

TYPICAL COLUMN ELEVATION - EXISTING
SCALE 1 : 20

TYPICAL COLUMN ELEVATION - REMEDIAL

DETAIL 
SCALE 1:5

SECTION 3a
SCALE 1:5

SECTION 2b
SCALE 1 : 5

SECTION 3b
SCALE 1:5

DETAIL 

SCALE 1 : 5

COLUMN REPAIR METHODOLOGY

- ENSURE PROPS ARE INSTALLED BEFORE STARTING ANY REMEDIAL WORKS,
- REMOVE HANDRAILS
- FOR EVERY ALTERNATIVE COLUMN, CAREFULLY CUT THE COLUMN CONCRETE WITH A SMALL SAW (10 CM ABOVE THE FIRST FLOOR SLAB) TO EXPOSE THE CORROSION OF THE REINFORCEMENT. TAKE GOOD CARE NOT TO DAMAGE REINFORCEMENT AND THE RWOP
- REMOVE THE EXPOSED CORROSION OF THE REINFORCEMENT USING ELECTRIC BREAKER BETWEEN THE CUT AND THE FIRST FLOOR UPSTAND. THE UPSTAND SHOULD ALSO BE DEMOLISHED, DEPENDING ON EXTENT OF CORROSION,
- REQUEST AN INSPECTION FROM THE ENGINEER TO DETERMINE IF SUFFICIENT CORROSION IS REMOVED.
- IF SUFFICIENT REINFORCEMENT BAR IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTION. (NOTE: FOR EXAMPLE, THE 1m BREAKING OF THE COLUMN, ASSUMES 520mm CORRODED REINFORCEMENT TO BE CUT AND 480mm TO BE USED FOR LAPPING), THEREFORE, IF CORROSION OF REINFORCEMENT IS MORE THAN 520mm, THE 1m CUTTING AND GRINDING OF THE COLUMN WILL HAVE TO BE DEMOLISHED
- REQUEST AN INSPECTION FROM THE ENGINEER TO REPAIR THE FULL BORE OUTLET, (WHERE APPLICABLE)
- INSTALL NEW SPLICE 2Y16 BARS ON THE OUTER EDGE AND OTHER 2Y16 BARS TO BE DOWELED IN USING ABE EPIBOND 350, OR SIMILAR APPROVED AS PER 2018 TEST ON DRAWING 2018-01-02. THE FULL BORE OUTLET SHOULD BE CAGED IN 10% STIRRUPS CAGED AT 200mm CENTRE
- REQUEST AN INSPECTION FROM THE ENGINEER TO REPAIR THE RWOP.
- REQUEST INSPECTION FROM THE ENGINEERING CONTRACTOR
- SHUTTER UPSTAND AND CAST WITH SELF-COMPACTING CONCRETE, GRADE 38/40mm,
- SHUTTER COLUMN AND CAST WITH SELF-COMPACTING CONCRETE, GRADE 35/9, THE MIX DESIGN MUST ALLOW FOR AN EARLY CHARACTERISTICS STRENGTH OF 30MPa AT 7 DAYS.
- WITH AN APPROVED CONCRETE FINISHER, FINISH THE EXPOSED SURFACE OF THE COLUMN
- REMOVE ALL SHUTTERING AFTER 3 DAYS AND PROCEED TO APPLY A UNIFORM 12mm PLASTER WITH AN APPROVED PLASTER
- PAINT AFTER TWO WEEKS OF CURING USING APPROVED PAINT
- REMOVE PROPS AS SOON AS THE REQUIRED STRENGTH IS ACHIEVED, SAY AT 14 DAYS AFTER WITH AN APPROVED PROPS REMOVAL COMPANY