

GENERAL

- G1. READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS AND SPECIFICATIONS, AND WITH SUCH OTHER WRITTEN INSTRUCTIONS ISSUED. REFER TO CIVIL DRAWINGS FOR SETTING OUT AND DETAIL DIMENSIONS IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS, THEN NOTES, THEN SPECIFICATION.
- G2. CARRY OUT WORK IN A SAFE MANNER IN ACCORDANCE WITH APPLICABLE STATUTORY REGULATIONS, BY-LAWS OR RULES, AND GIPPSLAND WATER WORK PERMIT REQUIREMENTS. COMPLY WITH VICTORIAN OCCUPATIONAL HEALTH AND SAFETY ACT INCLUDING ASSOCIATED REGULATIONS AND CODES OF PRACTICE. CONTRACTOR IS RESPONSIBLE FOR OCCUPATIONAL HEALTH AND SAFETY OF SITE PERSONNEL AND GENERAL PUBLIC IN ACCORDANCE WITH LEGISLATIVE REQUIREMENTS, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.
- G3. REFER DISCREPANCIES TO SUPERINTENDENT BEFORE PROCEEDING WITH WORK.
- G4. SUBMIT DETAILS OF CHANGES TO SCOPE, WORK METHODS OR MATERIALS etc TO SUPERINTENDENT FOR APPROVAL BEFORE PROCEEDING. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT.
- G5. CHECK CIVIL AND STRUCTURAL DRAWINGS AGAINST MECHANICAL, ELECTRICAL SERVICES AND OTHER DRAWINGS FOR REQUIREMENTS FOR PENETRATIONS, CONDUITS, DUCTS, PIPES, etc.
- G6. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE, BUT INDICATES REQUIRED PROPERTIES OF ITEM. SIMILAR ALTERNATIVES HAVING REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- G7. OBTAIN NECESSARY PERMITS AND APPROVALS FROM RELEVANT AUTHORITIES BEFORE COMMENCING WORK ON SITE.
- G8. NOTIFY RELEVANT SERVICE AUTHORITIES AND GIPPSLAND WATER PERSONNEL BEFORE COMMENCING WORK ON SITE.
- G9. GIVE TWO WORKING DAYS (48 HOURS) NOTICE TO SUPERINTENDENT SO THAT INSPECTION MAY BE MADE OF CRITICAL STAGES OF WORK.
- G10. INSPECTIONS UNDERTAKEN BY SUPERINTENDENT/OTHERS DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.
- G11. DO NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWINGS.
- G12. DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS UNO, CHAINAGES ARE IN METERS UNO.
- G13. DATUM FOR LEVELS IS AHD, AND CO-ORDINATES ARE TO MGA94.
- G14. HAVE SURVEY AND SETTING OUT UNDERTAKEN BY A REGISTERED SURVEYOR.
- G15. VERIFY ON SITE SETTING OUT DIMENSIONS AND EXISTING COMPONENT SIZES SHOWN ON DRAWINGS BEFORE SHOP DRAWINGS, CONSTRUCTION AND FABRICATION IS COMMENCED.
- G16. SUPERINTENDENT'S REVIEW OF SHOP DRAWINGS IS IN GENERAL CONFORMANCE WITH DESIGN CONCEPT AND GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS ONLY. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCEDURES AND CONSTRUCTION TECHNIQUES, AND PERFORMING WORK IN A SAFE MANNER. CORRECTIONS OR COMMENTS MADE ON SHOP DRAWINGS DO NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR COMPLIANCE WITH REQUIREMENTS OF CONTRACT DRAWINGS AND SPECIFICATION.
- G17. ALL SERVICES TO BE PROVEN BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK. TAKE CARE OF HAZARDS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS TO ESTABLISH LOCATION OF AND PROTECT EXISTING SERVICES AT SITE. SERVICES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE, AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF IN-GROUND SERVICES.
- G18. WORKMANSHIP AND MATERIALS TO COMPLY WITH REQUIREMENTS OF WSAA & SAA CODES, BUILDING CODE OF AUSTRALIA AND BY-LAWS AND ORDINANCES OF RELEVANT BUILDING AUTHORITIES. IN PARTICULAR WORKS SHALL COMPLY WITH MRWA WSA02-2014 SEWERAGE CODE OF AUSTRALIA. RISING MAIN WORKS SHALL COMPLY WITH MRWA WSA03-2011 WATER RETICULATION CODE OF AUSTRALIA WHERE MRWA WSA02-2014 IS NOT APPLICABLE OR UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR UNLESS OTHERWISE DIRECTED BY THE SUPERINTENDENT.
- G19. MAINTAIN STRUCTURE IN A STABLE CONDITION DURING CONSTRUCTION AND PROVIDE TEMPORARY BRACING AND/OR SUPPORT AS REQUIRED. PROVIDE SPREADERS AT LOADS AND/OR LIFTING POINTS WHERE REQUIRED. ENSURE NO PART IS OVERSTRESSED. DO NOT PLACE OR STORE BUILDING MATERIALS ON STRUCTURAL MEMBERS WITHOUT SUPERINTENDENT'S APPROVAL. PROVIDE CALCULATIONS TO PROVE ADEQUACY OF STRUCTURE FOR PROPOSED CONSTRUCTION METHODS AND LOADS.
- G20. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE RESPONSIBILITY OF THE CONTRACTOR.
- G21. THE CONTRACTOR SHALL SET OUT THE EXTENT OF WORKS FOR THE APPROVAL OF THE SUPERINTENDENT PRIOR TO COMMENCING WORK.
- G22. DISPOSE OF SURPLUS MATERIAL OFF SITE AT APPROVED WASTE MANAGEMENT FACILITY UNLESS OTHERWISE DIRECTED BY THE SUPERINTENDENT
- G23. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS.
- G24. MAKE GOOD ANY DAMAGE TO EXISTING ELEMENTS AT COMPLETION OF WORKS.
- G25. WHERE NEW WORK ABUTS EXISTING, PROVIDE SMOOTH TRANSITION FREE OF ABRUPT CHANGES.
- G26. HAVE ALL TESTING PERFORMED BY AN INDEPENDENT NATA (NATIONAL ASSOCIATION OF TESTING AUTHORITIES) ACCREDITED AUTHORITY, AND PROVIDE TEST REPORTS TO SUPERINTENDENT.
- G27. SEPARATE METALS FROM INCOMPATIBLE MATERIALS (eg GALVANIZED AND UNGALVANIZED STEEL, TREATED TIMBER AND STEEL etc) BY CONCEALED LAYERS OF SUITABLE INERT MATERIALS OF A SUITABLE THICKNESS. USE PLASTIC SLEEVES AND WASHERS FOR BOLTS, etc.
- G28. BACKFILL ALL TRENCHES BENEATH ROAD PAVEMENT AND VEHICLE CROSSINGS WITH PAVEMENT MATERIALS AS SPECIFIED.
- G29. SUPPLY RELEVANT NOTES, DRAWINGS AND SPECIFICATIONS etc TO SUB-CONTRACTORS.
- G30. UNO = UNLESS NOTED OTHERWISE
SLS = SERVICEABILITY LIMIT STATE
ULS = ULTIMATE LIMIT STATE.
- G31. BUILD, FABRICATE AND PROCURE ONLY FROM DRAWINGS 'ISSUED FOR CONSTRUCTION'.
- G32. KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS) AND SITE INSTRUCTIONS.
- G33. ALL NEW RISING MAIN PIPEWORK SHALL BE CREAM COLOUR CODED TO DESIGNATE PRESSURE SEWER PIPE.
- G34. ALL PIPEWORK FITTINGS, FLANGES AND FASTENERS WITHIN THE WET WELL AND INLET MANHOLE TO BE GRADE 316 STAINLESS STEEL UNO.
- G35. FLANGES TO BE IN ACCORDANCE WITH AS4087 METALLIC FLANGES FOR WATERWORKS PURPOSES. MINIMUM PRESSURE RATING SHALL BE PN16.
- G36. FLOWMETER FOR OUTGOING RISING MAIN SHALL BE BURIED, AND OF FULL BORE MAGFLOW TYPE OR EQUIVALENT APPROVED BY SUPERINTENDENT.
- G37. THRUST BLOCKS SHALL BE PROVIDED FOR RISING MAINS (IE PRESSURE MAINS) IN ACCORDANCE WITH THE WATER RETICULATION CODE MRWA WSA03-2011.
- G38. REFER TO GEOTECHNICAL INVESTIGATION REPORT FOR INFORMATION ON GROUND CONDITIONS.
- G39. LOCATION AND LEVEL OF EXISTING OUTGOING RISING MAIN AT POINT OF INTERCONNECTION SHALL BE DETERMINED ON SITE AND DESIGN OF NEW RISING MAIN SECTION TO BE CONFIRMED WITH SUPERINTENDENT.
- G40. OBTAIN REQUIREMENTS FOR ADJOINING ELEMENTS TO BE FIXED TO OR SUPPORTED ON WORK AND PROVIDE FOR REQUIRED FIXINGS. DRAWINGS DO NOT SHOW DETAILS OF ALL FIXTURES, INSERTS, SLEEVES, RECESSES OR OPENINGS etc REQUIRED. PROVIDE FOR TEMPORARY SUPPORT OF ADJOINING ELEMENTS DURING CONSTRUCTION.
- G41. ALL ACCESS TRACKS TO MEET REQUIREMENTS OF AS2890.2 FOR HEAVY RIGID VEHICLES.

CONCRETE

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600-2009.
- C2. MINIMUM CONCRETE QUALITY:
FOOTINGS/SLABS
SLUMP 80 +/- 20
MAX. AGGREGATE SIZE 25
CEMENT TYPE A
ADMIXTURES NIL
GRADE N25
WATER CEMENT RATIO (MAX.) 0.60
- C3. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN:
ANCHOR BLOCK 65 MM
- C4. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE SUPERINTENDENT.
- C7. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE SUPERINTENDENT.
- C8. REINFORCEMENT IS REPRESENTED DIAGRAMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
- C9. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN. THE WRITTEN APPROVAL OF THE SUPERINTENDENT SHALL BE OBTAINED FOR ANY OTHER SPLICES. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.
- C10. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
- C11. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE SUPERINTENDENT. THE CONCRETE COVER TO EMBEDDED PIPES OR CONDUITS SHALL BE A MINIMUM OF 20MM.
- C12. REINFORCEMENT SYMBOLS:
S - DENOTES STRUCTURAL GRADE DEFORMED BARS.
R - DENOTES HOT ROLLED PLAIN BARS.
N - DENOTES HOT ROLLED DEFORMED BARS.
SL - DENOTES HARD DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671:2001.
- C13. ALL REINFORCEMENT SHALL COMPLY WITH AS/NZS 4671:2001 FOR FABRIC SUPPLIED AS FLAT SHEETS.

PIPEWORK & FITTINGS

1. STAINLESS STEEL SHALL BE GRADE 316 (316L IF WELDED) TO A.S. 2837, UNLESS OTHERWISE NOTED.
2. ALL FLANGES & GASKETS SHALL BE DRILLED TO AS4087 PN16, DRILLED OFF-CENTRE UNO
3. FLANGE JOINTS SHALL BE ASSEMBLED WITH 3mm THICK FULL FACE NEOPRENE GASKETS.
4. ALL GROUTING SHALL BE 'EMBECON' 636 OR APPROVED EQUIVALENT, UNO.
5. ALL CHEMICAL ANCHORS SHALL BE 316SS M16, UNO.
6. PROVIDE ENGRAVED TRAFFOLYTE LABEL FIXED ON WALL OF WELL OPENING, BESIDE CHAIN HOLDING BRACKET TO IDENTIFY EACH PUMP, USE STAINLESS STEEL SCREWS FOR FIXING.
7. THE PUMP PEDESTAL SHALL BE SECURED AS PER DRAWING A1-70490.
8. ALL EQUIPMENT ITEMS SECURED TO WALL OF WELL OPENING TO BE FIXED WITH M16 SS316 CHEMICAL ANCHORS, 100 DEEP IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS UNO.
9. INCOMING SEWER ISOLATION VALVE TO BE A STAINLESS STEEL FULL BORE BI-DIRECTIONAL KNIFE GATE VALVE.
10. PUMP DISCHARGE AND NON-RETURN VALVE TO BE FUSION BONDED EPOXY COATED.
11. NON-RETURN VALVES TO BE FITTED WITH 15 NS GATE VALVE WITH COPPER BLEED PIPE TO RELEASE AIR DURING MAINTENANCE.
12. PROVIDE 20mm BSP SS TAPPING WITH 20mm QUARTERTURN BALL VALVE ON EACH DISCHARGE PIPE WITHIN VALVE PIT.
13. PROVIDE WET WELL WASHER WITH COPPER WATER SUPPLY WITH RPZ BACKFLOW PREVENTION DEVICE CONTROLLED BY SOLENOID FROM THE MULTITRODE WITHIN THE SWITCHBOARD.
14. WET WELL WASHER HOSE TO BE REINFORCED FLEXIBLE PRESSURE HOSE (POLY NOT ACCEPTABLE)
15. ALL BOLTS, NUTS & WASHERS TO BE STAINLESS STEEL GRADE 316 UNO.
16. SLUICE VALVES SHALL BE ANTI-CLOCKWISE CLOSING RESILIENT SEATED WITH FUSION BONDED EPOXY.
17. LOCATION OF CONTROL CUBICLE
A. DOORS TO HINGE AWAY FROM WELL
B. CUBICLE TO BE LOCATED TO ALLOW ACCESS TO CONTROLS SAFELY WHEN WELL COVERS ARE OPEN
C. WELL COVERS TO BE HINGED SO COVERS CAN BE OPENED FULLY WITHOUT COMING INTO CONTACT WITH ELECTRICAL CUBICLE
18. ELECTRICS & CONTROLS TO GIPPSLAND WATER STANDARD SPECIFICATION VERSION 3 & ASSOCIATED DRAWINGS REFER TO DRG. No. A1-47775 INDEX PAGE (7.5 TO 22kw) OR A1-47731 INDEX PAGE (UP TO 5.5kw). CUBICLE TO BE PAINTED "WILDERNESS GREEN".
18. HOLD POINTS FOR MANUFACTURE OF ELECTRICAL SWITCH BOARD FOR APPRAISAL BY GIPPSLAND WATER.
- HOLD POINT No. 1 - TO BE AT 50% COMPLETION OF CONSTRUCTION OF CABINET & INTERNAL COMPONENTRY.
- HOLD POINT No. 2 - TO BE AT 100% COMPLETION PRIOR TO DELIVERY TO SITE.
- HOLD POINT No. 3 - TO BE PRIOR TO COMMISSIONING ON SITE

REV. NO.	DATE	DESCRIPTION	APP'D	REFERENCES	DESIGNED BY:
0	28/06/21	INITIAL ISSUE	GM	A1-70471	DRAWING INDEX (CAD MASTER FILE)

DO NOT SCALE	GIPPSLAND WATER DRAWING STATUS	TYPICAL DRAWING ONLY	GIPPSLAND WATER FACILITY CODE TBD
CERTIFICATION OF COMPLIANCE WITH GIPPSLAND WATER'S DESIGN & DRAFTING REQUIREMENTS. DESIGNED: / / DRAWN: 13/02/19 GM CHECKED: 09/04/21 RD/FR		 GIPPSLAND WATER "LOCATION" SEWER RETICULATION SEWAGE PUMP STATION GENERAL STANDARD NOTES	DRAWING No. A1-70472 REV. 0