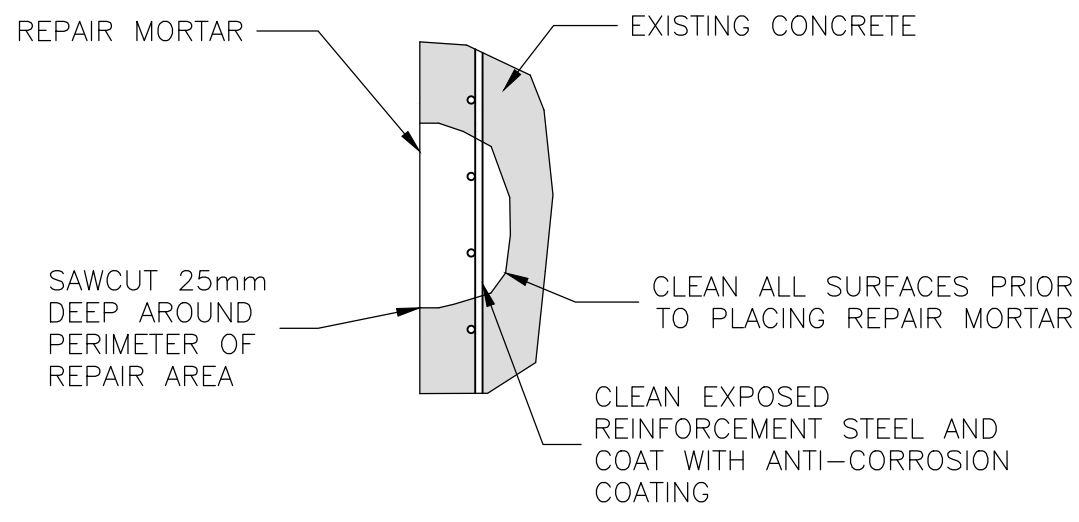


NOTES:

1. ALL SPALLS NEEDING SUCH REPAIR WILL BE IDENTIFIED BY THE ENGINEER ON SITE.
2. ALL CONCRETE DEMOLITION SHALL BE PERFORMED IN SUCH A WAY AS TO PRESERVE REINFORCEMENT

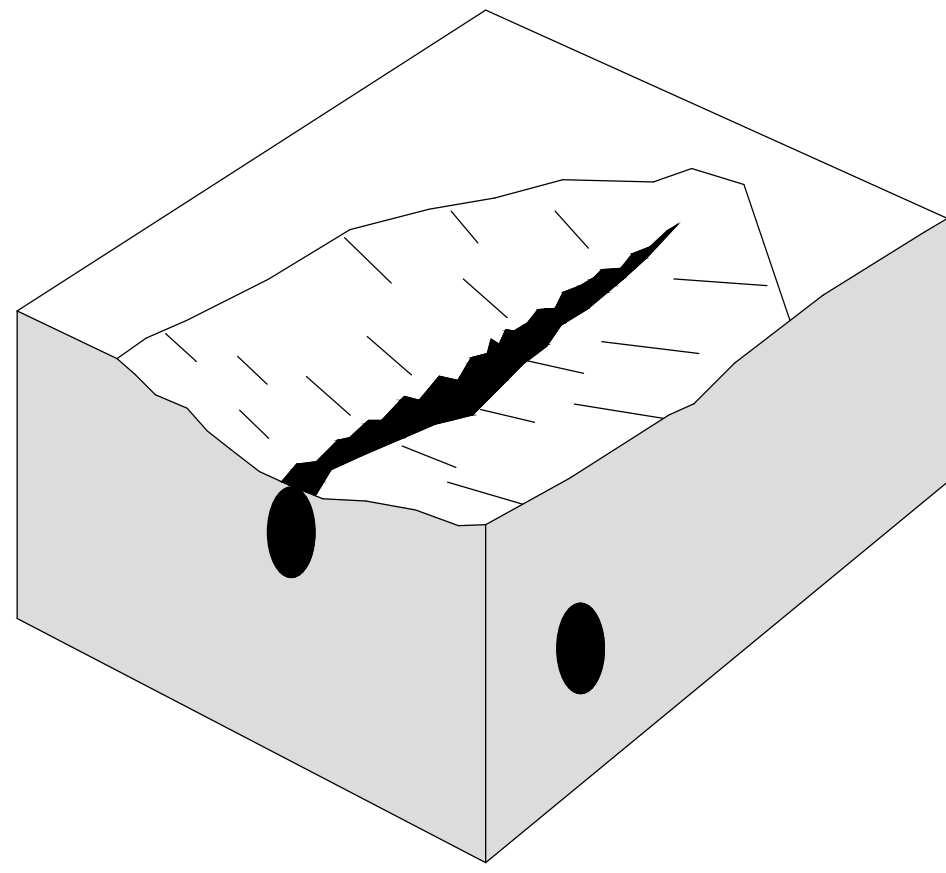
DETAIL 1  
SCALE 1:10



NOTES ON CONCRETE REPAIR WORK

PRIOR TO COMMENCEMENT CONTRACTOR TO SUBMIT METHOD STATEMENT FRO APPROVAL TO THE ENGINEER.

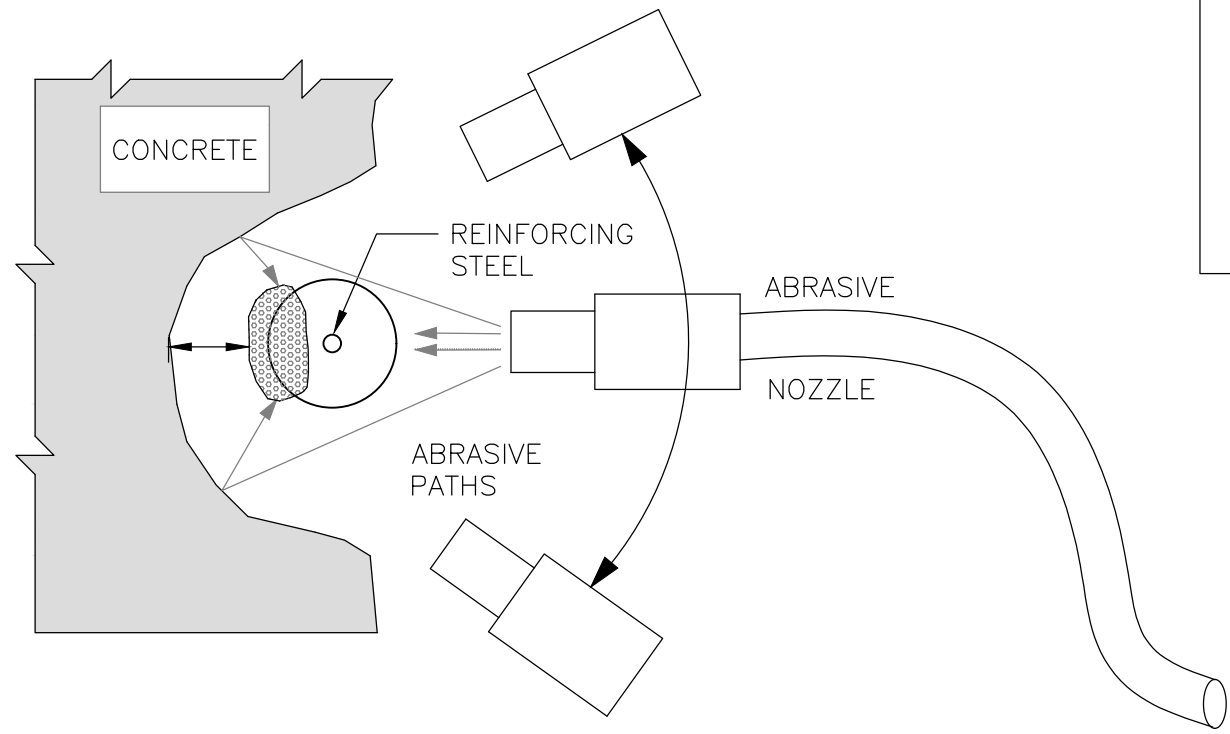
1. PREPARATION OF SURFACES
- 1.1. REMOVE ALL 'LAITANCE' AND DEGRADED SURFACE FROM THE CONCRETE. BY MEANS OF WATER JETTING OR DRY GRIT-BLASTING, THE SUBSTRATE MUST BE PREPARED MECHANICALLY TO REMOVE CEMENT LAITANCE AND ACHIEVE A PROFILE OPEN TEXTURED SURFACE.
- 1.2. LOCATE LOOSE PLASTER OR CONCRETE BY TAPPING (SOUNDING) ALL SUSPECT AREAS.
- 1.3. HACK OFF ALL LOOSE AND SPALLED MATERIAL TO FULLY EXPOSE ALL CORRODED STEEL REINFORCING BARS. CHASE A FURTHER 25mm INTO THE SOUND CONCRETE OVER THE WHOLE AREA AS WELL 50mm ADDITIONAL AT EACH END OF THE BAR.
- 1.4. ABRASE ALL CORRODED STEEL TO REMOVE THE RUST, EITHER BY GRIT-BLASTING OR BY NEEDLE DE-SCALING. A MIN. OF 95% OF THE RUST IS TO BE REMOVED DOWN TO BRIGHT STEEL IF THE STEEL IS BADLY CORRODED , REFER TO THE ENGINEER FOR REPLACEMENT ADVICE.
- 1.5. WHERE DIRECTED BY THE ENGINEER, ADDITIONAL REINFORCING STEEL MUST BE INTRODUCED AS PER THE RELEVANT SPALLING REPAIR DETAIL.



STEP 1  
REMOVE LOOSE OR DELAMINATED CONCRETE AND/OR CONCRETE AREAS IDENTIFIED BY THE ENGINEER

STEP 3  
ALL HEAVY CORROSION AND SCALE TO BE REMOVED USING HYDROJETTING (WITH GRIT) OR OTHER APPROVED METHOD TO ATTAIN BRIGHT STEEL CONDITION.

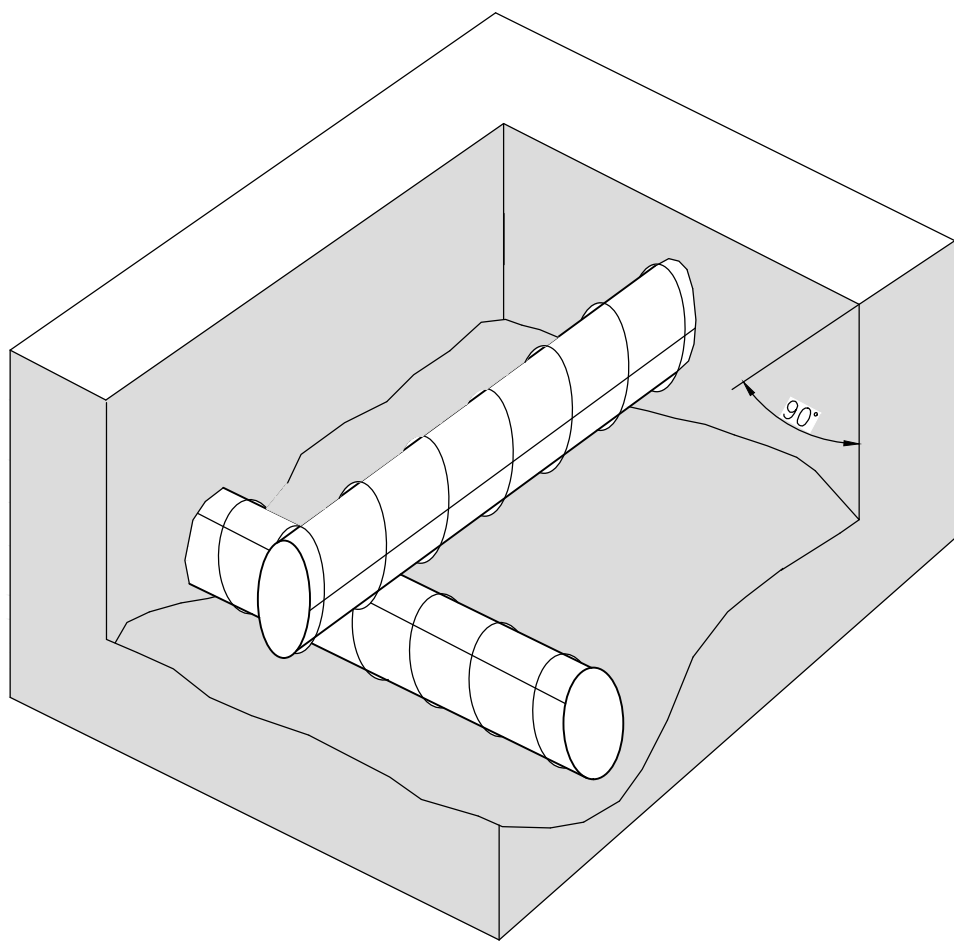
NOTE:  
IF REINFORCED STEEL HAS LOST SIGNIFICANT CROSS-SECTION (>15% OF DIAM) A STRUCTURAL ENGINEER SHOULD BE CONSULTED TO ADVISE THE ADDITION OF SUPPLEMENTAL REINFORCING BARS.



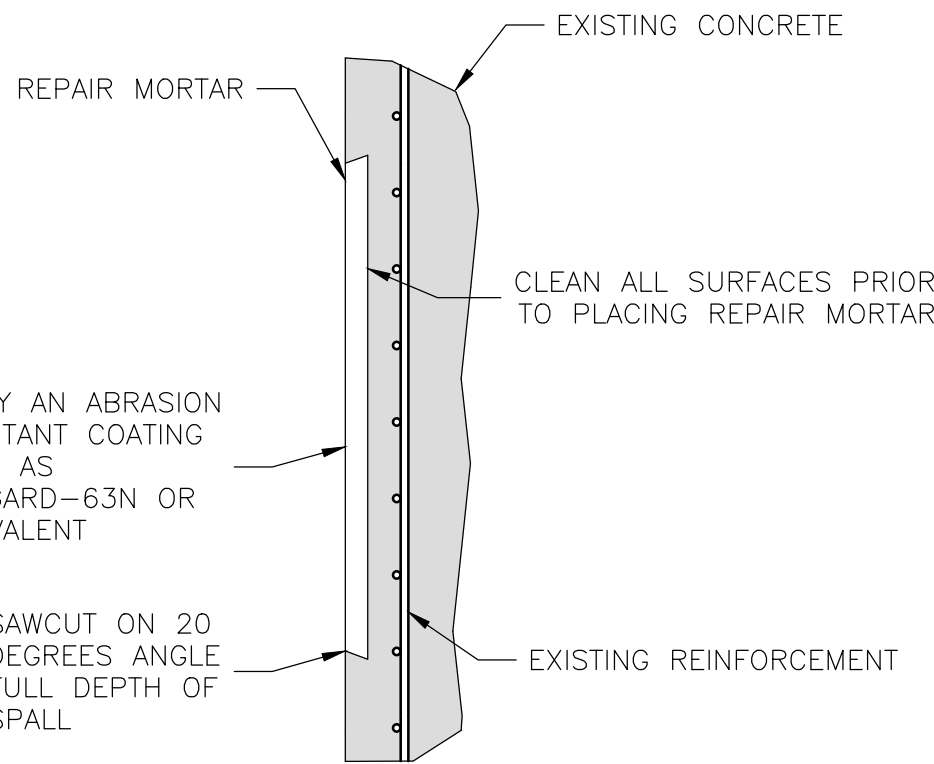
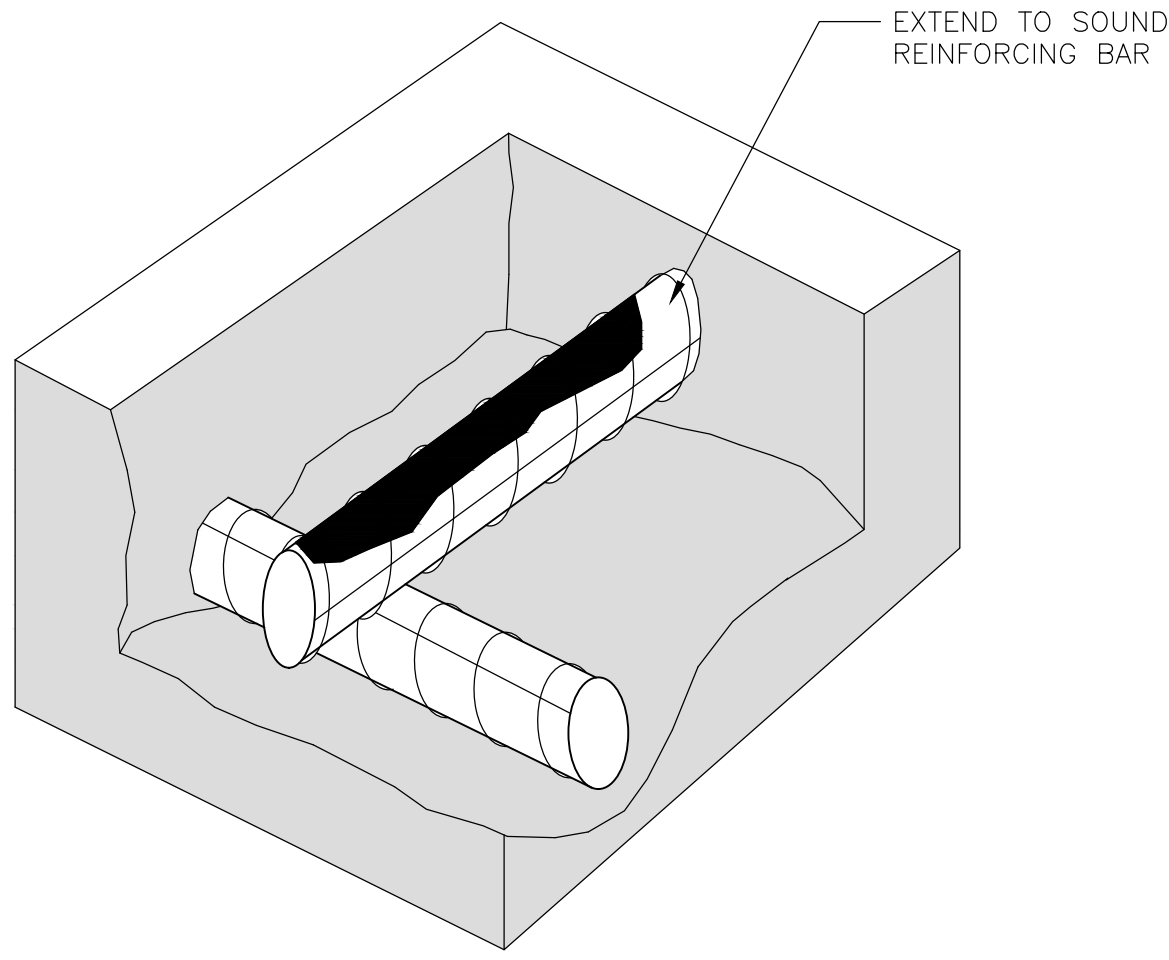
NOTES ON TREATMENT OF REINFORCING STEEL WORK

1. IMMEDIATELY AFTER REMOVAL OF RUST BY ABRASION, APPLY AN APPROVED ANTI-CORROSION COATING TO REINFORCEMENT AS PER MANUFACTURER INSTRUCTIONS.
2. AFTER THE ANTI CORROSION COATING HAS DRIED, FOR 'STRUCTURAL' REPAIRS, APPLY TO A PRE-DAMPENED SURFACE. PATCH AND REPAIR CONCRETE MORTAR TO THE REQUIRED THICKNESS. THE FINAL SURFACE TO BE FINISHED WITH A WOOD FLOAT.
3. PROTECT THE REPAIR WORK FROM RAPID EVAPORATION OF CONTAINED MOISTURE BY COVERING OR OTHER APPROVED METHOD OF CURING.

STEP 4  
AT EDGE LOCATIONS, PROVIDE RIGHT ANGLE CUTS TO THE CONCRETE SURFACE WITH SAWCUT 15mm OR LESS AS REQUIRED TO AVOID CUTTING REINFORCED STEEL.



NOTE:  
OVERALL REPAIR CONFIGURATION SHOULD BE KEPT AS SIMPLE AS POSSIBLE, PREFERABLY WITH SQUARED CORNERS. NO RE-ENTRANT CORNERS WILL BE ALLOWED.



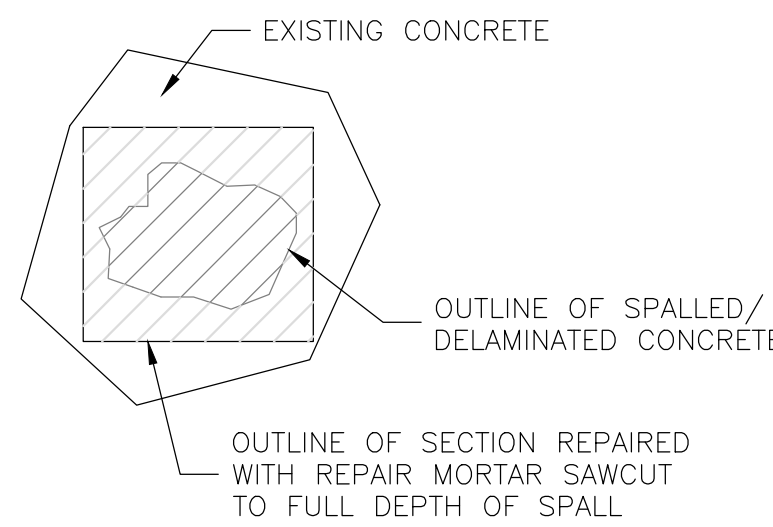
DETAIL 3  
SCALE 1:10

STEP 2  
SAW CUT REPAIR PERIMETER TO 10mm DEEP AT RIGHT ANGLES & BREAK-OUT CONCRETE AREAS IDENTIFIED BY THE ENGINEER, EXPOSE (TO 30mm OF UNRUSTED STEEL) AND UNDERCUT ALL CORRODED REINFORCING BARS.

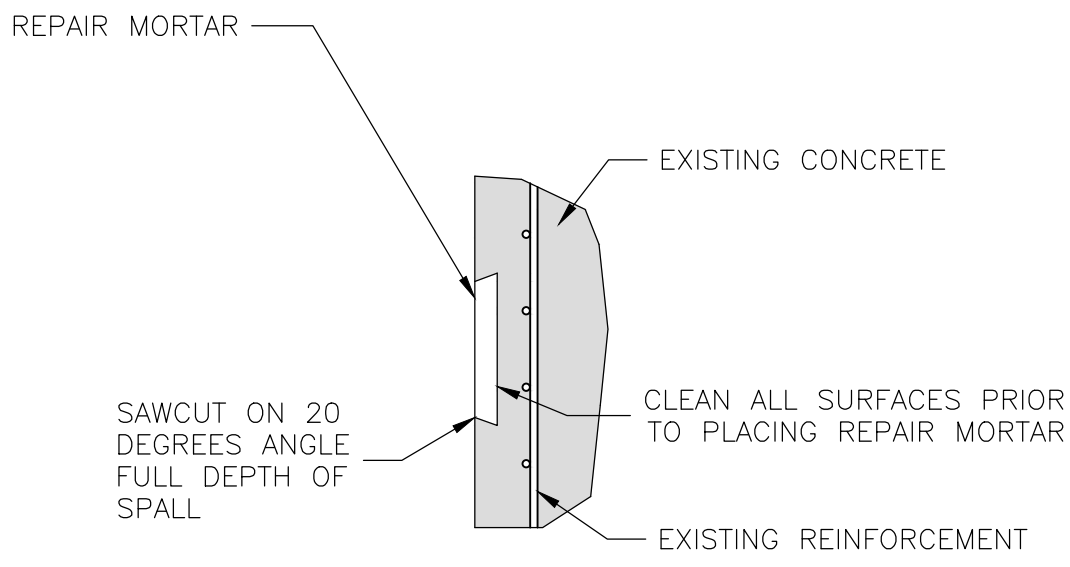
DETAIL 4  
TREATMENT OF CORRODED REINFORCING STEEL  
N.T.S

STEP 5  
COAT CLEANED AND DERUSTED REINFORCING STEEL WITH ANTI-CORROSION COATING (SIKATOP - ARMATEC 110 EPODEM OR APPROVED EQUIVALENT) TO THE SATISFACTION OF THE ENGINEER.

PROPOSED SPALLED / DELAMINATED CONCRETE REPAIR DETAILS



DETAIL 2  
SCALE 1:10

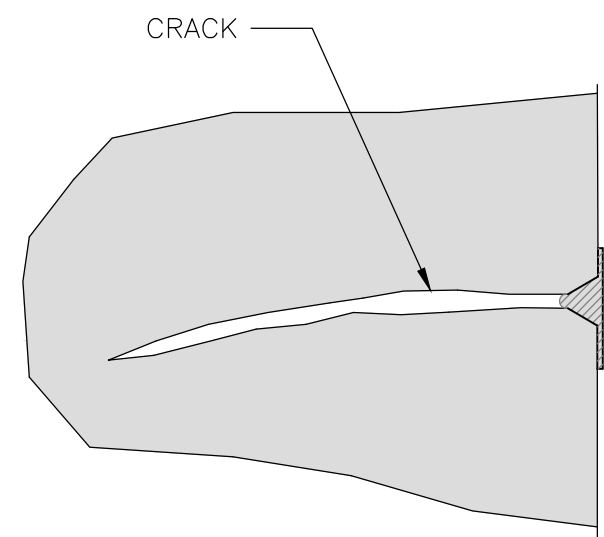


PROPOSED CRACK REPAIR DETAILS

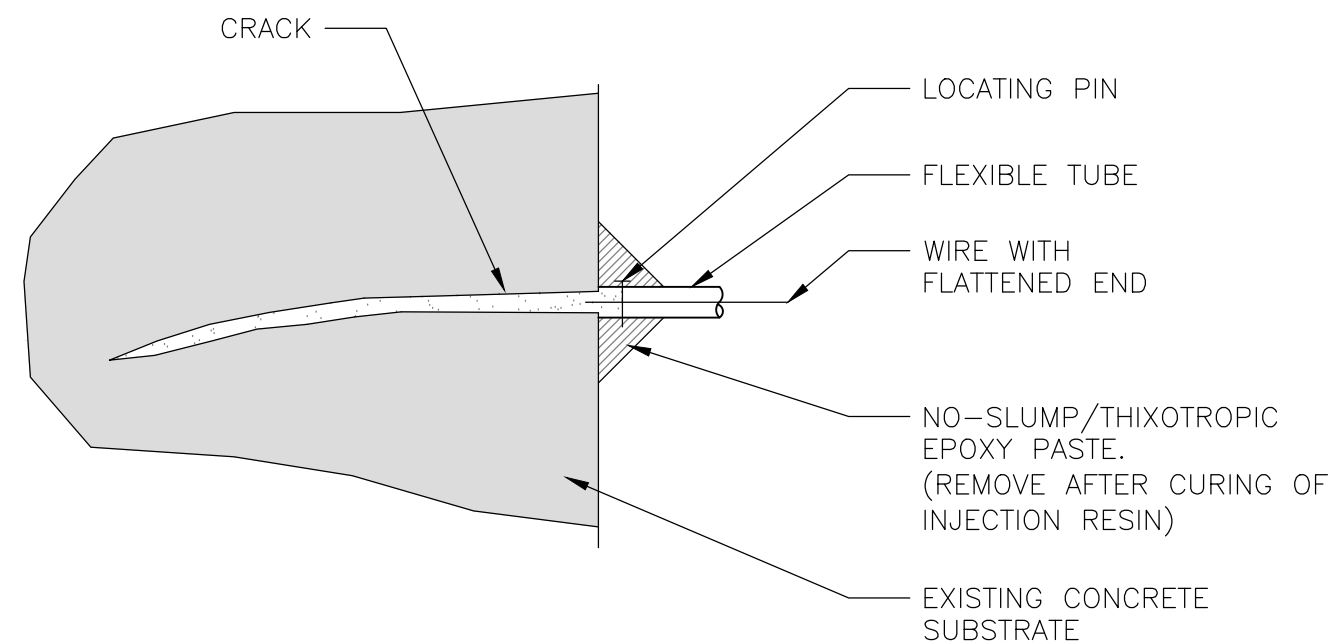
METHODS	APPLICATIONS
1. SEAL CRACKS	NON - STRUCTURAL CRACKS
2. SEAL + INJECT CRACKS	MINOR - STRUCTURAL CRACKS
3. CRACK REPAIR (INCL.SEAL+INJECT CRACKS)	MAJOR - STRUCTURAL CRACKS
	CORROSION - RELATED CRACKS TO BE TREATED AS SPALLED CONCRETE

NOTES ON CRACK REPAIR:

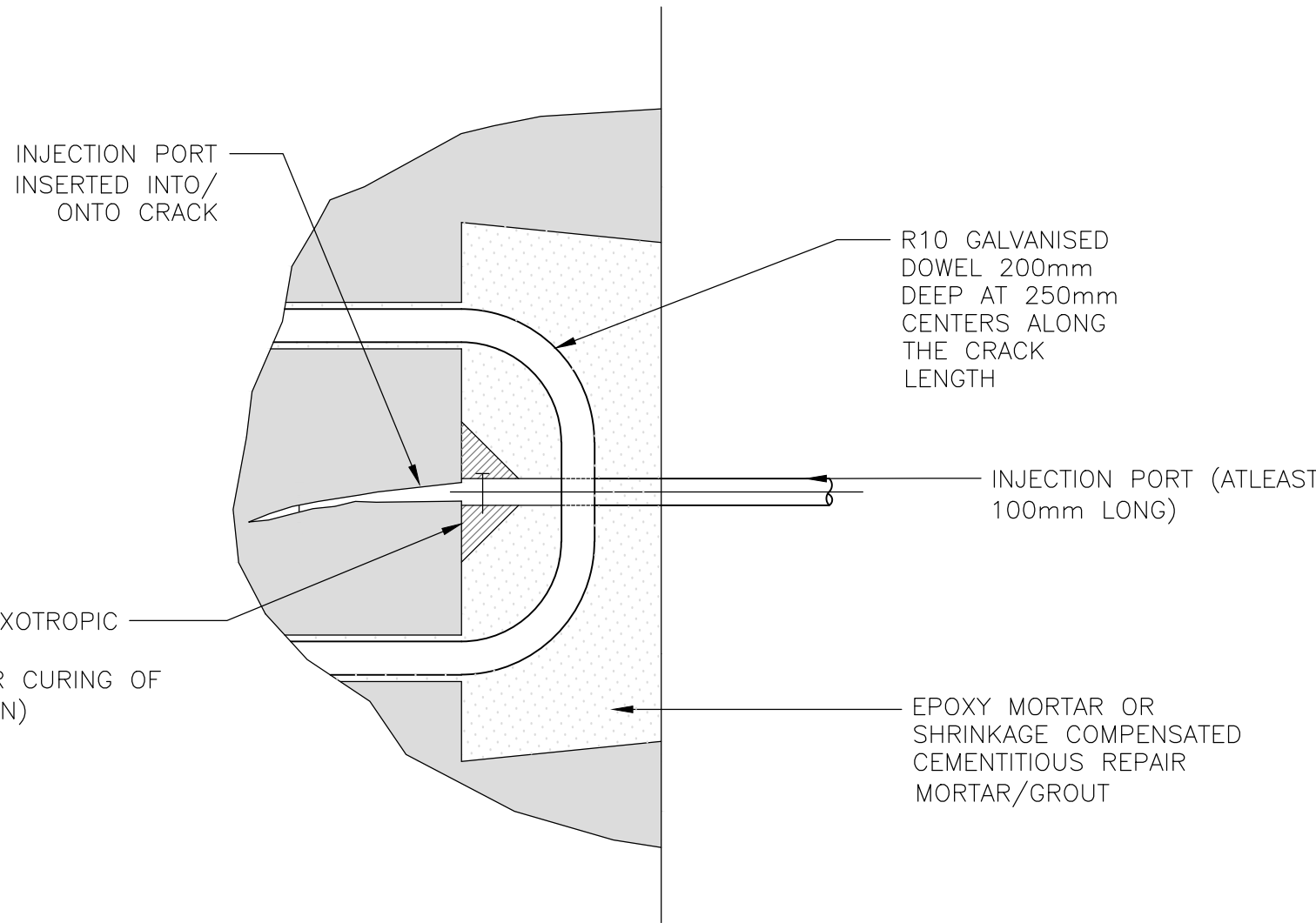
1. REPAIR CRACKS TO COTO SECTION 14.4 SURFACE REPAIR OF CONCRETE MEMBERS.
2. THIXOTROPIC EPOXY SEAL & INJECTOR PIPE ARE NOT TO BE INSERTED FLUSH WITH THE CRACK ENTRANCE.
3. CRACK INJECTION PROCEDURES AS SPECIFIED BY MATERIALS SUPPLIER ARE TO BE STRICTLY ADHERED TO.
4. WHERE INSTRUCTED BY THE ENGINEER, RESIN INJECTION SHALL BE CONFINED TO THE EXTENT OF THE INTENDED STRUCTURAL CRACK BY MEANS OF INDEPENDENT CUTS THROUGH THE COMPLETE DEPTH OF ANY BRANCH CRACKS AND THE CAULKING THEREOF USING THIXOTROPIC EPOXY SEAL.
5. THE EPOXY PASTE SEAL SHALL BE REMOVED BY MILD HEATING, UNTIL EPOXY PASTE SOFTENS, AND THEN SCRAPE OFF FLUSH. THIS SURFACE SHALL BE IMMEDIATELY FINISHED WITH WATER AND A RUBBING STONE.



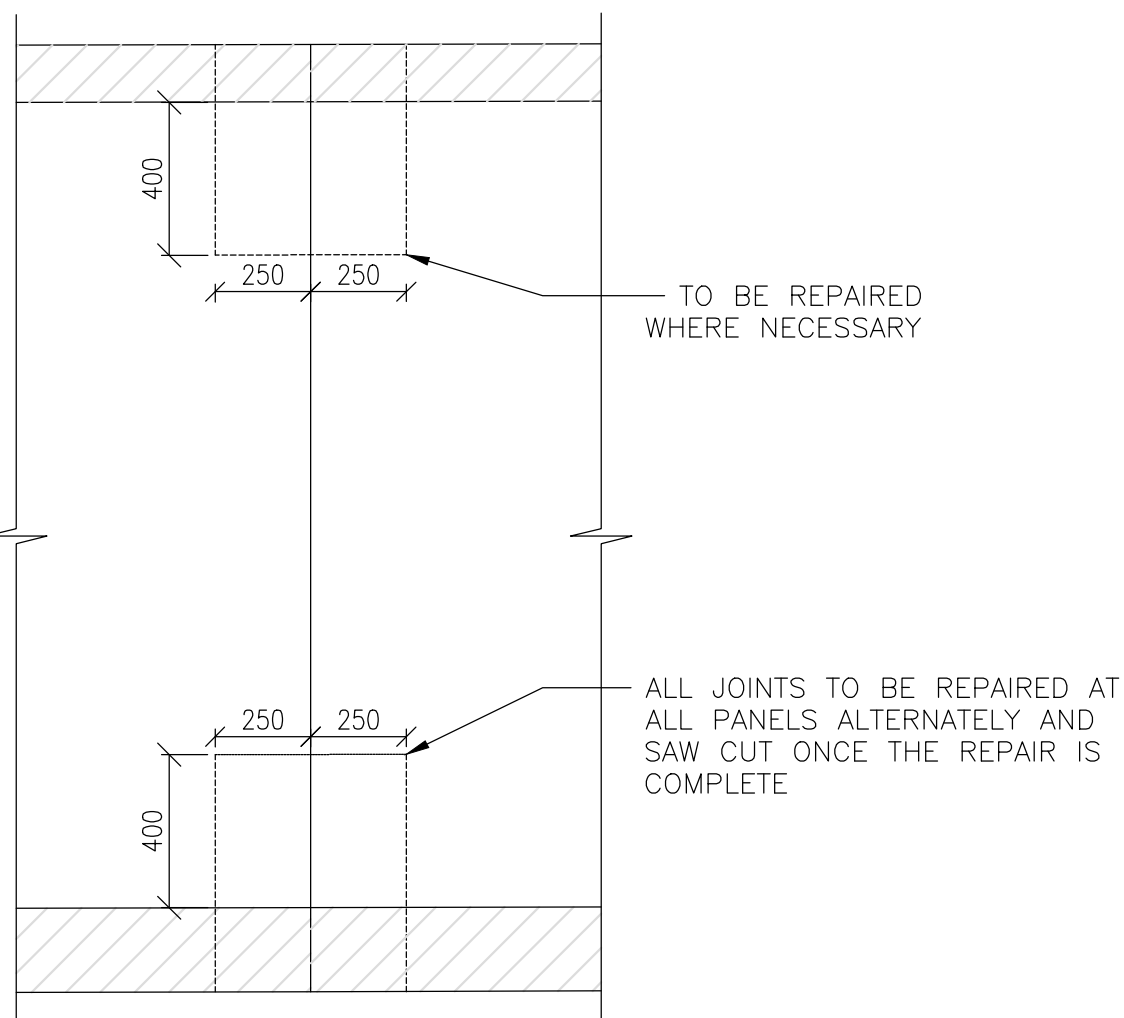
DETAIL 5  
(SEAL CRACK SURFACE)  
SCALE 1:10



DETAIL 6  
(INJECT AND SEAL CRACK SURFACE)  
SCALE 1:10




DETAIL 7  
(INJECTION AND EPOXY MORTAR PATCHING)  
SCALE 1:10



DETAIL 8  
SCALE 1:20

NOTE:  
REPAIR EXTENT TO BE CONFIRMED BY THE ENGINEER ON SITE

FOR TENDER

REVISIONS	NO	DATE	DESCRIPTION	EXAM	APP	H. SCHOLTZ DIRECTOR: ROADS INFRASTRUCTURE MANAGEMENT			CITY OF CAPE TOWN ROADS INFRASTRUCTURE MANAGEMENT		CONTRACT NO. 6Q/2025/26 STRUCTURES TERM TENDER		 <b>CITY OF CAPE TOWN</b> ISIXEKO SASEKAPA STAD KAAPSTAD <small>Making progress possible. Together.</small>	A0	SCALE	AS SHOWN
						DESIGNED BY								CoCT PROJECT NO.		S5023
						DRAWN BY	M. VILJOEN	JAN 2024						CoCT DRAWING NO.		5008
						CHECKED BY	W. KRIEL	JAN 2024						REVISIONS NO.		00
						APPROVED BY	S. MOHAMED	JAN 2024								
	00	AUGUST 2025	ISSUED FOR TENDER	S.M	S.M	CORR FILE	CORR FILE	EST. No								