Fulton Hogan	Hobart Airport TASMANIA	**Inspection and Test Plan - Control and Supervision of the Works**	**Document #** **GT4-ITP-019** Revision : 0 Date: 10/04/2024

Client:	**Hobart International Airport Pty Ltd**	**Construction Process:**	Prepared by:	Reviewed by :	Approved by :
Project:	**Project Mercury Early Works At Hobart International Airport**	***Fire Services Installation***	Name: **Carter Lawson -Kelleway**	Name: **Carter Lawson -Kelleway (VOC by David Hart)**	Name:
Contract No:	**MER-EW-001**	**Specifications:** Hobart Airport Project Mercury - Early Works Fire Protection Specification			
		Structure / Component: Fire Services	Signed : Carter Lawson -Kelleway	Signed Carter Lawson -Kelleway	Signed :
		Location: Hobart International Airport	Date : 10/04/2024	Date : 10/04/2024	Date :

Item No.	Task/Activity Description	Inspection / Controls and Verification Detail					HP/ WP/ AP/ IP/ TP	Responsibility	Checked by:			
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity		Project Engineer Site Engineer Superintendent Surveyor Foreman	Client	Fulton Hogan	FH's Subcontractor	Date
1	**Preliminary Works**											
1.1	Check that current revision drawings are being used	Prior to Commencing Work	Issued For Construction (IFC) and latest available revision used	IFC Project Drawings/ Drawing Register	Document review	Latest revision IFC drawings	***WP**	Site Engineer	N/A		N/A	
1.2	Confirm understanding of current EMP related to the work area and that all prescribed environmental controls are in place	Prior to Commencing	All environmental measures to be implemented as per current CEMP and local authorities. Sediment control measures to be installed and protected vegetation to be clearly identified	CEMP, Site induction	Document review & Site inspection	ITP signed	***WP**	Site Engineer	N/A		N/A	
1.3	Traffic Management (When required)	Prior to Commencing Work	Approved TMP and WASIN (where required)	Applicable TMP	Document review & Site inspection	Approved TMP	***HP**	Site Engineer	N/A		N/A	
1.4	Survey set out works	Prior to Commencing Work	Survey activities undertaken to ensure and validate that all works meet level and location requirements. The establishment and integrity of the survey network shall be verified before commencing any survey and set out activity. IFC and latest available revision used.	IFC Project Drawings	Site inspection	Survey records & marks on the ground. This ITP Signed off.	***HP**	Site Engineer / Surveyor / Superintendent			N/A	
2	**Material Conformance**											
2.1	Water Pipes, Valves and fittings	Every batch of new material	Fire Service pipe material to be free from defects and meet the following schedules As per B.6.1 Fire Pipe Schedule and B.6.2 Valves and Fittings Schedule.	Specification: EW-FP-SPC-0000001(C.) -B.6 - C.6.9 -C.6.10	Verify	ITP signed Receival Inspection Checklist	**IP**	Site Engineer	N/A		N/A	
2.2	Correct embedment / backfill materials onsite	Every batch of new material	Inspect bedding and backfill material to ensure suitability. If watermain is to be protected, use stabilised sand or concrete encasement	Specification: EW-FP-SPC-0000001(C.) -C.6.10.2,3,4,6, Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed Receival Inspection Checklist	**IP**	Site Engineer	N/A		N/A	
3	**Excavation of trenches**											
3.1	Trenching details	Ongoing	• Trench's to be excavated to conform with IFC drawing details. • Ensure trench width and depth are within tolerance • Ensure trench foundation & wall firm, stiff & suitable •Provide minimum clear space of 100mm between pipe and trench face	Specification: EW-FP-SPC-0000001(C.) -C.6.10.3 Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed	**IP**	Site Engineer	N/A		N/A	

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3.2	Benching & shielding (where required)	As Required	Trench support is required where the trench is more than 1.5 metres, unless the trench has been assessed as safe by a geotechnical engineer and written confirmation provided as such.	Work Procedure	Verify	ITP signed	***HP**	Site Engineer	N/A		N/A	
4	**Watermain Installation**											
4.01	Bedding	Each Lot	Bedding materials : 7mm single sized aggregate used Bedding Depth: 75-100mm COMPACTED DEPTH, BEDDING MATERIAL INCREASED TO 150mm WHER EEXCAVATING IN ROCK	Specification: EW-FP-SPC-0000001(C.) -C.6.10.5 Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed	**IP**	Site Engineer	N/A		N/A	
4.02	Pipe Joints	Each Lot	Ensure pipe joint deflection is acceptable, as per drawings and product specifications. Ensure all Butt Fusion Welds are completed are correctly (butt fusion weld indicator showing). Prior to completing any works on existing infrastructure, ensure line is isolated.	Specification: EW-FP-SPC-0000001(C.) -B.6.1	Verify	ITP signed, photo of each joint	**IP**	Site Engineer	N/A		N/A	
4.03	Pipe Embedment	Each Lot	Horizontal alignment of a completed length of pipework is laid beneath areas of normal usage but where passing under areas of vehicular traffic must be subject to a minimum cover of 750mm or as otherwise directed A minimum cover of 450mm and 750 mm for pipework must be provided under unpaved and paved area respectively 7mm Aggreate in Embedment layer.	Specification: EW-FP-SPC-0000001(C.) -C.6.10.1,3 Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed	**IP**	Site Engineer	N/A		N/A	
4.04	Survey pickup of Services	Each Lot prior to Backfill	Survey pick for As-built to be completed prior to Backfill	Work Procedure	Verify	ITP Signed	***HP**	Site Engineer	N/A		N/A	

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4.05	Pipe Backfill Material	Each Lot	A compacted sand bed of 75mm minimum thickness over earth or 150mm minimum thickness over rock must be provided. The pipework must be topped with 100mm minimum thickness of sand compacted carefully by watering and hard or light vibratory tamping to a dense tight state.	Specification: EW-FP-SPC-0000001(C.) -C.6.10.2,3,4,6, Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed	**IP**	Site Engineer	N/A		N/A	
4.06	Pipe Backfill Compaction	Subbase one test per 1000 sq.m	Backfill compacted in <= 250mm loose layers to achieve minimum density R_D 95% (MDDR = 95%).	Drawing(s): EW-FP-DRW-00-0001	Test report	ITP signed	**TP**	Site Engineer	N/A		N/A	
4.07	Marking Tape	Each Lot	Tape widths must be as recommended by the manufacturer for the size of pipe to be covered but must be not less than 75mm wide for pipework up to 50mm dia. DETECTABLE IDENTIFICATION -TAPE-300mm MINIMUM ABOVE PIPE.	Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed	**IP**	Site Engineer	N/A		N/A	
4.08	Valves	Each Lot	• Install valves in the vertical position and provide surface fittings and valve markings in accordance with Drawings • Inspect the valve for damage. Repair any damage to the external coating in accordance with the manufacturer's instructions • Check the valve and off-take clamp flanges to ensure the sleeves fit in the bolt holes. Trim insulation sleeves such that they join inside one flange, and not at the flange joint. • Ø150 U.P.V.C. (AS1477 CLASS 4.5) PIPE SLEEVE to be installed	Drawing(s): EW-FP-DRW-00-0001 SLUICE VALVE DETAIL	Verify	ITP signed	**WP**	Site Engineer	N/A		N/A	
4.9	Hydrants and Valve Covers	Each Lot	•Ø100 HOT DIPPED GALVANIZED PIPE RISER (SINGLE PIPE RISER FROM P.E. PIPE.) to be installed. • 600mm x 600mm x 250mm CONCRETE PAD TO STABILIZE HYDRANT RISER. FINISH NOMINAL 25m ABOVE GROUND. Ø200 CAST IRON INSPECTION SHAFT COVER (Valves • Refer to Table B.6.1	Specification: EW-FP-SPC-0000001(C.) -C.6.10.2,3,4,6, Drawing(s): EW-FP-DRW-00-0001 EW-FP-DRW-20-0004 EW-FP-DRW-10-0001	Verify	ITP signed	**WP**	Site Engineer	N/A		N/A	
4.1	Thrust blocks	Where required	Thrust blocks must be installed in systems with unrestrained anchors.	Specification: EW-FP-SPC-0000001(C.) -C.6.10.2,3,4,6, Drawing(s): EW-FP-DRW-00-0001	Verify	ITP signed	**WP**	Site Engineer	N/A		N/A	
5	**Testing**											

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5.1	Compaction Testing (when applicable)	Completion of pipe installation & fittings.	Undertake field density testing of trench fill in accordance with the methods specified within Specifcation and Drawings. Testing not required where stablised sand is substitued for rock.	Specification: EW-FP-SPC-0000001(C.)	Compaction Testing	ITP signed, Test Records	**WP**	Site Engineer / Superintendent	N/A		N/A	
5.2	Pipeline Pressure Testing	Completion of pipe installation & fittings.	Undertake pressure testing of pipelines in accordance with the methods specified in Specification: EW-FP-SPC-0000001(C.). Refer to Table B.6.1 - Fire Pipe Schedule and AS2419 - Section 7 for test requirements.	Specification: EW-FP-SPC-0000001(C.) AS2419 - Section 7	Pressure Testing	ITP signed, Test Records	**WP**	Site Engineer / Superintendent	N/A		N/A	

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6	**Completion**											
6.1	As constructed drawings	Each Lot	Ensure all conduit deviations are captured on redline drawings for updating the IFC Drawings, and providing asbuilt data.	Drawing(s): EW-FP-DRW-00-0001 EW-FP-DRW-20-0004 EW-FP-DRW-10-0001 EW-FP-DRW-20-0001	Verify	ITP signed	**IP**	Site Engineer	N/A		N/A	

Final Inspection
The signature below verifies that this ITP has been completed in accordance with the FH's Quality system Procedures and verifies lot compliance with specifications.

Print Name: Carter Lawson-kelleway Position: Site Engineer Signature: **CLK** Date: 21/06/2024

Legend

HP	Hold Point	Work shall not proceed past the HP until released by the Superintendent	**IP**	Inspection point	Formal Inspection to be done and recorded
HP*	FH Hold Point	Work shall not proceed past the HP* until released by FH	**TP**	Test Point	Product compliance test to be undertaken and recorded/reported
AP	Approval Point	Written or verbal approval given by the Superintendent			
WP	Witness Point	An inspection which must be witnessed by the Superintendent	**WP***	Fulton Hogan Witness Point	An inspection which must be witnessed by Fulton Hogan Representative

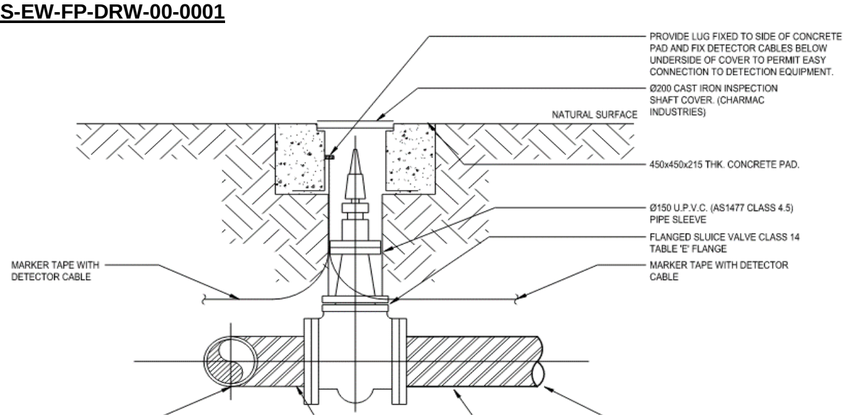
Table B.6.1 -Fire Pipe Schedule

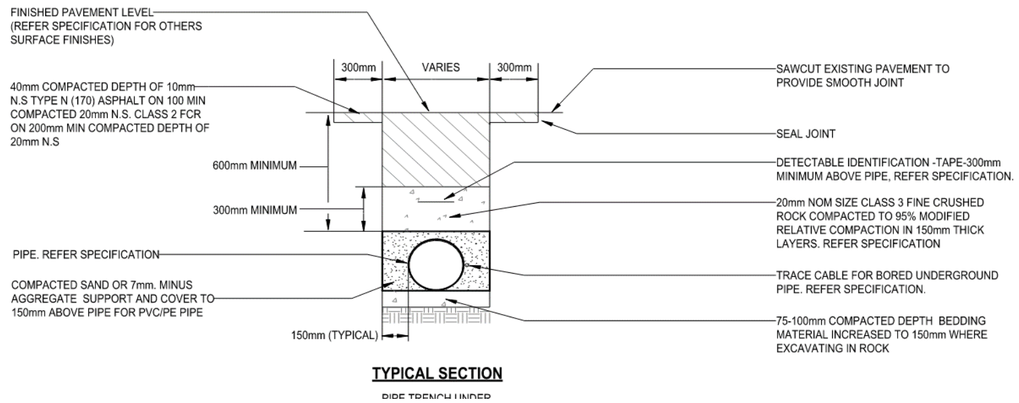
Service	Material	Grade Code	Fittings Jointing	Design Pressure	Working Pressure
Fire Hydrant – Above ground	Galvanised Mild Steel coupling	AS1074 "medium"	Roll Grooved	1700 kPa	1200kPa
Fire Hydrant – Pipes Underground	High Density Polyethylene Class PE100/	FM	Butt fusion welded	1700 kPa	1200kPa
Pipes Underground	Galvanised steel pipe (risers only)	AS1074 "Heavy"	Flanged Welded or Roll grooved coupling	1700 kPa	1200kPa

Table B.6.2 - Valves and Fittings Schedule

Valve Type	Duty	Manufacturer	Model	Remarks
Sluice	Isolation			Ductile iron Flanged ends Fusion bonded epoxy resin coatings internally and externally Non-rising stem Hand wheel with flow direction indicators for valves in large pits and stem key spindle cap for valves below box

TYPICALS-EW-FP-DRW-00-0001





TYPICAL SECTION

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5 SLUICE VALVE DETAIL Copy 1

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4 TYPICAL PIPE TRENCH DETAIL

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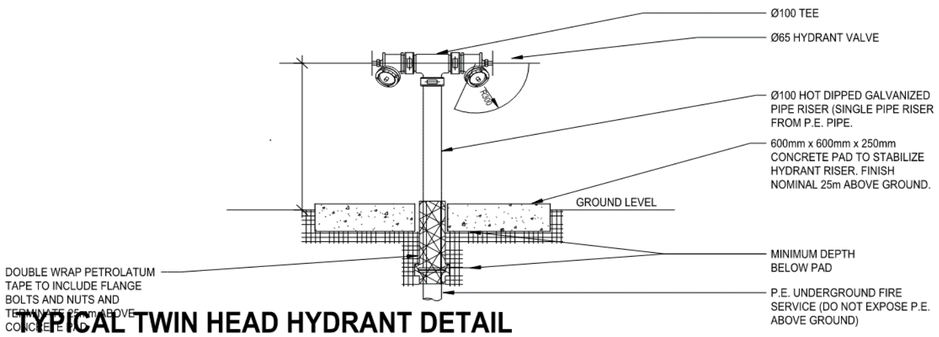

TYPICAL TWIN HEAD HYDRANT DETAIL Copy 1

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