SCHEDULE OF IRISH WATER WATERMAIN DETAILS

Drg No.	Drawing Title	Rev
STD-W-01	Water service connection responsibility	1
STD-W-02	Typical layout for water mains within developments	2
STD-W-03	Customer connection and boundary box (25mm OD pipe)	4
STD-W-04	General pipe connections (Sheet 1 of 7)	4
STD-W-05	General pipe connections (Sheet 2 of 7)	3
STD-W-06	General pipe connections (Sheet 3 of 7)	3
STD-W-07	General pipe connections (Sheet 4 of 7)	2
STD-W-08	General pipe connections (Sheet 5 of 7)	2
STD-W-09	General pipe connections (Sheet 6 of 7)	2
STD-W-10	General pipe connections (Sheet 7 of 7)	2
STD-W-11	Typical service layout indicating seperation distances	2
STD-W-12	Restrictions on Water Infrustructure works adjacent to existing trees	2
STD-W-12A	Restrictions on new trees/shrubs planting adjacent to Water mains	0
STD-W-13	Trench Backfill/bedding & reduced cover protection slab detail	2
STD-W-14	Sluice valve for ductile iron (D.I) pipe (Sheet 1 of 4)	4
STD-W-15	Sluice valve for polyethylene (P.E) pipe (<350mm dia.) (Sheet 2 of 2)	3
STD-W-16	On-line hydrant for ductile iron (D.I) pipe (Sheet 1 of 4)	3
STD-W-17	Off-line hydrant for ductile iron (D.I) pipe (Sheet 2 of 4)	4
STD-W-18	On-line hydrant for polyethylene (P.E) pipe (Sheet 3 of 4)	3
STD-W-19	Off-line hydrant for polyethylene (P.E) pipe (Sheet 2 of 4)	4
STD-W-20	On-line air valve for ductile iron (D.I) pipe (Sheet 1 of 4)	3
STD-W-21	Off-line air valve for ductile iron (D.I) pipe (Sheet 2 of 4	4
STD-W-22	On-line air valve for polyethylene (P.E) pipe (Sheet 3 of 4)	3
STD-W-23	Off-line air valve for polyethylene (P.E) pipe (Sheet 4 of 4	4
STD-W-24	Presure reducing/sustaining valve chamber in-situ R.C option	3
STD-W-25	Booster pump station arrangement	2
STD-W-26	Electromagnetic meter chamber (dn80 - dn250mm Dia.)	4
STD-W-26A	Chamber for flanged mech. Meter without strainer (dn40 - dn250mm Dia.)	1
STD-W-26B	Chamber for flanged mech. meter (dn40 - dn250mm Dia.) with separate strainer chamber	0
STD-W-26C	Threaded rotary piston flow meter chamber (dn30 - dn40mm Dia.) In-situ Concrete option	0
STD-W-26D	Threaded rotary piston flow meter chamber (dn30 - dn40mm Dia.) Precast Concrete option	0
STD-W-26E	Threaded rotary piston flow meter chamber (dn30 - dn40mm Dia.) Blockwork option	0
STD-W-26F	By-pass flow meter chamber (25-32mm O.D.Dia) For developments with <20m3/day water use	0
STD-W-26G	Flow meter chamber (25-32mm O.D.Dia)	0
STD-W-27	Marker posts/plates	3
STD-W-28	Watermain thrust and support blocks	1
STD-W-29	Duct chamber	3
STD-W-30	Scour chamber and head wall arrangements	4
STD-W-30A	Washout hydrant	3
STD-W-30B	Scour chamber to storm sewer arrangements	0
STD-W-31	Typical ditch/stream crossing for watermain ductile iron option	2
STD-W-31A	Typical ditch/stream crossing for watermain polyethylene option	0
STD-W-32	Typical bridge crossing for watermain (Sheet 1 of 2)	1
STD-W-33	Typical bridge crossing for watermain (Sheet 2 of 2)	2
STD-W-33A	Typical culvert and services crossing details for watermain	0
STD-W-34	Security gate and fencing palisade option (preferred)	0
STD-W-34A	Security gate and fencing wire mesh option	3
STD-W-35	Pipe repair to existing mains	2
STD-W-36	Flow meter kiosk	3
STD-W-36A	PRV/PSV control Kiosk	0
STD-W-37	Lamp bollard and lamp standards	2
STD-W-38	Watermain loop detail ductile iron option	0
STD-W-39	Watermain loop detail polyethylene option	0
STD-W-40	Section showing wastewater services seperation details in high density developments 2.5m wide footpaths with 6.0m wide carrigeways.	0
STD-W-41	Layout plan showing below ground services serperation details in high density developments 2.5m wide footpaths with 6.0m wide carriageways	0
STD-W-42	Section showing wastewater services seperation details in high density developments 1.8m wide footpaths, 2.45m wide parralle parking bays with 6.0m wide carrigeways.	0
STD-W-43	Layout plan showing below ground services serperation details in high density developments 1.8m wide footpaths, 2.5m wide parrallel parking bays with 6.0m wide carriageways	0

IRISH WATER WASTEWATER DETAILS

Drg. No.	Drawing Title	Rev
STD-WW-01	Watewater service connection maintenance responsibility	2
STD-WW-02	Typical layout for sewer within developments	2
STD-WW-03	Drain & service connection pipework	2
STD-WW-04	Typical sewer/service pipe connection	2
STD-WW-05	Typical service layout indicating seperation distances	2
STD-WW-05A	Wastewater service connection vertical serperation distances	0
STD-WW-06	Restrictions on wastewater infrustructure works adjacent to trees	2
STD-WW-06A	Restrictions on wastewater infrustructure works adjacent to sewers	1
STD-WW-07	Trench backfill & bedding	2
STD-WW-08	Concrete protection slab, bed, haunch & surround to wastewater pipes	1
STD-WW-09	Tblockwork manhole (<450mm dia.)	3
STD-WW-10	Pre-cast concrete manhole with cast in-situ base	3
STD-WW-10A	Pre-cast concrete manhole with pre-cast base	0
STD-WW-10B	Pre-cast concrete pumping station inlet manhole with cast in-situ concrete base	0
STD-WW-10C	Pre-cast concrete pumping station inlet manhole with pre-cast concrete base	0
STD-WW-11	In-situ concrete manhole	3
STD-WW-11A	Cast in-situ concrete pumping station inlet manhole	0
STD-WW-12	Backdrop and cascade manholes	3
STD-WW-13	Private side inspection shambers	3
STD-WW-14	Trust blocks for rising mains	2
STD-WW-15	Scour valve chamber (foul rising main <200mm dia.)	3
STD-WW-16	Sluice valve details for rising mains ductile iron (D.I) pipe (<200mm dia.) (sheet 1 of 2)	4
STD-WW-17	Sluice valve details for rising mains polyethylene (P.E) pipe (<200mm dia.) (sheet 2 of 2)	3
STD-WW-18	Air valve chamber (foul rising main <200mm dia.)	3
STD-WW-19	Duct chamber	3
STD-WW-20	Emergency overflow structure & eme4rgency overflow to storm sewer	2
STD-WW-21	Typical ditch/stream crossing for gravity sewer (sheet 1 to 2)	2
STD-WW-22	Typical ditch/stream crossing for ductile iron rising main (sheet 2 to 2)	2
STD-WW-22A	Typical ditch/stream crossing for polyethylene rising main	0
STD-WW-23	Typical bridge crossing for rising main (sheet 1 of 2)	2
STD-WW-24	Typical bridge crossing for rising main (sheet 2 of 2)	2
STD-WW-24A	Typical culvert and services crossing details for rising main	0
STD-WW-25	Security gate & fencing palisade option (preferred)	0
STD-WW-25A	Security gate & fencing wire mesh option	3
STD-WW-26	Indicatice pumping station site layout - access via lay-by	1
STD-WW-26A	Indicatice pumping station site layout - direct access from public road	0
STD-WW-27	Flow meter chamber (foul rising main <200mm dia.) cast in-situ concrete option	3
STD-WW-27A	Flow meter & valve chamber (foul rising main <200mm dia.) cast in-situ concrete option	0
STD-WW-27B	Flow meter & valve chamber (foul rising main <200mm dia.) pre-cast concrete option	0
STD-WW-27C	Flow meter & valve chamber (foul rising main <200mm dia.) pre-cast concrete option	0
STD-WW-28	Cast in-situ Indicatice submersible pumping station with cast in-situ valve chamber	3
STD-WW-28A	Indicative pre-cast concrete submersible pumping station and cast in-situ valve chamber	2
STD-WW-28B	Indicative pre-cast concrete submersible pumping station and pre-cast valve chamber	0
STD-WW-29	Rising main discharge stand off manhole	3
STD-WW-30	Type 1 pumping station control kiosk	3
STD-WW-30A	Type 2 and type 3 pumping station contriol kiosk	0
STD-WW-31	Pumping station wet kiosk	3
STD-WW-31A	Pumping station wet kiosk water service connection arrangment	0
STD-WW-32	Hardstanding area pumping station (permeable & impermeable)	2
STD-WW-33	Lamp bollard & lamp standard	2
STD-WW-34	Vent Stack	2
STD-WW-35	Rising main rodding chamber in-situ concrete option	0
STD-WW-35A	Rising main rodding chamber pre-cast concrete option	0
STD-WW-36	Marker posts/plates	0
STD-WW-37	Section showing wastewater services seperation details in high density developments 2.5m wide footpaths with 6.0m wide carrigeways.	0
STD-WW-38	Layout plan showing below ground services serperation details in high density developments 2.5m wide footpaths with 6.0m wide carriageways	0
STD-WW-39	Section showing wastewater services seperation details in high density developments 1.8m wide footpaths, 2.45m wide parralle parking bays with 6.0m wide carrigeways.	0
STD-WW-40	Layout plan showing below ground services serperation details in high density developments 1.8m wide footpaths, 2.5m wide parrallel parking bays with 6.0m wide carriageways	0

*DETAILS ABOVE TO BE USED FOR SURFACE WATER NETWORK

1. 500mm DEEP FILTER MEDIUM SHALL COMPLY WITH THE RECOMMENDATIONS OF CIRIA REPORT C753.
2. THE BASIC REQUIREMENTS OF THE MATERIAL SHALL BE:
   SATURATED HYDRAULIC CONDUCTIVITY TO BE BETWEEN 100mm/h - 300mm/h - TESTED IN-SITU USING THE SINGLE RING INFILTRATION TEST - EN ISO 22282-5:2012

   POROSITY > 30% (WHEN TESTED IN ACCORDANCE WITH BS 1377-2:1990)

   PARTICLE SIZE DISTRIBUTION

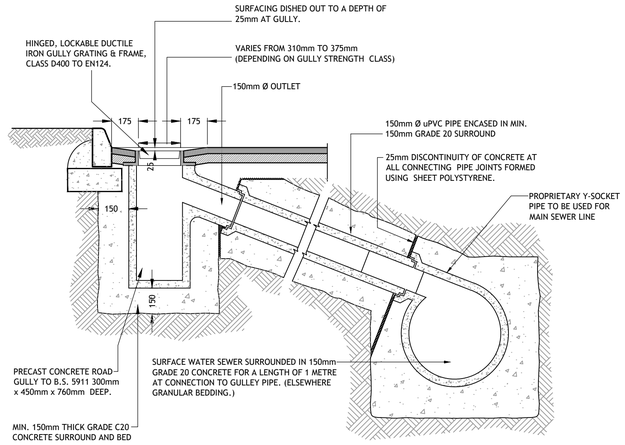
   6mm 100% PASSING

   2mm 90-100% PASSING

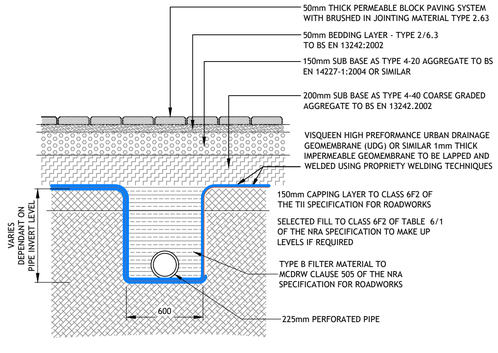
   0.6mm 40-70% PASSING

   0.2mm 5-20% PASSING

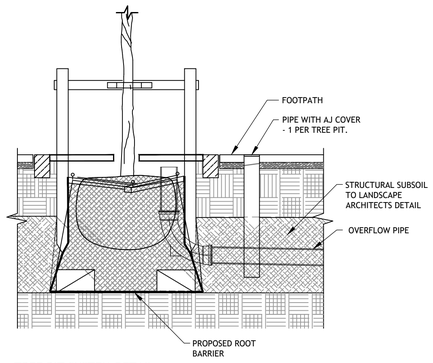
   0.063mm <5% PASSING
3. ORGANIC MATER CONTENT - 3-5% (w/w)
4. SOILS SHALL BE ASSESSED BY HORTICULTURIST TO ENSURE THAT IT WILL SUPPORT HEALTHY VEGETATION COMMUNITY.
5. ANY COMPONENT FOUND TO CONTAIN HIGH LEVELS OF SALT, CLAY OR SILT PARTICLES OR OTHER EXTREMES WHICH MAY BE CONSIDERED RETARDENT TO PLANT GROWTH SHALL BE REJECTED.
6. THE FILTER MEDIUM LAYER MATERIAL SHALL NOT BE COMPACTED WHEN PLACED.



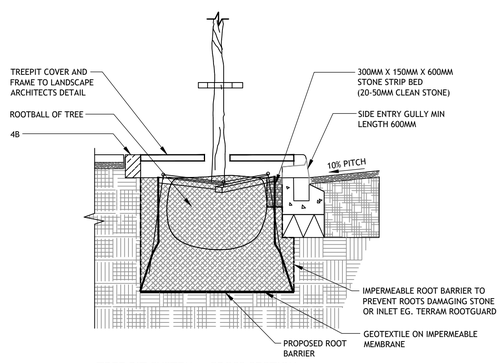
PRECAST CONCRETE TRAPPED GULLY IN MACADAM AREA
SCALE 1:20



TYPICAL SECTION THROUGH PERMEABLE PAVING BUILD UP
SCALE 1:20



TREE PIT SYSTEM DETAIL
NOT TO SCALE



TREE PIT SYSTEM - CROSS SECTION
NOT TO SCALE

FOR PLANNING PURPOSES ONLY

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018
NSAI Certified

Rev	Amendment	By	Date	Rev	Amendment	By	Date

Client:

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
97 Henry Street, Limerick, V94 YC2H
t +353 61 221 200 | w punchconsulting.com

Project: 33 - 34 Thomas Street, Living Georgian Limerick				
Title: Proposed Drainage Details				
Drawn: S.K.	Date drawn: 12/12/2022	Technician Check: PJM	Engineer Check: JT	Approved: KM
Project No: 201220	Model Ref: 201220-PUNCH-XX-XX-M2-C-0250		Drawing Status:	A0
Scale @ A1: As Shown	Document No: 201220-PUNCH-XX-XX-DR-C-0250			Revision No: P01