

# SPARK – North East Link – Primary Package

## Inspection and Test Plan (ITP)

ITP Title: Type A Fill Placement

ITP Number: NEL-CNT-SDC-2990-PQA-ITP-0027 Rev.1




LOT Number: \_\_\_\_\_

Primary Asset Location Code: \_\_\_\_\_

Discipline: Earthworks

**Security Classification: OFFICIAL**

**Spark NELP Approval Record**

Function	Position	Name	Signature	Date
Prepared By	Quality Representative	Joe Failla	 Digitally signed by Joe Failla Date: 2022.09.09 14:21:06 +10'00'	
Reviewed By	Project Engineer	Dominic Ciccone	 Digitally signed by Dominic Ciccone DN: C=AU, E=dominic.ciccone@sparknel-dc.com.au, O=SPARK, CN=Dominic Ciccone Date: 2022.09.09 14:57:23+10'00'	
Approved By	Quality Manager	Greg Iro	 Digitally signed by Greg Iro Date: 2022.09.09 16:16:31 +10'00'	

**Note:**

1. Ensure all Records or Checklist References are attached and that each Inspection Requirement is clearly named, signed, and dated.
2. Ensure every Records or Checklist References attached are legible
3. This Inspection Test Plan may be generic – ensure the requirement is demographically clear to your scope of work
4. Verification Inspections where applicable for the IREA stated as "Witness" or "Hold" shall be formally notified for their engagement and with sufficient advance notice time (i.e. 3 days or as agreed with the Sub-IREA Representative and/or the Nominated Authority)
5. All Nominated Authority Hold Points are Witness Points for Sub-IREA
6. The Sub-IREA representative is not required to physically sign-off on ITPs

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**References:**

IFC Drawings

**Standards:** VR 204 (December 2015), VR 173 (October 2008)

**ITP No:** NEL-CNT-SDC-2990-PQA-ITP-0027 **Rev No:** 1

**Lot No:** ..... **Location:** ..... **Ch:** ..... **to** ..... **Offset:** ..... **to** ..... **Layer:** .....

Item No.	Responsible Person	Inspection and Test Activity	Specification Reference	Acceptance Criteria	Test Method	Test Frequency	Inspection/Verification (Name, signature & date)				Records/ Documents	Field Notes / Comments	
							Sub- Contractor	Spark NEL Engineer	Nominated Authority	IREA			
1.0	Preliminaries (Include all aspects of Materials, Approvals, IFC Drawings, etc. Ensure all required permits have been raised prior to commencing works)												
1.1	PE	IFC Drawings issued	IFC Drawing Number:  PSDR Part 6 Section 2(h)	IFC Drawings, approved plans, technical specification issued for construction  Construction of any Construction Package must not commence until at least 5 Business days after the later of when: i). the Construction Documentation has been submitted to the State, the IREA and any Returned Asset Owner (if applicable) in accordance with section 2(f) and ii). Any requirements of the IREA under section 2(g) have been complied with.	V	PW	NR	HP		NR	NR	IFC Drawings	
1.2	PE	Survey Set Out	CQMP  IFC Drawings	Confirmation and visually inspect survey set out as per the IFC Drawing.	V	PW	HP	HP		NR	NR	• InEight Document References:  • Lot Map	
1.3	PE	Calibration Approval	CQMP	▫ Equipment calibration certificates filed in Ineight. ▫ Ensure all equipment associated with the relevant works is calibrated.	V	PW		WP				• InEight Document References:	
2.0	Operations (Include Work Execution – Installation / Manufacturing Process step-by-step)												

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2.1	Nominated Authority	Pre-condition	VR 204.10 (b) VR 204.04 VR 204.06	<ul style="list-style-type: none"> <li>No fill placement shall commence on the prepared areas until the area has been reviewed by the Superintendent.</li> <li><b>Note:</b> Material classified as silt, either before or after compaction, is not acceptable as Type A material without stabilisation to the satisfaction of the Superintendent (VR204.04b).</li> </ul>	V	PW	NR	WP	HP	WP	Signed ITP	
2.2	PE	Verify Material Properties	IFC Drawings VR 204.04	<ul style="list-style-type: none"> <li>Approved material won from site or approved imported fill shall be moisture conditioned in accordance with the recommendations of the Geotechnical</li> <li>Report prior to being placed in uniform horizontal layers of 200mm maximum depth.</li> </ul>	V	PW	NR	WP	NR	NR	NATA Test Reports Geotechnical Report Material Certificates	
2.3	SE	Fill Placement	IFC Drawing VR 204.10 (d)	<b>Type A Material</b> <ul style="list-style-type: none"> <li>Shall be placed in locations shown on the drawings, if surplus Type A material is available, it may be used in locations specified for Type B material.</li> <li>Type A material shall be spread and compacted in layers not exceeding a compacted thickness of 200mm.</li> <li>Type A structural material shall be in accordance with the requirements of clause 204.11 and 204.13 of the VicRoads standards.</li> </ul>	V	PL	NR	WP	NR	NR	Delivery Docket	

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2.4	SE	Fill at Structures (If applicable)	VR 204.11 (b)	<ul style="list-style-type: none"> <li><b>Note:</b> No fill shall be placed against or within 3m of a structure until the foundation for the fill has been reviewed by the Superintendent.</li> <li>No material shall be placed against concrete within 14 days of curing.</li> <li>In addition to Type A placement at bridge abutments as structural material, embankment material or backfilling within 3m of retaining walls, wing walls, all crown units and culverts with an opening height greater than 1200mm, shall be material of at least Type A material quality.</li> </ul>	V	PL		WP	HP	WP	Signed ITP  [ ] Applicable  [ ] Not Applicable	
2.5	Nominated Authority	Test Roll	IFC Drawings VR 204.12 VR 204.13 VR 173.03	<p>All subgrades are to be proof rolled and approved prior to constructing pavements and /or commencement of filling. Test Rolling to be in accordance with VR173.03.</p> <p><b>Note1:</b> Areas upon which structural fills are to be constructed, all layers of structural fill, and materials within 150mm of permanent subgrade level in cuttings should be compacted so as to be capable of withstanding test rolling without visible deformation or springing.</p>	IP	PL	NR	NR	HP	WP	Signed ITP	

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				<b>Note2:</b> Where unstable areas exceed 20% of the area being considered by test rolling, the whole of the area should be ripped, recompact and re-presented for test rolling.								
2.6	SE	Post compaction	IFC Drawings VR 204.14 VR 204.13	Refer to table <b>VR204.131</b> for Type A Material Compaction requirements.	T	PL	NR	WP	NR	NR	NATA Test Records	
3.0	Post Operations (Include Inspection and Testing)											
3.1	SE	Testing Frequency	VR 204.14  IFC Drawings	<u>Small Developments</u> Lot surface area <500m2. <u>Large Developments</u> Refer to table <b>VR204.142</b> for Type A Acceptable lot size and minimum testing frequency. <b>Note1:</b> where any test in a lot indicates that compliance with the specification has not been achieved, the lot is considered to have failed – the entire lot will need to be reworked and retested. <b>Note2:</b> Selection of a lot for testing requires careful consideration.	T	PL	NR	WP	NR	NR	Signed ITP	
3.2	SE	CBR/Swell Grading, PI, LL		(1) The Assigned CBR and percentage swell values are to be determined in accordance with VicRoads Code of	T	PL	NR	WP	NR	NR	NATA Test Records	

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		(Post Compaction)	VR 204 Table 204.041	Practice RC 500.20. Sampling for CBR testing shall be undertaken after field compaction.  (2) The permeability value is to be determined in accordance with VicRoads Code of Practice RC 500.16. The permeability value is to be determined on specimens manufactured from that fraction of material which passes a 19.0 mm AS sieve, compacted at optimum moisture content and 98% of maximum dry density as determined by testing using standard compactive effort for CBR and swell.								
3.3	SE	Conformity with drawings	VR 204.03 Table 204.031 IFC Drawings	Scale A requirements: The finished surface level to conform to a mean level of +5mm to -15mm and a standard deviation of 12 mm (max).	V	PL	NR	WP	NR	NR	Survey records	
4.0	<b>Quality</b>											
4.1	QSR	Identification and control of non-conforming products or services (if applicable)	CQMP	Review and confirm closure of NCR's and associated RFI's prior to closing of construction lot	R	PL	NR	HP	NR	NR	NCR closed with related documentation	

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4.2	QSR	Check all quality records for lot closure	CQMP	▫ All applicable quality records are complete.	R	PL	NR	HP	NR	NR	Compiled Documents, Forms (all data reports and records)	

**Legend:**

Responsibility	Method	Inspection / Verification	Test Frequency	Other
<b>SS:</b> Site Supervisor <b>SE:</b> Site Engineer <b>PE:</b> Project Engineer <b>SPE:</b> Senior Project Engineer <b>GE:</b> Geotechnical Engineer <b>PS:</b> Project Surveyor <b>IREA:</b> Independent Reviewer (Observer)	<b>PSM:</b> Project Systems Manager <b>QSR:</b> Quality Site Rep. <b>STR:</b> Structural Engineer <b>SSR:</b> Site Safety Rep. <b>EMR:</b> Environmental Management Rep. <b>NA:</b> Nominated Authority (Release of HP)	<b>V:</b> Verify <b>I:</b> Inspection <b>R:</b> Review <b>T:</b> Test	<b>HP:</b> Hold Point <b>WP:</b> Witness Point <b>NR:</b> Not Required <b>PW:</b> Prior to Works <b>PL:</b> Per Lot <b>F:</b> Full or 100% Inspection or Testing <b>X1:</b> Inspect or Test at Specified Frequency <b>X2:</b> Random Inspection or Test	<b>QP:</b> Quality Plan <b>RFI:</b> Request for Information <b>NCR:</b> Non-Conformance <b>VC:</b> Verification Checklist <b>XXXX:</b> Sequential Number from Doc Control

**DDD – Types:** B – Building, C – Civil, G – General, M – Mechanical & Electrical, I – Motorway Operations System (ITS), S – Structure, O – Tolling, T – Tunnel, U – Urban Design & Landscape

Supplier/Subcontract or: (If applicable)	Name	Signature and Date	Spark-NELPP REP	Name	Signature and Date

**Lot closure comments:**

**Spark NELP QA Rep:**

**Name** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_