ITP and PS Checklists

INSPECTION AND TEST PLAN – WATER/SEWAGE PUMP STATION

ITP to be completed by Consulting Engineer

Developer:	**Consultant Engineer:**		**Consultant Engineer Representative:**
Project:	**Contractor:**		**Contractor Site Representative:**
Description:	**Sub-contractor:**		**Witness, Hold & Surveillance points added to ITP**
	Field Tester:		
Location:	**ITP Prepared by:**	**Reviewed by:**	**Council Representative**
	Date / /	**Date / /**	**Date / /**

No	Construction/Inspection Activity	Inspection Procedure & Acceptance Criteria	Contractor	Consult. Engineer	Council*	Record	Comment
1	Pre-start/Site establish	Pre-Start Meeting Checklist. Site establishment visual check. Checklist completed. (PS1)	I	**H**	**H**	Checklist PS1	
2	Approved materials on Site/delivered	Visual check approved materials. Quantity and condition. Checklist completed (PS2)	I	I	S	Checklist PS2	
3	Excavation	Visual inspection to WRC standards. Checklist completed. (PS3)	I	I	S	Checklist PS3	
4	Foundations	Visual and dimensional check to WRC Standards.	I	W	W	Checklist PS4	
5	Base slab	Visual inspection to WRC Standards.	I	**H**	I	Checklist PS4	
6	Reinforcement and formwork	Visual inspection to WRC Standards.	I	**H**	W	Checklist PS4	
7	Anchor/Thrust Blocks	Visual and dimensional check to WRC Standards.	I	**H**	**H**		
8	Embedment and Backfill	Visual check and compaction to WRC Standards	I	**H**	**H**	Compaction test results	
9	Electrical/Scada	Review certification and visually check installation to WRC standards.	I	W	I	Certification	
10	Lifting Chain	Review certification.	I	I	I	Certification	
11	Surface fittings	Visual and dimension check to WRC Standards. Checklist completed (PS6)	I	I	S	Checklist PS5	
12	Disinfection	Disinfection to WRC Standards	I	**H**	**H**	Test Results	
13	Testing	Pressure test and Compaction test to WRC Standards	I	**H**	**H**	Test Results	
14	Pre-connection	Visual inspection to WRC Standards. Checklist completed (PS6)	**H**	**H**	**H**	Checklist PS6	
	inspection	Isolation procedure as per Job Specific Letter					
15	Commissioning of System	Visual and dimensional check to WRC Standards and, where required, removal of RPZD.	I	**H**	**H**	PS Commi Checklist	

Symbol	Legend	No	Amendment	Date	Reviewed	Validation
I	Inspection					I certify that the works have been constructed in accordance with WRC Standards and the Inspection and Test Plan
H	Mandatory Hold Point					
W	Witness Point					
S	Surveillance					…… Consulting Engineer Date / /

*** Council reserves the right to vary these requirements at any time** **** Council's written approval MUST be obtained prior to varying these requirements**

PUMP STATION CHECKLIST PS1

PRE-START AND SITE ESTABLISHMENT

PROJECT:								CONSULTING ENGINEER:							
Date from: to:		PIPE TYPE:		SIZE:		CLASS:		CONTRACTOR:							
		SITE						DATE:	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**			**COMMENT**				**SIGNATURES**
1.1	Plan current and on site														
1.2	Pre construct report inc. photographs														
1.3	Property Entry Agreement														
1.4	Road opening requirements														
	Fees paid														
	Traffic mgt plan implemented														
1.5	Environmental Management Plan on site and implemented														
1.6	WH&S Plan on site and implemented														
1.7	Receiving sewer located														
1.8	Specification on site														
1.9	Footways to finished levels														
1.10	Survey pegs in place							Registered Surveyor							
1.11	Job set out														
1.12	All services located							'Dial Before You Dig', services search and Relevant Authorities							
1.13	All services marked														
1.14	Contractors holding relevant accreditation on site														

VARIATIONS AND CHANGES:	**SITE INSTRUCTIONS:**

COMMENT:

PUMP STATION CHECKLIST PS2

APPROVED MATERIALS ON SITE AND DELIVERED

PROJECT:								CONSULTING ENGINEER:							
Date from: to:			PIPE TYPE:		SIZE:		CLASS:	CONTRACTOR:							
		SITE						DATE:	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**			**COMMENT**				**SIGNATURES**
2.1	Delivery Inspection														
2.2	Types and sizes to current plan														
2.3	Marking tape														
2.4	Bedding material														
2.5	Trench fill														
2.6	Fittings														
2.7	Surface Fittings														
2.8	Pre Cast chambers														

VARIATIONS AND CHANGES:	**SITE INSTRUCTIONS:**

COMMENT:

PUMP STATION CHECKLIST PS3 – PAGE 1 OF 2

EXCAVATION

PROJECT:				CONSULTING ENGINEER:							
Date from: to:		PIPE TYPE:		SIZE:		CLASS:		CONTRACTOR:			
		DAY						DATE:	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**			**COMMENT**			**SIGNATURES**
3.1	Environmental Management Plan on site and implemented													
3.2	Traffic Management Plan on site and implemented													
3.3	Services exposed													
3.4	Clearance from Services													
3.5	Trench width ..... mm													
3.6	Trench depth ..... mm													
3.7	Trench shoring													
3.8	Excavation prior to placement of backfill													
3.9	Embedment													
	Compaction													
	Bedding													
	Surround													
	Overlay													
	Testing													

VARIATIONS AND CHANGES:	**SITE INSTRUCTIONS:**

COMMENT:

PUMP STATION CHECKLIST PS3 – PAGE 2 OF 2

EXCAVATION AND PIPE LAYING

PROJECT:								CONSULTING ENGINEER:			
Date from: to:		PIPE TYPE:			SIZE:		CLASS:	CONTRACTOR:			
		DAY						DATE: DAY 1	DAY 2	DAY 3 DAY 4	DAY 5 DAY 6
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**	**COMMENT**		**SIGNATURES**
3.10	Valves, Hydrants & Surface fittings installed										
	Shroud assembly										
	Valve anchorage										
3.11	Marking tape										
	Correct location										
	Connected to fittings										
3.12	Concrete										
	Trench stops in place										
	Bulkheads in place										
	Thrust blocks in place										
	Embedment & Encasement in place										
3.13	Trench fill										
	Material										
	Compaction										
	Compaction Testing							NATA Certified Lab			

VARIATIONS AND CHANGES:

SITE INSTRUCTIONS:

COMMENT:

PUMP STATION CHECKLIST PS4 – PAGE 1 OF 2

CHAMBERS

PROJECT:					CONSULTING ENGINEER:						
Date from: to:		PIPE TYPE:		SIZE:	CLASS:	CONTRACTOR:					
		CHAMBER			DATE:	CH 1	CH 2	CH 3	CH 4	CH 5	CH 6
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**	**COMMENT**		**SIGNATURES**
4.1	Finished Surface Levels Supplied										
4.2	Base										
	Placement										
	Channels										
	First shaft section										
4.3	In-situ chamber										
	Formwork – correct sizing										
	Formwork – correct levels										
	Reinforcement										
	Cover										
	Concrete type to Specification										
	Step iron location and spacing										
	Dimension check										
	Cover and frame										
	Conduits							Plan Specification			
4.4	Pre cast chamber										
	Shaft assembled in correct order										
	Step iron location and spacing										
	Sealing										
	Offset cone located correctly										
	Minimum one make up ring										
	Cover and frame										

VARIATIONS AND CHANGES:

SITE INSTRUCTIONS:

COMMENT:

PUMP STATION CHECKLIST PS4 – PAGE 2 OF 2

CHAMBERS

PROJECT:					CONSULTING ENGINEER:						
Date from: to:		PIPE TYPE:		SIZE:	CLASS:	CONTRACTOR:					
		CHAMBER				DATE:	CH 1	CH 2	CH 3	CH 4	CH 5	CH 6
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**	**COMMENT**			**SIGNATURES**
4.5	Ladders / handrails / step irons											
4.6	Sealing							Manufacturer Specification				
4.7	Drainage											
4.8	Security Grate lid											
4.9	Plastering/rendering											
4.10	Benching											
4.11	Operational access											

VARIATIONS AND CHANGES:

SITE INSTRUCTIONS:

COMMENT:

PUMP STATION CHECKLIST PS5

SURFACE FITTINGS

PROJECT:								CONSULTING ENGINEER:		
Date from: to:		PIPE TYPE:		SIZE:		CLASS:		CONTRACTOR:		

		SITE						DATE:	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6

ITEM	DESCRIPTION	1	2	3	4	5	6	MINIMUM STANDARD	COMMENT	SIGNATURES
5.1	Surface boxes and surrounds to finished levels									
5.2	Surface box lids hinged in direction of traffic flow									
5.3	Shroud pipes assembled to Standards									
5.4	Fitting bolts protected to Standards									
5.5	Correct depth to Spindle tops									
5.6	Correct depth to Hydrant lugs									
5.7	Spindle retaining disc in place									
5.8	Indicator plates in place									

VARIATIONS AND CHANGES:	SITE INSTRUCTIONS:

COMMENT:

PUMP STATION CHECKLIST PS6
PRE-CONNECTION INSPECTION

PROJECT:								CONSULTING ENGINEER:							
Date from: to:			PIPE TYPE:		SIZE:		CLASS:	CONTRACTOR:							
		SITE						DATE:	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	
ITEM	**DESCRIPTION**	**1**	**2**	**3**	**4**	**5**	**6**	**MINIMUM STANDARD**			**COMMENT**				**SIGNATURES**
6.1	WAC compiled														
6.2	Compaction and concrete tests														
6.3	Pressure test results														
6.4	Deflection Test Results														
6.5	CCTV Inspection														
6.6	Marking tape in place & tested														
6.7	Surface boxes and surrounds level														
6.8	Indicator plates in place														
6.9	Chambers sized to Standard														
6.10	Chamber ladder or step irons to Standards														
6.11	Chamber drainage adequate & to Standards														
6.12	Benching to Standard														
6.13	Sealing to Standard														
6.14	Scour outlet protected from erosion														
6.15	Site restored satisfactorily														

VARIATIONS AND CHANGES:	**SITE INSTRUCTIONS:**

COMMENT: