



SYMBOLS LEGEND

	AIR ADMITTANCE VALVE
	CONNECT TO EXISTING
	DIRECTION OF FLOW
	WATER OUTLET POINT
	STORMWATER RAINWATER OUTLET
	TRAPPED TUNDISH
	SERVICE IDENTIFICATION SYMBOL
	OVERFLOW RELIEF GULLY
	HOSE TAP
	FLOOR WASTE
	THERMOSTATIC MIXING VALVE
	STOP VALVE
	INSPECTION OPENING
	NON RETURN VALVE / CHECK VALVE
	WATER METER
	GAS REGULATOR
	GAS METER
	SENSOR CONTROL VALVE

LINETYPES LEGEND

	SEWER
	STORMWATER DRAINAGE PIPE
	VENT PIPE
	COLD WATER PIPE
	HOT WATER PIPE
	GAS
	PIPE CONTINUATION
	PIPE RISER
	DOWN PIPE
	PIPE DROPPER

FIXTURE NUMBERS

FIXTURES	NO OFF
1. WC	(6)
2. HB	(6)
3. SHR	(7)
4. SK	(3)

ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE
AB	ABOVE BENCH
AFFL	ABOVE FINISHED FLOOR LEVEL
HB	HAND BASIN
CO	CLEAR OUT
Cu	COPPER
CW	COLD WATER
DCV	DOUBLE CHECK VALVE
DIA	DIAMETER
DP	DOWNPIPE
FW	FLOOR WASTE
HL	HIGH LEVEL
HT	HOSE TAP
HW	HOT WATER
IL	INVERT LEVEL
IO	INSPECTION OPENING
L/L	LOW LEVEL
CV	CHECK VALVE
PVC	POLYVINYLCHLORIDE
RL	REDUCED LEVEL
RPZD	REDUCED PRESSURE ZONE DEVICE
RSV	RECESSED STOP VALVE
SWR	SEWER DRAINAGE
SHR	SHOWER
SK	KITCHEN SINK
STW	STORMWATER
SV	STOP VALVE
S/S	STAINLESS STEEL
STR	STRAINER
TD	TUNDISH
TMV	THERMOSTATIC MIXING VALVE
VP	VENT PIPE
WC	WATER CLOSET
WW	WARM WATER

SPECIFICATION NOTES

1.1. GENERALLY

HYDRAULIC SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH :-
 - BUILDING CODE OF AUSTRALIA (BCA)
 - AUSTRALIAN STANDARD AS 3500 SERIES NATIONAL PLUMBING AND DRAINAGE CODE
 - ALL WORK MUST BE CARRIED OUT IN CONFORMITY WITH THE WATER AND SEWERAGE ACT AND REGULATIONS, AS/NZ 3500 AND THE APPROVED ARCHITECTURAL PLANS.
 - WATER METER INSTALLATION SHALL COMPLY WITH THE SYDNEY WATER REQUIREMENTS.

THE CONTRACTORS' OBLIGATIONS SHALL INCLUDE BUT NOT BE LIMITED TO :-
 - COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONTRACT
 - PROVISION FOR ALL INSPECTIONS AND APPROVALS AND PAYING ALL ASSOCIATED FEES
 - ESTABLISHING THE EXTENT OF THE EXISTING SERVICES AND THEIR SUITABILITY FOR CONNECTION
 - OBTAINING APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO MAKING PENETRATION THROUGH EXISTING STRUCTURE
 - CO-ORDINATION ON SITE OF NEW HYDRAULIC SERVICES WITH ALL EXISTING SERVICES
 - PROVISION OF AS INSTALLED DRAWINGS, OPERATING AND MAINTENANCE MANUALS
 - PROVISION OF ACOUSTIC INSULATION TO ACHIEVE BCA STC NOISE CRITERIA AS NECESSARY.
 GENERALLY PROVIDE INSTALLATION TO ALL PIPEWORK WITHIN THE OCCUPIED SPACE OR AS MAY BE FURTHER SPECIFIED BY ACOUSTIC CONSULTANT

1.2. MATERIALS

THE FOLLOWING MATERIALS ARE TO BE USED FOR EACH SERVICE :-
 - SANITARY PLUMBING >100: UPVC WITH SOLVENT CEMENT AND PRIMING FLUID
 - SANITARY PLUMBING <100: UPVC WITH SOLVENT CEMENT AND PRIMING FLUID
 - VENT PIPES: UPVC WITH SOLVENT CEMENT AND PRIMING FLUID
 - COLD WATER PIPEWORK: COPPER TUBE TYPE B TO AS.1432, BRAZED JOINTS WITH 15% SILVER CONTENT OR EQUAL APPROVED
 - HOT & WARM WATER PIPEWORK: COPPER TUBE TYPE B TO AS.1432 WITH KEMLAG SHEATHING, BRAZED JOINTS WITH 15% SILVER CONTENT OR EQUAL APPROVED
 - SAFETY TRAYS: 0.45 THICK COPPER
 - HOT WATER PIPEWORK SHALL BE THERMALLY INSULATED WITH INSULATING MATERIAL EQUIVALENT TO THERMOTEC 4-ZERO OR EQUAL APPROVED
 - COPPER PIPE FOR GAS

NOTE:
CONTRACTOR TO CONFIRM ALL FIXTURES AND TAPWARE WITH ARCHITECT SCHEDULE PRIOR TO INSTALLATION

1.3. SANITARY PLUMBING

INSTALL ALL SANITARY DRAINAGE TO THE PROPOSED CHANGE ROOMS, CANTEEN AND AMENITIES AREA AS SHOWN ON DRAWING No. 80816048-HY-1002.

1.4. COLD WATER

INSTALL ALL COLD WATER SUPPLY TO THE PROPOSED CHANGE ROOMS, CANTEEN AND AMENITIES. ALLOW TO CONNECT TO ALL FAUCETS INCLUDING SHOWERS FAUCETS, SINK TAP SET, HWU'S AND STOP VALVES AS SHOWN ON DRAWING No. 80816048-HY-1003.

1.5. HOT WATER

FROM HWU'S, EXTEND UNDER BENCHES TO SHOWERS FAUCETS, SINK TAP SET AND HAND BASIN TAP SET AS SHOWN. PROVIDE A THERMOSTATIC MIXING VALVE BEFORE SUPPLY TO FIXTURES AT 45°C.

SPECIFICATION NOTES

1.6 FIXTURES and TAPWARE

SUPPLY AND INSTALL FIXTURE & TAPWARE AS SPECIFIED BY THE ARCHITECT AND AS LISTED IN THE FOLLOWING:-
 - 'RHEEM' MODEL No. 613315L (SINGLE PHASE WITH 3 x 6.0kW) ELECTRIC HWU'S COMPLETE WITH ALL VALVES AND ACCESSORIES
 - 'ENWARE' AQUABLEND 1500 THERMOSTATIC MIXING VALVE WITH S/S RECESSED LOCKABLE BOX ATM700-SET AT 45°C
 - 'ZIP HYDRO TAP' MODEL No. BC 165 / 175 ARC BOILING/CHILLED WATER UNIT COMPLETE WITH ALL ANCILLARY VALVES, DRAINS AND ASSOCIATED ELECTRONIC HYDROTAP
 - STUDOR MINI-VENT AIR ADMITTANCE VALVE COMPLETE WITH ALL PIPE FITTINGS AND STUDOR RECESSED BOX WITH GRILLE LOUVRE FOR VENTILATION.
 - MARLEY FLOOR WASTE GULLY WITH ROUND 100mm GRATE, 80mm 4-WAY RISER AND 65mm TRAPPED OUTLET.
 - SPS TRUFLO TBS100F HEAVY DUTY CLASS C GRATE RAINWATER OUTLET WITH 100mm PIPE OUTLET.
 - KWIKFLOW ENVIRONMENTAL 5,000 LITERS POLYETHYLENE SEWER PUMP OUT STATION WITH DSK SERIES 20-2 DUAL SUBMERSIBLE GRINDER PUMP SYSTEM, FPC-30020 WEATHERPROOF CONTROL PANEL, HIGH LEVEL FLOAT SWITCH, WORKING LEVEL FLOAT SWITCH AND PUMP GUARD RAILS. MAXIMUM DISCHARGE FROM PUMPS SHALL BE 2 L/S.
 - GROUND FOS MAGNA3 25-40 HOT WATER RECIRCULATION PUMP WITH A DUTY OF 2.3 LMIN @ 30 kPA.

GENERAL NOTES

- ALL WORK SHALL BE CARRIED OUT UNDER THE DIRECT SUPERVISION OF A LICENSED PLUMBER. WORK IS ALSO TO BE CO-ORDINATED WITH PROJECT MANAGER.
- EXISTING LOCATION OF SERVICES SHOWN HAS BEEN DETERMINED FROM VISUAL INSPECTION ON SITE AND RECORD DRAWINGS AVAILABLE. NO CONFIRMATION/PROVING OF SERVICES SHOWN HAS BEEN UNDERTAKEN. THE HYDRAULIC CONTRACTOR SHALL CONFIRM ALL SERVICES PRIOR TO STARTING WORKS. ANY DISCREPANCIES FOUND SHALL BE REPORTED TO THE HYDRAULIC DESIGNER
- ALLOW TO SITE CHECK THE INVERT LEVELS OF ALL SANITARY PIPEWORK TO WHICH CONNECTIONS ARE SHOWN TO BE MADE. ANY DISCREPANCIES FOUND SHALL BE REPORTED TO THE PROJECT MANAGER.
- ALLOW TO DRILL CORE HOLES WHERE NECESSARY AND OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER/ BUILDER FOR CORES PRIOR TO DRILLING. WHEN DRILLING HOLES, PROVIDE ADEQUATE PROTECTION TO PREVENT DAMAGE OF ANY FINISHED AND EXTERNAL SURFACES ABOVE AND BELOW. ANY DAMAGE CAUSED SHALL BE RECTIFIED AT THE CONTRACTOR'S COST. ALLOW FOR STRUCTURAL ENGINEERING FEES AND APPROVALS
- HYDRAULIC DRAWINGS ARE APPROXIMATE ONLY AND ARCHITECT'S DETAILS ARE TO BE REFERRED TO FOR ACCURATE SETOUTS OF FIXTURES etc.
- FIRE SEAL AROUND ALL PIPE PENETRATIONS THROUGH FIRE RATED CONSTRUCTION MEMBERS WITH FULLY CERTIFIED MATERIALS
- THE SUB-CONTRACTOR SHALL BE DEEMED TO HAVE INSPECTED THE SITE PRIOR TO TENDER AND BE SATISFIED THAT THE WORKS, AS DOCUMENTED, ARE COMPLETE AND ALL EXISTING SERVICES SHOWN FOR CONNECTION ARE SUITABLE
- ALLOW TO CAP AND REMOVE EXISTING SERVICES NOT IN USE
- UPON COMPLETION OF THE PROJECT, SUBMIT FOUR (4) COPIES OF MAINTENANCE MANUALS CONTAINING 'AS INSTALLED' PAPER COPY DRAWINGS. INCLUDE ALL DRAWINGS IN ELECTRONIC FORMAT
- IF FOR ANY REASON DOUBT EXISTS ON WHETHER A PARTICULAR PORTION OF WORK IS REQUIRED THE SUB-CONTRACTOR SHALL INCLUDE THIS AS A SEPARATE QUOTATION IN THE TENDER
- THE SUB-CONTRACTOR SHALL INCLUDE A FULL SCHEDULE OF RATES TO COVER THE WORKS AND ANY VARIATION WITH THE TENDER
- ALL PLUMBING PIPEWORK PASSING THROUGH ANY SENSITIVE ROOM EXAMPLE MEETING ROOMS SHALL BE ACOUSTICALLY INSULATED AS BCA REQUIREMENTS FOR EXAMPLE GREENLAG PIPE INSULATION.
- ALL THE PIPEWORK INVERT LEVELS HAS BEEN PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE ON SITE FOR ACTUAL SITE INVERT LEVELS AND PIPE DRAINAGE. CONTRACTOR TO COORDINATE ALL DRAINAGE AND STORMWATER PIPEWORK IN CEILING VOID WITH OTHER SERVICES.

SCOPE OF WORKS

THE WORK COVERED BY THIS SPECIFICATION AND ASSOCIATED DRAWINGS SHALL BE CARRIED OUT BY THE HYDRAULICS SUB-CONTRACTOR AND CONSISTS OF THE FOLLOWING BUT NOT LIMITED TO:

THE COMPLETE FABRICATION, SUPPLY, DELIVERY, OFF-LOADING, HOISTING INTO POSITION, INSTALLATION, TESTING, COMMISSIONING, SETTING TO WORK, DEMONSTRATING, TRAINING AND MAINTENANCE OF THE FOLLOWING NECESSARY TO COMPLETE THE INTENT OF THE PROJECT:

COLD WATER SYSTEM

- PIPEWORK WITH ISOLATION VALVES, CHECK VALVES, PIPE FITTINGS, SUPPORTS AND ALL OTHER ASSOCIATED ACCESSORIES.
- ALL COLD WATER SYSTEM INSTALLATION SHALL HAVE NECESSARY SIGN / LABELLING AS PER REQUIRED STANDARDS.

HOT WATER SYSTEM

- 2 No. RHEEM MODEL 613315L (SINGLE PHASE WITH 3 x 6.0kW) 315L ELECTRIC HOT WATER STORAGE TANK COMPLETE WITH PRESSURE RELIEF VALVE, COPPER SAFE TRAY, ISOLATION VALVES, CHECK VALVES, PIPE FITTINGS, SUPPORTS AND ALL OTHER ASSOCIATED ACCESSORIES.
- 'ZIP HYDRO TAP' MODEL No. BC 165 / 175 ARC BOILING/CHILLED WATER UNIT COMPLETE WITH ALL ANCILLARY VALVES, DRAINS AND ASSOCIATED ELECTRONIC HYDROTAP
- PIPEWORK WITH ISOLATION VALVES, CHECK VALVES, PUMPS, PIPE FITTINGS, THERMOSTATIC / TEMPERATURE MIXING VALVE, VALVE CABINET, SUPPORTS AND ALL OTHER ASSOCIATED ACCESSORIES.
- ALL HOT WATER SYSTEM INSTALLATION SHALL HAVE NECESSARY SIGN / LABELLING AS PER REQUIRED STANDARDS.

SEWER SYSTEM

- 1 No. KWIKFLOW ENVIRONMENTAL 5,000 LITERS POLYETHYLENE SEWER PUMP OUT STATION WITH DSK SERIES 20-2 DUAL SUBMERSIBLE GRINDER PUMP SYSTEM, FPC-30020 WEATHERPROOF CONTROL PANEL, HIGH LEVEL FLOAT SWITCH, WORKING LEVEL FLOAT SWITCH AND PUMP GUARD RAILS. MAXIMUM DISCHARGE FROM PUMPS SHALL BE 2 L/S.
- CONNECTION FROM FIXTURE, PIPEWORK, FIXTURE TRAPS, AIR ADMITTANCE VALVES, CABINETS, OVERFLOW RELIEF GULLY, INSPECTION OPENINGS, GULLY TRAPS, TUNDISHES, FLOOR GULLIES, VENTING, FITTINGS, SUPPORT AND ALL OTHER ASSOCIATED ACCESSORIES.

ATTENDANCE AT MEETINGS, CONTRACT ADMINISTRATION AND COORDINATION WITH THE CLIENTS REPRESENTATIVES, OTHER TRADES, UTILITY PROVIDERS, LOCAL AUTHORITIES, ETC.

ANY OMISSIONS FROM THE ABOVE SCOPE DOES NOT RELIEVE THE CONTRACTOR OF THE DESIGN INTENT.

Rev.	Date	Description	Des.	Verif.	Appd.
E	08.09.2016	CONSTRUCTION ISSUE	D.C.	B.W.	B.P.
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C	18.03.2016	CONSTRUCTION CERTIFICATE ISSUE	D.C.	B.W.	B.P.
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Drawn	Date	Client
A.T.	Sept '16	BRIARS SPORTING CLUB
Checked	Date	Project
M.D.	Sept '16	COMMUNITY AND AMENITIES BUILDING
Designed	Date	Location
A.T.	Sept '16	ROTHWELL PARK, CONCORD
Verified	Date	Title
Z.W.	Sept '16	HYDRAULIC SERVICES
Approved	Date	LEGEND & SPECIFICATION NOTES
B.P.	Sept '16	

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