

GENERAL

- G.1 These drawings are to be read in conjunction with the "Melbourne Water Guideline for Stormwater harvesting – Design, Construction and Maintenance of Diversion Structures Document Any discrepancy shall be referred to the Engineer prior to proceeding with the work.
- G.2 Abbreviations:
- U.N.O. = Unless Noted Otherwise
 - T & B = Top and Bottom
 - EW = Each Way
 - TF = Top Face
 - BF = Bottom Face
 - Denotes Detail No.
 - Reference Drawing No.
- G.3 All dimensions shown are to be verified on site. Engineering drawings must not be scaled.
- G.4 Materials and workmanship and tolerances are to be in accordance with the relevant current S.A.A. Codes and the Building Code of Australia.
- G.5 It is the contractor's responsibility to ensure that the structure shall be maintained in a stable condition and no part shall be over stressed during construction. When requested the contractor shall provide calculations to justify the adequacy of the structure to safely withstand any imposed loading from the construction procedure.
- G.6 All materials and workmanship shall be in accordance with the relevant S.A.A. codes, Building regulations and Project Specification.
- G.7 Substitutes shall not be permitted without approval of the Engineer.
- G.8 Unless noted otherwise, all levels are in metres and all dimensions are in millimetres.
- G.9 Stability of the neighbouring buildings structure during construction and all excavations in the vicinity of neighbouring buildings is the sole responsibility of the contractor or subcontractors.
- G.10 A 'Dial-Before-You-Dig' check shall be carried out prior to excavation.
- G.11 All design loadings are in accordance with AS 1170.

CIVIL WORKS

- C.0 Entry into MW assets are subject to Melbourne Water Corporations confined space entry and permit to work systems. Permits must be arranged through the Drainage Area Coordinators or through the Diversion team.
- C.1 All areas to be excavated or covered by fill material shall have the topsoil removed and stockpiled.
- C.2 The excavation is to be made dry at all times by dewatering.
- C.3 The excavation is to be supported to ensure a safe working environment in accordance with the relevant State Safe Working legislation.
- C.4 Backfill shall be compacted to 95% Maximum Dry Density in accordance with AS1289. The Maximum Dry Density shall be determined in accordance with Test Nos 5.1.1 (Standard Compaction) and 5.2.1 (Modified Compaction) in AS1289.
- C.5 Backfill layers shall not exceed 300mm thickness prior to compaction.

FOUNDATIONS

- F.1 Foundation material shall be approved by the Site Engineer prior to pouring concrete.
- F.2 All foundation material shall have a minimum bearing capacity of 100kPa.

REINFORCED CONCRETE

- R.1 All concrete formwork shall be carried out in accordance with the requirements of the following codes unless modified by the Specification:
AS 1379 – The specification & supply of concrete
AS 3600 – Concrete structures
AS 3610 – Formwork code
- R.2 The commercial batching used shall have an approved quality assurance system and concrete delivery dockets are to be kept for all concrete. The slump for each grade of concrete shall be 80mm in accordance with AS3600.19.1.
- R.3 If not specified on the drawings all concrete shall have a minimum compressive F'c (28 days) 32 MPa (U.N.O.).
- R.4 Project control testing for insitu concrete work shall be carried out in accordance with AS 1379 or as required in the Inspection and Test Plan.
- R.5 Concrete sizes shown do not include finish and concrete members must not be reduced or holed in any way without the Engineer's approval.
- R.6 Reinforcement notation and grades:
"R" denotes structural grade round bars (to AS/NZS4671)
"N" denotes 500Y deformed bars
- R.7 Bar reinforcement shall be pre-bent to the shapes shown on the drawings.
- R.8 Exposure classification for unit in accordance with table 4.3 in AS 3600.
- R.9 Cover to reinforcing bars shall be as specified in AS 3600 and AS3735 for the appropriate exposure classification and characteristic strength of concrete. Minimum cover to reinforcement for durability should be 45mm for in-situ concrete and 35mm for precast.
- R.10 Where Sikadur-31 is used to adhere surfaces, it is to be applied liberally to ensure complete adhesion between surfaces.
- R.11 Sikadur-31 or Conseal shall be applied to all precast joints before assembly.
- R.12 Sikaflex 11 FC is to be used for joints where there could be movement caused by expansion and contraction.
- R.13 The sealant shall not be subjected to hydrostatic loads until at least 48 hours after installation or as per manufacturers recommendation.
- R.14 Concrete finish shall conform to the following specification:
1 Off-form finishes
– Class 3 finish in accordance with AS 3610 for visible concrete faces
– Class 5 finish in accordance with AS 3610 for outer surfaces below ground.
2 Hand-finishes
– Steel float finish for hydraulic surfaces such as separation chamber floor.
– Steel, broom or wood float as agreed to 1st class standard for finished surface concrete.


- R.15 All formwork is to be structurally sound so as to support the weight of the concrete without movement beyond the acceptable tolerances.
- R.16 All conduits, pipes and penetrations through concrete members not specified on the drawings are to be prior to concrete pour approved by the Site Engineer.
- R.17 Walls and other rigid construction shall not be stacked or constructed on propped slabs or beams.
- R.18 Field welding of reinforcement is only permitted where shown on the drawings or otherwise approved to AS/NZS 1554.3.
- R.19 All concrete is to be cured in accordance with AS 3600.
- R.20 Splices in reinforcement shall be sufficient to develop the full strength of the reinforcement without displacement from structural location. Laps to fabric shall be two transverse wires plus 100mm.
- R.21 Concrete cover to be maintained by the use of approved chairs and/or concrete blocks spaced at approx. 1000mm cross centres. Conduits, pipes etc are not to be placed in cover concrete.
- R.22 Additives must not be added to concrete without Engineer's approval.

STEELWORK

- S.1 Unless otherwise specified steel shall comply with AS 3678 and AS 3679 for grade 250, AS 1163 grade 350 for structural steel hollow sections, AS 1397 for cold formed purlins, girts and light gauge members of grade 450.
- S.2 Unless specified elsewhere on the drawings, all metal parts which are permanently or periodically in contact with corrosive or aggressive water shall be stainless steel Grade 316 to AS 1449.
- S.3 All aluminium shall be in accordance with AS 1734 and AS 1866.
- S.4 Steelwork and metalwork shall be appropriately marked, handled and stored in such a manner that it will not be overstressed or deformed.
- S.5 The general tolerance on all dimensions shall be in accordance with AS4100 for steelwork.
- S.6 All welding shall be in accordance with AS 1554.
- S.7 All steel with the exception of reinforcing and stainless steel components is to be hot dip galvanised to a thickness of 0.127mm.

HEALTH & SAFETY

- H.1 The contractor shall develop, implement and administer a workplace health and safety program that will ensure that all construction activities are performed to the relevant workplace health and safety requirements and any other relevant statutory requirements.
- H.2 The workplace health and safety program must be co-ordinated with adjoining property owners and all relevant parties as necessary to ensure a safe building environment at all times.

		Drawn	B.G.	Designed	B.G.	MELBOURNE WATER CORPORATION	SCALE	N.T.S.	ORIGINAL SIZE	AS
		Drafting Check	I.V.	Design Check	I.V.		 DEVELOPMENT OF STANDARD DRAWINGS DIVERSION STRUCTURES FOR STORMWATER HARVESTING - GENERAL NOTES	SHEET 1 OF 11		
C	ISSUED DRAWINGS	Consultant Representative	I.V.	MWC Project Manager	S.H.	MWC DRAWING NO				
B	REVISED DRAFT	Approved	S.H.	Consultant Drg Number		7251/10/001				C
A	DRAFT FOR REVIEW									
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