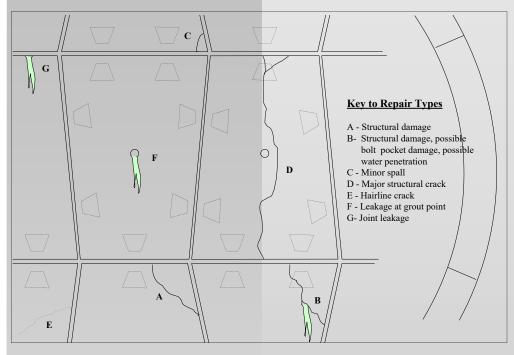
TECHNICAL REFERENCE

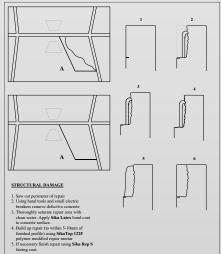


MRTA Initial System Project – Underground Structures North

In-situ Repairs To Tunnel Segments



A. Structural Damage



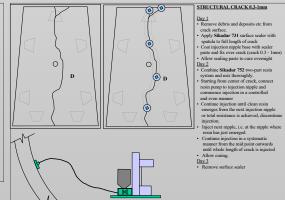
B. Structural Damage / Water Leak

STRUCTURAL DAMAGE / WATERLEAKAGE

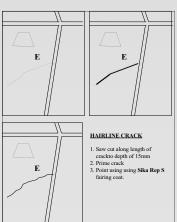
C. Minor Spall

MINOR SPALL 1. Saw cut perimeter of repair 2. Using hand tools and small electric breakers remove defective concrete 3. Thoroughly saturate repair area with clean water. Apply Sika Latex bond coat to concrete surface. 4. If necessary finish repair using Sika Rep S fairing out.

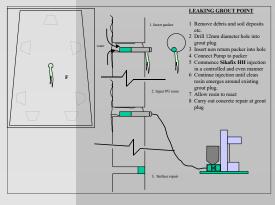
D. Structural Crack



E. Minor Crack



F. Leakage at Grout Point



G. Leakage at Segment Joint

