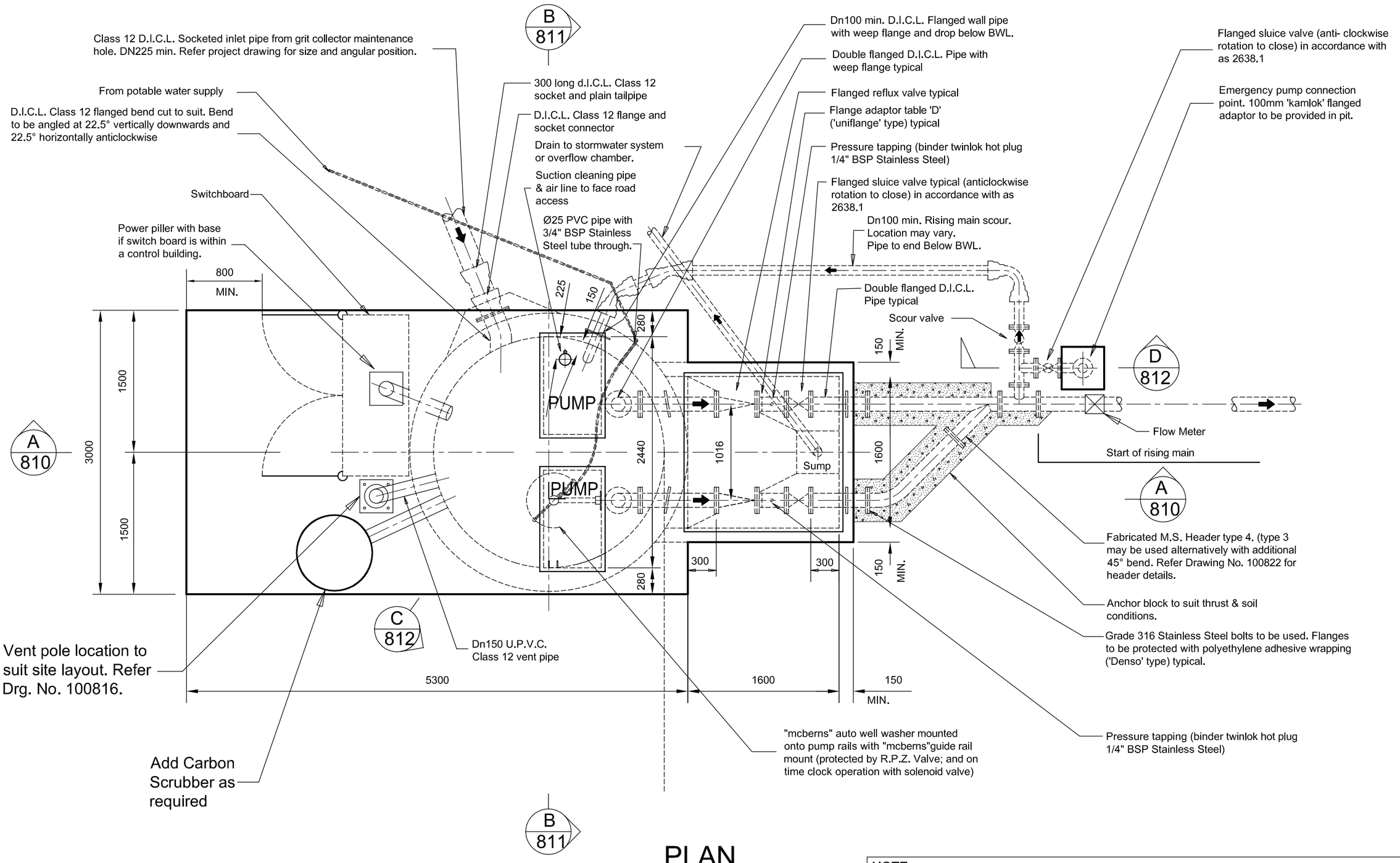

PLAN

(NOTE: COVERS OMITTED)

NOTE:-
REINFORCED CONCRETE WORK TO BE DESIGNED AND CERTIFIED BY RPEQ STRUCTURAL ENGINEER TO CURRENT STANDARDS AUSTRALIA CODES.

Drawings adopted with permissions from Brisbane City Council by Burnett Shire Council 21/09/04

Scales:

NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Update Plan Details	MLP 12/05	drawn	Org signed by MLP 9/04
			checked	Org signed by
			designed	Org signed by I C 9/04
	Revisions		checked	Org signed by

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

STANDARD 2440 DIAMETER SEWAGE PUMP STATION CIVIL REQUIREMENTS PLAN

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Original No. 486/5/25–S23

Drawing No. 100809

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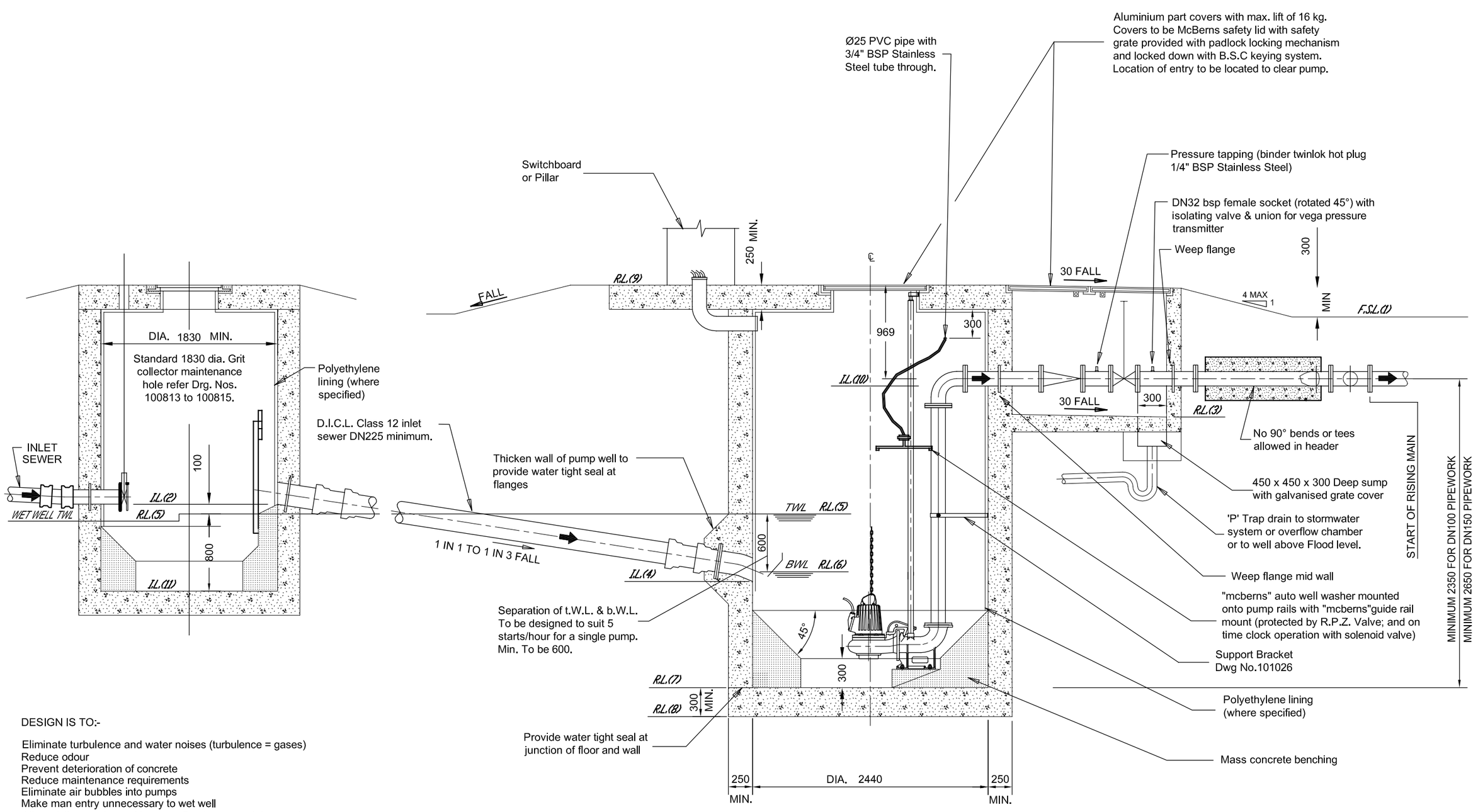

SECTION A
808 & 809

(Grit collector maintenance hole added to section)

DESIGN IS TO:-

Eliminate turbulence and water noises (turbulence = gases)
Reduce odour
Prevent deterioration of concrete
Reduce maintenance requirements
Eliminate air bubbles into pumps
Make man entry unnecessary to wet well
Allow civil operations without confined space training requirements ensure electrodes/vega probes have reliable operation

Where on pumping and/or industrial areas are in the catchment, lining of wet wells and grit collectors will be specified.

NOTE:-
REINFORCED CONCRETE WORK TO BE DESIGNED AND CERTIFIED BY RPEQ STRUCTURAL ENGINEER TO CURRENT STANDARDS AUSTRALIA CODES.

Drawings adopted with permissions from Brisbane City Council by Burnett Shire Council 21/09/04

Scales: NOT TO SCALE

Sheet A3 , Datum: A.H.D.

A	Update Plan Details	MLP 12/05	drawn	Org signed by MLP 9/04
			checked	Org signed by
			designed	Org signed by I C 9/04
Revisions			checked	Org signed by

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

STANDARD 2440 DIAMETER SEWAGE PUMP STATION SECTION A.

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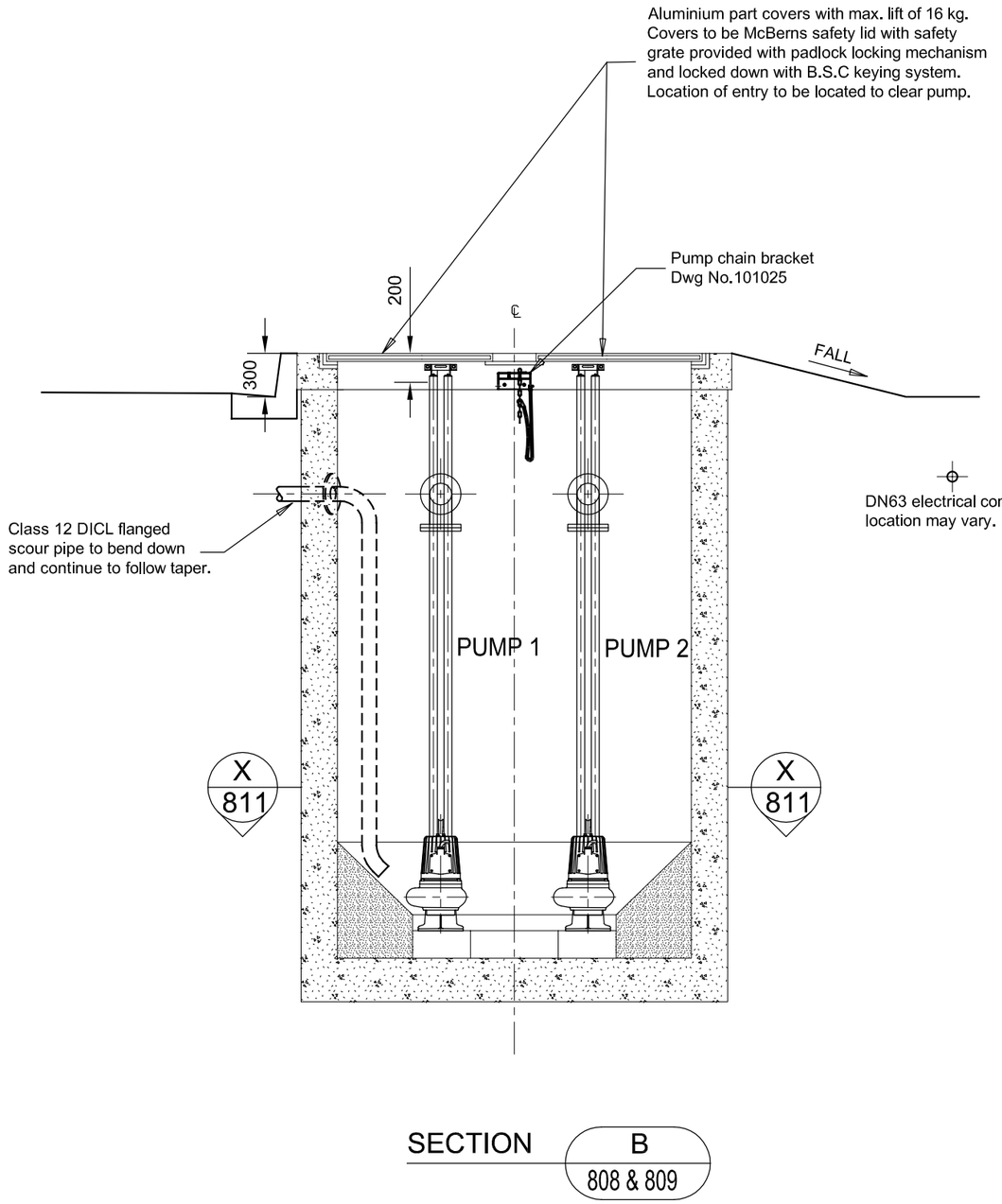
Original No. 486/5/25–S24

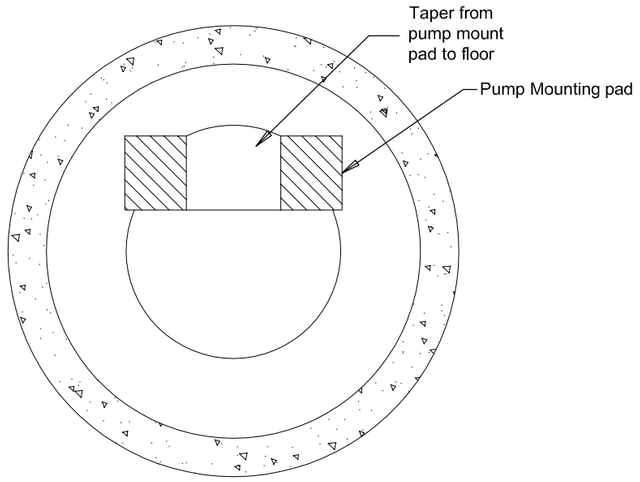
Drawing No. 100810

A



SECTION X 811

SECTION B 808 & 809



DN63 electrical conduit location may vary.

TABULATION OF PUMPING STATION LEVELS

REF.	DESCRIPTION	LEVEL
LEVEL 1	SURFACE LEVEL	
LEVEL 2	INVERT OF INLET AND OUTLET OF GRIT COLLECTOR MAINTENANCE HOLE	
LEVEL 3	TOP OF BASE OF REFLUX VALVE PIT	
LEVEL 4	INVERT OF INLET SEWER AT PUMP WELL	
LEVEL 5	TOP WATER LEVEL OF PUMP WELL	
LEVEL 6	BOTTOM WATER LEVEL OF PUMP WELL	
LEVEL 7	TOP OF BASE SLAB OF PUMP WELL	
LEVEL 8	BOTTOM OF BASE SLAB OF PUMP WELL	
LEVEL 9	TOP OF ROOF SLAB OF PUMP WELL	
LEVEL 10	INVERT LEVEL OF RISING MAIN THROUGH PIT WALL	
LEVEL 11	TOP OF BASE OF GRIT COLLECTOR MAINTENANCE HOLE	
LEVEL 12	INVERT LEVEL OF OVERFLOW	

NOTE:

FOR R.L.(2) AND R.L.(11) REFER TO GRIT COLLECTOR MAINTENANCE HOLE.
FOR R.L.(12) REFER TO OVERFLOW DETAIL.

NOTE:-
REINFORCED CONCRETE WORK TO BE DESIGNED AND CERTIFIED BY RPEQ STRUCTURAL ENGINEER TO CURRENT STANDARDS AUSTRALIA CODES.

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Scales:

NOT TO SCALE

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A	Update Plan Details	MLP 12/05	drawn	Org signed by MLP 9/04	
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			designed	Org signed by I C 9/04	
	Revisions		checked	Org signed by	

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Original signed by
General Manager of Engineering Operations

STANDARD 2440 DIAMETER SEWAGE PUMP STATION SECTION B.

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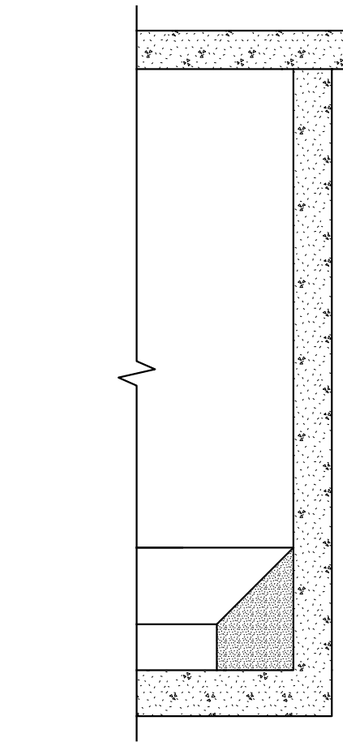
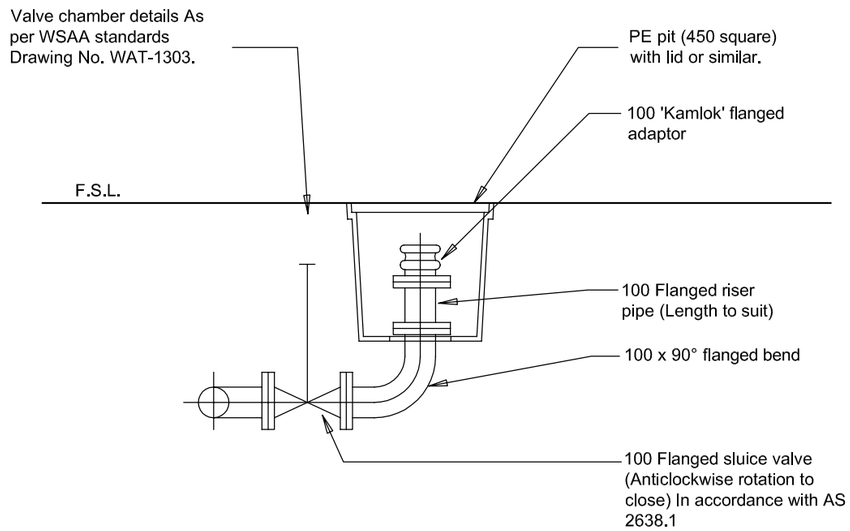
Original No. 486/5/25–S25

Drawing No. 100811

A | B



SECTION C 809



SECTION D 809

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STANDARD 2440 DIAMETER SEWAGE PUMP STATION SECTION C.

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Original
No. 486/5/25–S26

Drawing No. 100812

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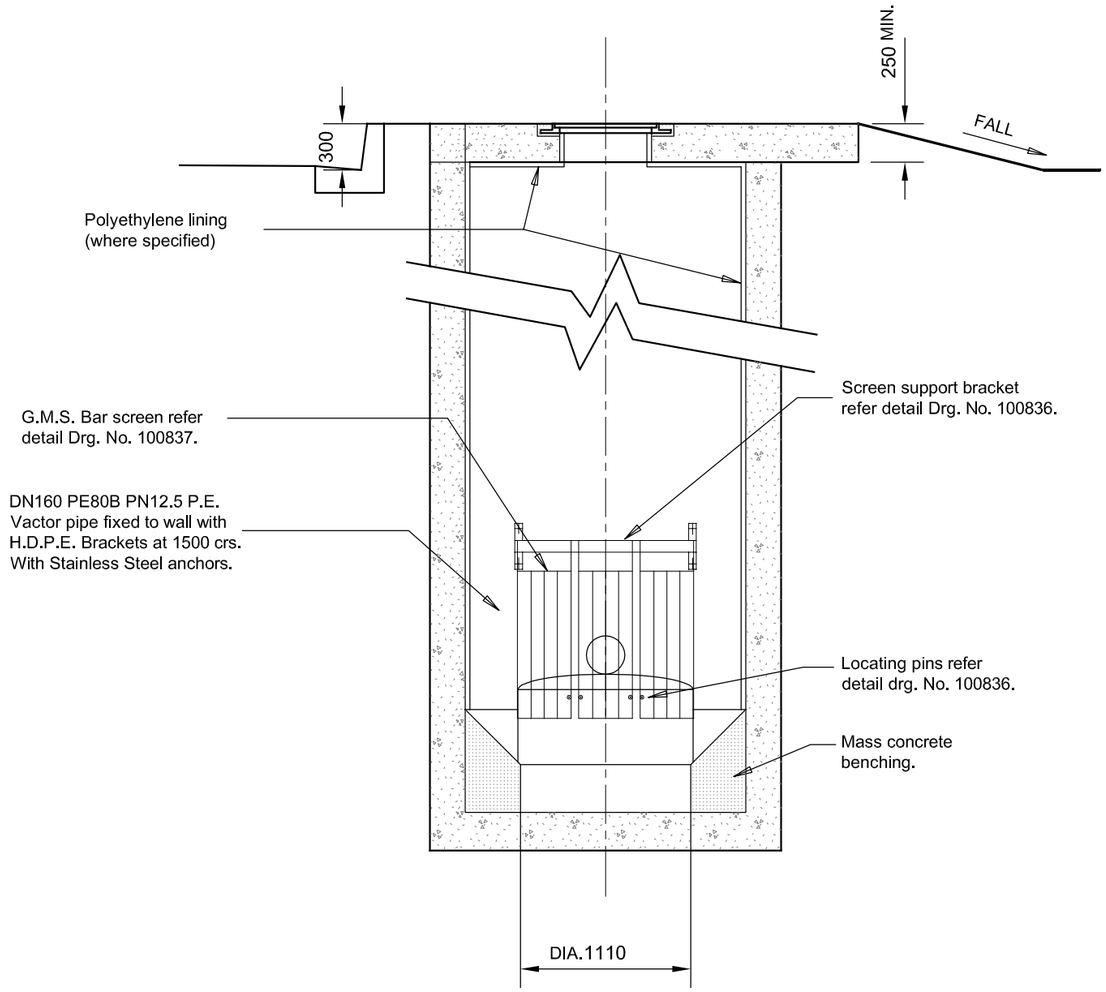
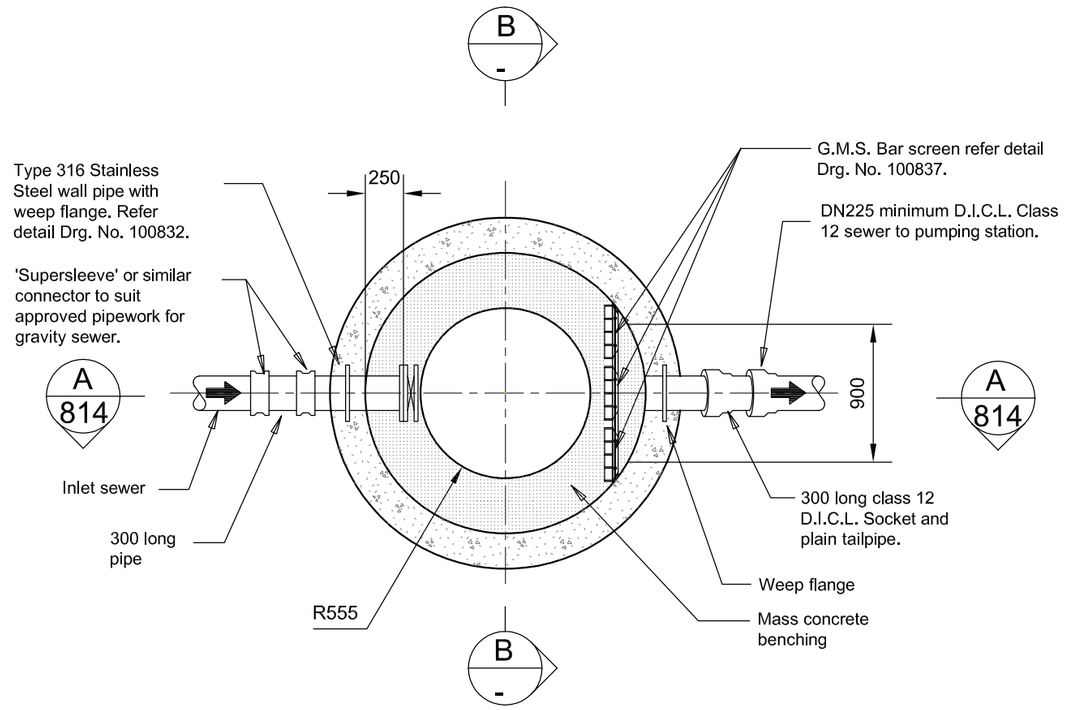


SECTION B / -



PLAN SECTION C / 814

NOTE:-
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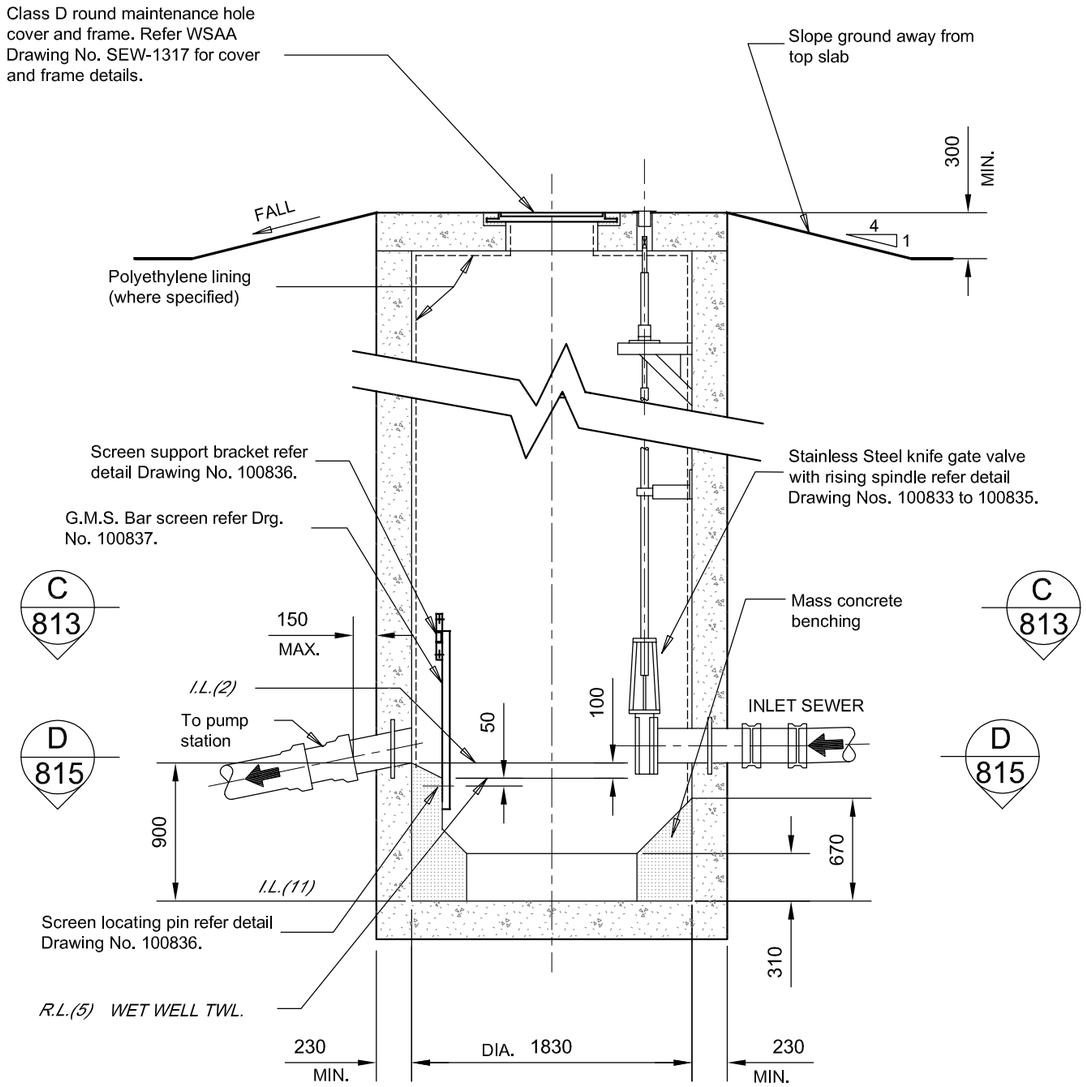
STANDARD 1830 DIAMETER GRIT COLLECTOR MAINTENANCE HOLE DETAILS

H:\11Acad_dwg\100800-100899\100813B.dwg, 01/03/2006 4:29:21 PM

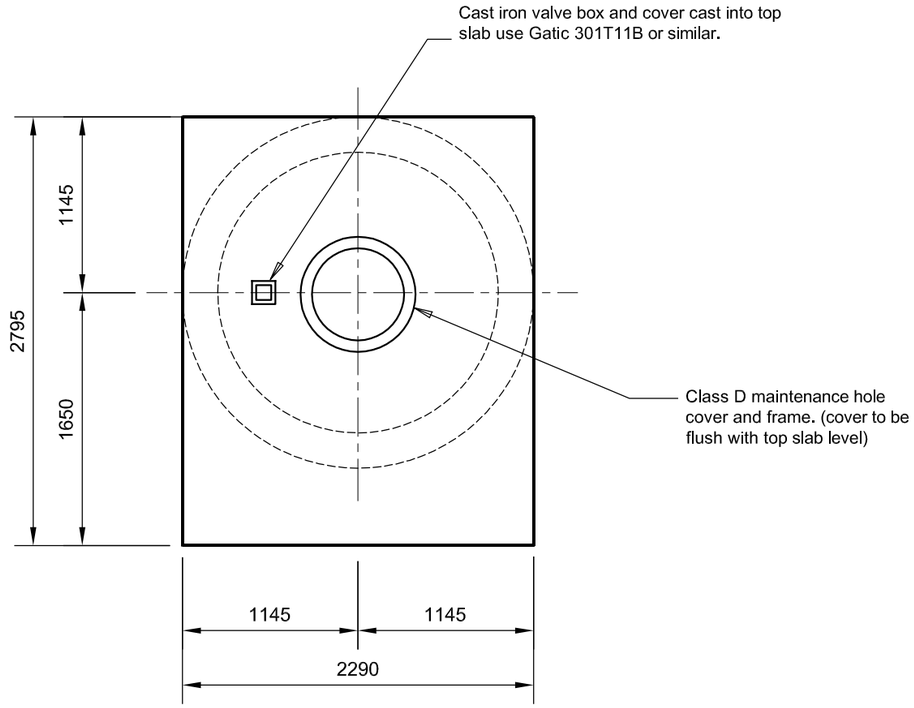
Original
No. 486/5/25–S27

Drawing No.
100813

A | B



SECTION A 813



PLAN OF TOP SLAB

NOTE:-
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			checked	Org signed by	
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STANDARD 1830 DIAMETER GRIT COLLECTOR MAINTENANCE HOLE DETAILS

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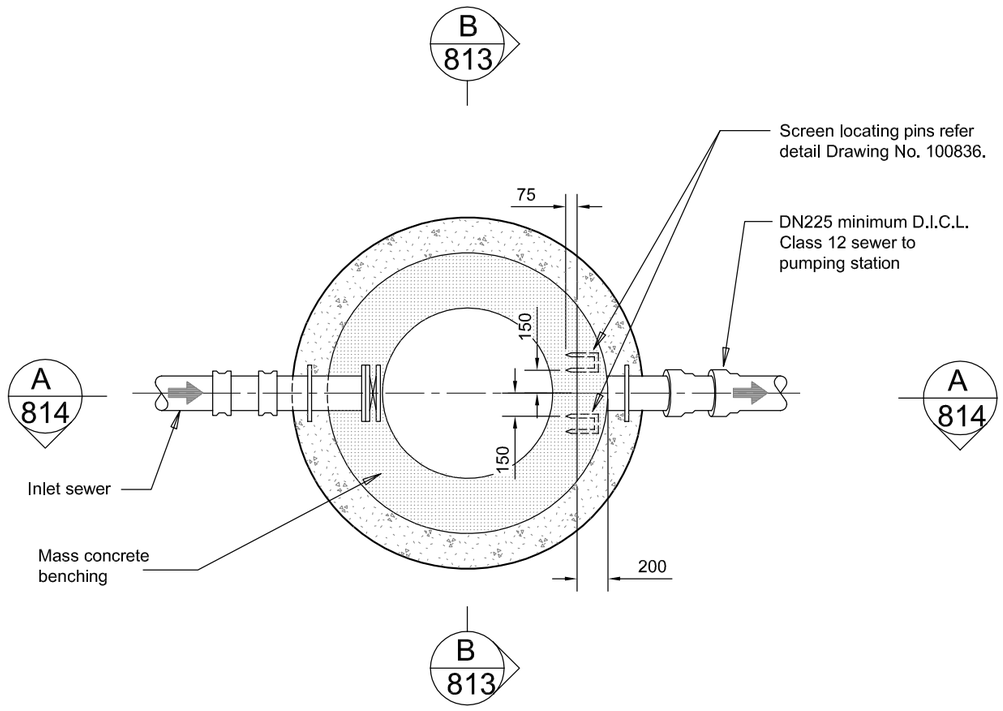
Original No. 486/5/25–S28

Drawing No. 100814

A B



PLAN SECTION D 814

(BAR SCREENS OMITTED FOR CLARITY)

NOTE:-
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B	Update Plan Details	MLP 2/06	
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designed	Org signed by I C 9/04
checked	Org signed by

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STANDARD 1830 DIAMETER GRIT COLLECTOR MAINTENANCE HOLE DETAILS

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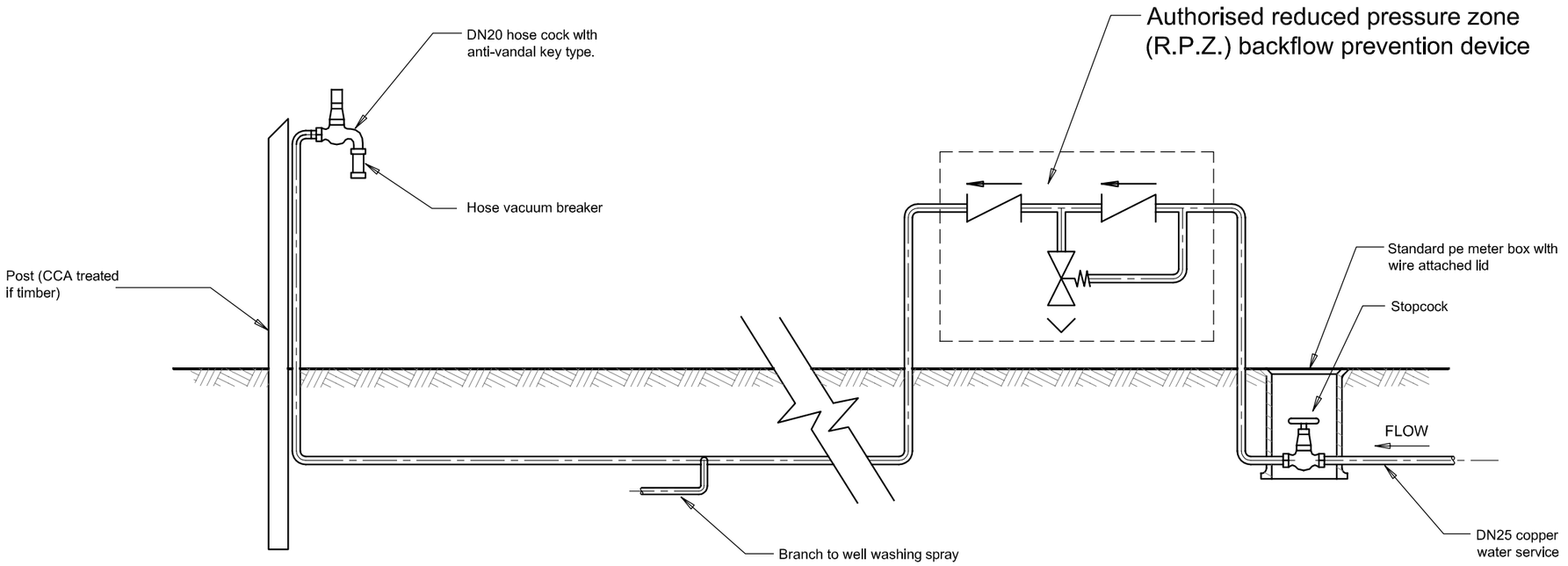
Original
No. 486/5/25–S29

Drawing No.
100815

A | B



WATER SERVICE DETAILS

NOT TO SCALE

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STANDARD 1830 DIAMETER SEWAGE PUMP STATION POTABLE WATER DETAILS

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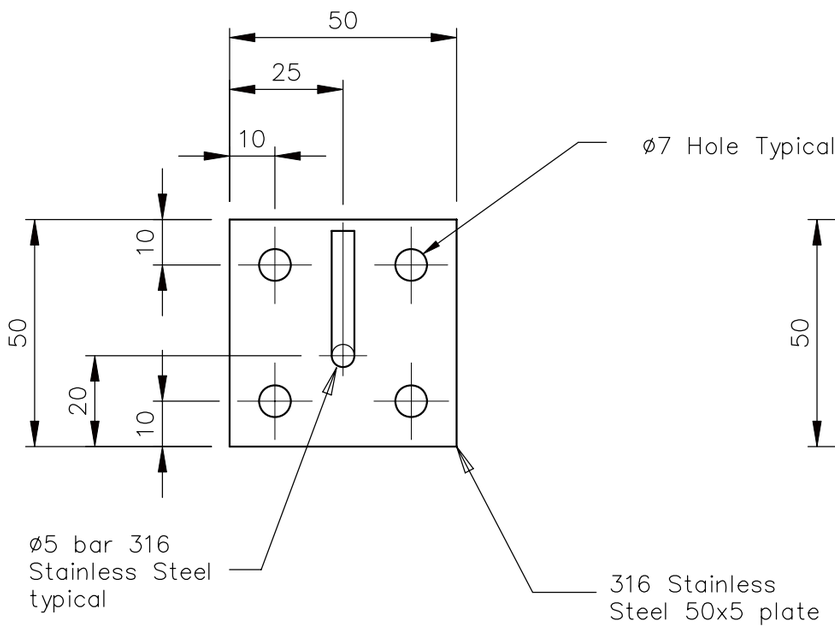
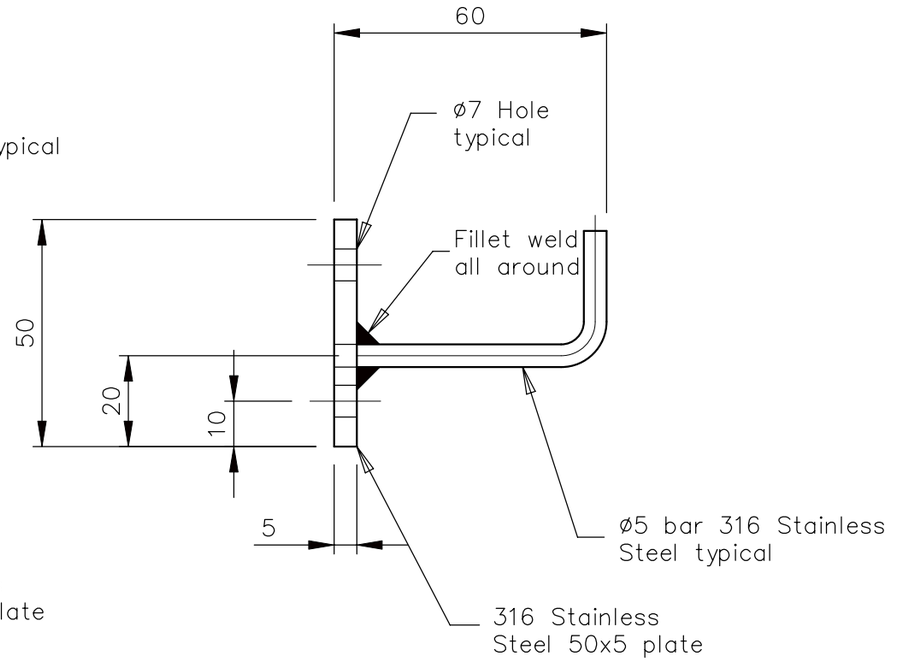
Original
No. 486/5/25–S31

Drawing No. 100817



FRONT ELEVATION



SIDE ELEVATION

Scales: 1 : 2

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Sheet A4
Datum: A.H.D.

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			des	Org signed RMC IC 9/04
	Revisions		chk	Org signed

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Director of Infrastructure Services

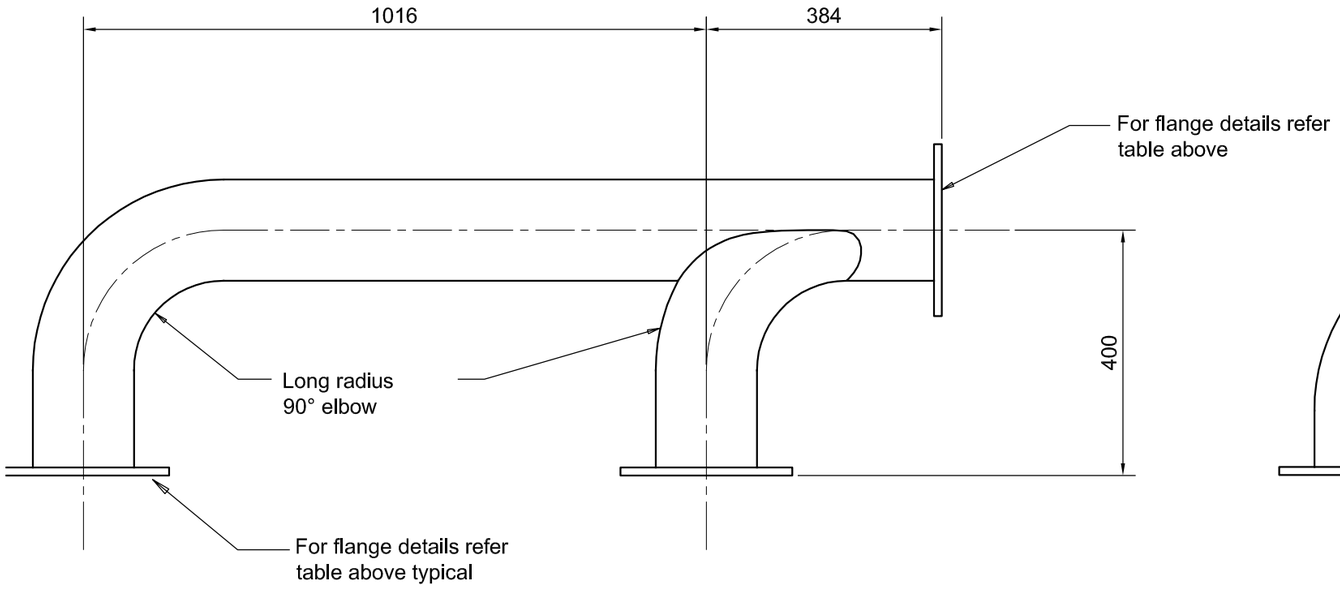
STANDARD 2440 DIAMETER SEWAGE PUMP STATION LEVEL PROBE BRACKET DETAILS

Drawing No.
100819
A

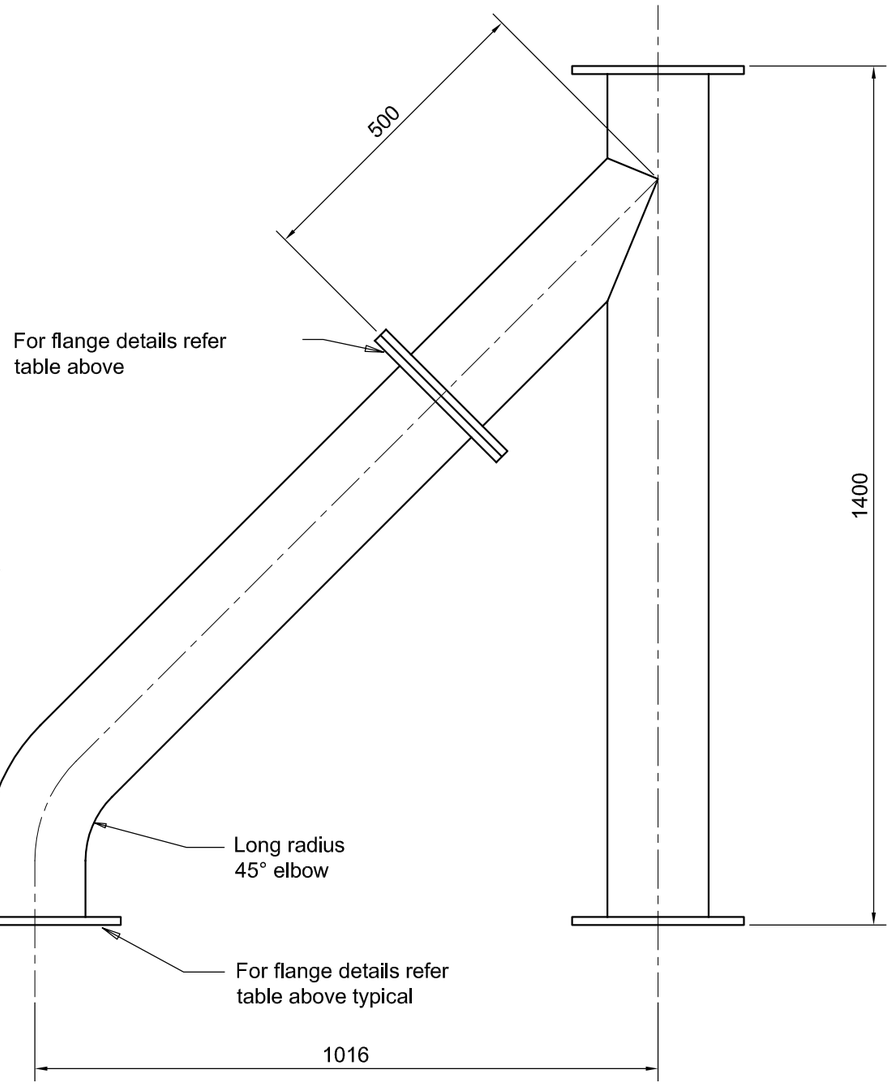
HEADER SIZE	PIPE O.D.	MIN. WALL THICKNESS	FLANGE O.D.	FLANGE THICKNESS	NO. OF BOLTS	DIA. OF HOLES	P.C.D. OF HOLES
100	114	6.5	215	11	4 *	18	178
150	165	6.5	280	15	8 *	18	235

* OFF CENTRE DRILLING

HEADER FLANGE DETAILS (AS 4087)



TYPE 3



TYPE 4

FABRICATED MILD STEEL HEADERS FOR 2440 DIA. PUMP WELLS

FINISH

OUTSIDE: MEDIUM DENSITY FUSION BONDED POLYETHYLENE COATED
INSIDE: CEMENT LINED

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STANDARD 2440 DIAMETER SEWAGE PUMP STATION FABRICATED MILD STEEL HEADERS

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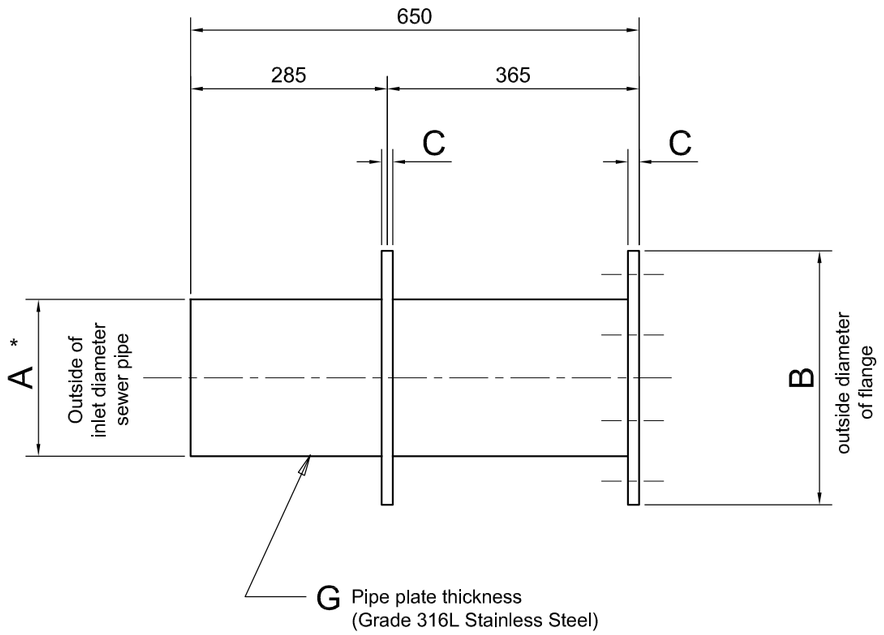
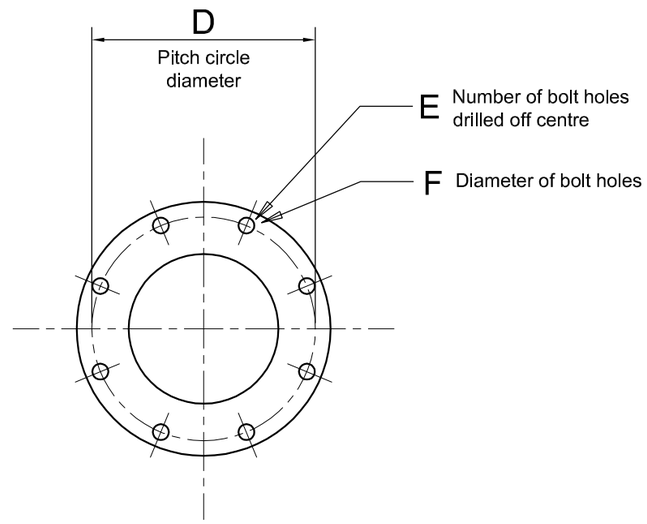
Original No. 486/5/25–S36

Drawing No. 100822





* Outside diameter of wall pipe to be equal to outside diameter of inlet sewer to grit collector maintenance hole

NOMINAL DIAMETER OF PIPE	A *			B	C	D	E	F	G
	VC PIPE	DICL PIPE	PVC PIPE						
150	195	177	160	280	12	235	8	18	5
225	277	259	250	370	16	324	8	18	5
300	356	345	315	455	16	406	12	22	5

WALL PIPE DETAIL

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STANDARD 1830 DIAMETER GRIT COLLECTOR MAINTENANCE HOLE WALL PIPE DETAIL

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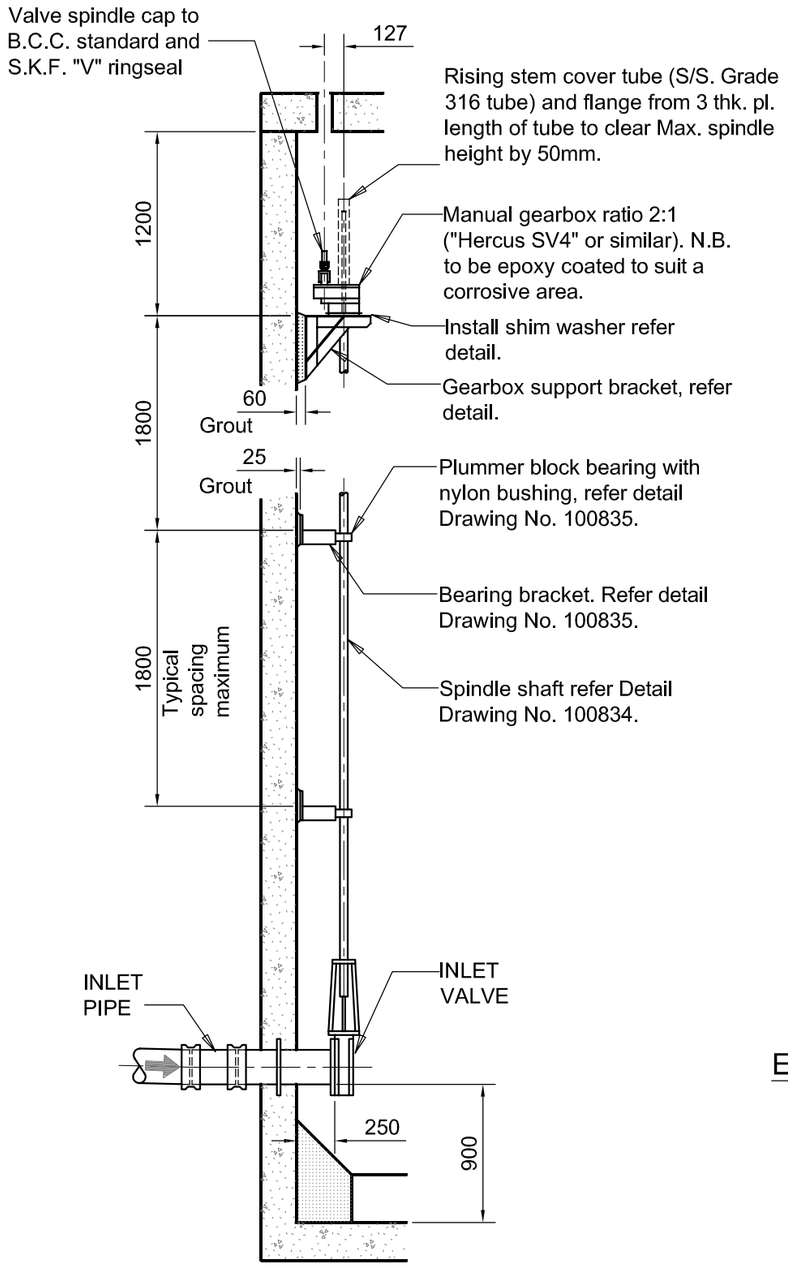
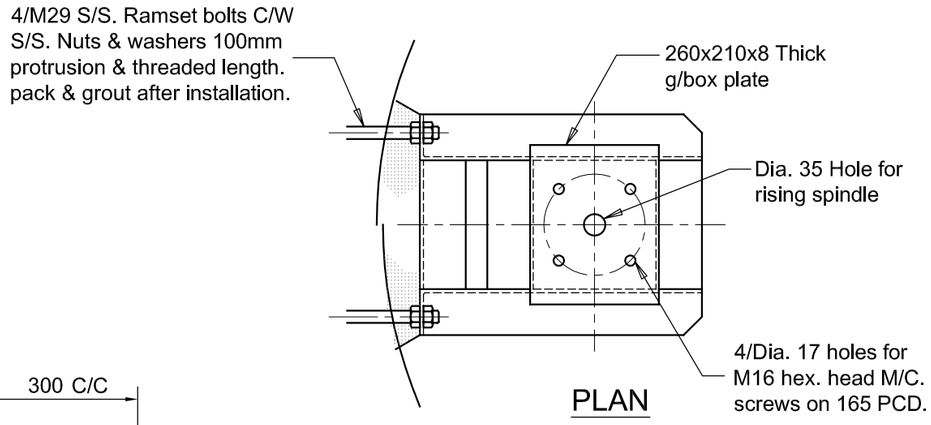
Original No. 486/5/25–S46

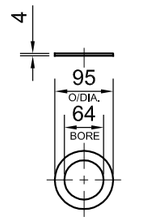
Drawing No. 100832



GENERAL ARRANGEMENT

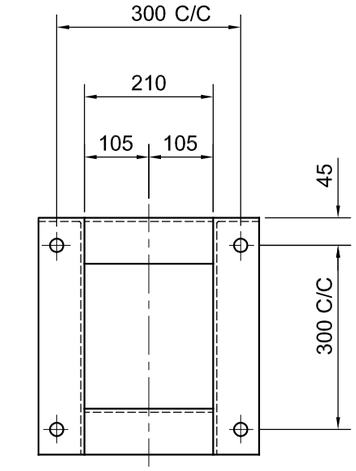


PLAN



GEARBOX SHIM WASHER
SCALE 1:5

1 No. off required. insert between gearbox & support bracket/stool. Stainless Steel Grade 316



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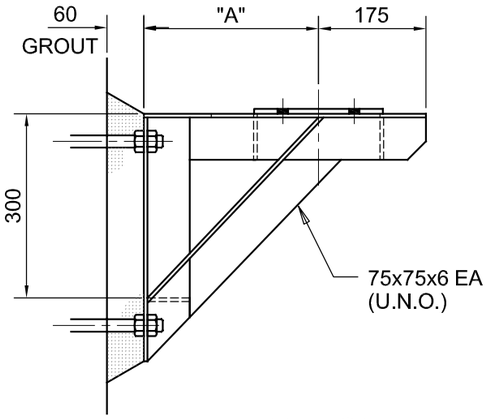

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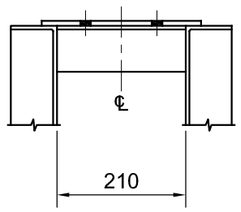

END ELEVATION

DIA. VALVE	DIMN. "A"
150	219
225	225
300	228

GEARBOX SUPPORT BRACKET

1 No. Off Required Stainless Steel Grade 316

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GRIT COLLECTOR MAINTENANCE HOLE INLET VALVE GENERAL ARRANGEMENT

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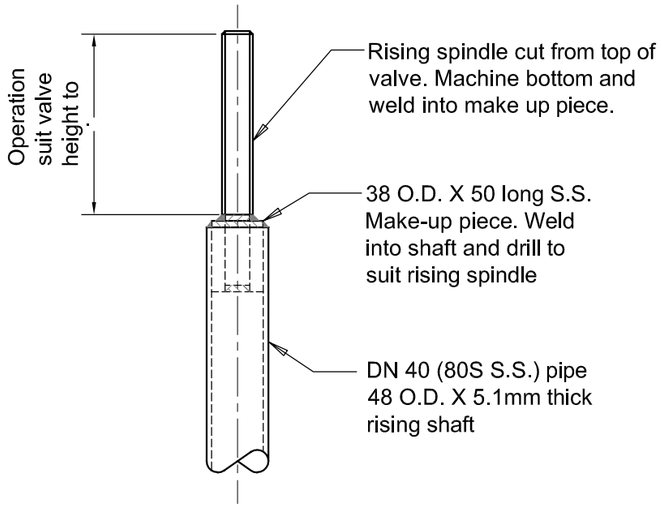
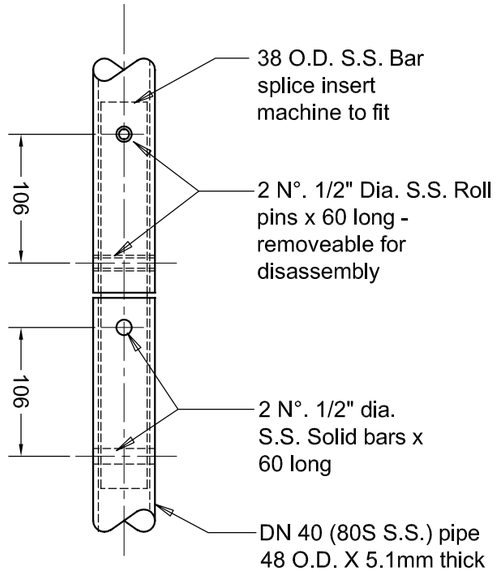
Original No. 486/5/25–S47

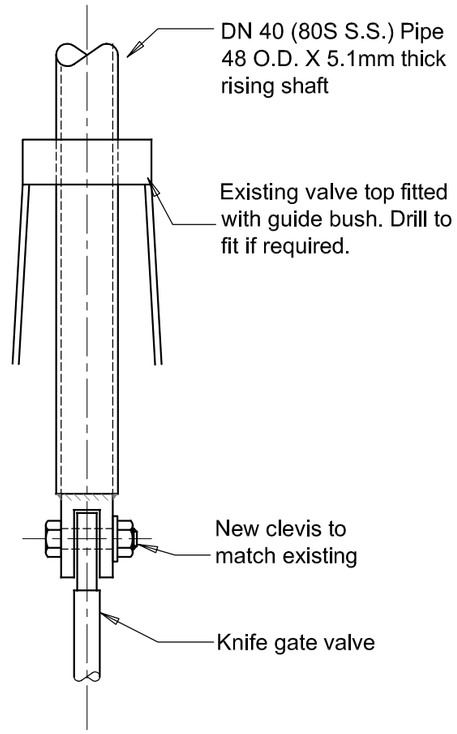
Drawing No. 100833



GEARBOX CONNECTION



SPLICE DETAIL (As Required)



VALVE CONNECTION

SPINDLE SHAFT DETAILS

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GRIT COLLECTOR MAINTENANCE HOLE INLET VALVE SPINDLE SHAFT DETAILS.

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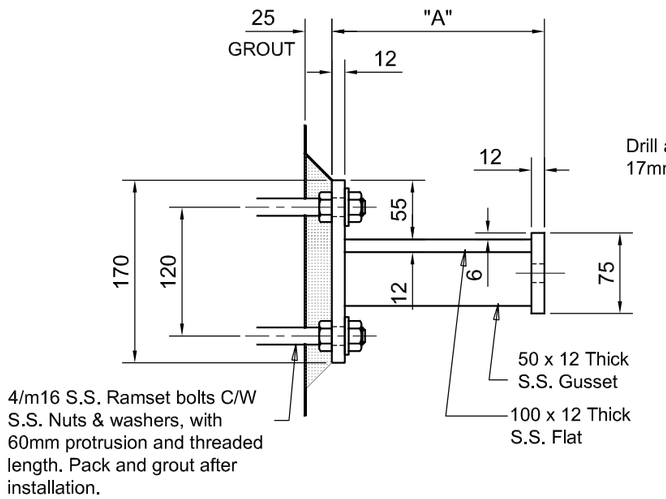
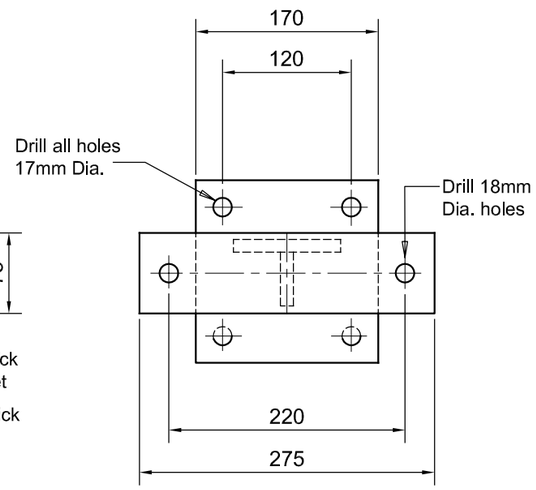
Original No. 486/5/25–S48

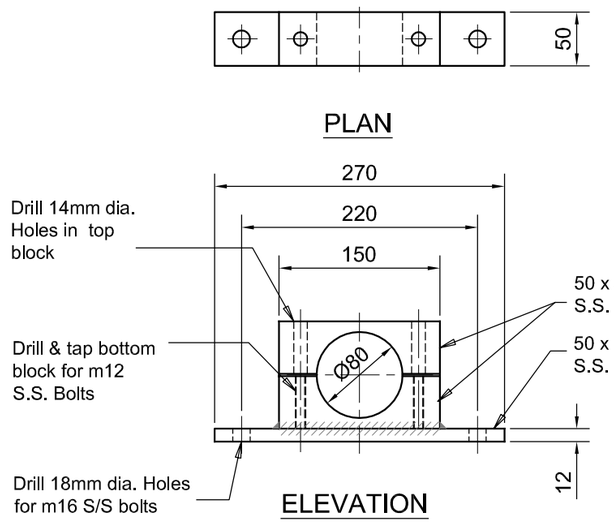
Drawing No. 100834



ELEVATION



END ELEVATION

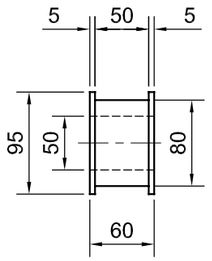


PLUMMER BLOCK BEARING

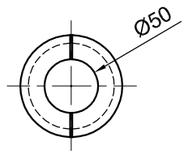
BEARING BRACKET

No. Off required - Depends on MH depth
Stainless Steel Grade 316

DIA. VALVE	DIMN. "A"
150	192
225	198
300	201



SIDE ELEVATION



END ELEVATION

To suit 50mm shaft

PLUMMER BLOCK BUSH

N.B.: NYLON BUSHING
MATERIAL TO BE USED.

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		designed	Org signed by I C 9/04	Original signed by General Manager of Engineering Operations
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GRIT COLLECTOR MAINTENANCE HOLE INLET VALVE BEARING SUPPORT DETAILS.

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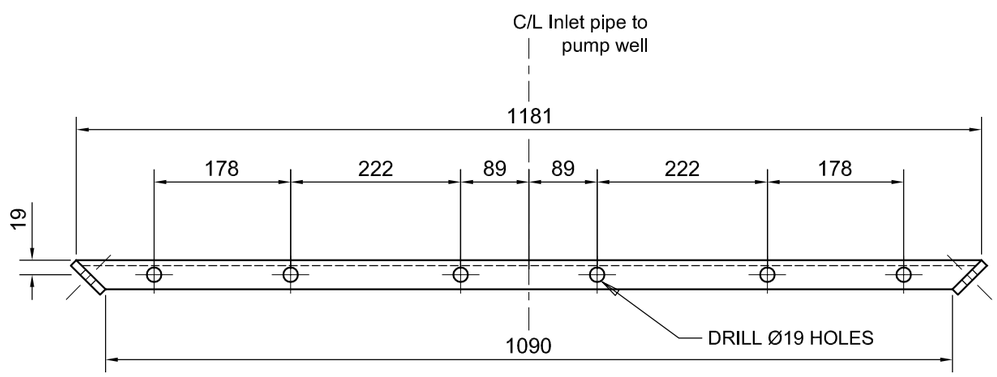
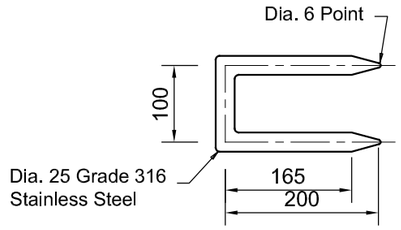
Original
No. 486/5/25–S49

Drawing No. 100835

NOTE:
All mild steel work to be hot dipped galvanised after fabrication.

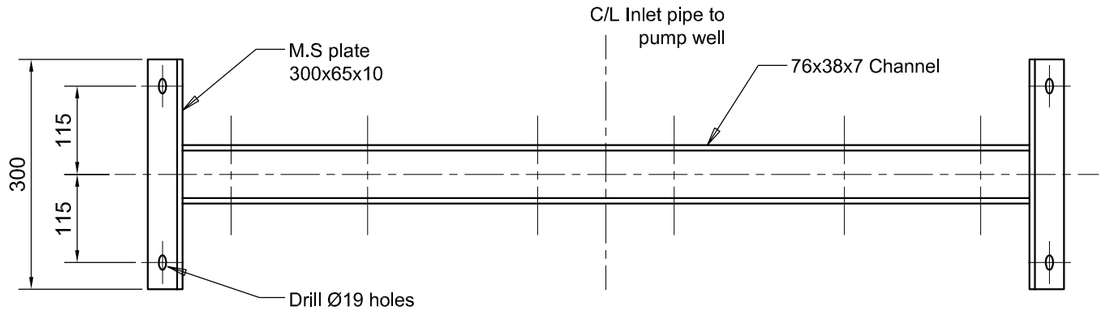


PLAN



SCREEN LOCATING PIN

2 No. Off Required



ELEVATION

SCREEN SUPPORT BRACKET DETAIL

1 No. Off required

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GRIT COLLECTOR MAINTENANCE HOLE INLET VALVE BAR SCREEN DETAILS.

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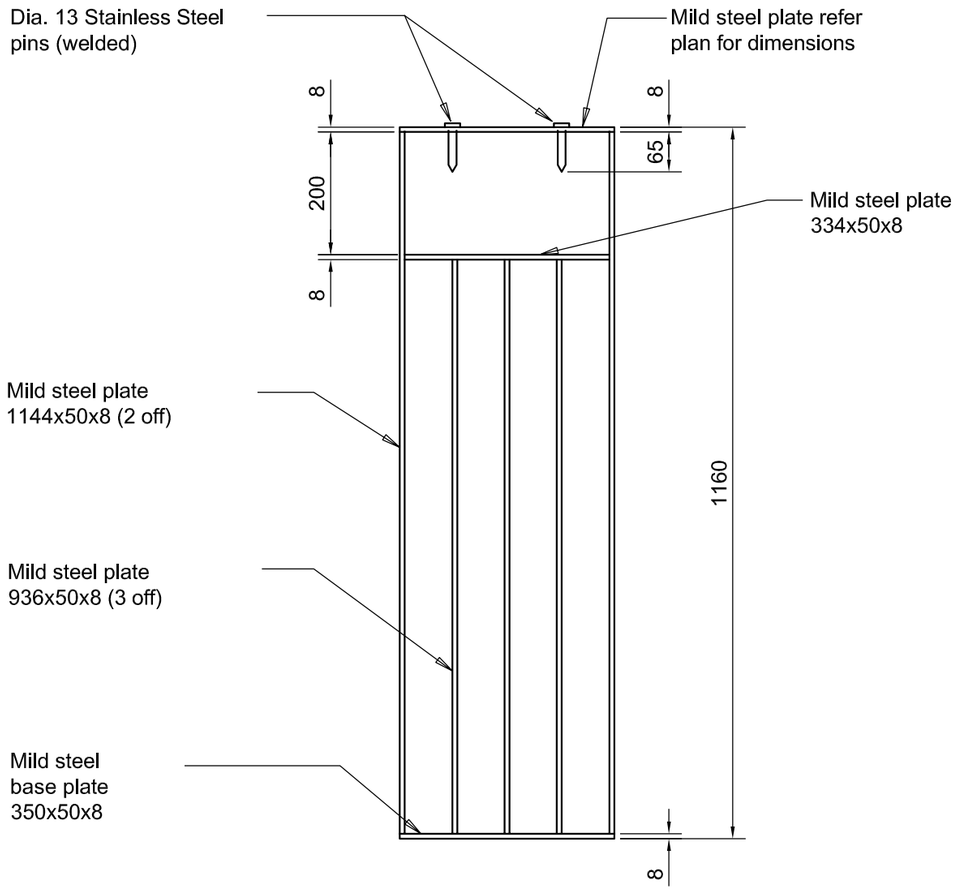
Original
No. 486/5/25–S50

Drawing No.
100836



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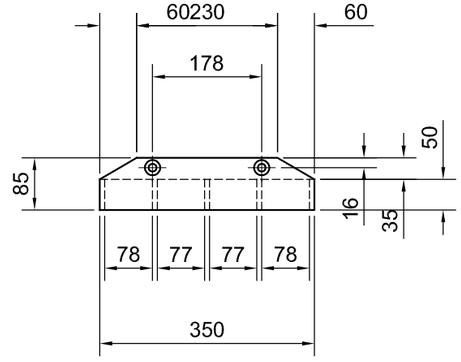

PLAN

NOTE:
All mild steel work to be hot dipped galvanised after fabrication.

SCREEN DETAIL

1 No. off required

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STD 1830 DIAMETER GRIT COLLECTOR MAINTENANCE HOLE INLET VALVE BAR SCREEN DETAILS.

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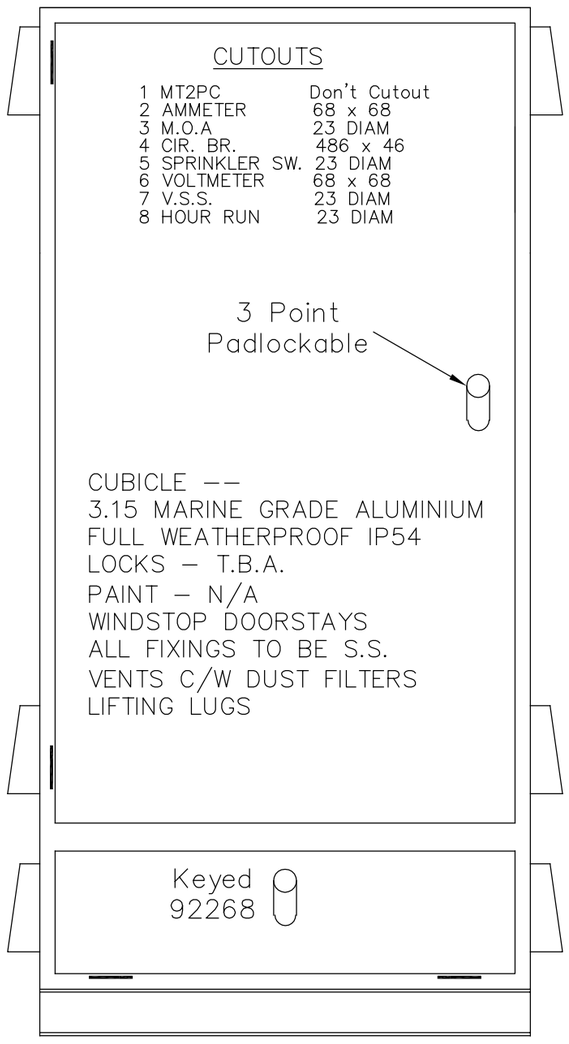
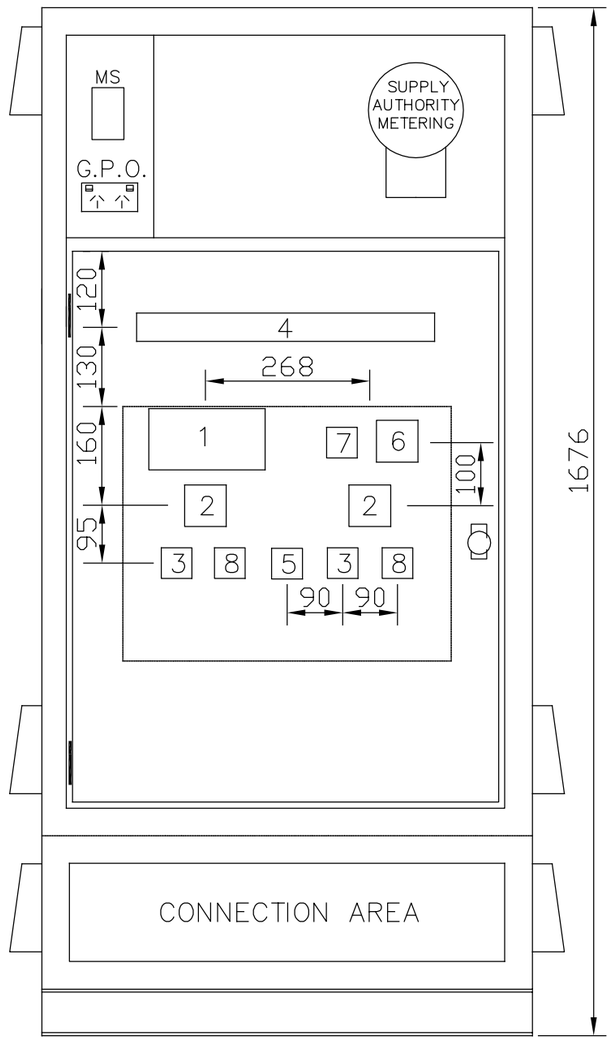
Original
No. 486/5/25–S51

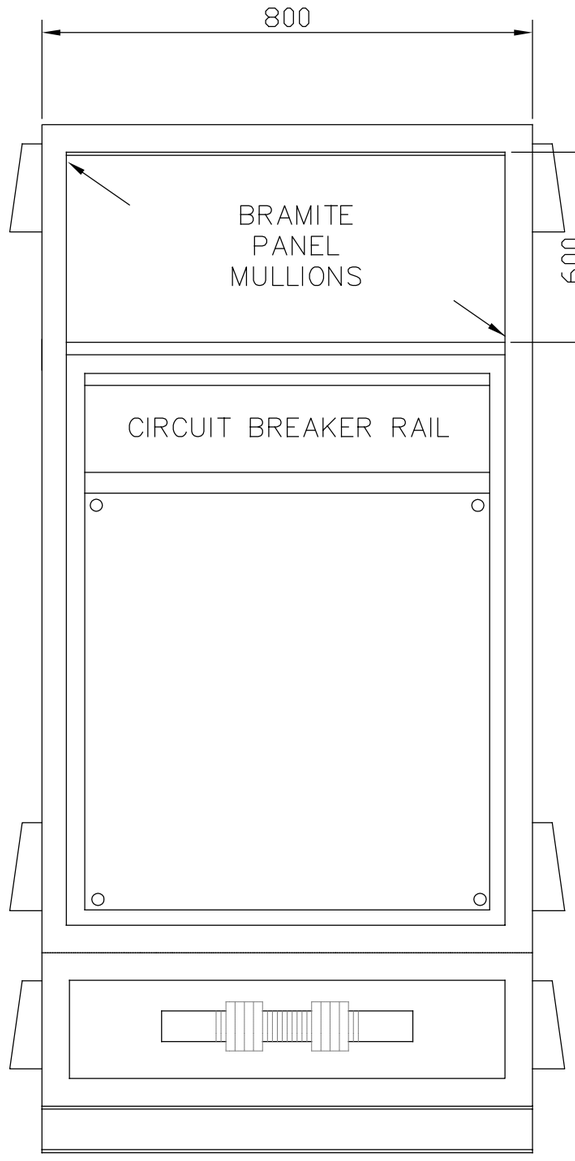
Drawing No.
100837



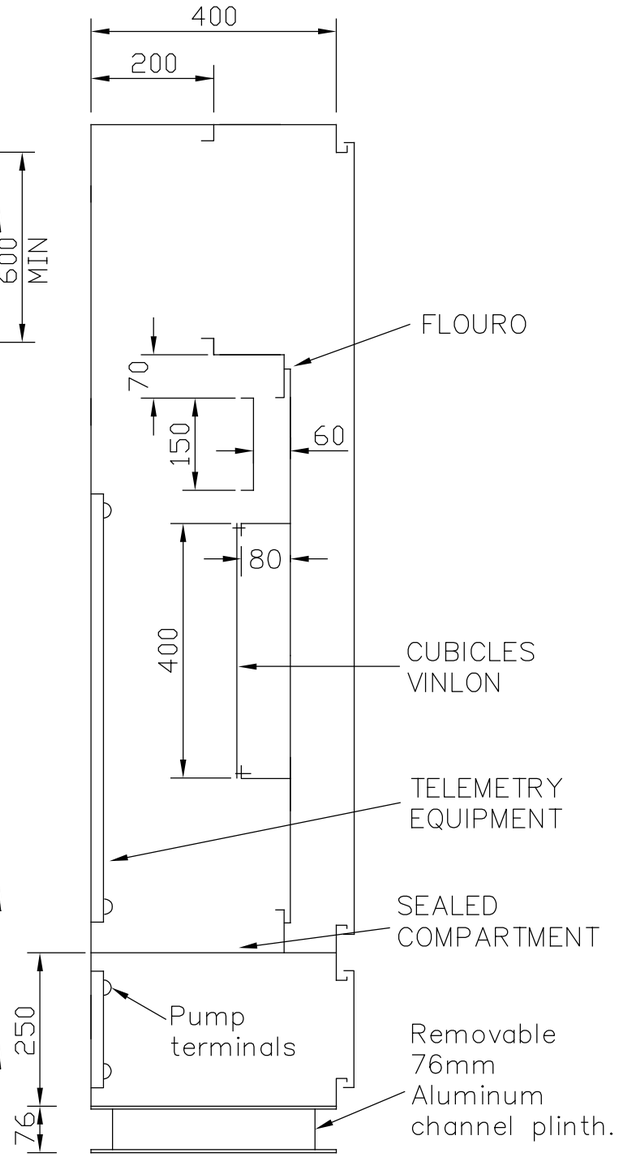
FRONT ELEVATION



FRONT ELEVATION
SHOWING DOORS REMOVED



FRONT ELEVATION
SHOWING PANELS REMOVED



SECTION END

Scales: 1 : 10

0 100 200 300m

Sheet A3 , Datum: A.H.D.

A	Update Plan Details	MLP 12/05	drawn	Org signed by MLP 9/05
			checked	
			designed	
	Revisions		checked	

BURNETT SHIRE COUNCIL

Original signed by
Director of Infrastructure Services

SEWERAGE PUMP STATION
TYPICAL CUBICLE LAYOUT
(6Kw D.O.L.)

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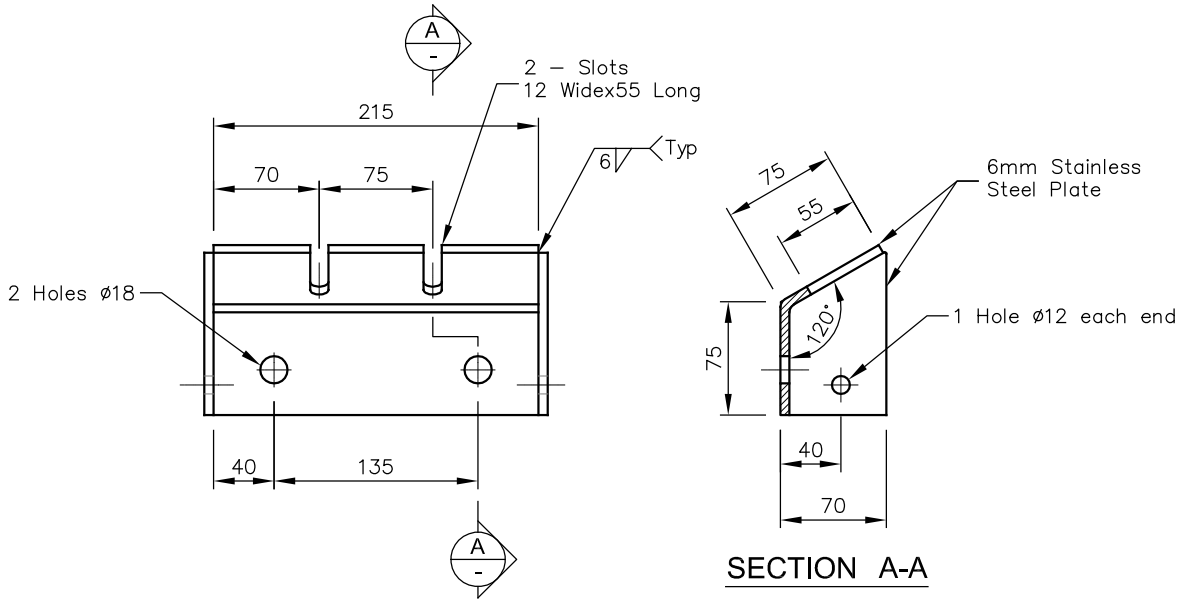
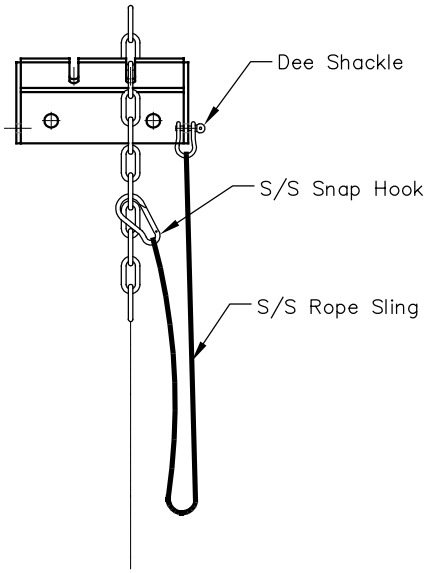
Drawing No.
100995
A



Pump Chain Bracket

Scale 1:5



Pump Chain & Bracket Details

Scale 1:10

NOTES

1. The lifting chain offered must comply with statutory authorities requirements for industrial lifting.

2. The pump lifting chain shall be PWB anchor grade "L" lifting chain, or approved equivalent, hot dipped galvanized finish, manufactured to AS2321–1979.

3. The chain shall be sized to cary the weight of the pump, Taking into account load carrying reductions for angled two leg slings. The minimum chain size shall be 10mm for small pumps, but larger pumps will require 12mm or 16 mm, Partially where a lower bridge is attached to two eyebolts.

4. The dee shackles used shall be PWB anchor grade "S". or approved equivalent, dot dipped galvanized finish, manufactured to comply with AS 2741–1992–Shackles.

5. Eyebolts provided by manufacturers as part of the lifting arrangement to equipment shall be manufactured to comply with AS 2317 – Collared eyebolts.

Scales: 1 : 5 0 50 100 150mm				drawn	MLP 12/05
				checked	
				designed	MLP 12/05
Sheet A4 , Datum: A.H.D.	Revisions			checked	

BURNETT SHIRE COUNCIL

Director of Infrastructure Services

date

B.S.C. STANDARD DRAWINGS FOR SEWAGE PUMP STATIONS CHAIN BRACKET DETAILS.

Drawing No. 101025

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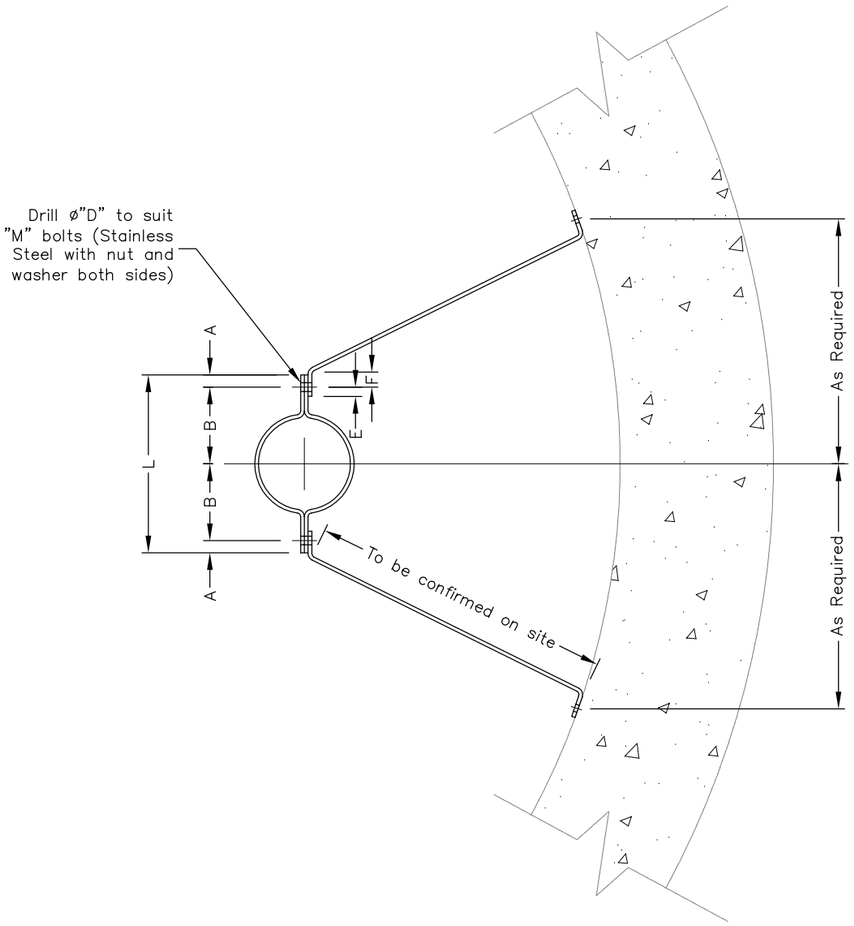
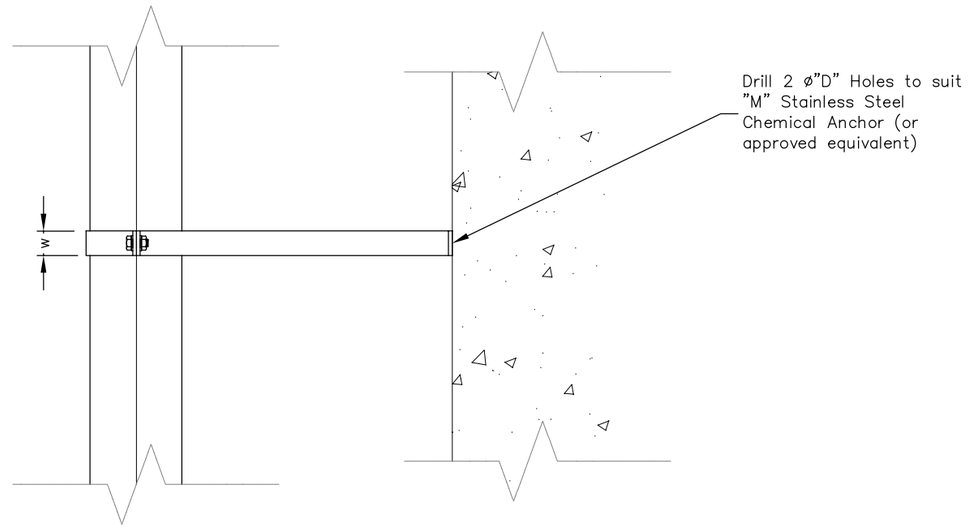


PLAN

Scale 1:10



ELEVATION

Scale 1:10

NOTES

1. All welding to be 6mm Continuos fillet and conform to AS/NZS 1554.1:2000 : structural steel welding—welding of steel structures.

2. Stainless Steel to AS 2837—1986 : Wrought Alloy Steels — Stainless Steel bars and semi—finished products grade 316 unless otherwise noted.

Nominal Bore of Pipe	A	B	L	E	F	G	H	R	T	W	M	øD
50	15	60	150	13	20	15	25	5	3	25	M10	12
80	20	80	200	15	25	20	30	7	5	40	M12	14
100	20	95	230	15	25	20	30	7	5	40	M12	14
150	20	125	290	15	25	20	30	8	6	40	M12	14
200	25	155	360	20	30	25	35	8	6	50	M16	18
225	25	170	390	20	30	25	35	12	10	50	M16	18
250	25	190	430	20	30	25	35	12	10	50	M16	18
300	25	220	490	20	30	25	35	12	10	50	M16	18

Scales: 1 : 10

0 100 200 300mm

Sheet A3 , Datum: A.H.D.

			drawn	Org signed by MLP 12/05
			checked	
			designed	Org signed by MLP 12/05
Revisions			checked	

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B.S.C. STANDARD DRAWINGS FOR SEWAGE PUMP STATIONS PIPE SUPPORT BRACKET DETAILS.

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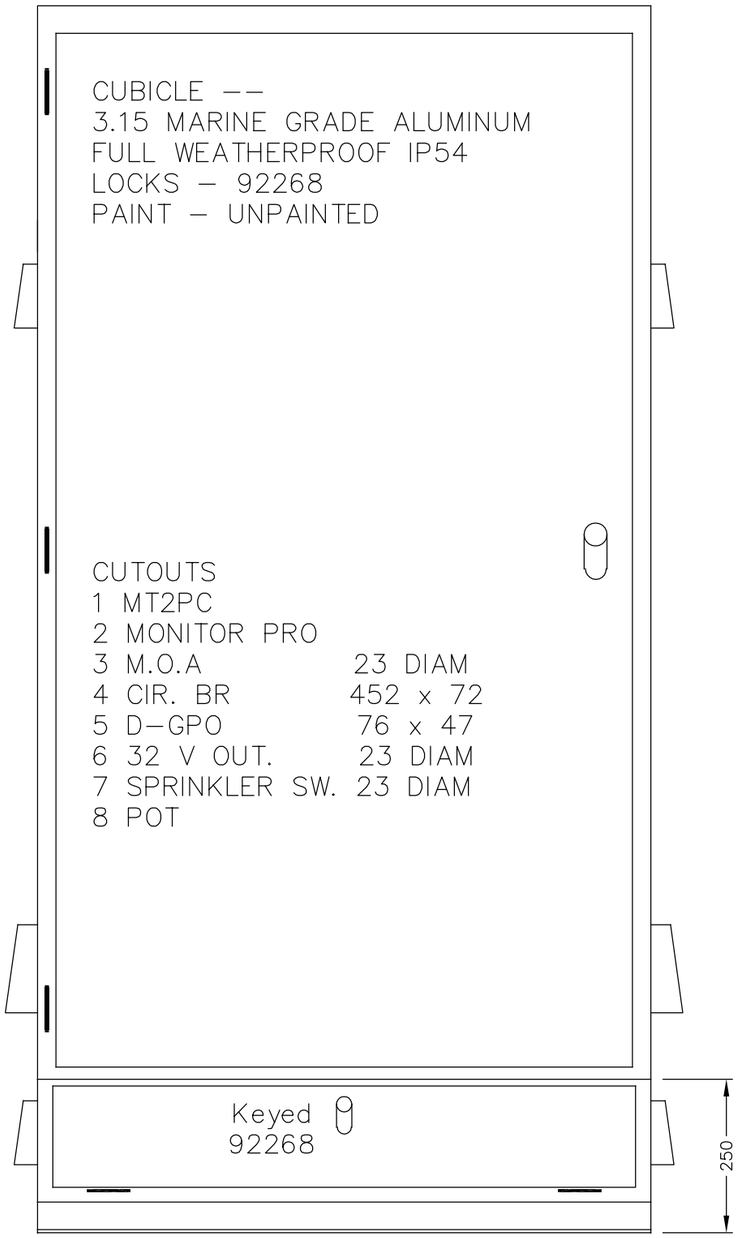
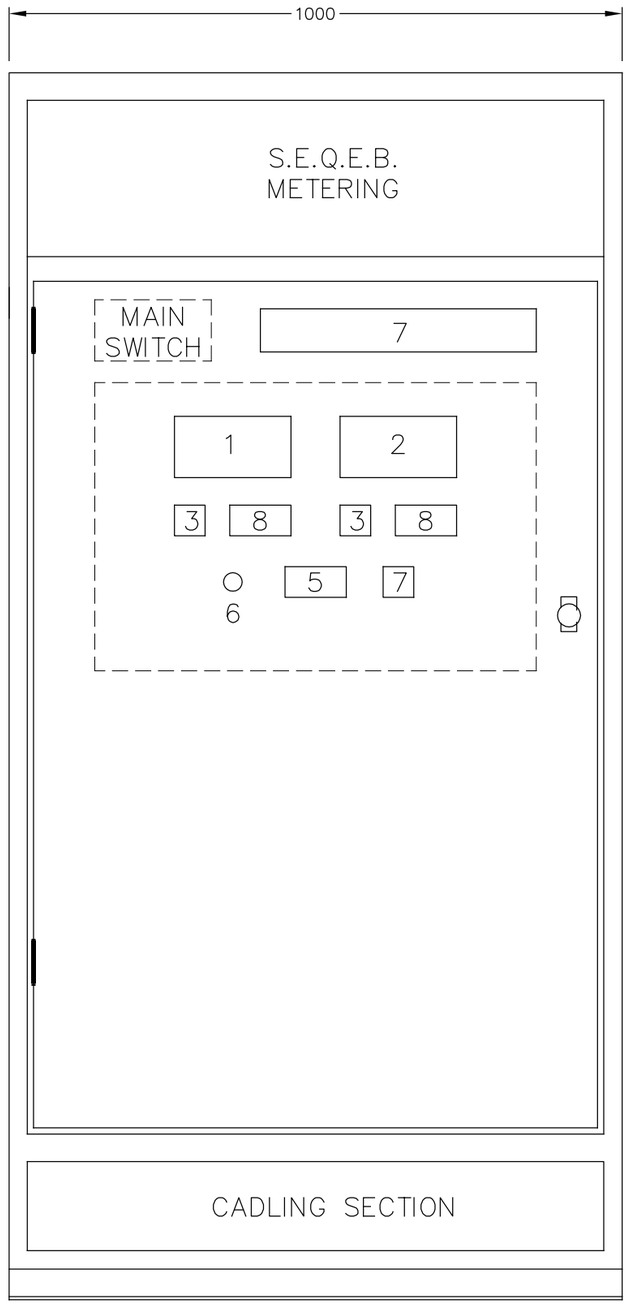
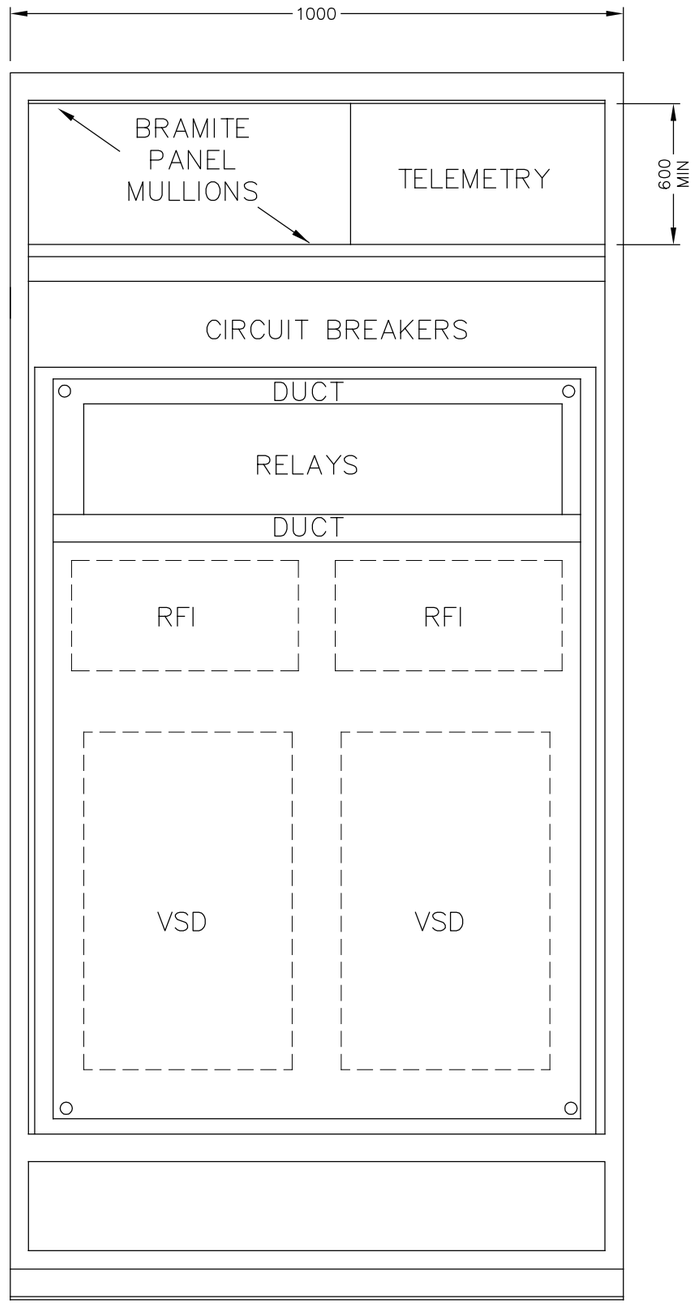
Drawing No.
101026



FRONT ELEVATION



FRONT ELEVATION
SHOWING DOORS REMOVED



FRONT ELEVATION
SHOWING PANELS REMOVED

Scales: 1 : 10 0 100 200 300m Sheet A3 , Datum: A.H.D.			drawn	Org signed by MLP 12/05
			checked	
			designed	
Revisions			checked	

BURNETT SHIRE COUNCIL

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Director of Infrastructure Services

SEWERAGE PUMP STATION
TYPICAL CUBICLE LAYOUT
(VSD.)

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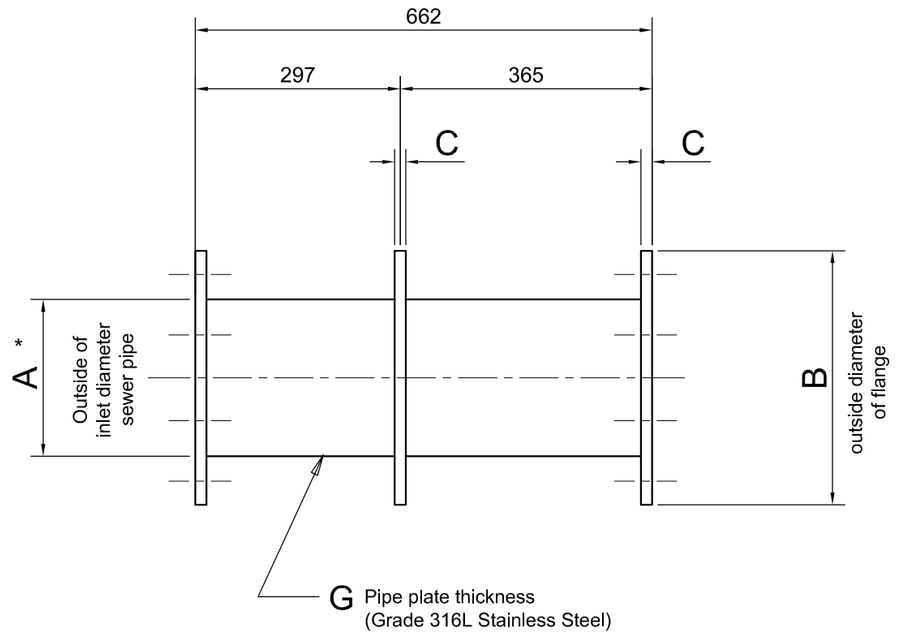
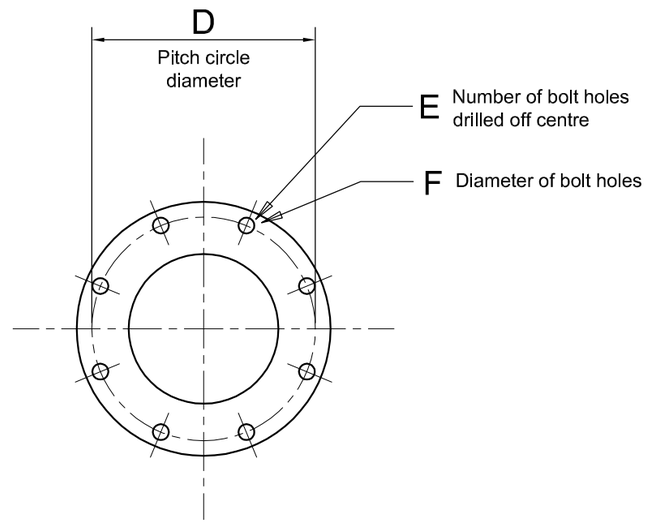
Drawing No.
101027





* Outside diameter of wall pipe to be equal to outside diameter of inlet sewer to grit collector maintenance hole

NOMINAL DIAMETER OF PIPE	A *		B	C	D	E	F	G
	DICL PIPE	PVC PIPE						
150	177	160	280	12	235	8	18	5
225	259	250	370	16	324	8	18	5
300	345	315	455	16	406	12	22	5

WALL PIPE DETAIL

Scales:

NOT TO SCALE

Sheet A3 , Datum: A.H.D.

Revisions

drawn	Org signed by MLP 12/05
checked	Org signed by
designed	Org signed by I C 9/04
checked	Org signed by

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

STANDARD 2440 DIAMETER SEWAGE PUMP STATION HOLE WALL PIPE DETAIL

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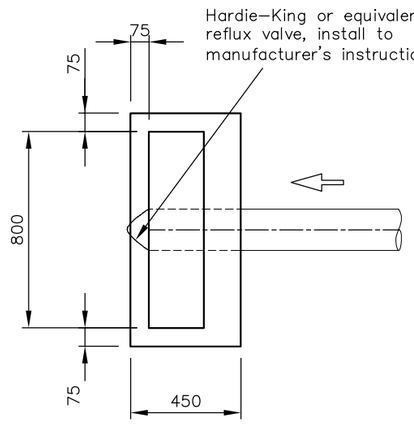
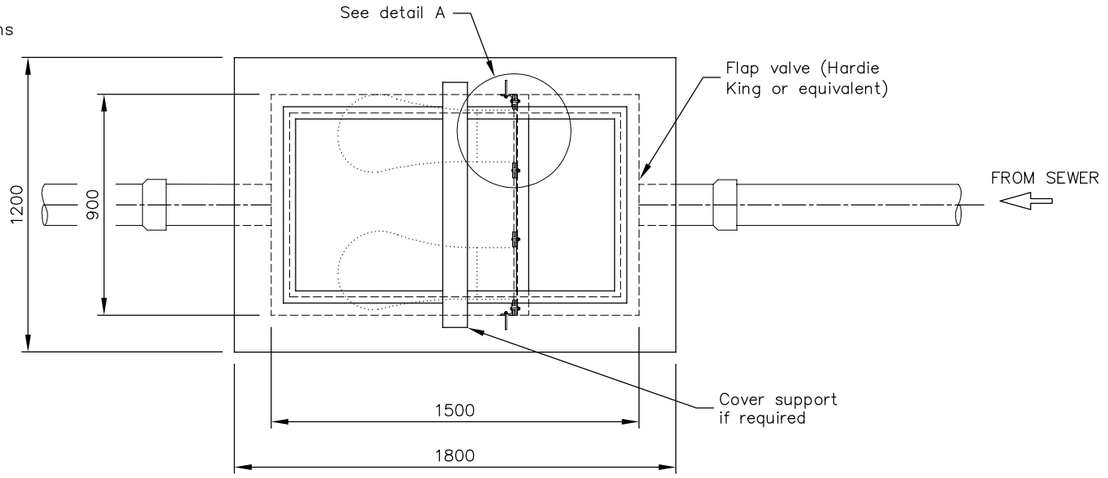
Drawing No. 101028

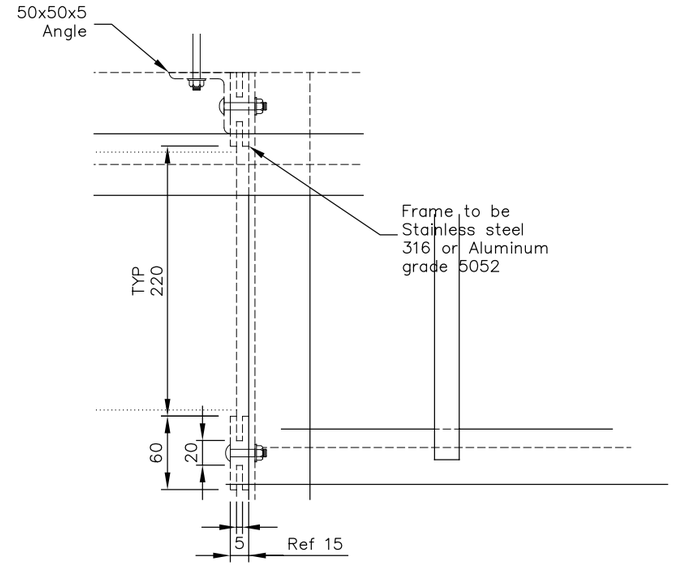




OVERFLOW CHAMBER

PLAN

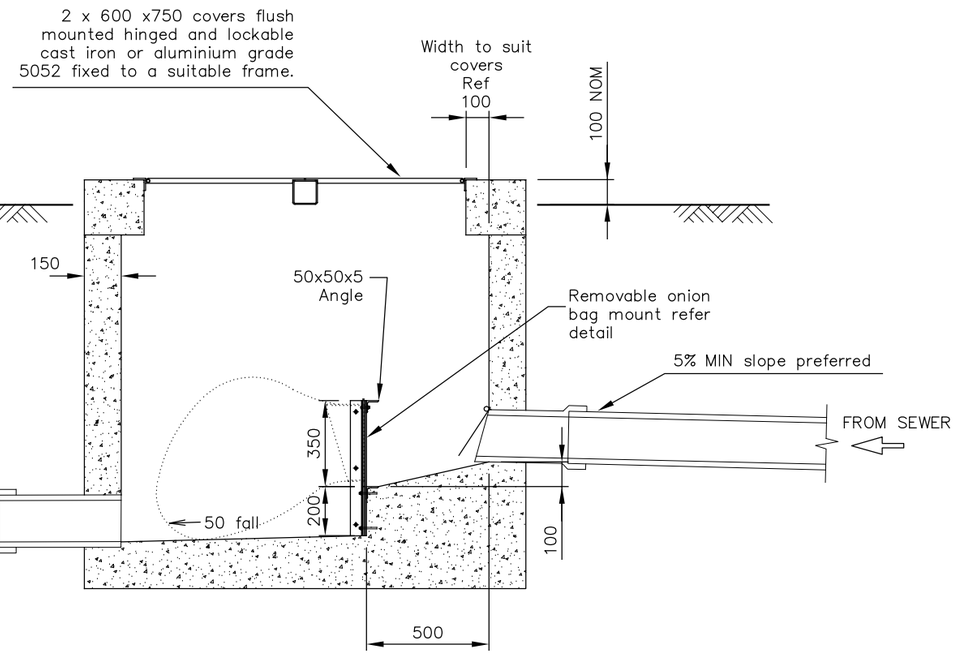
Scale 1:25



Detail A

Scale 1:5

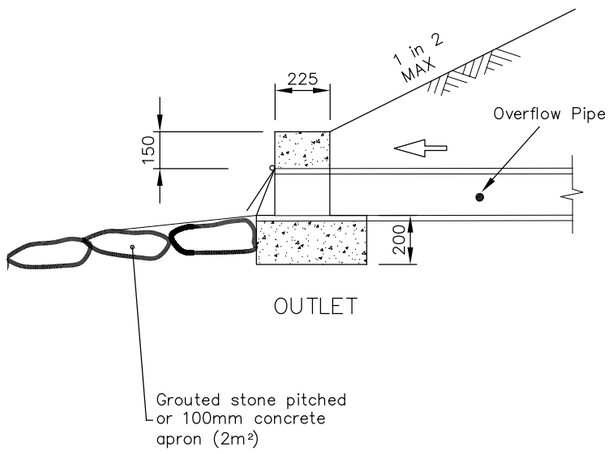
NOTES
1. Pipes shown are diagrammatic only, refer project drawings for layout and levels.
2. Concrete N32. in accordance with AS 1379 and AS 3600.
3. All steelwork hot dip galvanived to AS 1650 after fabrication.
4. All bars and angles Grade 250 to AS 3679 or Grade 5052 Aluminum.
5. All bolts, nuts and washers shall be Grade AS 2837/316 stainless steel with approved anti–galling compound.
6. All welds to AS 1554. All welding symbols comply with AS 1101.3.
7A. The covers shall be gastight similar to those produced by Hallco Engineering.
7B. All components of access covers and frames shall be fabricated from aluminium alloy 6061–T6, to AS 2848 or Cast steel covers with Stainless Steel frame.
7C. All embedded surfaces shall be painted with two coats of alkali resistant bitumous paint.
7D. The covers shall be designed as a platform in accordance with AS 1657.
7E. Fabrication details shall be submitted to Burnett Shire Councils Project Officer for approval prior to manufacture.
8. If covers are subject to vehicular loading, use appropriately rated C.I. covers.
9. All dimensions in millimetres.

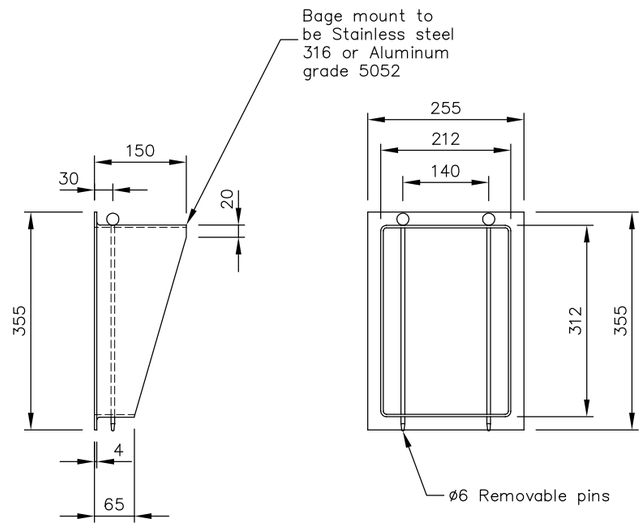


OVERFLOW CHAMBER

SECTIONAL ELEVATION

Scale 1:25





Removable "Onion Bag" Mount

Scale 1:10

Scales: 1 : 25 0 250 500 750mm; 0 50 100 150mm; 1 : 5			drawn	Org signed by MLP 8/05
Sheet A3 , Datum: A.H.D.		Revisions	checked	
			designed	
			checked	

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STANDARD SEWERAGE PUMP STATION OVERFLOW

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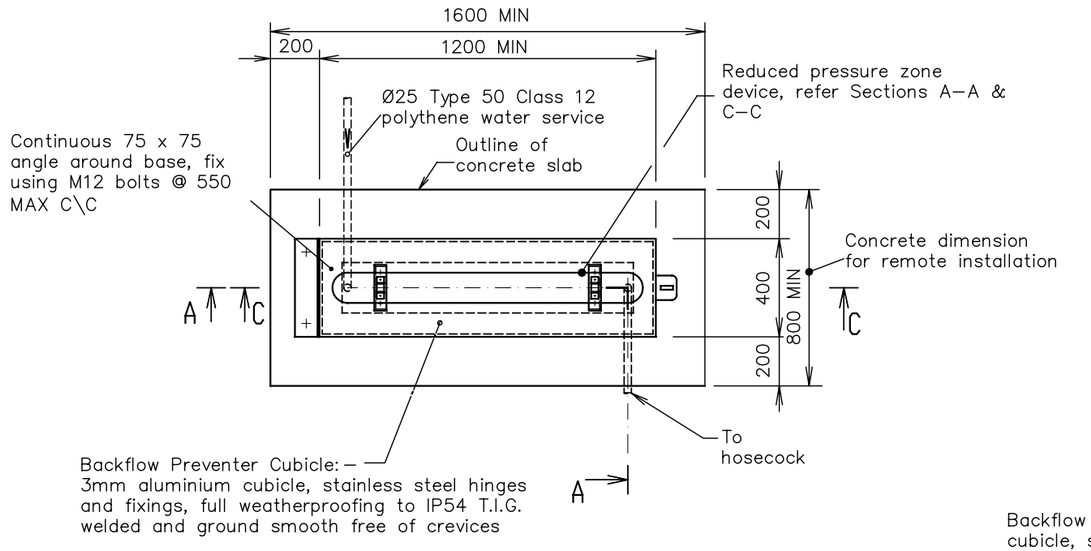
Drawing No. 100991

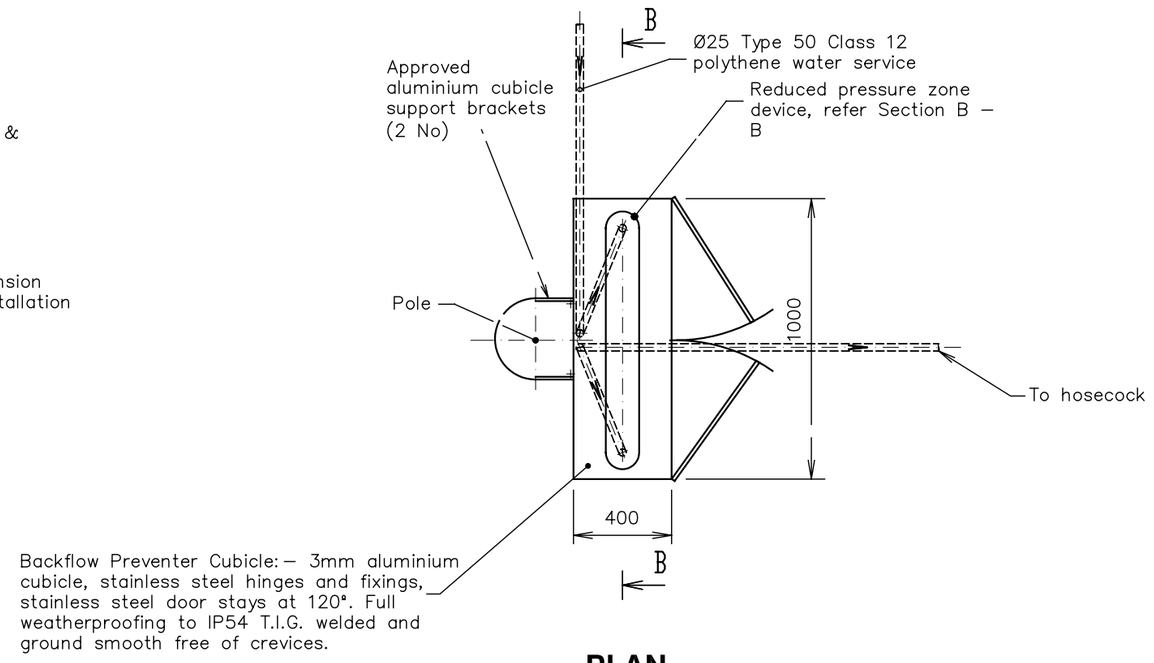
BURNETT SHIRE COUNCIL STANDARD DRAWINGS

WATER SUPPLY

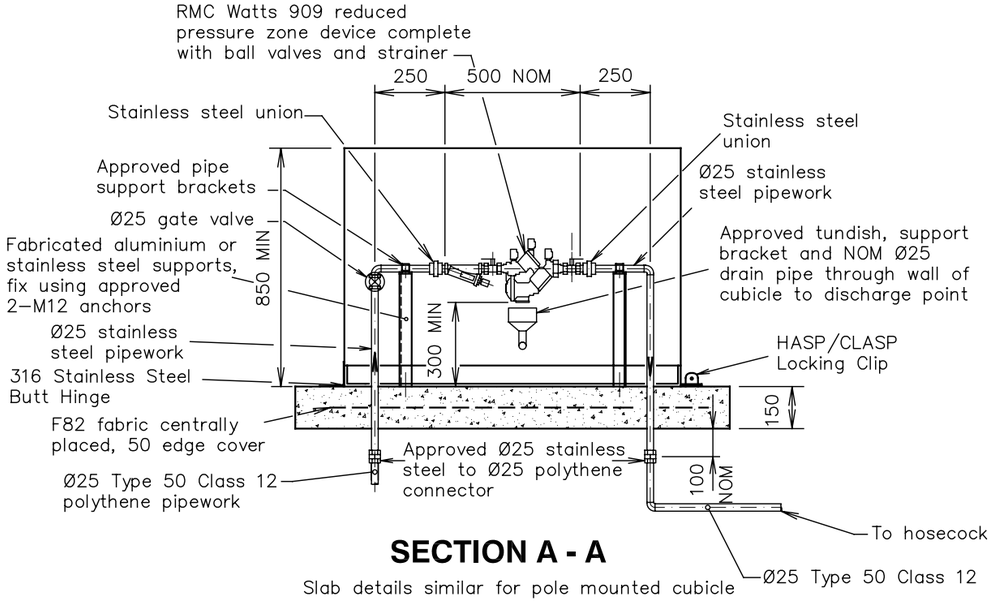
Number	Title / Topic
W400	Backflow Prevention Device Slab and Pole Mounted Device
W401	Burnett Shire Council Hydrant Identification Standard.



PLAN
SLAB MOUNTED CUBICLE



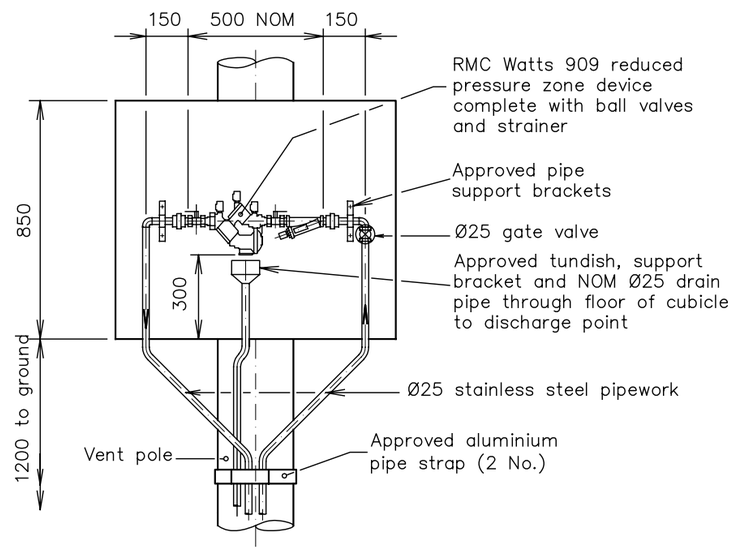
PLAN
POLE MOUNTED CUBICLE



SECTION A - A

Slab details similar for pole mounted cubicle

NOTES:
1. Concrete S32 in accordance with AS 1379 and AS 3600.
2. Reinforcement fabric to AS 1304.
3. Stainless steel Grade AS 2837/316.
4. Polythene pipework to AS 1159.
5. Aluminium Sheet 5083–H321, Extruded sections 6061–T6, to AS 2848.
6. All dimensions in millimetres.



SECTION B - B

Scales: NOT TO SCALE		drawn	Org signed by MLP 11/04
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		designed	
Sheet A3 , Datum: A.H.D.	Revisions	checked	

BURNETT SHIRE COUNCIL

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General Manager of Engineering Operations

BACKFLOW PREVENTION DEVICE
SLAB AND POLE MOUMTED DEVICE

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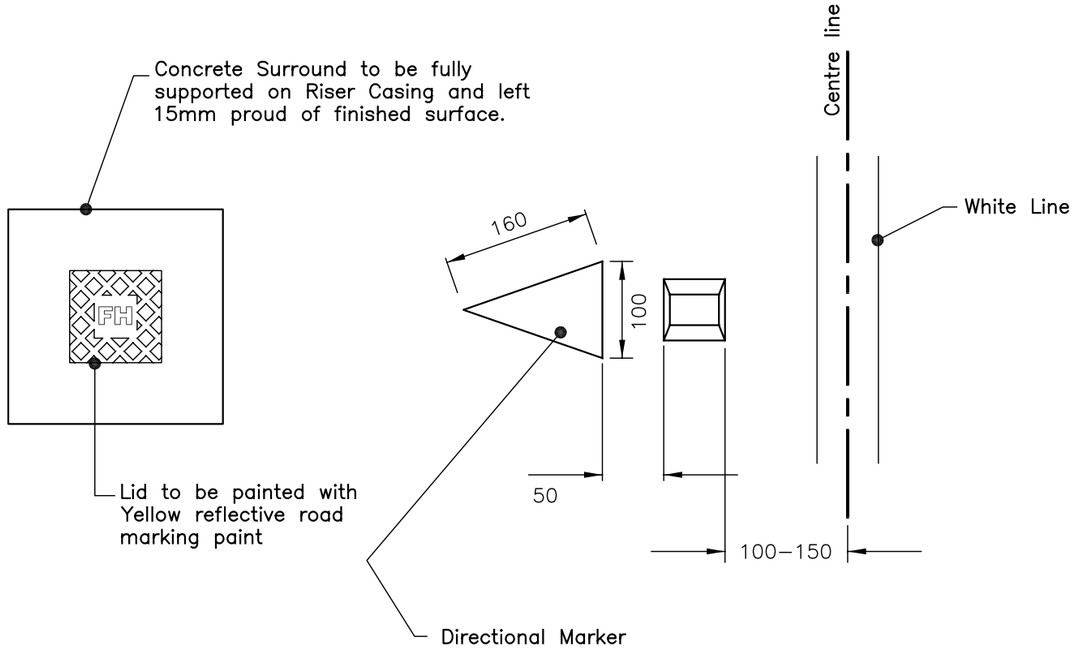
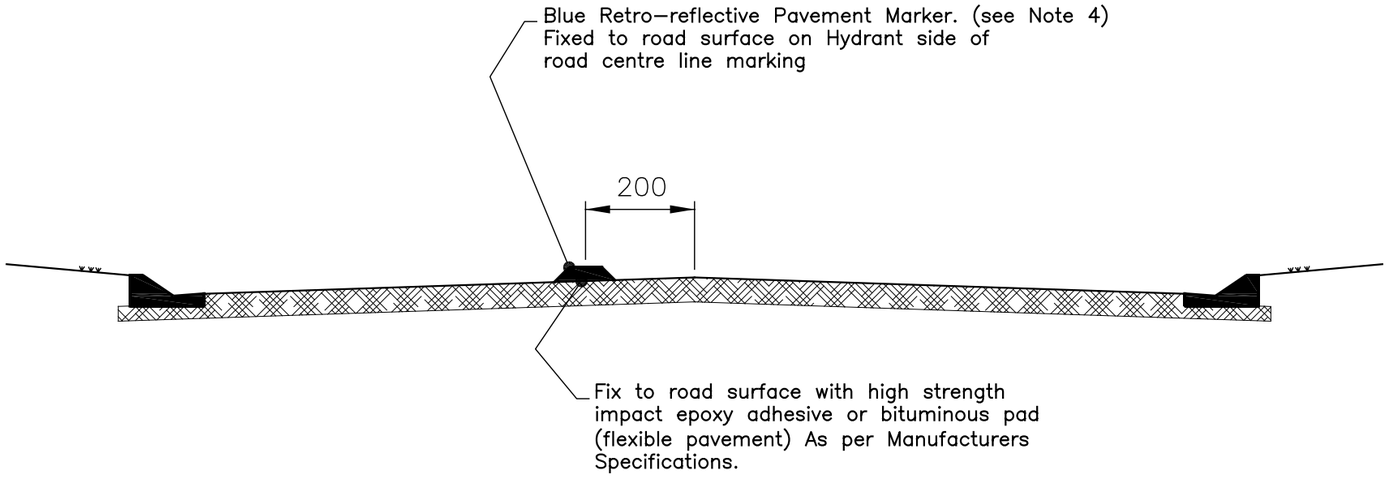
Drawing No.
W400



Hydrant Marking System To Include:

- Cats Eye
- Directional Marker
- Painted Lid

PLAN VIEW
NOT TO SCALE



SECTIONAL VIEW
NOT TO SCALE

Notes:

1. All Dimensions In Milimetres.
2. Type, Location And Orientation Of Markers To Be In Accordance With Relevant Burnett Shire Council Requirements.
3. Locate Markers At Right Angles To The Main
4. Raised Pavement Retro–flective Markers To Comply With As 1906.3–1992
5. Markers And Directional Arrows To Be Installed To Manufacturers Specifications

NOT TO SCALE			drawn	Org signed by CD 11/04
			checked	Org signed by RT 11/04
			designed	Org signed by CD 11/04
Sheet A3	Revisions		checked	Org signed by RT 11/04

BURNETT SHIRE COUNCIL

Original signed by
General Manager of Engineering Operations

BURNETT SHIRE COUNCIL
HYDRANT IDENTIFICATION STANDARD

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Drawing No.
W401