APPENDIX P – Interlock Work Zone Call Points

Purpose

To identify and control risks associated with train movements through interlocking and crossover limits during roadway worker activities.

Establishing designated OCC call-points ensures operators maintain safe separation and route verification before entering any work zone that involves switch, signal, or OCS infrastructure.

Hazard Identification

Hazard ID	Description	Likelihood	Severity	Risk Rating	Mitigation / Control
H-1	Unauthorized train movement into an active interlock work zone	Medium	High	High	Mandatory OCC call at designated station pair; exclusive track occupancy (ETO) enforced.
H-2	Miscommunication between OCC and train operator regarding route alignment or switch position	Medium	High	High	Operators stop at predefined call-points; OCC verbally confirms route and alignment; RWP Supervisor acknowledges via radio.
H-3	Operator fails to recognize interlock limits during maintenance activity	Medium	Medium	Medium	Visual signage or temporary flags at call-points; operator

Hazard ID	Description	Likelihood	Severity	Risk Rating	Mitigation / Control
					training includes interlock map awareness, Signals as parameters of interlock limits
H-4	Unexpected switch movement or signal loss of correspondence while workers are on track	Low	High	Medium	OCC places switches in “blocked” status; field verifies physical switch alignment before work begins.
H-5	Reduced visibility or distraction in complex downtown interlock areas (e.g., Jackson, Culver, Dorsey)	Medium	Medium	Medium	Dual verification (Operator & OCC); speed restriction to 5–10 mph approaching call-points; lookout protection in congested areas.

Risk Control Evaluation

Control Type	Description	Implementation
Procedural Control	OCC authorization required designated call-points before entering interlock limits.	All operators trained during RWP module and enforced through Train Orders.
Administrative Control	Interlock call-point list maintained in RWP TAG Appendix D; reviewed quarterly.	Safety & OCC jointly maintain updates.
Engineering Control	Interlock switches placed under OCC block; signal routes locked against conflicting movement.	Signal technicians coordinate before releasing for train movement.
Communication Control	Two-way radio confirmation between Operator, OCC, and RWP Supervisor prior to entry.	Logged via radio timestamp and OCC work order.

Residual Risk Assessment

After all mitigations are applied, residual risk for interlock work zone incursions is Low / Acceptable under FTA 49 CFR 674 and FRA 214 Subpart C criteria, provided all communication and call-point protocols are followed.

Verification and Monitoring

- Random OCC audits of call-point compliance (minimum 1 per month per line).
- Safety Department performs field observations during scheduled maintenance activities.
- Any missed call or premature movement recorded as a Rule Violation – RWP Protocol Breach and reviewed by SERB.

Supporting Documentation

- Appendix D: Interlock Call-Points
- SOP 600.13: Mainline Switch Repair
- SOP 500.3: LRV Derailment / Switch Failure Response
- FTA 49 CFR Part 674.27: Accident Prevention & Corrective Actions

Summary Statement

Designated interlock call-points act as procedural barriers preventing trains from entering active work zones without OCC clearance.

This control directly mitigates the hazard of roadway worker strike, signal interference, and unintended switch movement, aligning with Valley Metro's RWP Hierarchy of Controls and FTA safety certification standards.

CALL POINTS

ORANGE LINE (B LINE)

South Central Extension (OL-B-1)
(Baseline Tail Track → Sherman St / Central Ave)

- Baseline Crossover: Between Baseline Rd / Central Ave → Southern Ave / Central Ave
- Cocopah Crossover: Between Southern Ave / Central Ave → Hidalgo Ave / Central Ave
- Hidalgo Crossover: Between Hidalgo Ave / Central Ave → Raymond Rd / Central Ave
- Raymond Crossover: Between Raymond Rd / Central Ave → Buckeye Rd / Central Ave
- Sherman Crossover: Between Buckeye Rd / Central Ave → Lincoln St / Central Ave

Downtown Corridor (OL-B-2)
(Sherman St / Central Ave → McDowell Rd / Central Ave)

- Jackson Interlock: Between Downtown Phoenix Hub (Jefferson / Washington) → Roosevelt St / Central Ave → Van Buren St / 1st Ave

Central Phoenix (OL-B-3)
(McDowell Rd / Central Ave → Montebello Ave / 19th Ave)

- Culver Interlock: Between Roosevelt St / Central Ave → McDowell Rd / Central Ave
- Earll (Manual Switches): Between Thomas Rd / Central Ave → Osborn Rd / Central Ave
- Pierson Interlock: Between Campbell Ave / Central Ave → Camelback Rd / Central Ave
- McKinley Crossover: Between Van Buren St / Central Ave → Roosevelt St / Central Ave

Northwest Extension (OL-B-4)
(Montebello Ave / 19th Ave → Metro Pkwy / 25th Ave)

- Montebello Interlock: Between Glendale Ave / 19th Ave → Montebello Ave / 19th Ave
- Tuckey Interlock: Between Northern Ave / 19th Ave → Glendale Ave / 19th Ave
- Morten Interlock: Between Northern Ave / 19th Ave → Glendale Ave / 19th Ave
- Dunlap Interlock: Between Dunlap Ave / 19th Ave → Northern Ave / 19th Ave
- Mountain View Interlock: Between Mountain View Rd / 25th Ave → Metro Pkwy / 19th Ave

BLUE LINE (A LINE)

Central Mesa Extension (BL-A-1)
(Gilbert Tail Track → Edgemont)

- Guthrie Interlock: Between Gilbert Rd / Main St → Stapley Dr / Main St
- Edgemont Interlock: Between Mesa Dr / Main St → Stapley Dr / Main St

Central Mesa (BL-A-2)
(Edgemont → Dobson)

- Hibbert Interlock: Between Center St / Main St → Mesa Dr / Main St
- Date Interlock: Between Alma School Rd / Main St → Country Club Dr / Main St
- Longmore Pocket: Between Sycamore St / Main St → Alma School Rd / Main St
- Dobson Interlock: Between Price 101 / Apache Blvd → Sycamore St / Main St

Central / Tempe Town Lake Section (BL-A-3)
(Dobson → Center Pkwy / Washington)

- River Interlock: Between Smith-Martin / Apache Blvd → Price 101 / Apache Blvd
- Dorsey Interlock: Between University Dr / Rural Rd → Dorsey Ln / Apache Blvd
- Mill Pocket Interlock: Between Mill Ave / 3rd St → Veterans Way / College Ave

Phoenix East Corridor (BL-A-4)
(Center Pkwy / Washington → 27th Ave / Washington)

- Yard Entrance Crossover: Between 50th St / Washington St → Priest Dr / Washington St
- 27th St Interlock: Between 24th St / Jefferson St → 38th St / Washington St

Downtown Phoenix Section (BL-A-5)
(27th Ave / Jefferson St → 3rd Ave / Washington St)

- 11th St Loop: Between 3rd St / Washington St → 12th St / Washington St & 3rd St / Jefferson St → 12th St / Jefferson St
- Jackson Interlock: Between Downtown Phoenix Hub (Jefferson / Washington) → 3rd Ave / Washington St → 1st Ave / Jefferson St

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