



WATER SERVICES
ASSOCIATION OF AUSTRALIA

GRAVITY SEWERAGE CODE OF AUSTRALIA

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CITY OF
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Contents

List of Figures.....	22
List of Tables.....	28
FRONTMATTER.....	2
ACKNOWLEDGEMENTS.....	2
DISCLAIMER.....	2
PUBLICATION DETAILS.....	3
COPYRIGHT.....	3
FOREWORD.....	30
PREFACE.....	31
THE NEED FOR TECHNICAL DOCUMENTATION.....	31
The Benefits of National Codes.....	31
Innovation.....	31
HYPOTHETICAL EXAMPLE OF THE USE OF THE GRAVITY SEWERAGE CODE.....	32
Concept Plan.....	32
Agency/Development Agreement.....	32
Project Manager.....	33
Design.....	33
Specification.....	33
Constructor.....	33
Testing.....	33
The WSAA Website.....	33
INTRODUCTION.....	34
SCOPE OF CODE.....	34
CODE PURPOSE.....	34
MANDATORY AND INFORMATIVE.....	35
APPENDICES.....	35
PRODUCT SPECIFICATIONS.....	35
General.....	35
Quality Assurance.....	35
Packaging, Transportation and Delivery.....	36
Products and Material Information and Guidance.....	36
Water Industry Standards.....	36
WORK HEALTH AND SAFETY (WHS) LAWS.....	36
NATIONAL STANDARD FOR CONSTRUCTION WORK.....	37
SAFE DESIGN OF STRUCTURES.....	38
PROPOSED AMENDMENTS.....	38
USING THE CODE.....	39
CONDITIONS OF SUPPLY OF SEQ-SP STANDARDS AND SEQ STANDARD DRAWINGS.....	39
GLOSSARY, ABBREVIATIONS AND REFERENCES.....	41
I GLOSSARY OF TERMS.....	41
II ABBREVIATIONS.....	57
III REFERENCED DOCUMENTS.....	61
PART 1: PLANNING AND DESIGN.....	66
1 GENERAL.....	66
1.1 SCOPE.....	66

1.2 PLANNING AND DESIGN.....	66
1.2.1 Objectives.....	66
1.2.2 Scope and requirements.....	66
1.2.3 Servicing strategies.....	67
1.2.4 Functional design requirements.....	68
1.2.5 Concept plan format.....	69
1.2.6 Critical infrastructure protection.....	69
1.2.6.1 General.....	69
1.2.6.2 Asset categorisation.....	69
1.2.6.3 All hazards – Infrastructure protection.....	70
1.2.7 Detailed design.....	71
1.2.7.1 Designer's needs and responsibilities.....	71
1.2.7.2 Requirements to be addressed.....	71
1.2.7.3 Design outputs.....	72
1.2.7.4 Safety in design.....	73
1.3 CONSULTATION WITH OTHER PARTIES.....	73
1.3.1 Design life.....	73
1.3.2 Instrumentation and control systems.....	73
2 SYSTEM PLANNING.....	77
2.1 GENERAL.....	77
2.2 SEWER SYSTEM PHILOSOPHY AND DEFINITION.....	77
2.2.1 Disaggregation.....	77
2.2.2 Level 1 Total system.....	78
2.2.3 Level 2 Transportation subsystems.....	78
2.2.4 Level 3 operating units.....	78
2.2.4.1 Sewers.....	78
2.2.4.2 Sewage pumping stations (SPSs).....	79
2.2.4.3 Storage.....	79
2.3 PLANNING PRINCIPLES.....	79
2.3.1 Planning horizon.....	79
2.3.2 Concept plan.....	79
2.3.3 Catchment analysis.....	80
2.3.4 Provision for future gauging needs.....	80
2.4 PLANNING PARAMETERS.....	80
2.4.1 Loading per serviced lot.....	80
2.4.2 Estimating future catchment loads.....	81
2.4.3 Estimating existing system loads.....	81
2.4.4 Climate change impacts.....	81
2.4.5 Environmental, cultural and heritage impacts.....	82
2.4.6 Geotechnical investigations.....	82
2.4.7 Contaminated sites.....	82
2.4.8 Operations and maintenance considerations.....	82
2.4.9 Sewer mining.....	83
2.5 SEWAGE QUALITY.....	83
2.5.1 Septicity.....	83
2.5.2 Australian sewage quality management guidelines.....	84

2.5.3 Swimming Pools.....	84
2.6 PLANNING REVIEW.....	85
3 FLOW ESTIMATION.....	86
3.1 GENERAL.....	86
3.2 DESIGN FLOW ESTIMATION.....	86
3.3 DESIGN FLOW ESTIMATION METHOD.....	86
3.3.1 General.....	86
3.3.2 Traditional design flow estimation method.....	87
3.3.3 Design flow estimation incorporating existing systems.....	87
3.3.4 Design flow estimation—Partially pumped systems.....	87
3.3.5 Flow schedule.....	87
4 PRODUCTS AND MATERIALS.....	88
4.1 GENERAL.....	88
4.2 IDENTIFICATION OF SEWER SYSTEMS.....	88
4.3 SERVICABILITY OF SEWER SYSTEMS.....	91
4.4 PROTECTION AGAINST DEGRADATION.....	91
4.5 DUCTILE IRON GRAVITY SEWERS.....	92
4.5.1 Product Specifications.....	92
4.5.2 Sizes and configurations.....	93
4.5.3 Cement mortar lining.....	93
4.5.4 Sleeving.....	93
4.5.5 Screw-on flanges for DI pipes.....	94
4.5.6 Flanged joints.....	94
4.5.7 Coatings.....	94
4.6 PVC GRAVITY SEWERS.....	95
4.6.1 Product Specifications.....	95
4.6.2 Sizes and configurations.....	96
4.7 POLYETHYLENE GRAVITY SEWERS.....	96
4.7.1 Product Specifications.....	96
4.7.2 Sizes and configurations.....	97
4.8 POLYPROPYLENE GRAVITY SEWERS.....	98
4.8.1 Product Specifications.....	98
4.8.2 Sizes and configurations.....	98
4.9 GRP GRAVITY SEWERS.....	98
4.9.1 Product Specifications.....	98
4.9.2 Sizes and configurations.....	99
4.10 PLASTICS-LINED CONCRETE GRAVITY SEWERS.....	99
4.10.1 Product Specifications.....	99
4.10.2 Sizes and configurations.....	99
4.11 VITRIFIED CLAY SEWERS.....	99
4.11.1 Product Specifications.....	99
4.11.2 Sizes and configurations.....	100
4.12 STEEL GRAVITY SEWERS.....	100
4.12.1 Product Specifications.....	100
4.12.2 Sizes and configurations.....	100
4.12.3 Joints.....	100

4.12.4	Field welding.....	101
4.12.5	Flanged joints.....	101
4.13	MAINTENANCE STRUCTURES.....	101
4.13.1	Product Specifications.....	101
4.13.2	Classification and application.....	102
4.13.3	Sizes and configurations.....	103
4.14	MARKING TAPES.....	103
4.14.1	Product Specifications.....	103
4.14.2	Application.....	103
4.15	ACCESS COVERS AND FRAMES.....	103
4.15.1	Product Specifications.....	103
4.15.2	Application.....	103
4.15.3	Ductile cast iron access covers and frames.....	104
4.15.4	Polymeric access covers and frames.....	104
4.15.5	Not Used.....	104
4.15.6	Size and configuration.....	104
4.15.7	Marking of access covers and frames.....	105
4.16	VENT SHAFTS.....	105
4.16.1	Product Specifications.....	105
4.16.2	Application.....	105
5	DETAIL DESIGN.....	106
5.1	DETAIL DESIGN PROCESS.....	106
5.2	DETAIL DESIGN CONSIDERATIONS.....	106
5.2.1	Catchment design.....	106
5.2.2	Design accuracy.....	107
5.2.3	Sewer layout.....	107
5.2.4	Location of sewers.....	108
5.2.4.1	General.....	108
5.2.4.2	Sewers located along side boundaries.....	109
5.2.4.3	Sewers located along rear boundaries.....	109
5.2.4.4	Sewers located in small lots (lot area $\leq 450 \text{ m}^2$).....	110
5.2.4.5	Sewers servicing industrial /commercial lots.....	110
5.2.4.6	Branch and trunk sewers.....	110
5.2.5	Trenchless techniques for pipe installation.....	111
5.2.6	Near-horizontal boreholes and tunnels.....	111
5.2.6.1	General.....	111
5.2.6.2	Design requirements.....	112
5.2.6.3	Silt traps.....	113
5.2.7	Environmental, cultural and heritage considerations.....	113
5.2.7.1	General.....	113
5.2.7.2	Urban salinity.....	115
5.2.7.3	Acid sulphate soils.....	115
5.2.7.4	Vegetation.....	116
5.2.7.5	Coastal zones.....	116
5.2.8	Easements.....	116
5.2.9	Disused sewers.....	118

5.2.10 Special design considerations.....	119
5.3 HORIZONTAL ALIGNMENT OF SEWERS.....	119
5.3.1 General.....	119
5.3.2 Roads, reserves and open space.....	119
5.3.3 Railway reserves.....	120
5.3.4 Waterways.....	120
5.3.5 Maintenance structures and vent shafts.....	121
5.3.6 Changes in direction using an MH.....	121
5.3.7 Changes in direction using an MS or MC.....	122
5.3.8 Horizontal curves in sewers.....	122
5.3.8.1 General.....	122
5.3.8.2 Use of manufactured and variable bends in reticulation sewers.....	125
5.3.8.3 Cumulative deflection using pipe joints.....	125
5.4 OBSTRUCTIONS AND CLEARANCES.....	125
5.4.1 General.....	125
5.4.2 Surface obstructions.....	126
5.4.3 Clearance from transmission towers and power lines.....	126
5.4.4 Clearance from structures.....	126
5.4.5 Underground obstructions and services.....	127
5.4.5.1 General.....	127
5.4.5.2 Clearance requirements.....	128
5.4.6 Marker posts.....	130
5.5 PIPE SIZING AND GRADING.....	130
5.5.1 General.....	130
5.5.2 Environmental protection requirements.....	130
5.5.3 Minimum air space.....	130
5.5.4 Minimum pipe sizes for maintenance purposes.....	130
5.5.5 Maximum ET for reticulation sewers.....	131
5.5.5.1 General.....	131
5.5.5.2 Design assumptions.....	132
5.5.6 Limitation on sewer size reduction.....	133
5.5.7 Minimum grades.....	133
5.5.7.1 General.....	133
5.5.7.2 Reticulation sewers.....	134
5.5.7.3 Property connection sewers and end-of-line sewers.....	134
5.5.8 Minimum grades for slime control.....	134
5.5.9 Maximum grades.....	134
5.5.9.1 Branch and trunk sewers.....	134
5.5.9.2 Reticulation sewers.....	135
5.6 VERTICAL ALIGNMENT OF SEWERS.....	135
5.6.1 General.....	135
5.6.2 Long section design plan.....	135
5.6.3 Minimum cover over sewers.....	135
5.6.4 Lot servicing requirements.....	136
5.6.4.1 General.....	136
5.6.4.2 Serviced area requirements for residential lots.....	137

5.6.4.3	5.6.4.3 Serviced area requirements for industrial and commercial lots.....	137
5.6.4.4	5.6.4.4 Partial lot service.....	137
5.6.4.5	5.6.4.5 Servicing of basements.....	138
5.6.4.6	5.6.4.6 Servicing of developed lots.....	138
5.6.5	5.6.5 Minimum depth of sewer connection point.....	138
5.6.5.1	5.6.5.1 General.....	138
5.6.5.2	5.6.5.2 Minimum Soffit requirement.....	139
5.6.5.3	5.6.5.3 Soffit requirement by calculation.....	139
5.6.5.4	5.6.5.4 Depth of connection point.....	140
5.6.6	5.6.6 Grading through MHs.....	141
5.6.6.1	5.6.6.1 General.....	141
5.6.6.2	5.6.6.2 Internal fall through MHs joining sewers of same diameter.....	142
5.6.6.3	5.6.6.3 Internal falls through MHs joining sewers of different diameters.....	142
5.6.6.4	5.6.6.4 Major sewer junctions.....	142
5.6.6.5	5.6.6.5 Large falls at MHs.....	142
5.6.6.6	5.6.6.6 Avoiding hydraulic jumps due to steep grades.....	143
5.6.6.6.1	5.6.6.6.1 GENERAL.....	143
5.6.6.6.2	5.6.6.6.2 BRANCH AND TRUNK SEWERS.....	144
5.6.6.6.3	5.6.6.6.3 RETICULATION SEWERS.....	144
5.6.6.7	5.6.6.7 Avoiding deep channels in MHs due to steep grades.....	145
5.6.7	5.6.7 Vertical curves in sewers.....	146
5.6.8	5.6.8 Compound curves.....	146
5.6.9	5.6.9 Deep Sewers.....	147
6	6 PROPERTY CONNECTION.....	148
6.1	6.1 GENERAL.....	148
6.2	6.2 LIMITATIONS OF CONNECTION TO SEWERS.....	148
6.3	6.3 METHODS OF THE PROPERTY CONNECTION.....	148
6.3.1	6.3.1 General.....	148
6.3.2	6.3.2 Not Used.....	148
6.3.3	6.3.3 Buried interface method.....	148
6.3.4	6.3.4 Typical layouts of sewers and general arrangements for property connection sewers.....	150
6.3.5	6.3.5 Maximum depth of property connection point.....	151
6.4	6.4 NUMBER OF PROPERTY CONNECTION POINTS.....	152
6.4.1	6.4.1 Single occupancy lots.....	152
6.4.2	6.4.2 Multiple occupancy lots.....	152
6.5	6.5 LOCATION OF PROPERTY CONNECTION POINTS.....	153
6.5.1	6.5.1 General.....	153
6.5.2	6.5.2 Vacant lots.....	153
6.5.3	6.5.3 Lots with existing buildings.....	153
6.6	6.6 PROPERTY CONNECTION SEWERS.....	154
6.6.1	6.6.1 General.....	154
6.6.2	6.6.2 'Type 7 spur' or 'Y' property sewer connections.....	154
6.7	6.7 LENGTH OF PROPERTY CONNECTION SEWERS.....	155
6.8	6.8 LOCATION OF SEWER CONNECTION POINTS.....	156
7	7 MAINTENANCE STRUCTURES.....	157
7.1	7.1 TYPES OF MAINTENANCE STRUCTURES.....	157

7.2 LOCATIONS OF MAINTENANCE STRUCTURES.....	157
7.3 SPACING OF MAINTENANCE STRUCTURES.....	158
7.3.1 General.....	158
7.3.2 Maintenance structure spacing—Reticulation sewers.....	160
7.3.3 Maintenance structure spacing—Branch and trunk sewers.....	162
7.4 SPECIAL CONSIDERATIONS FOR LOCATION OF MAINTENANCE STRUCTURES.....	162
7.5 SPECIAL CONSIDERATIONS FOR CONNECTION OF NEW SEWERS TO EXISTING SEWERS.....	162
7.6 MAINTENANCE HOLES (MHs).....	163
7.6.1 General.....	163
7.6.2 Types of MH construction and corrosion protection.....	163
7.6.3 Design parameters for MHs.....	164
7.6.4 Design requirements for connection of sewers to MHs.....	164
7.6.4.1 Pre-cast concrete MH base units.....	164
7.6.4.2 Cast in-situ concrete MH base units.....	166
7.6.4.3 Rocker pipes.....	168
7.6.5 Connection of property connection sewers into MHs.....	169
7.6.6 MH drops.....	169
7.6.7 Diameters of MHs.....	173
7.6.8 MH base layout.....	173
7.6.9 Ladders, step irons and landings.....	174
7.7 MAINTENANCE SHAFTS (MSs) / MAINTENANCE CHAMBERS (MCs).....	175
7.7.1 General.....	175
7.7.2 Design parameters for Sewer Maintenance Structures other than MHs.....	175
7.7.3 Connections to MCs, MSs and TMSs.....	177
7.7.3.1 Connections to PE MCs, MSs and TMSs.....	178
7.7.3.2 Connections to pre-cast concrete MC base units.....	179
7.7.3.3 Connections to PP MCs and MSs.....	180
7.7.4 High-level connections to MCs, MSs and TMSs.....	180
7.7.4.1 High-level connections into a pre-cast concrete MC.....	182
7.7.4.2 High-level connections into a PE MC and MS.....	183
7.7.4.3 High-level connections into a PVC-U MS.....	184
7.7.4.4 High-level connections into a PP MC and MS.....	185
7.8 INSPECTION SHAFTS (ISs).....	188
7.8.1 General.....	188
7.8.2 (Not used).....	188
7.8.3 (Not used).....	189
7.8.4 (Not used).....	189
7.8.5 Ends of pipe.....	189
7.8.5.1 Temporary ends of pipe.....	189
7.8.5.2 Permanent ends of pipe.....	189
7.9 MAINTENANCE STRUCTURE COVERS.....	189
7.9.1 General.....	189
7.9.2 Cross-fall on MH covers.....	192
7.9.3 Modifications to existing maintenance holes.....	192
7.10 (NOT USED).....	192

7.11 OTHER MAINTENANCE STRUCTURES AT INTERFACE OF PROPERTY CONNECTION	
SEWERS AND SANITARY DRAINS.....	192
8 ANCILLIARY STRUCTURES.....	193
8.1 GENERAL.....	193
8.2 WATER SEALS, BOUNDARY TRAPS, WATER-SEALED MHs AND GAS CHECK MHs.....	193
8.2.1 Boundary traps on sanitary drains.....	194
8.2.1.1 General.....	194
8.2.1.2 Responsibility for installation of boundary traps.....	194
8.2.2 Water seals, water-sealed MHs and gas check MHs.....	195
8.2.2.1 General.....	195
8.2.2.2 Water seals on reticulation sewers entering branch or trunk sewers.....	195
8.2.2.3 Water seals on branch sewers entering trunk sewers.....	195
8.2.3 Water-sealed MHs and gas check MHs.....	196
8.2.3.1 General.....	196
8.2.3.2 Water-sealed MHs.....	196
8.2.3.3 Gas check MHs.....	198
8.3 VERTICAL AND NEAR VERTICAL SEWERS.....	200
8.3.1 General.....	200
8.3.2 Design parameters for bored, exposed and encased vertical and near vertical sewers.....	200
8.4 VENTILATION.....	201
8.4.1 General.....	201
8.4.2 Design parameters for ventilation and location of vent shafts.....	201
8.4.3 Design details for ventilation lines, vent shafts and cowls.....	202
8.5 VORTEX INLETS AND WATER CUSHIONS.....	202
8.6 INVERTED SYPHONS.....	203
8.6.1 General.....	203
8.6.2 Design parameters for inverted syphons.....	203
8.7 EMERGENCY RELIEF STRUCTURES.....	205
8.7.1 General.....	205
8.7.2 Design parameters for ERSs.....	206
8.7.2.1 General.....	206
8.7.2.2 Configuration.....	206
8.7.2.3 Overflow pipe.....	207
8.7.2.4 Overflow level.....	207
8.8 FLOW MEASURING DEVICES.....	209
8.8.1 General.....	209
8.8.2 Within the sewer system.....	209
8.8.3 At a sewage pumping station.....	210
8.9 WET WEATHER STORAGE.....	210
8.9.1 General.....	210
8.9.2 Design considerations.....	211
9 STRUCTURAL DESIGN.....	212
9.1 GENERAL.....	212
9.2 PRODUCTS AND MATERIALS.....	212
9.3 STRUCTURAL CONSIDERATIONS.....	212
9.3.1 Pipes.....	212

9.3.2 Design factors affecting buried flexible and rigid pipes.....	213
9.3.3 Maintenance structures.....	213
9.4 LOADINGS.....	213
9.4.1 External forces.....	213
9.4.2 Native soil strength.....	214
9.4.3 Embedment zone dimensions.....	215
9.4.4 Pipe embedment.....	215
9.4.5 Buoyancy.....	216
9.4.6 Flotation.....	217
9.5 FOUNDATION DESIGN AND GROUNDWATER CONTROL.....	217
9.5.1 Migration of fines.....	217
9.6 GEOTECHNICAL CONSIDERATIONS.....	218
9.6.1 General.....	218
9.6.2 Pipelines in engineered or controlled fill.....	221
9.6.3 Pipelines in non-engineered fill.....	222
9.6.4 Filling along route of pipeline.....	222
9.6.5 Mine subsidence.....	222
9.6.6 Slip areas.....	223
9.6.7 Water-charged ground.....	223
9.7 SPECIAL EMBEDMENT CONCRETE AND STABILISED SUPPORTS.....	223
9.7.1 General.....	223
9.7.2 Requirements.....	224
9.8 ABOVE GROUND CROSSINGS.....	226
9.9 PIPE COVER.....	226
9.10 BULKHEADS AND TRENCHSTOPS.....	226
9.11 TRENCH DRAINAGE.....	227
10 DESIGN REVIEW AND DRAWINGS.....	234
10.1 DESIGN REVIEW.....	234
10.2 DESIGN DRAWINGS.....	234
10.2.1 General.....	234
10.2.2 Composition of Design Drawings.....	234
10.2.3 Scale.....	235
10.2.4 Real property information.....	235
10.2.5 Sewers.....	235
10.2.6 Structures.....	236
10.2.7 Longitudinal sections (profiles).....	236
10.2.8 Title block notation and standard notes.....	237
10.2.9 Other.....	237
10.3 SEWER SYSTEM ACRONYMS.....	238
10.4 SPECIFICATIONS.....	238
10.5 RECORDING OF WORK AS CONSTRUCTED INFORMATION.....	239
PART 2: CONSTRUCTION.....	241
11 GENERAL.....	241
11.1 SCOPE.....	241
11.1.1 (NOT USED).....	241
11.2 INTERPRETATION.....	241

11.3 QUALITY.....	241
11.3.1 Quality assurance.....	241
11.3.1.1 General.....	242
11.3.1.2 Quality system.....	242
11.3.1.3 Project-management plan.....	242
11.3.1.4 Inspection and test plans.....	242
11.3.1.5 Quality tests.....	242
11.3.1.6 Quality audits.....	242
11.3.1.7 Traceability.....	243
11.3.1.8 Quality records.....	243
11.3.1.9 Inspection.....	243
11.3.2 Personnel qualifications.....	243
12 GENERAL CONSTRUCTION.....	245
12.1 GENERAL.....	245
12.2 ORDER OF CONSTRUCTION, TESTING AND COMMISSIONING.....	245
12.3 CONTRACT INTERFACES.....	245
12.4 CUSTOMER FOCUS.....	245
12.4.1 General.....	245
12.4.2 Resolution of complaints.....	246
12.4.3 Affected party notifications.....	246
12.5 PROTECTION OF PROPERTY AND ENVIRONMENT.....	246
12.5.1 Protection of other services.....	246
12.5.2 Road reserves or other thoroughfares.....	247
12.5.2.1 Road works permits.....	247
12.5.2.2 Treatment of pavements and other surfaces.....	247
12.5.2.3 Cleanliness of roads, paths, accesses and drainage paths.....	247
12.5.2.4 Storage of products, materials, equipment and excavated material.....	248
12.5.2.5 Obstruction of street drainage.....	248
12.5.3 Private and public lands.....	248
12.5.4 Protection of the environment and heritage areas.....	248
12.5.4.1 General.....	248
12.5.4.2 Collection and disposal of wastes.....	248
12.5.4.3 Protection of adjacent lands and vegetation.....	249
12.5.4.4 Control of water pollution.....	249
12.5.4.5 Contaminated soils.....	251
12.5.4.6 Control of noise and atmospheric pollution.....	251
12.5.4.7 Equipment and machinery use in bush fire prone areas.....	252
12.6 DISUSED SEWERS.....	252
12.7 OPERATION OF WATER SUPPLY NETWORK.....	252
12.8 ALTERATION OF EXISTING SERVICES.....	252
12.9 SURVEY MARKS.....	252
12.10 CONSTRUCTION TOLERANCES.....	252
12.11 LATENT CONDITIONS.....	252
13 PRODUCTS AND MATERIALS.....	254
13.1 APPROVED PRODUCTS AND MATERIALS.....	254
13.2 DELIVERY INSPECTION OF PRODUCTS AND MATERIALS.....	254

13.3 TRANSPORTATION, HANDLING AND STORAGE OF PRODUCTS AND MATERIALS.....	255
13.3.1 General.....	255
13.3.2 Transportation.....	255
13.3.3 Unloading and handling.....	255
13.3.4 On-site storage.....	256
13.3.5 Plastics-lined concrete products.....	256
13.3.6 Coiled plastics pipe.....	256
13.4 CONCRETE WORKS.....	257
13.4.1 Delivery.....	257
13.4.2 Transportation of concrete.....	257
13.4.3 Formwork.....	257
13.4.3.1 General.....	257
13.4.3.2 Formwork for plastic-lined concrete.....	257
13.4.4 Reinforcement.....	258
13.4.5 Placement.....	258
13.4.5.1 General.....	258
13.4.5.2 Placement in water.....	258
13.4.6 Slump.....	258
13.4.7 Compaction.....	259
13.4.8 Stripping.....	259
13.4.9 Curing.....	259
13.4.10 Repair of blemishes.....	259
13.5 SUPPLY OF WATER TO THE WORKS.....	259
14 EXCAVATION.....	260
14.1 PRECAUTIONS.....	260
14.2 LIMITS OF CLEARING AND EXCAVATION.....	260
14.3 PROTECTION OF TREES.....	260
14.3.1 General precautions.....	260
14.3.2 Protection of roots.....	260
14.4 BLASTING.....	261
14.5 SUPPORT OF EXCAVATIONS.....	261
14.6 DRAINAGE AND DEWATERING.....	261
14.7 EXCAVATION ACROSS IMPROVED SURFACES.....	262
14.8 TRENCH EXCAVATION.....	262
14.8.1 General.....	262
14.8.2 Construction of embankment.....	262
14.8.3 Clearances for on-site works.....	262
14.9 REFILL OF EXCESSIVE EXCAVATION.....	263
14.10 FOUNDATIONS AND FOUNDATION STABILISATION.....	263
14.11 SURPLUS EXCAVATED MATERIAL.....	264
14.12 EXCAVATION AND PIPELAYING USING TRENCHLESS TECHNIQUES.....	264
15 BEDDING FOR PIPES AND MAINTENANCE STRUCTURES.....	265
15.1 TRENCH FLOOR PREPARATION.....	265
15.2 BEDDING MATERIALS.....	265
15.2.1 Placement of bedding.....	265
15.3 SPECIAL PIPE SUPPORT FOR NON-SUPPORTIVE SOILS.....	265

15.4 BEDDING FOR MAINTENANCE CHAMBERS, MAINTENANCE SHAFTS, INSPECTION SHAFTS AND BENDS.....	266
15.5 BEDDING FOR MAINTENANCE HOLES.....	266
16 PIPE LAYING AND JOINTING.....	267
16.1 INSTALLATION OF PIPES.....	267
16.1.1 General.....	267
16.1.2 Cleaning, inspection and joint preparation.....	267
16.1.3 Coiled plastics pipes.....	267
16.1.4 Laying.....	267
16.2 HORIZONTAL AND VERTICAL DEFLECTION OF SEWERS.....	268
16.2.1 General.....	268
16.2.2 Methods of deflection.....	268
16.2.3 Horizontal curves.....	269
16.2.4 Vertical curves.....	269
16.2.5 Compound curves.....	269
16.3 HORIZONTAL AND VERTICAL SEPARATION OF CROSSING PIPELINES.....	270
16.4 FLOTATION CONTROL.....	270
16.5 TRENCH STOPS.....	270
16.6 BULKHEADS.....	270
16.7 PROPERTY CONNECTION SEWERS.....	270
16.8 DEAD ENDS.....	271
16.9 MARKING OF PROPERTY CONNECTION SEWERS AND DEAD ENDS.....	271
16.10 CORROSION PROTECTION OF CAST IRON.....	271
16.11 MARKERS.....	271
16.11.1 Non-detectable marking tape.....	271
16.11.2 Detectable marking tape.....	271
16.11.3 Tracer Wire.....	271
16.12 BORED PIPES UNDER ROADS, DRIVEWAYS AND ELSEWHERE.....	272
16.13 AQUEDUCTS.....	272
16.14 BRIDGE CROSSINGS.....	272
16.15 PLASTICS-LINED RC PIPE JOINTING.....	272
16.15.1 General.....	272
16.15.2 Plastics lining work protection.....	273
16.15.3 Field jointing.....	273
16.15.4 Plastics lining ancillary work.....	273
16.15.4.1 Alignment of lining keys.....	273
16.15.4.2 Provision of seepage channels.....	273
16.15.4.3 Use of jointing accessories and adhesives.....	273
16.16 WELDING OF STEEL PIPELINES.....	273
16.16.1 General.....	273
16.16.2 Field welding of flanges.....	274
16.16.3 Reinstatement of cement mortar lining.....	274
16.16.4 Reinstatement of external corrosion protection at joints using a tape system.....	274
16.16.4.1 Surface preparation.....	274
16.16.4.2 Priming surfaces.....	274
16.16.4.3 Mastic filler.....	275

16.16.4.4	Tape application.....	275
16.16.5	Reinstatement of external corrosion protection at joints using a heat-shrinkable sleeve system.....	276
16.16.5.1	Surface preparation.....	276
16.16.5.2	Preheat pipe.....	276
16.16.5.3	Priming surfaces.....	277
16.16.5.4	Mastic filler.....	277
16.16.5.5	Heat-shrinkable sleeve preparation.....	277
16.16.5.6	Heat-shrinkable sleeve application.....	277
16.17	WELDING OF PE PIPELINES.....	277
16.17.1	General.....	277
16.17.2	Welder qualifications.....	277
16.17.3	Connections to pipes of other materials.....	278
17	MAINTENANCE HOLES (MHs).....	279
17.1	GENERAL.....	279
17.2	CONCRETE MHs.....	279
17.2.1	Concrete MH base.....	279
17.2.2	Pre-cast concrete MH systems.....	279
17.2.3	Cast in-situ concrete MH.....	280
17.2.4	Benching and channels.....	280
17.2.5	Concreting for thermoplastics-lined works.....	280
17.2.5.1	Concrete work planning.....	280
17.2.5.2	Fixing of thermoplastics lining for concrete work.....	281
17.2.5.3	Concrete placement and formwork removal.....	281
17.2.6	Internal coating of concrete MHs.....	281
17.3	GLASS REINFORCED PLASTICS (GRP) MHs.....	282
17.4	POLYETHYLENE (PE) MHs.....	282
17.5	POLYPROPYLENE (PP) MHs.....	282
17.6	TRENCH DRAINAGE AROUND MHs.....	282
17.7	COVERS.....	282
17.8	CONNECTIONS TO MHs.....	282
17.9	MH DROPS.....	283
17.10	LADDERS, STEP IRONS AND LANDINGS.....	283
18	SEWER MAINTENANCE STRUCTURES OTHER THAN MHs.....	284
18.1	GENERAL.....	284
18.2	SEALING CAPS.....	284
18.3	COVERS.....	284
18.4	CONNECTIONS TO MCs, MSs AND TMSs.....	284
19	PIPE EMBEDMENT AND SUPPORT.....	285
19.1	GENERAL.....	285
19.2	EMBEDMENT MATERIALS.....	285
19.3	COMPACTION OF EMBEDMENT.....	285
19.3.1	Methods.....	285
19.3.2	Compaction trials / Pre-qualification of embedment compaction method.....	286
19.3.2.1	General.....	286
19.3.2.2	Test method.....	286

19.3.2.3 Interpretation and applicability.....	286
19.3.3 Compaction control.....	286
19.4 SPECIAL BEDDING AND EMBEDMENTS / GEOTEXTILE SURROUND AND PILLOW.....	286
19.5 REMOVAL OF TRENCH SUPPORTS.....	287
19.6 CONCRETE EMBEDMENT AND ENCASEMENT.....	287
20 FILL.....	288
20.1 TRENCH FILL.....	288
20.1.1 General.....	288
20.1.2 Material requirements.....	288
20.1.2.1 Trafficable areas.....	288
20.1.2.2 Non-trafficable areas.....	288
20.1.3 Placement.....	289
20.1.4 Compaction of trench fill.....	289
20.2 EMBANKMENT FILL.....	290
20.3 DRIVES AND TUNNEL FILL.....	290
21 ACCEPTANCE TESTING.....	291
21.1 GENERAL.....	291
21.2 VISUAL INSPECTION—ABOVE-GROUND.....	291
21.3 COMPACTION TESTING.....	292
21.3.1 General.....	292
21.3.2 Compaction testing requirements.....	294
21.3.2.1 General.....	294
21.3.3 Embedment compaction testing.....	294
21.3.3.1 Applicable pipe sizes.....	294
21.3.3.2 Frequency and location of embedment tests.....	294
21.3.3.3 Retesting.....	294
21.3.4 Trench fill compaction testing.....	295
21.3.4.1 Trafficable test zone.....	295
21.3.4.2 Non-trafficable test zone.....	295
21.3.4.3 Test method.....	295
21.3.4.4 Frequency and location of tests.....	295
21.3.4.5 Retesting.....	295
21.3.5 Other fill compaction testing.....	295
21.3.5.1 General.....	295
21.3.5.2 Trafficable test zone.....	296
21.3.5.3 Non-trafficable test zone.....	296
21.3.5.4 Frequency and location of tests.....	296
21.3.5.5 Retesting.....	296
21.4 AIR PRESSURE AND VACUUM TESTING OF SEWERS.....	296
21.4.1 General.....	296
21.4.2 Air testing methods for sewers.....	297
21.4.2.1 Vacuum testing.....	297
21.4.2.2 Low pressure air testing.....	298
21.4.3 Testing of sewers >DN 1500.....	298
21.4.3.1 General.....	298
21.4.3.2 Method of test.....	299

21.4.4	Testing of non-pressure PE sewers.....	299
21.4.5	Testing of concrete MHs.....	299
21.4.5.1	General.....	299
21.4.5.2	Test method.....	299
21.5	INFILTRATION TESTING.....	300
21.6	DEFLECTION (OVALITY) TESTING OF FLEXIBLE SEWERS.....	301
21.6.1	General.....	301
21.6.2	Ovality proving tools.....	301
21.6.3	Flexible sewers \leq DN 300.....	302
21.6.4	Flexible sewers $>$ DN 300.....	302
21.6.4.1	General.....	302
21.6.4.2	Flexible sewers $>$ 300 NB and $<$ 750 NB.....	303
21.6.4.3	Flexible sewers \geq 750 NB.....	303
21.7	MEASUREMENT OF SEWER GRADE.....	303
21.8	INTERNAL INSPECTION.....	304
21.9	INSPECTION AND TESTING OF THERMOPLASTICS LINED CONCRETE SEWERS AND MHs.....	305
21.9.1	Visual inspection.....	305
21.9.2	Spark testing.....	305
21.9.3	Locking key pull-out tests.....	306
21.10	PRESSURE TESTING OF INVERTED SYPHONS.....	306
21.10.1	General.....	306
21.10.1.1	Test procedure.....	306
21.10.2	Hydrostatic system test pressure.....	307
21.10.3	Satisfactory pressure test.....	307
21.11	POLYETHYLENE PIPELINES INSTALLED USING HDD TECHNIQUES.....	307
22	TOLERANCES ON AS-CONSTRUCTED WORK.....	309
22.1	HORIZONTAL TOLERANCES.....	309
22.1.1	Sewers and on-line structures.....	309
22.1.2	Property connection sewers.....	309
22.2	VERTICAL TOLERANCES.....	309
22.2.1	Sewers and structures.....	309
22.2.2	Property connection risers and inspection openings.....	309
22.2.3	Grade.....	309
22.2.4	Verticality ("plumb").....	310
22.3	TOLERANCES ON FINISHED SURFACE STRUCTURES AND FITTINGS.....	310
22.4	TOLERANCES ON CAST IN-SITU CONCRETE STRUCTURES AND SLABS.....	310
23	CONNECTION TO EXISTING SEWERS.....	312
24	RESTORATION.....	313
24.1	GENERAL.....	313
24.2	PAVEMENTS.....	313
24.3	LAWNS.....	313
24.4	GRASSED AREAS.....	314
24.5	BUSHLAND.....	314
24.6	PROVISION FOR AND RECTIFICATION OF SETTLEMENT.....	314
24.7	MAINTENANCE OF RESTORED SURFACES.....	314

25 WORK AS CONSTRUCTED DETAILS.....	315
PART 3: DRAWINGS.....	317
SEQ 26 - LISTING OF STANDARD DRAWINGS.....	317
SEW-1000 SERIES – PIPELINE LAYOUT.....	326
DESIGN LAYOUT.....	326
SEWERAGE RETICULATION.....	330
NOTES.....	331
DESIGN LAYOUTS.....	334
PIPELAYING.....	335
SEWERAGE HOUSE CONNECTION.....	338
PROPERTY CONNECTION.....	341
SEW-1200 SERIES – EMBEDMENT / TRENCHFILL AND SUPPORT SYSTEMS.....	348
SOIL CLASSIFICATION GUIDELINES.....	348
EMBEDMENT AND TRENCHFILL.....	349
STANDARD EMBEDMENT.....	350
TRENCH AND BEDDING DETAILS.....	354
TRENCH DRAINAGE.....	355
SEW-1300 SERIES – ACCESS STRUCTURES.....	358
MAINTENANCE HOLES.....	358
DEEP MAINTENANCE HOLES.....	368
MAINTENANCE HOLES.....	380
PE LINED MAINTENANCE HOLES.....	390
MAINTENANCE HOLE COVER.....	396
DEEP MAINTENANCE HOLES.....	407
GRP MAINTENANCE HOLE.....	411
MAINTENANCE HOLE.....	412
MAINTENANCE STRUCTURES.....	415
MAINTENANCE SHAFTS.....	416
PIPELAYING.....	417
MAINTENANCE STRUCTURES.....	418
SEW-1400 SERIES – SPECIAL CROSSINGS / STRUCTURES ARRANGEMENTS.....	420
BURIED CROSSINGS.....	420
TYPICAL BURIED CROSSINGS.....	421
AERIAL CROSSINGS.....	426
TYPICAL VENTILATION SYSTEMS.....	427
WATER SEAL ARRANGEMENTS.....	428
STANDARD OVERFLOW FLAP VALVE.....	430
SEWAGE OVERFLOW ARRANGEMENT.....	439
SEW-1500 SERIES – CONNECTIONS TO EXISTING SYSTEMS.....	443
INSERTIONS AND REPAIR SYSTEMS.....	443
APPENDICES.....	446
APPENDIX A — GENERIC INFRASTRUCTURE PROTECTION GUIDANCE.....	446
A1 INFRASTRUCTURE PROTECTION TREATMENTS - SELECTION AND DEFINITION.....	446
A2 RISK MANAGEMENT - INFRASTRUCTURE PROTECTION RISK ASSESSMENTS.....	446
A3 INFRASTRUCTURE PROTECTION DESIGN CONSIDERATIONS.....	446
A4 INFRASTRUCTURE PROTECTION TREATMENTS.....	447

A5 SECURITY DESIGN CONCEPTS.....	447
A6 ENVIROMENTAL DESIGN CONSIDERATIONS.....	447
A7 SEWER FAILURE IMPACT ASSESSMENT.....	448
A8 WATER AGENCY'S ENVIRONMENTAL AESTHETICS GUIDANCE.....	449
APPENDIX B — NOT USED.....	457
APPENDIX C — FLOW ESTIMATION FOR DEVELOPMENT AREAS (FOR INFORMATION ONLY - NOT USED BY SEQ-SPs. REFER TO SEQ DESIGN CRITERIA FOR SEQ-SP REQUIREMENTS).....	458
C1 GENERAL.....	458
C2 PEAK DRY WEATHER (SANITARY) FLOW.....	458
C3 GWI CALCULATION.....	459
C4 RDI CALCULATION.....	460
C5 WORKED EXAMPLE FOR A RESIDENTIAL DEVELOPMENT.....	463
C5.1 <i>Description</i>	463
C5.2 <i>Peak dry weather flow (PDWF)</i>	463
C5.3 Ground water infiltration (GWI).....	463
C5.4 Rainwater dependent inflow and infiltration (RDI).....	463
C5.5 Design flow.....	464
APPENDIX D — PROTECTION AGAINST DEGRADATION.....	465
D1 GENERAL.....	465
D2 PROTECTION AGAINST INTERNAL CORROSION.....	465
D3 PROTECTION AGAINST EXTERNAL AGGRESSIVE ENVIRONMENT.....	465
D4 PROTECTION AGAINST EXTERNAL CONTAMINATED GROUND.....	466
APPENDIX E — GUIDELINES FOR VENTILATION OF RETICULATION SEWERS (FOR INFORMATION ONLY).....	468
E1 GENERAL.....	468
E2 PROTECTION AGAINST INTERNAL CORROSION.....	468
E3 PROTECTION AGAINST EXTERNAL AGGRESSIVE ENVIRONMENT.....	469
E4 PROTECTION AGAINST EXTERNAL CONTAMINATED GROUND.....	469
APPENDIX F — TRENCHLESS TECHNOLOGIES (FOR INFORMATION ONLY).....	471
F1 GENERAL.....	471
F2 HORIZONTAL DIRECTIONAL DRILLING (HDD).....	471
F3 MICRO-TUNNELLING.....	471
F4 UNGUIDED BORING/THRUST BORING/AUGER BORING.....	472
F5 PIPE JACKING.....	472
F6 MINI-TUNNELLING.....	472
APPENDIX G — USE OF BENDS, FITTINGS AND MAINTENANCE SHAFTS/CHAMBERS.....	476
G1 GENERAL.....	476
G2 MAINTENANCE SHAFT AND MAINTENANCE CHAMBER BASE CONFIGURATIONS.....	477
G2.1 STANDARD MAINTENANCE SHAFT CONFIGURATIONS.....	478
G2.2 STANDARD MAINTENANCE CHAMBER CONFIGURATIONS.....	480
G3 NOTATION AND SYMBOLS FOR MAINTENANCE SHAFTS/CHAMBERS AND VARIABLE BENDS.....	483
G4 USE OF BENDS IN RETICULATION SEWERS.....	483
G4.1 VARIABLE-BEND USAGE.....	484
G4.1.1 General.....	484
G4.1.2 Variable bends - DWV PVC-U Pipes.....	484

G4.1.3 Minimum bend radii – DWV PVC-U bends.....	485
G4.1.4 Variable bend deflection limits – DWV PVC-U variable bends.....	485
G4.1.5 Polyethylene (PE) sweep bends.....	487
G4.1.6 Minimum bend radii - polyethylene (PE) sweep bends.....	487
G4.1.7 Typical PE sweep bend assembly.....	488
G4.2 MANUFACTURED-BEND USAGE.....	488
APPENDIX H — PROPERTY CONNECTION TYPES (FOR INFORMATION ONLY).....	489
H1 SCOPE.....	489
H2 TYPE 1 - PROPERTY CONNECTION SEWERS.....	489
H3 TYPE 2 - RISER PROPERTY CONNECTION SEWERS.....	490
H4 TYPE 3 - SLOPING RISER PROPERTY CONNECTION SEWERS.....	492
H5 TYPE 4 - VERTICAL RISER FOR PROPERTY CONNECTION SEWERS.....	492
H6 TYPE 5 - SLOPING RISER FOR PROPERTY CONNECTION SEWERS.....	493
H7 TYPE 6 - VERTICAL JUNCTION FOR PROPERTY CONNECTION SEWERS.....	493
H8 TYPE 7 - SPUR PROPERTY CONNECTION SEWERS.....	495
APPENDIX I — MAXIMUM DEPTH TO INVERT FOR STANDARD SUPPORT TYPES (FOR INFORMATION ONLY).....	497
I1 GENERAL.....	497
I2 STRUCTURAL DESIGN.....	497
I2.1 Flexible buried pipelines.....	497
I2.2 Precast concrete pipes pipelines.....	497
I2.3 Trench width dimensions.....	498
I3 EMBEDMENT MATERIAL.....	498
I4 TRENCH FILL.....	498
I5 COMPACTION.....	499
I6 MAXIMUM DEPTH TO INVERT FOR STANDARD SUPPORT TYPE.....	499
APPENDIX J — PIPELINES IN SLIP AND POTENTIALLY UNSTABLE AREAS.....	504
J1 INTRODUCTION.....	504
J2 SLIP AND UNSTABLE AREAS.....	504
J2.1 FACTORS INFLUENCING STABILITY OF SLOPES.....	505
J2.1.1 Soil and rock condition.....	505
J2.1.2 Angle of slope.....	505
J2.1.3 Groundwater and surface water.....	505
J2.1.4 Domestic development.....	505
J2.1.5 Vegetation.....	505
J2.1.6 Road construction.....	505
J3 IDENTIFICATION OF POTENTIALLY UNSTABLE AREAS.....	505
J4 PRECAUTIONS.....	506
J4.1 GRAVITY SEWERS AND RISING MAINS.....	506
Gravity sewers	506
Rising mains	507
J4.2 ALTERNATIVE SEWERAGE SYSTEMS AND CONSTRUCTION TECHNIQUES.....	508
J4.3 SHALLOW TRENCH OR ABOVE-GROUND CONSTRUCTION.....	508
J4.4 DESIGN FOR POSSIBLE GROUND MOVEMENT.....	509
J4.5 CONSIDER GROUNDWATER AND DRAINAGE.....	509
J4.6 PRECAUTIONS DURING CONSTRUCTION.....	511

APPENDIX K — OVALITY TESTING OF PVC AND GRP GRAVITY SEWERS DEFAULT PROVING TOOL DIAMETERS.....	513
K1 GENERAL.....	513
K2 REQUIREMENTS.....	513
APPENDIX L — SPECIFICATION FOR INTERNAL INSPECTION OF NEWLY CONSTRUCTED OR REHABILITATED SEWERS.....	515
L1 INTRODUCTION.....	515
L2 INSPECTION REQUIREMENTS.....	515
L3 QUALIFICATIONS OF INSPECTORS.....	515
L4 WORK AS CONSTRUCTED.....	515
L5 REPORTING SUMMARIES.....	516
L6 MATERIALS.....	516
Definitions.....	523

List of Figures

Figure 2.1 DISAGGREGATION MODEL FOR TRANSPORTATION SUBSYSTEMS.....	77
Figure 3.1 FLOW COMPONENTS IN A GRAVITY SYSTEM.....	86
Figure 4.1 FLANGE FASTENER TIGHTENING SEQUENCE.....	94
Figure 5.1 PHYSICAL LOSSES IN CUSTOMER SANITARY DRAINS.....	140
Figure 5.2 DEPTH OF POINT OF CONNECTION AND USE OF RISERS.....	141
Figure 5.3 EXCESSIVELY DEEP CHANNELS CAUSED BY STEEP GRADES.....	145
Figure 5.4 INCOMING LEVEL ADJUSTED TO PREVENT DEEP CHANNEL.....	145
Figure 6.1 NOT USED.....	148
Figure 6.2 TYPICAL BURIED INTERFACE METHOD – VARIATION (A).....	149
Figure 6.3 TYPICAL BURIED INTERFACE METHOD – VARIATION (B).....	150
Figure 6.4 NOT USED.....	150
Figure 6.5 PROPERTY CONNECTION POINTS FOR SEWERS IN EASEMENTS AND PRIVATE LOTS – BURIED INTERFACE METHOD.....	151
Figure 6.6 TYPICAL CONNECTION TO DEEP SEWERS IN PRIVATE PROPERTY.....	152
Figure 6.7 'TYPE 7 'SPUR' OR 'Y' PROPERTY SEWER CONNECTIONS - BURIED INTERFACE METHOD.....	155
Figure 7.1 END OF LINE CONFIGURATIONS.....	161
Figure 7.2 MULTIPLE MS OR MC BETWEEN CONSECUTIVE MHS.....	161
Figure 7.3 NOT USED.....	161
Figure 7.4 NOT USED.....	161
Figure 7.5 TYPICAL PRE-CAST MH BASE WITH PRE-FORMED BENCHING.....	165
Figure 7.6 TYPICAL PRE-CAST CONCRETE MH BASE WITH CONICAL BENCHING.....	165
Figure 7.7 TYPICAL CAST IN-SITU CONCRETE MH BASE FOR VC, RC AND DI RRJ SEWERS.....	166
Figure 7.8 TYPICAL CAST IN-SITU CONCRETE MH BASE FOR PVC RRJ SEWERS.....	166
Figure 7.9 TYPICAL CAST IN-SITU CONCRETE MH BASE FOR PVC-U SCJ.....	167
Figure 7.10 TYPICAL CAST IN-SITU CONCRETE MH BASE FOR VC AND GRP SLEEVED COUPLED SEWERS.....	167
Figure 7.11 TYPICAL CAST IN-SITU CONCRETE MH BASE FOR PROFILE WALL PP SEWERS.....	167
Figure 7.12 TYPICAL CAST IN-SITU CONCRETE MH BASE FOR SOLID WALL PE SEWERS.....	168
Figure 7.13 TYPICAL CAST IN-SITU CONCRETE MH WITH EXTERNAL DROP PIPE (PVC-U DWV RRJ SEWER PIPE SHOWN).....	170

Figure 7.14 TYPICAL PRE-CAST CONCRETE MH WITH EXTERNAL DROP PIPE (PVC-U DWV RRJ SEWER PIPE SHOWN).....	171
Figure 7.15 TYPICAL CAST IN-SITU CONCRETE MH WITH INTERNAL DROP PIPE (PVC-U DWV SEWER PIPE SHOWN).....	172
Figure 7.16 TYPICAL MH BASE DESIGN.....	174
Figure 7.17 TYPICAL ARRANGEMENTS FOR THE CONNECTION OF PE SEWERS.....	178
Figure 7.18 TYPICAL ARRANGEMENTS FOR THE CONNECTION OF A PE MS TO PE SEWERS.....	179
Figure 7.19 TYPICAL PVC-U CAP ASSEMBLY AND FITTINGS.....	179
Figure 7.20 TYPICAL ARRANGEMENT FOR THE CONNECTION TO A PRE-CAST CONCRETE MC.....	180
Figure 7.21 TYPICAL PP MC AND MS CONNECTION DETAILS.....	180
Figure 7.22 TYPICAL TMS WITH PROPERTY CONNECTION AHEAD.....	182
Figure 7.23 TYPICAL PRE-CAST MC WITH HIGH-LEVEL CONNECTION.....	183
Figure 7.24 TYPICAL PE MC OR MS DROP DETAIL DIMENSIONS.....	184
Figure 7.25 TYPICAL PVC-U MS DROP DETAIL DIMENSIONS.....	185
Figure 7.26 TYPICAL PP MC/MS WITH HIGH-LEVEL CONNECTION.....	186
Figure 7.27 TYPICAL EXTERNAL SEWER DROP STRUCTURE TYPE A - 45° SLOPE JUNCTION.....	187
Figure 7.28 TYPICAL EXTERNAL SEWER DROP STRUCTURE TYPE B - 90° SLOPE JUNCTION.....	188
Figure 7.29 (NOT USED).....	188
Figure 7.30 (NOT USED).....	189
Figure 7.31 (NOT USED).....	189
Figure 7.32 (NOT USED).....	192
Figure 8.1 APPLICATION OF WATER SEAL ARRANGEMENTS.....	193
Figure 8.2 TYPICAL BOUNDARY TRAP AND SHAFT.....	195
Figure 8.3 TYPICAL WATER SEAL ON INLET SEWER.....	196
Figure 8.4 TYPICAL WATER-SEALED MH WITH EXTERNAL DROP – PLAN VIEW.....	197
Figure 8.5 TYPICAL WATER-SEALED MH WITH EXTERNAL DROP – ELEVATION.....	197
Figure 8.6 TYPICAL WATER-SEALED MH WITH MINIMUM DROP – PLAN VIEW.....	198
Figure 8.7 TYPICAL WATER-SEALED MH WITH MINIMUM DROP - ELEVATION.....	198
Figure 8.8 TYPICAL GAS CHECK MH – SECTIONAL PLAN.....	199
Figure 8.9 TYPICAL GAS CHECK MH – SECTION ELEVATION.....	199
Figure 8.10 TYPICAL GAS CHECK MH – INTERNAL DROP ARRANGEMENT SECTION ELEVATION.....	200
Figure 8.11 TYPICAL SYPHON CREEK CROSSING.....	205
Figure 8.12 TYPICAL PE PIPE SECTION.....	205
Figure 8.13 TYPICAL ERS ARRANGEMENT – PLAN.....	208
Figure 8.14 TYPICAL ERS ARRANGEMENT – ELEVATION.....	208
Figure 8.15 TYPICAL HEADWALL ARRANGEMENT - ELEVATION.....	209
Figure 9.1 TYPICAL ARRANGEMENT FOR BURIED FLEXIBLE PIPELINES.....	214
Figure 9.2 TYPE 1 SUPPORT FOR RIGID PIPES ONLY.....	215
Figure 9.3 TYPE 2 SUPPORT FOR RIGID PIPES ONLY.....	216
Figure 9.4 TYPE 3 SUPPORT FOR FLEXIBLE AND RIGID PIPES.....	216
Figure 9.5 TYPE 4 EMBEDMENT SUPPORT WITH GEOTEXTILE FILTER FABRIC FOR FLEXIBLE AND RIGID PIPES.....	218
Figure 9.6 TYPE 5 AND 6 SUPPORT UTILISING CONCRETE FOUNDATION.....	219
Figure 9.7 TYPE 7 SUPPORT UTILISING GEOTEXTILE PILLOW FOUNDATION FOR RIGID AND FLEXIBLE PIPES.....	219

Figure 9.8 TYPE 8 SUPPORT UTILISING CEMENT STABILISED FOUNDATION FOR RIGID AND FLEXIBLE PIPES.....	220
Figure 9.9 TYPE 11 EMBEDMENT SUPPORT.....	220
Figure 9.10 TYPE 12 EMBEDMENT SUPPORT.....	221
Figure 9.11 TYPE 13 EMBEDMENT SUPPORT.....	221
Figure 9.12 TYPE 9 (reinforced) SUPPORT CONCRETE EMBEDMENT.....	225
Figure 9.13 TYPE 9 (unreinforced) SUPPORT CONCRETE ENCASEMENT.....	225
Figure 9.14 TYPE 10 SUPPORT UTILISING CEMENT STABILISED EMBEDMENT.....	225
Figure 9.15 TYPICAL CONCRETE BULKHEAD DETAIL.....	228
Figure 9.16 TYPICAL ROAD CROSSING BULKHEAD.....	229
Figure 9.17 TYPICAL TRENCHSTOP DETAIL.....	230
Figure 9.18 TYPICAL TRENCH DRAINAGE DETAIL AT BULKHEAD.....	231
Figure 9.19 TYPICAL TRENCH DRAINAGE DISCHARGE.....	231
Figure 9.20 TYPICAL TRENCH DRAINAGE DETAIL AT LOW POINT IN TRENCH.....	232
Figure 9.21 TYPICAL TRENCH DRAINAGE DETAIL AT CONCRETE ENCASED SECTIONS.....	232
Figure 9.22 TYPICAL TRENCH DRAINAGE AROUND MHs.....	233
Figure 16.1 BALL AND SOCKET JOINT.....	275
Figure 16.2 SLIP-IN WELDED JOINT.....	275
Figure 16.3 PLAIN END WELDED COLLAR JOINT.....	276
Figure 16.4 PLAIN END BUTT WELDED JOINT.....	276
SEQ-SEW-1100-1 PE NUSEWERS TYPICAL LOCALITY & SITE PLAN.....	326
SEQ-SEW-1100-2 RIGGS TYPICAL LOCALITY & SITE PLAN.....	327
SEQ-SEW-1101-1 PE NUSEWERS TYPICAL LONGITUDINAL SECTIONS.....	328
SEQ-SEW-1101-2 RIGSS TYPICAL LONGITUDINAL SECTIONS.....	329
SEQ-SEW-1101-3 TYPICAL ESTATE DETAILS AND NOTES.....	330
SEQ-SEW-1101-4 MAINTENANCE HOLES SHEET 1 OF 3.....	331
SEQ-SEW-1101-5 MAINTENANCE HOLES SHEET 2 OF 3.....	332
SEQ-SEW-1101-6 MAINTENANCE HOLES SHEET 3 OF 3.....	333
SEQ-SEW-1102-1 CONNECTION TO EXISTING SEWER TYPICAL SCHEDULE OF WORKS.....	334
SEQ-SEW-1103-1 RIGSS TYPICAL ARRANGEMENTS.....	335
SEQ-SEW-1103-2 PE NUSEWER TYPICAL ARRANGEMENTS.....	336
SEQ-SEW-1103-3 SEWER ROAD CROSSINGS KERB MARKING REQUIREMENTS.....	337
SEQ-SEW-1104-1 RIGSS TYPICAL CONSTRUCTION DETAILS - SHEET 1.....	338
SEQ-SEW-1104-3 PROPERTY CONNECTION SEWER ROAD CROSSING PROPERTY CONNECTION RIGSS.....	339
SEQ-SEW-1105-1 RIGSS TYPICAL CONSTRUCTION DETAILS - SHEET 2.....	340
SEQ-SEW-1106-1 PE NUSEWERS TYPICAL LAYOUT.....	341
SEQ-SEW-1106-2 PE NUSEWERS TYPE A1, A2 STANDARD AND EXTENDED.....	342
SEQ-SEW-1106-3 PE NUSEWERS TYPE A3, A4 STANDARD AND EXTENDED.....	343
SEQ-SEW-1106-4 PE NUSEWERS TYPE B1 TO B4 SLOPED CONNECTIONS.....	344
SEQ-SEW-1106-5 PE NUSEWERS TYPE C1 TO C4 VERTICAL RISER.....	345
SEQ-SEW-1106-6 PE NUSEWERS TWIN PROPERTY CONNECTIONS.....	346
SEQ-SEW-1106-8 PE NUSEWERS ROAD CROSSING PROPERTY CONNECTION.....	347
SEQ-SEW-1200-1 ALLOWABLE BEARING PRESSURES BULKHEADS.....	348
SEQ-SEW-1200-2 TYPICAL ARRANGEMENT.....	349
SEQ-SEW-1201-1 FLEXIBLE AND RIGID PIPES.....	350

SEQ–SEW 1202-1 INADEQUATE FOUNDATIONS REQUIRING OVER EXCAVATION AND REPLACEMENT.....	351
SEQ–SEW 1203-1 CONCRETE AND STABILISED SUPPORTS.....	352
SEQ–SEW-1204-1 SUPPORT UTILISING PILES.....	353
SEQ–SEW-1205-1 WITHIN EXISTING ROADS TYPE 14 TO 17.....	354
SEQ–SEW-1206-1 BULKHEADS AND TRENCH STOPS.....	355
SEQ–SEW-1207-1 TYPICAL SYSTEMS.....	356
SEQ–SEW-1207-2 DRAINAGE OF SEWER TRENCHES AND DIVERSION DRAINS.....	357
SEQ–SEW-1300-1 ≤ DN300 SEWER TYPES P1, P2 & P3 TYPICAL PRE-CAST.....	358
SEQ–SEW-1301-1 CAST IN-SITU MAINTENANCE HOLE TYPICAL COPING & ANCHOR BRACKET DETAILS.....	359
SEQ–SEW-1301-2 PE NUSEWERS TYPICAL ‘G’ TYPE MAINTENANCE HOLE G.A. DETAILS.....	360
SEQ–SEW-1301-3 PE NUSEWERS TYPICAL ‘G’ TYPE MAINTENANCE HOLE AND SLAB G.A. DETAILS.....	361
SEQ–SEW-1301-4 PE NUSEWERS TYPICAL ‘G’ TYPE MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS FOR TYPE ‘A’ DROP.....	362
SEQ–SEW-1301-5 PE NUSEWERS TYPICAL ‘G’ TYPE MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS FOR TYPE ‘C’ AND TYPE ‘D’ DROPS.....	363
SEQ–SEW-1301-8 PE NUSEWERS TYPICAL ‘F’ TYPE MAINTENANCE HOLE G.A. DETAILS.....	364
SEQ–SEW-1301-9 PE NUSEWERS TYPICAL ‘F’ TYPE MAINTENANCE HOLE AND SLAB G.A. DETAILS.....	365
SEQ–SEW-1301-10 PE NUSEWERS TYPICAL ‘F’ MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS FOR TYPE ‘A’ DROP.....	366
SEQ–SEW-1301-11 PE NUSEWERS TYPICAL ‘F’ TYPE MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS FOR TYPE ‘C’ AND TYPE ‘D’ DROPS.....	367
SEQ–SEW-1301-14 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - TYPICAL ARRANGEMENT AND G.A. DETAILS - SEWERS 1200 NB OR LESS.....	368
SEQ–SEW-1301-15 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - TYPICAL ARRANGEMENT AND G.A. DETAILS - SEWER > 1200 NB.....	369
SEQ–SEW-1301-16 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - TYPICAL ARRANGEMENT AND G.A. DETAILS - SEWER 600 NB OR LESS WITH DROP PIPE.....	370
SEQ–SEW-1301-17 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - TYPICAL ARRANGEMENT AND G.A. DETAILS - SEWER 600 NB TO 900 NB WITH DROP PIPE AND SAFETY CHAIN DETAIL.....	371
SEQ–SEW-1301-18 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - TYPICAL JUNCTION DETAILS.....	372
SEQ–SEW-1301-19 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - TYPICAL TOP SLAB G.A. DETAILS.....	373
SEQ–SEW-1301-20 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS - SEWERS 600 NB OR LESS.....	374
SEQ–SEW-1301-21 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - STRUCTURAL REINFORCEMENT DETAILS - SEWERS 600 NB OR LESS.....	375
SEQ–SEW-1301-22 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS - SEWERS > 600 NB TO 1200 NB.....	376
SEQ–SEW-1301-23 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - STRUCTURAL REINFORCEMENT DETAILS - SEWERS > 600 NB TO 1200 NB.....	377

SEQ–SEW-1301-24 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - STRUCTURAL G.A. DETAILS - SEWERS > 1200 NB.....	378
SEQ–SEW-1301-25 PE NUSEWERS TYPICAL ‘X’ TYPE MAINTENANCE HOLE - STRUCTURAL REINFORCEMENT DETAILS - SEWERS > 1200 NB.....	379
SEQ–SEW-1301-26 PE NUSEWERS ‘G’, ‘F’, ‘X’ TYPE MAINTENANCE HOLES - TOP SLABS REINFORCEMENT DETAILS.....	380
SEQ–SEW-1301-27 TYPICAL M.S. AND S.S. LADDERS AND ASSOCIATED FITTINGS.....	381
SEQ–SEW-1302-1 CAST IN-SITU AND PRECAST TYPICAL PIPE CONNECTION DETAILS.....	382
SEQ–SEW-1303-1 SEWERS ≤ DN300 TYPICAL CHANGES IN LEVEL DETAILS.....	383
SEQ–SEW-1303-2 IRON INSPECTION BENDS FOR TYPICAL INTERNAL DROP PIPES IN MAINTENANCE HOLES.....	384
SEQ–SEW-1303-4 TYPICAL STAINLESS STEEL BRACKETS FOR DN100 AND DN150 uPVC DROP PIPES.....	385
SEQ–SEW-1304-1 SEWERS ≤ DN300 TYPICAL CHANNEL ARRANGEMENTS.....	386
SEQ–SEW-1305-1 TYPICAL CHANNEL DETAILS.....	387
SEQ–SEW-1306-1 TYPICAL ALTERNATIVE DROP CONNECTIONS.....	388
SEQ–SEW-1307-1 DN1000 TO DN1500 CAST IN-SITU MAINTENANCE HOLES TYPICAL DETAILS.....	389
SEQ–SEW-1307-2 SULPHIDE CONTROL SEWER MAINTENANCE HOLE - PE LINED GENERAL ARRANGEMENT.....	390
SEQ–SEW-1307-3 SULPHIDE CONTROL SEWER MAINTENANCE HOLE - PE LINED DETAILS AND VENT POLE DETAILS.....	391
SEQ–SEW-1307-4 SULPHIDE CONTROL SEWER MAINTENANCE HOLE - CUT-IN TO EXISTING MH DETAILS.....	392
SEQ–SEW-1307-5 SULPHIDE CONTROL SEWER MAINTENANCE HOLE - PE LINED STRUCTURAL G.A. DETAILS.....	393
SEQ–SEW-1307-6 SULPHIDE CONTROL SEWER MAINTENANCE HOLE - PE LINED STRUCTURAL REINFORCEMENT DETAILS.....	394
SEQ–SEW-1307-7 SULPHIDE CONTROL SEWER MAINTENANCE HOLE - TOP SLAB REINFORCEMENT DETAILS.....	395
SEQ–SEW-1308-1 TYPICAL MAINTENANCE HOLE COVER AND SURROUND DETAIL.....	396
SEQ–SEW-1308-2 SEWER - CLASS B - CONCRETE INFILL TYPICAL FRAME DETAILS.....	397
SEQ–SEW-1308-3 SEWER - CLASS B - CONCRETE INFILL TYPICAL COVER DETAILS.....	398
SEQ–SEW-1308-4 SEWER - CLASS B - CONCRETE INFILL TYPICAL LIFTING HOLE DETAILS.....	399
SEQ–SEW-1308-5 SEWER - CLASS B - BOLT DOWN TYPICAL FRAME DETAILS.....	400
SEQ–SEW-1308-6 SEWER - CLASS B - BOLT DOWN TYPICAL COVER DETAILS.....	401
SEQ–SEW-1308-7 SEWER - CLASS B - BOLT DOWN TYPICAL COVER DETAILS.....	402
SEQ–SEW-1308-8 SEWER - CLASS D - BOLT DOWN TYPICAL BASE FRAME DETAILS.....	403
SEQ–SEW-1308-9 SEWER - CLASS D - BOLT DOWN TYPICAL RISER RING DETAILS.....	404
SEQ–SEW-1308-10 SEWER - CLASS D - BOLT DOWN TYPICAL COVER DETAILS.....	405
SEQ–SEW-1308-11 SEWER - CLASS D - BOLT DOWN TYPICAL COVER DETAILS.....	406
SEQ–SEW-1309-1 ‘Y’ TYPE SEWER MAINTENANCE HOLE - SEWERS DN600 AND DN750 TYPICAL ARRANGEMENT.....	407
SEQ–SEW-1309-2 ‘Y’ TYPE SEWER MAINTENANCE HOLE - DN1500 AND DN1800 - STRUCTURAL G.A. DETAILS.....	408
SEQ–SEW-1309-3 ‘Y’ TYPE SEWER MAINTENANCE HOLE - DN1500 AND DN1800 - STRUCTURAL REINFORCEMENT DETAILS.....	409

SEQ–SEW-1309-4 ‘Y’ TYPE SEWER MAINTENANCE HOLE - DN1500 AND DN1800 - TOP SLAB REINFORCEMENT DETAILS.....	410
SEQ–SEW-1310-1 “Z1” TYPE NON-TRAFFICABLE TYPICAL GRP MH OPTION DN1200 AND LARGER SEWERS.....	411
SEQ–SEW-1311-1 “Z2” TYPE TYPICAL TUNNEL JACKING SHAFT - CAISSON OPTION.....	412
SEQ–SEW-1312-1 “Z3” TYPE TYPICAL TUNNEL RECEIVAL SHAFT MANHOLE OPTION.....	413
SEQ–SEW-1313-1 SEWER CONNECTION DETAILS ALL PIPE MATERIALS.....	414
SEQ–SEW-1314-1 RIGSS DN225 AND SMALLER TYPICAL ARRANGEMENT DETAILS.....	415
SEQ–SEW-1314-2 RIGSS MS AND VARIABLE BEND FOR TYPICAL ARRANGEMENT DETAILS.....	416
SEQ–SEW-1314-3 RIGSS TYPICAL IN-LINE BEND DETAILS.....	417
SEQ–SEW-1315-1 PE NUSEWERS TYPICAL MAINTENANCE SHAFT AND TERMINAL ENTRY POINT.....	418
SEQ–SEW-1316-1 PE NUSEWERS TYPICAL MAINTENANCE STRUCTURE COVER FRAME AND SUPPORT DETAILS.....	419
SEQ–SEW-1400-1 SIPHON ARRANGEMENT.....	420
SEQ–SEW-1401-1 RAILWAYS.....	421
SEQ–SEW-1402-1 MAJOR ROADWAYS.....	422
SEQ–SEW-1403-1 BORED AND JACKED ENCASING PIPE DETAILS.....	423
SEQ–SEW-1404-1 AQUEDUCT.....	424
SEQ–SEW-1405-1 AQUEDUCT PROTECTION GRILLE.....	425
SEQ–SEW-1406-1 BRIDGE CROSSING CONCEPTS.....	426
SEQ–SEW-1407-1 INDUCT VENT.....	427
SEQ–SEW-1408-1 MAINS TYPE.....	428
SEQ–SEW-1408-2 MAINTENANCE HOLE SYSTEM.....	429
SEQ–SEW-1409-1 CHAMBER - TYPE 1 TYPICAL CHAMBER DETAILS.....	430
SEQ–SEW-1409-2 CHAMBER - TYPE 1 TYPICAL TOP SLAB AND FLAP DETAILS.....	431
SEQ–SEW-1410-1 CHAMBER - TYPE 2 TYPICAL CHAMBER DETAILS.....	432
SEQ–SEW-1410-2 CHAMBER - TYPE 2 TYPICAL TOP SLAB AND FLAP DETAILS.....	433
SEQ–SEW-1411-1 CHAMBER - TYPE 3 TYPICAL CHAMBER DETAILS.....	434
SEQ–SEW-1411-2 CHAMBER - TYPE 3 TYPICAL TOP SLAB AND FLAP DETAILS.....	435
SEQ–SEW-1411-3 CHAMBER - TYPE 1, 2 & 3 STRUCTURAL G.A. DETAILS.....	436
SEQ–SEW-1411-4 CHAMBER - TYPE 1, 2 & 3 TYPICAL REINFORCEMENT DETAILS.....	437
SEQ–SEW-1411-5 TOP SLAB REINFORCEMENT DETAILS.....	438
SEQ–SEW-1412-1 TYPICAL DETAILS FROM PUMP WELL OR MANHOLE SHIELDED OUTLET.....	439
SEQ–SEW-1412-2 TYPICAL SHIELDED OUTLET.....	440
SEQ–SEW-1413-1 TYPICAL OVERFLOW WITH SCREENED OUTLET.....	441
SEQ–SEW-1413-2 TYPICAL OVERFLOW ‘COMB SEPARATOR’ SCREENED OUTLET.....	442
SEQ–SEW-1500-1 PIPE CUT-IN METHODS.....	443
SEQ–SEW-1501-1 INSERTION OF JUNCTIONS.....	444
SEQ–SEW-1502-1 MAINTENANCE STRUCTURES.....	445
Figure C.1 "d" FACTOR VERSUS AREA - AREAS $\leq 40\text{ Ha}$.....	459
Figure G.1 TYPICAL VARIABLE BEND ADAPTORS.....	484
Figure G.2 TYPICAL VARIABLE BEND ASSEMBLY.....	484
Figure H.1 TYPE 1 RUN-IN PROPERTY CONNECTION SEWER.....	490
Figure H.2 TYPE 2 RISER PROPERTY CONNECTION SEWER.....	491
Figure H.3 TYPE 3 SLOPING RISER PROPERTY CONNECTION SEWER.....	492

Figure H.4 TYPE 4 VERTICAL JUMP-UP PROPERTY CONNECTION SEWER.....	492
Figure H.5 TYPE 5 SLOPING RISER FOR PROPERTY CONNECTION SEWER.....	493
Figure H.6 TYPE 6 VERTICAL JUNCTION FOR PROPERTY CONNECTION SEWER.....	494
Figure H.7 TYPE 7A SPUR RUN-IN PROPERTY CONNECTION SEWER.....	495
Figure H.8 TYPE 7B SPUR JUMP-UP PROPERTY CONNECTION SEWER.....	496
Figure H.9 TYPE 7C VERTICAL SPUR PROPERTY CONNECTION SEWER.....	496
Figure J.2 CUT AND FILL SCENARIO.....	506
Figure J.3 POTENTIALLY UNSTABLE/LANDSLIP AREAS MONITORING PITS FOR DN 100 AND DN 150 RETICULATION MAINS IN ROAD RESERVES.....	507

List of Tables

Table 1.1 ASSET CATEGORIES.....	70
Table 1.2 TYPICAL ASSET DESIGN LIFE.....	73
Table 1.3 PLANNING AND DESIGN APPROACH.....	74
Table 4.1 COLOUR IDENTIFICATION OF COMPONENTS IN RETICULATION SEWER SYSTEMS.....	89
Table 4.2 LIMITATIONS OF SEWAGE CHEMISTRY CONSTITUENTS FOR USE OF DIFFERENT TYPES OF CEMENT.....	93
Table 5.1 MAXIMUM LIMIT OF DEVIATION IN LEVEL AND LINE OF BOREHOLES AND TUNNELS.....	113
TABLE 5.1A MINIMUM EASEMENT WIDTH FOR GRAVITY SEWERS.....	117
Table 5.2 MAXIMUM ALLOWABLE DEFLECTIONS THROUGH AN MH1,5.....	121
Table 5.3 METHODS OF ACHIEVING CURVED SEWERS.....	124
Table 5.4 CLEARANCES BETWEEN SEQ-SP SEWERS AND OTHER UNDERGROUND SERVICES.....	128
Table 5.5 MINIMUM PIPE SIZES FOR RETICULATION AND PROPERTY CONNECTION SEWERS.....	130
Table 5.6 NOT USED.....	131
Table 5.7 NOT USED.....	133
Table 5.8 NOT USED.....	133
Table 5.9 NOT USED.....	134
Table 5.10 NOT USED.....	134
Table 5.11 (Specified in 5.6.3) MINIMUM COVER OVER SEWERS1.....	136
Table 5.12 NOT USED.....	142
Table 5.13 LIMITATIONS ON LARGE FALLS AT MHs USING INTERNAL AND EXTERNAL DROPS.....	143
Table 5.14 STEEP SEWERS REQUIRING SPECIAL TREATMENT.....	144
Table 7.1 ACCEPTABLE MAINTENANCE STRUCTURE OPTIONS FOR RETICULATION AND PROPERTY CONNECTION SEWERS.....	158
Table 7.2 EXTERNAL MH DROP PIPE STRUCTURE.....	168
Table 7.3 ROCKER PIPE DIMENSIONS.....	168
TABLE 7.3A MINIMUM MH DIAMETERS.....	173
Table 7.4 NOT USED.....	188
Table 7.5 GUIDE TO SELECTION OF MAINTENANCE STRUCTURE ACCESS COVERS, CLASS AND FINISHED SURFACE LEVELS.....	190
TABLE 7.5A MODIFICATIONS TO EXISTING MHs REQUIRED BY QUU.....	192
Table 8.1 REQUIREMENTS FOR VORTEX INLETS AND WATER CUSHIONS.....	202
Table 8.2 ERS STRUCTURE COMPONENTS.....	207
Table 9.1 REQUIREMENTS FOR BULKHEADS AND TRENCHSTOPS.....	227
Table 21.1 FLEXIBLE PIPES – MINIMUM COMPACTION EMBEDMENT, TRENCH FILL AND EMBANKMENT OF FLEXIBLE PIPES.....	292

Table 21.2 RIGID PIPES – MINIMUM COMPACTION EMBEDMENT, TRENCH FILL AND EMBANKMENT.....	293
Table 21.3 PRESSURE AND VACUUM AIR TESTING ACCEPTANCE TIMES FOR 7 kPa PRESSURE CHANGE.....	297
Table 21.4 (NOT USED).....	300
Table 21.5 MINIMUM TEST TIMES FOR CONCRETE MHs.....	300
Table 21.6 MAXIMUM ALLOWABLE SHORT-TERM PIPE DEFLECTIONS.....	302
Table 22.1 SEWER GRADE TOLERANCES.....	310
Table 22.2 PROPERTY CONNECTION SEWER GRADE TOLERANCES.....	310
LISTING OF STANDARD DRAWINGS.....	317
Table A.1 ASSET CATEGORISATION AND INDICATIVE PROTECTIVE TREATMENT SCHEDULE.....	450
Table C.1 LEAKAGE SEVERITY COEFFICIENT (C).....	461
Table C.2 APPROXIMATE VALUES OF I(1,39.34%) FOR VARIOUS LOCATIONS.....	462
Table C.3 CONTAINMENT FACTOR VERSUS ARI.....	463
Table F.1 GENERAL PERFORMANCE CHARACTERISTICS OF BOREHOLE AND TUNNELLING TECHNOLOGIES.....	473
Table G.1 OPERATIONAL, MAINTENANCE AND TESTING LIMITATIONS OF MC, MS AND TMS.....	476
Table G.2 MAINTENANCE SHAFT BASE CONFIGURATION.....	478
Table G.3 MAINTENANCE CHAMBER BASE CONFIGURATION.....	481
Table G.4 MINIMUM BEND RADII OF DWV PVC-U VARIABLE BENDS.....	485
Table G.5 DEFLECTION LIMITS OF DN 150 DWV PVC-U VARIABLE BENDS.....	485
Table G.6 VARIABLE BEND CUTTING TABLE DN150 DWV PVC-U PIPE.....	485
Table G.7 MINIMUM WALL BEND RADII OF PE SWEEP BENDS.....	487
Table H.1 MINIMUM RETICULATION AND PROPERTY CONNECTION SEWER SIZES.....	489
Table H.2 MINIMUM RISE FOR TYPE 1 PROPERTY CONNECTION SEWERS.....	490
Table H.3 MINIMUM RISE FOR TYPE 2 PROPERTY CONNECTION SEWERS.....	491
Table H.4 MINIMUM RISE FOR TYPE 4 PROPERTY CONNECTION SEWERS.....	492
Table H.5 MINIMUM RISE FOR TYPE 6 VERTICAL JUNCTIONS.....	494
Table I.1 MAXIMUM DEPTH TO INVERT FOR PVC SEWERS.....	500
Table I.2 MAXIMUM DEPTH TO INVERT FOR PVC SEWERS (including W7 & T44 wheel loads).....	500
Table I.3 MAXIMUM DEPTH TO INVERT FOR PP SEWERS.....	500
Table I.4 MAXIMUM DEPTH TO INVERT FOR PP SEWERS (including W7 & T44 wheel loads).....	501
Table I.5 MAXIMUM DEPTH TO INVERT FOR FW-GRP SEWERS.....	501
Table I.6 MAXIMUM DEPTH TO INVERT FOR FW-GRP SEWERS (including W7 & T44 wheel loads).....	501
Table I.7 MAXIMUM DEPTH TO INVERT FOR PE100.....	502
Table I.8 MAXIMUM DEPTH TO INVERT FOR PE100 SEWERS (including W7 & T44 wheel loads).....	502
Table K.1 PROVER OUTSIDE DIAMETER FOR PVC AND GRP PIPES.....	513
Table L.1 DEFECT AND FEATURE REPORTING SUMMARY FOR RIGID SEWERS – VITRIFIED CLAY, STEEL REINFORCED CONCRETE WHERE REFERRAL TO WATER AGENCY IS NECESSARY TO ASCERTAIN THE REQUIRED CORRECTIVE ACTION.....	516
Table L.2 DEFECT AND FEATURE REPORTING SUMMARY FOR FLEXIBLE SEWER PIPES – PLASTICS (PVC, PE, PP, GRP), DUCTILE IRON AND STEEL WHERE REFERRAL TO WATER AGENCY IS NECESSARY TO ASCERTAIN THE REQUIRED CORRECTIVE ACTION.....	519
Table L.3 REPORTING SUMMARY FOR ITEM CONFIGURATION – ALL SEWERS.....	521



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PART 0: GLOSSARY, ABBREVIATIONS AND REFERENCES

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PART 3: DRAWINGS

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PART 3: DRAWINGS**SEQ 26 - LISTING OF STANDARD DRAWINGS****LISTING OF STANDARD DRAWINGS**

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
PIPELINE LAYOUT			
<u>SEQ-SEW-1100-1</u>	DESIGN LAYOUT	PE NUSWERS TYPICAL LOCALITY & SITE PLAN	C
<u>SEQ-SEW-1100-2</u>	DESIGN LAYOUT	RIGSS TYPICAL LOCALITY & SITE PLAN	C
<u>SEQ-SEW-1101-1</u>	DESIGN LAYOUT	PE NUSEWERS TYPICAL LONGITUDINAL SECTIONS	B
<u>SEQ-SEW-1101-2</u>	DESIGN LAYOUT	RIGSS TYPICAL LONGITUDINAL SECTIONS	C
<u>SEQ-SEW-1101-3</u>	SEWERAGE RETICULATION	TYPICAL ESTATE DETAILS AND NOTES	B
<u>SEQ-SEW-1101-4</u>	NOTES	MAINTENANCE HOLES SHEET 1 OF 3	A
<u>SEQ-SEW-1101-5</u>	NOTES	MAINTENANCE HOLES SHEET 2 OF 3	A
<u>SEQ-SEW-1101-6</u>	NOTES	MAINTENANCE HOLES SHEET 3 OF 3	A
<u>SEQ-SEW-1102-1</u>	DESIGN LAYOUTS	CONNECTION TO EXISTING SEWER TYPICAL SCHEDULE OF WORKS	C
<u>SEQ-SEW-1103-1</u>	PIPELAYING	RIGSS TYPICAL ARRANGEMENTS	A
<u>SEQ-SEW-1103-2</u>	PIPELAYING	PE NUSEWER TYPICAL ARRANGEMENTS	C
<u>SEQ-SEW-1103-3</u>	PIPELAYING	SEWER ROAD CROSSINGS KERB MARKING REQUIREMENTS	B
<u>SEQ-SEW-1104-1</u>	SEWERAGE HOUSE CONNECTION	RIGSS TYPICAL CONSTRUCTION DETAILS - SHEET 1	D
<u>SEQ-SEW-1104-3</u>	SEWERAGE HOUSE CONNECTION	PROPERTY CONNECTION SEWER ROAD CROSSING PROPERTY CONNECTION	A

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
		RIGSS	
SEQ-SEW-1105-1	SEWERAGE HOUSE CONNECTION	RIGSS TYPICAL CONSTRUCTION DETAILS - SHEET 2	D
SEQ-SEW-1106-1	PROPERTY CONNECTION	PE NUSEWERS TYPICAL LAYOUT	D
SEQ-SEW-1106-2	PROPERTY CONNECTION	PE NUSEWERS TYPE A1, A2 STANDARD AND EXTENDED	D
SEQ-SEW-1106-3	PROPERTY CONNECTION	PE NUSEWERS TYPE A3, A4 STANDARD AND EXTENDED	D
SEQ-SEW-1106-4	PROPERTY CONNECTION	PE NUSEWERS TYPE B1 TO B4 SLOPED CONNECTIONS	C
SEQ-SEW-1106-5	PROPERTY CONNECTION	PE NUSEWERS TYPE C1 TO C4 VERTICAL RISER	D
SEQ-SEW-1106-6	PROPERTY CONNECTION	PE NUSEWERS TWIN PROPERTY CONNECTIONS	D
SEQ-SEW-1106-7	PROPERTY CONNECTION	PE NUSEWERS ROAD CROSSING PROPERTY CONNECTION	A
SEQ-SEW-1106-8	PROPERTY CONNECTION	PE NUSEWERS ROAD CROSSING PROPERTY CONNECTION	A
EMBEDMENT / TRENCHFILL AND SUPPORT SYSTEMS			
SEQ-SEW-1200-1	SOIL CLASSIFICATION GUIDELINES	ALLOWABLE BEARING PRESSURES BULKHEADS	A
SEQ-SEW-1200-2	EMBEDMENT & TRENCHFILL	TYPICAL ARRANGEMENT	B
SEQ-SEW-1201-1	STANDARD EMBEDMENT	FLEXIBLE & RIGID PIPES	B
SEQ-SEW 1202-1	STANDARD EMBEDMENT	INADEQUATE FOUNDATIONS REQUIRING OVER EXCAVATION AND REPLACEMENT	A
SEQ-SEW 1203-1	STANDARD EMBEDMENT	CONCRETE AND STABILISED SUPPORTS	A
SEQ-SEW-1204-1	STANDARD EMBEDMENT	SUPPORT UTILISING PILES	A
SEQ-SEW-1205-1	TRENCH AND BEDDING DETAILS	WITHIN EXISTING ROADS TYPE 14 TO 17	A

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
SEQ-SEW-1206-1	TRENCH DRAINAGE	BULKHEADS AND TRENCH STOPS	B
SEQ-SEW-1207-1	TRENCH DRAINAGE	TYPICAL SYSTEMS	A
SEQ-SEW-1207-2	TRENCH DRAINAGE	DRAINAGE OF SEWER TRENCHES AND DIVERSION DRAINS	A
ACCESS STRUCTURES			
SEQ-SEW-1300-1	MAINTENANCE HOLES	≤ DN300 SEWER TYPES P1, P2 & P3 TYPICAL PRE-CAST	C
SEQ-SEW-1301-1	MAINTENANCE HOLES	CAST IN-SITU MAINTENANCE HOLE TYPICAL COPING & ANCHOR BRACKET DETAILS	B
SEQ-SEW-1301-2	MAINTENANCE HOLES	PE Nusewers Typical 'G' Type Maintenance Hole G.A. Details	D
SEQ-SEW-1301-3	MAINTENANCE HOLES	PE Nusewers Typical 'G' Type Maintenance Hole and Slab G.A. Details	D
SEQ-SEW-1301-4	MAINTENANCE HOLES	PE Nusewers Typical 'G' Type Maintenance Hole - Structural G.A. Details for Type 'A' Drop	C
SEQ-SEW-1301-5	MAINTENANCE HOLES	PE Nusewers Typical 'G' Type Maintenance Hole - Structural G.A. Details for Type 'C' and Type 'D' Drops	C
SEQ-SEW-1301-8	MAINTENANCE HOLES	PE Nusewers Typical 'F' Type Maintenance Hole G.A. Details	D
SEQ-SEW-1301-9	MAINTENANCE HOLES	PE Nusewers Typical 'F' Type Maintenance Hole and Slab G.A. Details	D
SEQ-SEW-1301-10	MAINTENANCE HOLES	PE Nusewers Typical 'F' Type Maintenance Hole - Structural G.A. Details for Type 'A' Drop	B
SEQ-SEW-1301-11	MAINTENANCE HOLES	PE Nusewers Typical 'F' Type Maintenance Hole - Structural G.A. Details for Type 'C' and Type 'D' Drops	B
SEQ-SEW-1301-14	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Typical	A

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
		Arrangement and G.A. Details - Sewers 1200 NB or Less	
<u>SEQ-SEW-1301-15</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Typical Arrangement and G.A. Details - Sewer > 1200 NB	A
<u>SEQ-SEW-1301-16</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Typical Arrangement and G.A. Details - Sewer 600 NB or less with Drop Pipe	A
<u>SEQ-SEW-1301-17</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Typical Arrangement and G.A. Details - Sewer 600 NB to 900 NB with Drop Pipe and Safety Chain Detail	A
<u>SEQ-SEW-1301-18</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Typical Junction Details	A
<u>SEQ-SEW-1301-19</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Typical Top Slab G.A. Details	A
<u>SEQ-SEW-1301-20</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Structural G.A. Details - Sewers 600 NB or Less	A
<u>SEQ-SEW-1301-21</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Structural Reinforcement Details - Sewers 600 NB or Less	A
<u>SEQ-SEW-1301-22</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Structural G.A. Details - Sewers > 600 NB to 1200 NB	A
<u>SEQ-SEW-1301-23</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Structural Reinforcement Details - Sewers > 600 NB to 1200 NB	A
<u>SEQ-SEW-1301-24</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Structural	A

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
		G.A. Details - Sewers > 1200 NB	
<u>SEQ-SEW-1301-25</u>	DEEP MAINTENANCE HOLES	PE Nusewers Typical 'X' Type Maintenance Hole - Structural Reinforcement Details - Sewers > 1200 NB	A
<u>SEQ-SEW-1301-26</u>	MAINTENANCE HOLES	PE Nusewers 'G', 'F', 'X' Type Maintenance Holes - Top Slabs Reinforcement Details	A
<u>SEQ-SEW-1301-27</u>	MAINTENANCE HOLES	Typical M.S. and S.S. Ladders and Associated Fittings	A
<u>SEQ-SEW-1302-1</u>	MAINTENANCE HOLES	CAST IN-SITU AND PRECAST TYPICAL PIPE CONNECTION DETAILS	C
<u>SEQ-SEW-1303-1</u>	MAINTENANCE HOLES	SEWERS \leq DN300 TYPICAL CHANGES IN LEVEL DETAILS	D
<u>SEQ-SEW-1303-2</u>	MAINTENANCE HOLES	IRON INSPECTION BENDS FOR TYPICAL INTERNAL DROP PIPES IN MAINTENANCE HOLES	B
<u>EQ-SEW-1303-4</u>	MAINTENANCE HOLES	TYPICAL STAINLESS STEEL BRACKETS FOR DN100 AND DN150 uPVC DROP PIPES	A
<u>SEQ-SEW-1304-1</u>	MAINTENANCE HOLES	SEWERS \leq DN300 TYPICAL CHANNEL ARRANGEMENTS	B
<u>SEQ-SEW-1305-1</u>	MAINTENANCE HOLES	TYPICAL CHANNEL DETAILS	A
<u>SEQ-SEW-1306-1</u>	MAINTENANCE HOLES	TYPICAL ALTERNATIVE DROP CONNECTIONS	A
<u>SEQ-SEW-1307-1</u>	MAINTENANCE HOLES	DN1000 TO DN1500 CAST IN-SITU MAINTENANCE HOLES TYPICAL DETAILS	C
<u>SEQ-SEW-1307-2</u>	PE LINED MAINTENANCE HOLES	SULPHIDE CONTROL SEWER MAINTENANCE HOLE - PE LINED GENERAL ARRANGEMENT	B

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
SEQ-SEW-1307-3	PE LINED MAINTENANCE HOLES	Sulphide Control Sewer Maintenance Hole - PE Lined Details and Vent Pole Details	B
SEQ-SEW-1307-4	PE LINED MAINTENANCE HOLES	Sulphide Control Sewer Maintenance Hole - Cut-in to Existing MH Details	C
SEQ-SEW-1307-5	PE LINED MAINTENANCE HOLES	Sulphide Control Sewer Maintenance Hole - PE Lined Structural G.A. Details	A
SEQ-SEW-1307-6	PE LINED MAINTENANCE HOLES	Sulphide Control Sewer Maintenance Hole - PE Lined Structural Reinforcement Details	A
SEQ-SEW-1307-7	PE LINED MAINTENANCE HOLES	Sulphide Control Sewer Maintenance Hole - Top Slab Reinforcement Details	A
SEQ-SEW-1308-1	MAINTENANCE HOLE COVER	TYPICAL MAINTENANCE HOLE COVER AND SURROUND DETAIL	D
SEQ-SEW-1308-2	MAINTENANCE HOLE COVER	SEWER - CLASS B - CONCRETE INFILL TYPICAL FRAME DETAILS	A
SEQ-SEW-1308-3	MAINTENANCE HOLE COVER	SEWER - CLASS B - CONCRETE INFILL TYPICAL COVER DETAILS	A
SEQ-SEW-1308-4	MAINTENANCE HOLE COVER	SEWER - CLASS B - CONCRETE INFILL TYPICAL LIFTING HOLE DETAILS	A
SEQ-SEW-1308-5	MAINTENANCE HOLE COVER	SEWER - CLASS B - BOLT DOWN TYPICAL FRAME DETAILS	A
SEQ-SEW-1308-6	MAINTENANCE HOLE COVER	SEWER - CLASS B - BOLT DOWN TYPICAL COVER DETAILS	A
SEQ-SEW-1308-7	MAINTENANCE HOLE COVER	SEWER - CLASS B - BOLT DOWN TYPICAL COVER DETAILS	A

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
SEQ-SEW-1308-8	MAINTENANCE HOLE COVER	SEWER - CLASS D - BOLT DOWN TYPICAL BASE FRAME DETAILS	A
SEQ-SEW-1308-9	MAINTENANCE HOLE COVER	SEWER - CLASS D - BOLT DOWN TYPICAL RISER RING DETAILS	A
SEQ-SEW-1308-10	MAINTENANCE HOLE COVER	SEWER - CLASS D - BOLT DOWN TYPICAL COVER DETAILS	B
SEQ-SEW-1308-11	MAINTENANCE HOLE COVER	SEWER - CLASS D - BOLT DOWN TYPICAL COVER DETAILS	A
SEQ-SEW-1309-1	DEEP MAINTENANCE HOLES	'Y' Type Sewer Maintenance Hole - Sewers DN600 and DN750 Typical Arrangement	C
SEQ-SEW-1309-2	DEEP MAINTENANCE HOLES	'Y' Type Sewer Maintenance Hole - DN1500 and DN1800 - Structural G.A. Details	A
SEQ-SEW-1309-3	DEEP MAINTENANCE HOLES	'Y' Type Sewer Maintenance Hole - DN1500 and DN1800 - Structural Reinforcement Details	A
SEQ-SEW-1309-4	DEEP MAINTENANCE HOLES	'Y' Type Sewer Maintenance Hole - DN1500 and DN1800 - Top Slab Reinforcement Details	A
SEQ-SEW-1310-1	GRP MAINTENANCE HOLE	'Z1' Type Non-Trafficable Typical GRP MH Option DN1200 and larger Sewers	B
SEQ-SEW-1311-1	MAINTENANCE HOLE	"Z2" TYPE TYPICAL JACKING SHAFT - CAISSON OPTION	B
SEQ-SEW-1312-1	MAINTENANCE HOLE	"Z3" TYPE TYPICAL RECEIVAL SHAFT MANHOLE OPTION	B
SEQ-SEW-1313-1	MAINTENANCE HOLE	SEWER CONNECTION DETAILS ALL PIPE MATERIALS	B
SEQ-SEW-1314-1	MAINTENANCE STRUCTURES	RIGSS DN225 AND SMALLER TYPICAL ARRANGEMENT DETAILS	C

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
SEQ-SEW-1314-2	MAINTENANCE SHAFTS	RIGSS MS AND VARIABLE BEND FOR TYPICAL ARRANGEMENT DETAILS	C
SEQ-SEW-1314-3	PIPELAYING	RIGSS TYPICAL IN-LINE BEND DETAILS	C
SEQ-SEW-1315-1	MAINTENANCE STRUCTURES	PE NUSEWERS TYPICAL MAINTENANCE SHAFT AND TERMINAL ENTRY POINT	D
SEQ-SEW-1316-1	MAINTENANCE STRUCTURES	PE Nusewers Typical Maintenance Structure Cover Frame and Support Details	B
SPECIAL CROSSINGS / STRUCTURES ARRANGEMENTS			
SEQ-SEW-1400-1	BURIED CROSSINGS	SIPHON ARRANGEMENT	A
SEQ-SEW-1401-1	TYPICAL BURIED CROSSINGS	RAILWAYS	C
SEQ-SEW-1402-1	TYPICAL BURIED CROSSINGS	MAJOR ROADWAYS	C
SEQ-SEW-1403-1	TYPICAL BURIED CROSSINGS	BORED AND JACKED ENCASING PIPE DETAILS	D
SEQ-SEW-1404-1	TYPICAL BURIED CROSSINGS	AQUEDUCT	B
SEQ-SEW-1405-1	TYPICAL BURIED CROSSINGS	AQUEDUCT PROTECTION GRILLE	B
SEQ-SEW-1406-1	AERIAL CROSSINGS	BRIDGE CROSSING CONCEPTS	B
SEQ-SEW-1407-1	TYPICAL VENTILATION SYSTEMS	INDUCT VENT	A
SEQ-SEW-1408-1	WATER SEAL ARRANGEMENTS	MAINS TYPE	A
SEQ-SEW-1408-2	WATER SEAL ARRANGEMENTS	MAINTENANCE HOLE SYSTEM	A
SEQ-SEW-1409-1	STANDARD OVERFLOW FLAP VALVE	CHAMBER - TYPE 1 TYPICAL CHAMBER DETAILS	B
SEQ-SEW-1409-2	STANDARD OVERFLOW FLAP VALVE	CHAMBER - TYPE 1 TYPICAL TOP SLAB AND FLAP DETAILS	B

DRAWING NUMBER	ACTIVITY	TITLE	REV NO.
SEQ-SEW-1410-1	STANDARD OVERFLOW FLAP VALVE	CHAMBER - TYPE 2 TYPICAL CHAMBER DETAILS	B
SEQ-SEW-1410-2	STANDARD OVERFLOW FLAP VALVE	CHAMBER - TYPE 2 TYPICAL TOP SLAB AND FLAP DETAILS	B
SEQ-SEW-1411-1	STANDARD OVERFLOW FLAP VALVE	CHAMBER - TYPE 3 TYPICAL CHAMBER DETAILS	B
SEQ-SEW-1411-2	STANDARD OVERFLOW FLAP VALVE	CHAMBER - TYPE 3 TYPICAL TOP SLAB AND FLAP DETAILS	B
SEQ-SEW-1411-3	STANDARD OVERFLOW FLAP VALVE	Chamber - Type 1, 2 & 3 Structural G.A. Details	A
SEQ-SEW-1411-4	STANDARD OVERFLOW FLAP VALVE	Chamber - Type 1, 2 & 3 Typical Reinforcement Details	A
SEQ-SEW-1411-5	STANDARD OVERFLOW FLAP VALVE	Top Slab Reinforcement Details	A
SEQ-SEW-1412-1	SEWAGE OVERFLOW ARRANGEMENT	TYPICAL SHIELDED OUTLET	C
SEQ-SEW-1412-2	SEWAGE OVERFLOW ARRANGEMENT	TYPICAL SHIELDED OUTLET	B
SEQ-SEW-1413-1	SEWAGE OVERFLOW ARRANGEMENT	TYPICAL OVERFLOW WITH SCREENED OUTLET	C
SEQ-SEW-1413-2	SEWAGE OVERFLOW ARRANGEMENT	TYPICAL OVERFLOW 'COMB SEPARATOR' SCREENED OUTLET	A
CONNECTIONS TO EXISTING SYSTEMS			
SEQ-SEW-1500-1	INSERTIONS AND REPAIR SYSTEMS	PIPE CUT-IN METHODS	B
SEQ-SEW-1501-1	INSERTIONS AND REPAIR SYSTEMS	INSERTION OF JUNCTIONS	B
SEQ-SEW-1502-1	INSERTIONS AND REPAIR SYSTEMS	MAINTENANCE STRUCTURES	C