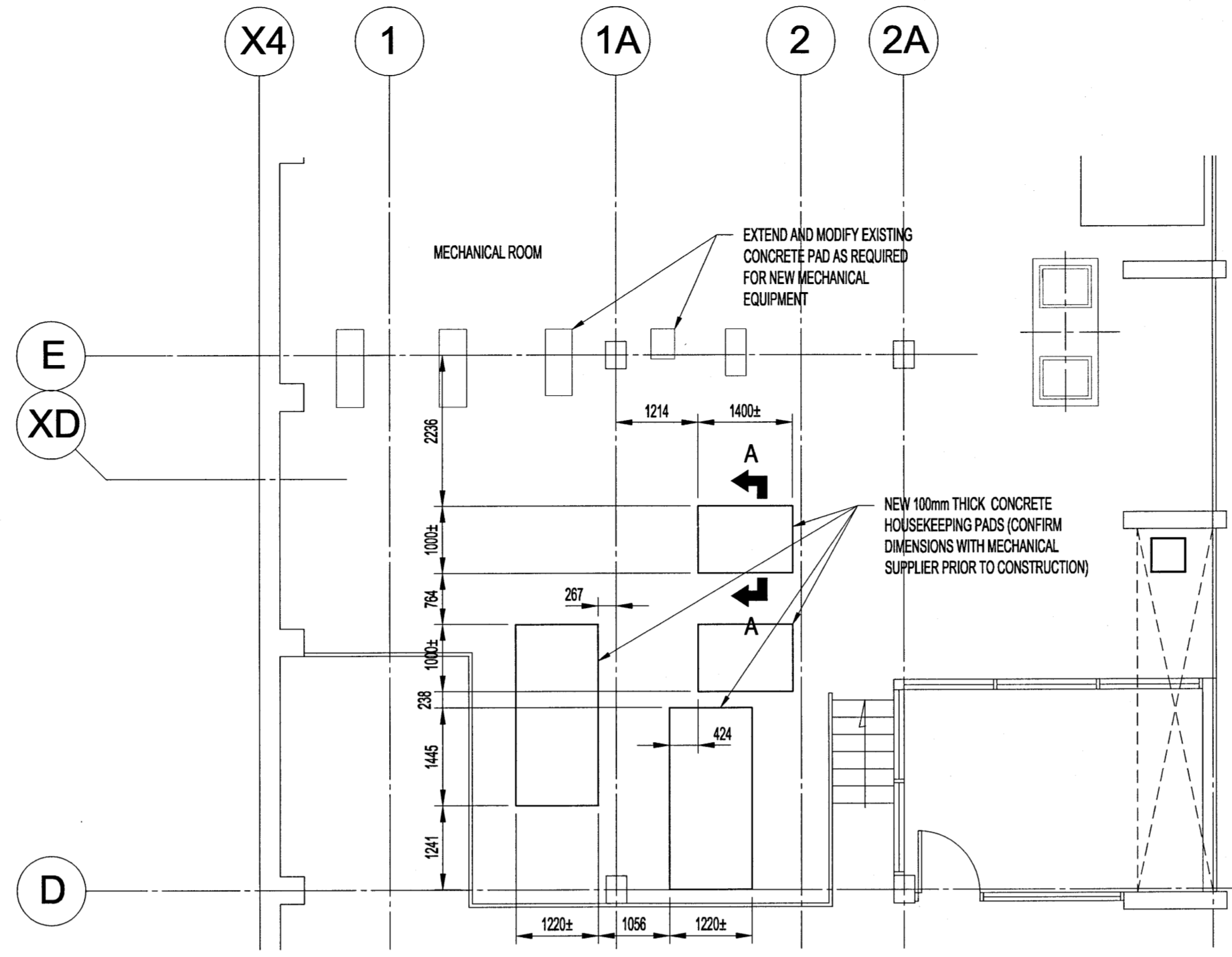
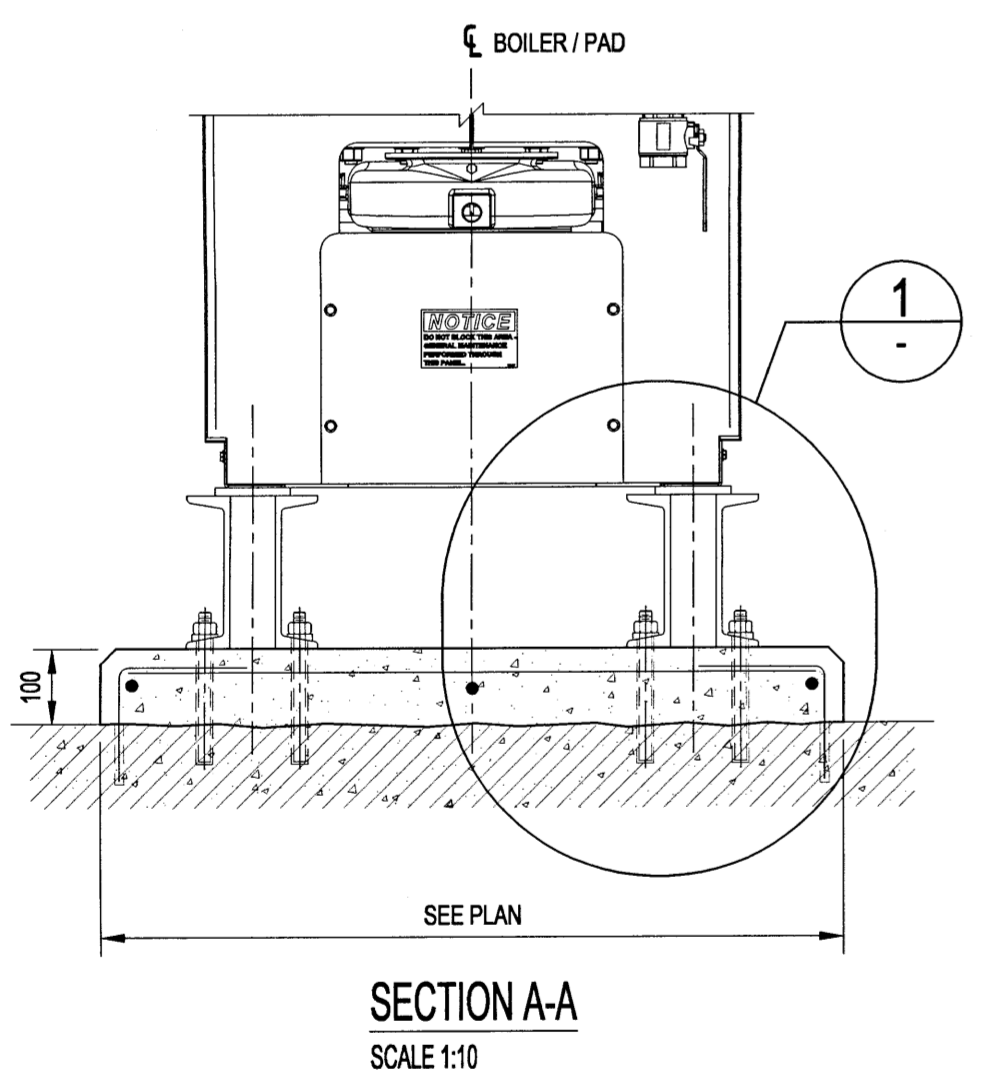


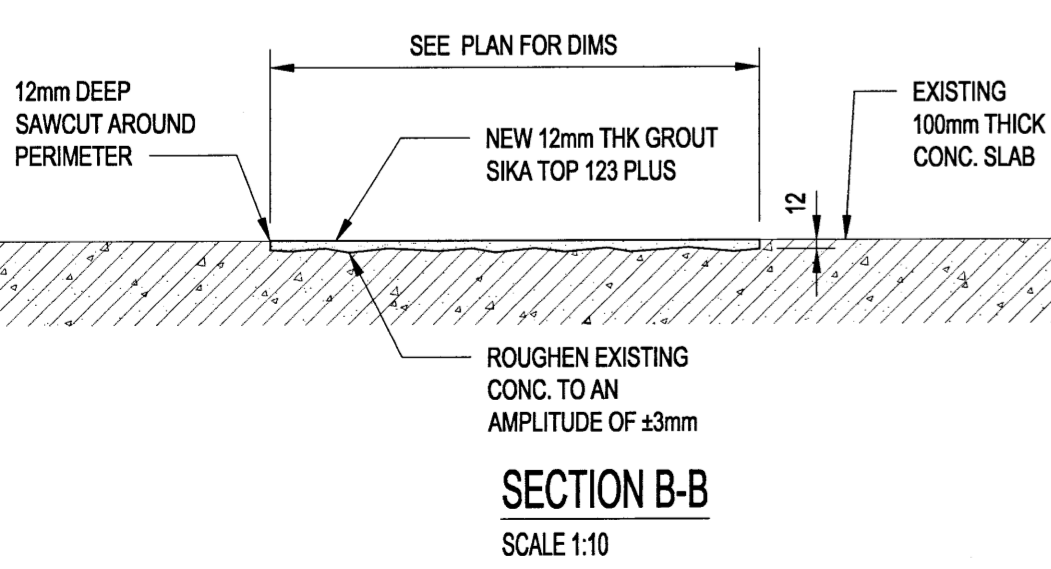
BOILER ROOM PLAN - DEMO
SCALE 1:75



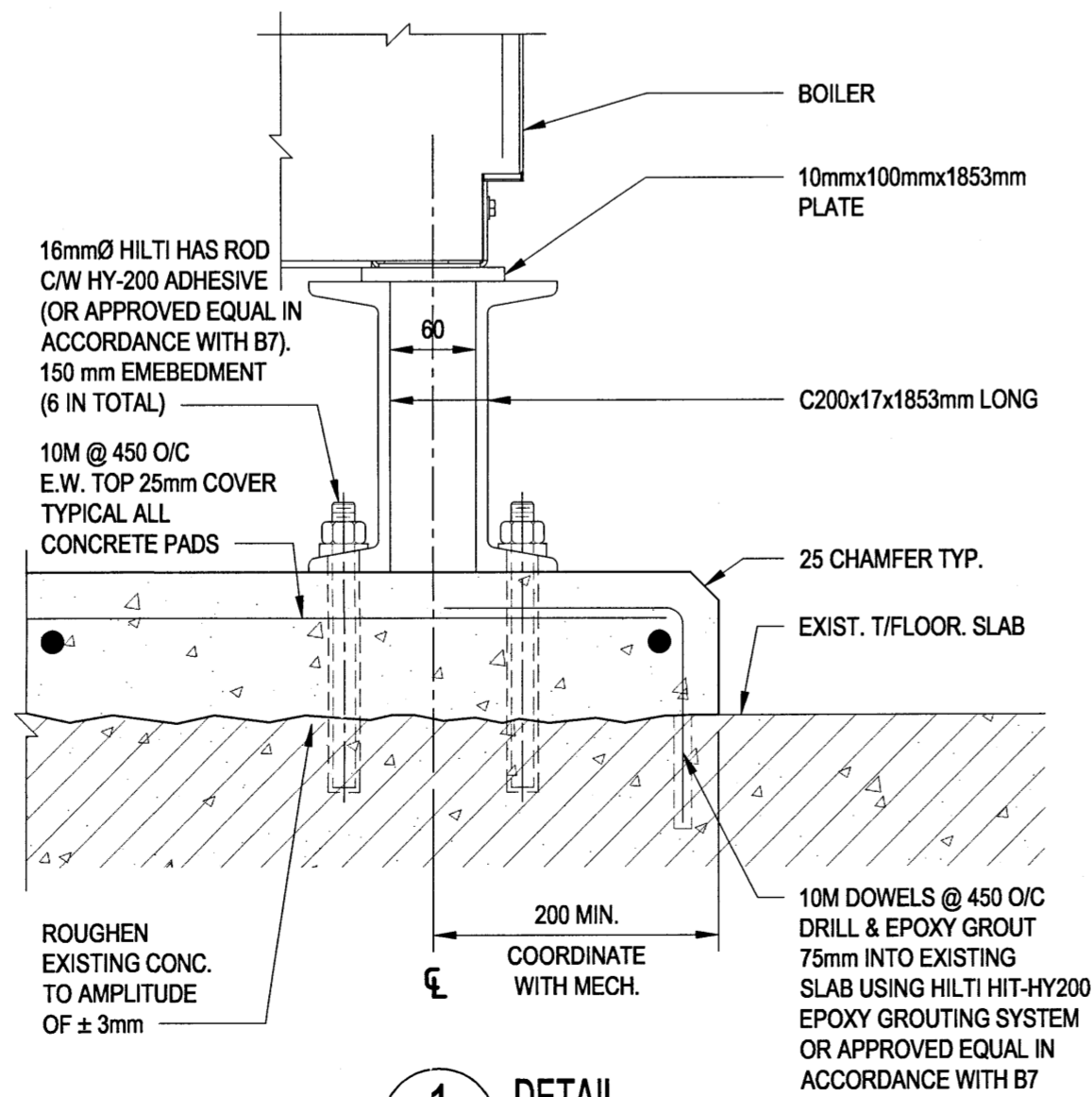
BOILER ROOM PLAN - NEW
SCALE 1:75



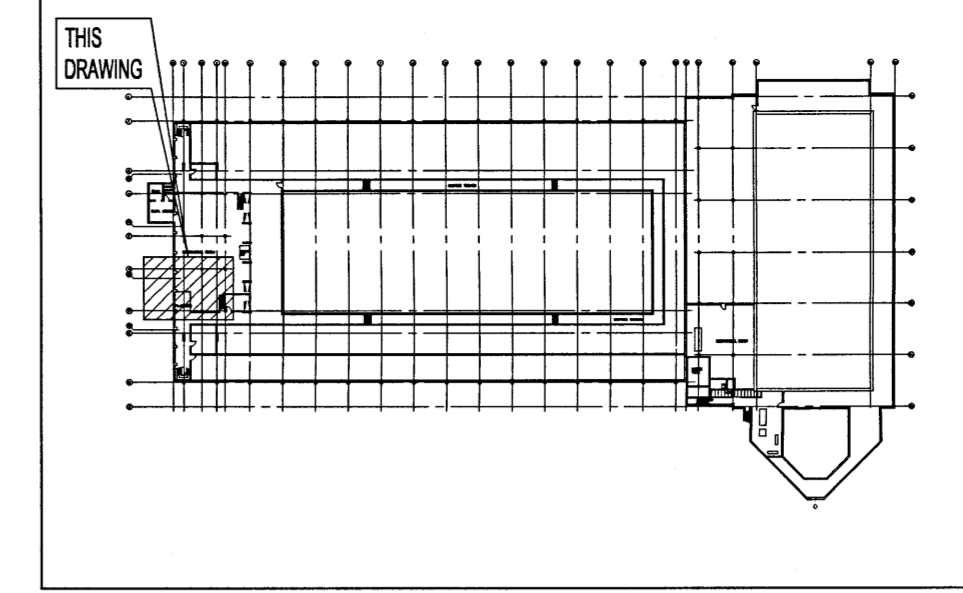
SECTION A-A
SCALE 1:10



SECTION B-B
SCALE 1:10



1 DETAIL
SCALE 1:5



KEY PLAN
SCALE: N.T.S.

CONCRETE:

- CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1-09 (R2014). SEE BELOW FOR MIX REQUIREMENTS.
- ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE CONTRACT ADMINISTRATOR. CALCIUM CHLORIDE SHALL NOT BE USED.
- MIX WATER SHALL BE POTABLE.
- DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CANCSA S269.3-MR2 (R2013). ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
- CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
- PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- PLACE AND SECURE ALL EMBEDDED ANCHORS, WELD PLATES, SLEEVES, BUCKS, DOWELS, INSERTS, WATERSTOPS, ETC. PRIOR TO PLACING CONCRETE. CO-ORDINATE WITH ALL TRADES FOR EMBEDDING OF ALL OTHER, CONDUIT, SERVICES, BLOCKING, ETC.
- LOCATE AND FABRICATE ALL CONSTRUCTION JOINTS, CONTROL JOINTS AND EXPANSION JOINTS AS DETAILED ON THE DRAWINGS. JOINTS NOT SHOWN SHALL BE APPROVED BY THE CONTRACT ADMINISTRATOR PRIOR TO THE PLACEMENT OF CONCRETE.
- ALL EXPOSED CORNERS TO HAVE 25mm CHAMFER FILLET UNLESS NOTED.
- CAST-IN-PLACE ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM A307-14.
- EXPANSION ANCHORS SHALL BE HILTI KWIK-BOLTS OR APPROVED EQUAL IN ACCORDANCE WITH B7, UNLESS NOTED. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.
- ADHESIVE ANCHORS SHALL BE HILTI HY200 HAS RODS OR APPROVED EQUAL IN ACCORDANCE WITH B7, UNLESS NOTED. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.
- GROUT REINFORCING DOWELS WITH EPOXY GROUT HILTI HIT-HY200, OR APPROVED EQUAL IN ACCORDANCE WITH B7. GROUT BASE PLATES WITH NON-SHRINK GROUT SIKAM-BED STANDARD, OR APPROVED EQUAL. PLACE AND CURE ALL GROUT WITHIN TEMPERATURE RANGE RECOMMENDED BY MANUFACTURER.
- BONDING AGENTS SHALL BE USED TO ADHERE NEW CONCRETE TO EXISTING CONCRETE OR STEEL. ACCEPTABLE PRODUCT: SIKADUR 32 HI-MOD (EPOXY) OR APPROVED EQUAL IN ACCORDANCE WITH B7.
- THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING ANY CONCRETE.
- PROVIDE 12mm FIBREBOARD ISOLATION JOINT BETWEEN CONCRETE SLAB ON GRADE AND STRUCTURAL COLUMNS, WALLS AND BEAMS.

CONCRETE MIX DESIGNS:

CONCRETE MIX DESIGN SHALL BE PROPORTIONED TO MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:

INTERIOR CONCRETE, ALL SLABS, WALLS, BEAMS & COLUMNS:

EXPOSURE CLASS	N
MIN. 28 DAY COMP. STRENGTH	30 MPa
CEMENT TYPE	GU
MAX. W/C RATIO	0.45
MAX. AGGREGATE SIZE	20mm
ENTRAINED AIR CONTENT	NA

CONCRETE SURFACE REPAIR:

- REMOVE EXISTING FINISH AS REQUIRED BY SCRAPING, HIGH-PRESSURE WASH OR APPROVED ALTERNATE METHOD IN ACCORDANCE WITH B7.
- SQUARE CUT PERIMETER OF LARGE REPAIR AREAS TO A MINIMUM 25mm DEPTH TO AVOID FEATHER EDGES.
- CHIP UNSOUND DETERIORATED CONCRETE TO A MINIMUM 25mm DEPTH.
- COMPLETELY EXPOSE ANY REINFORCING STEEL IF ENCOUNTERED DURING CONCRETE DEMOLITION TO ENSURE COMPLETE ENCAPSULATION WITH REPAIR MORTAR.
- REMOVE CORROSION FROM REINFORCING STEEL USING MECHANICAL ABRASION TECHNIQUES (WIRE BRUSH, BLASTING).
- LAP OR REPLACE EXISTING REINFORCING THAT HAS EXPERIENCED SIGNIFICANT SECTION LOSS.
- CLEAN THE ROUGHENED CONCRETE SURFACE OF DIRT, LOOSE CHIPS, DUST, OIL, ETC. BY PRESSURE WASH AND COMPRESSED AIR (CONTAIN ALL DEBRIS).
- FORM VERTICAL SURFACES AS REQUIRED AND CHAMFER TO MATCH EXISTING.
- DAMPEN SUBSTRATE WITH WATER AND THEN PRIME WITH BRUSH COAT OF STRUCTURAL REPAIR MORTAR.
- CAST REPAIR AREA WITH STRUCTURAL REPAIR MORTAR AS PER MANUFACTURER'S SPECIFICATIONS (SMALL AREAS MAY BE APPLIED BY HAND TROWEL).
- MOIST CURE REPAIR AREAS EXPOSED TO THE AIR FOR 3 DAYS AT A MINIMUM TEMPERATURE OF 10 DEGREES CELSIUS OR UNTIL MINIMUM OF 40% OF THE COMPRESSIVE STRENGTH OF THE CONCRETE IS ATTAINED.

REINFORCING STEEL:

- REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-09 (R2014). GRADE TO BE 400 MPa.
- REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
- WELDED STEEL WIRE FABRIC SHALL CONFORM TO A1064A1064M-14, 400 MPa MINIMUM GRADE IN FLAT SHEETS ONLY UNLESS APPROVED OTHERWISE.
- SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES, SPACINGS, LOCATIONS & QUANTITIES OF REINFORCING STEEL, BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION. DETAIL, FABRICATE AND PLACE REINFORCING IN ACCORDANCE WITH CSA A23.1-09 (R2014), CSA A23.3-14 AND ACI SP-46 (2004) UNLESS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) UNLESS NOTED.
- TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER.
- PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:
SLAB-ON-GRADE (TOP) 25mm
SLAB-ON-GRADE (BOTTOM) 25mm

NOTES:
THESE DRAWINGS SHALL NOT BE SCALED.
THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.
THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS, WALLS, AND CEILINGS FOR DUCT, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS.
ALL OPENINGS THROUGH THE FIRE SEPARATIONS AS A RESULT OF THE WORK OF THIS CONTRACT ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE AND SMOKE-TIGHT BARRIER.
ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.
THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE RENOVATION WORK.
WHERE NEW FLOORING AND BASE IS TO BE INSTALLED IN EXISTING AREAS (REFER TO FLOOR PLAN AND ROOM SCHEDULE) THE EXISTING FLOORING SURFACE AND BASE MUST BE REMOVED, UNLESS OTHERWISE NOTED. ALL FLOOR SURFACES SHALL BE PREPARED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF NEW FLOOR.
WHERE PAINTING OF EXISTING WALLS IS INDICATED ON THE ROOM SCHEDULE, THESE WALLS MUST BE CLEANED OF ANY EXISTING WALL COVERING, PATCHED & PREPARED TO ACCEPT NEW MATERIAL, UNLESS OTHERWISE NOTED.

STRUCTURAL AND MISCELLANEOUS STEEL:

- STRUCTURAL AND MISCELLANEOUS STEEL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH CANCSA S16 (LATEST).
- STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF CANCSA G40.20/G40.21 (LATEST)
ROLLED W-SHAPES CSA G40.21-350W
ROLLED SHAPES & PLATES CSA G40.21-300W
HSS SECTIONS CSA G40.21-350W CLASS C
BOLTS, NUTS, & WASHERS ASTM A325
WELDING ELECTRODES CSA W48
- WELDING SHALL BE IN ACCORDANCE WITH CSA W59 (LATEST), BY WELDERS CERTIFIED AND QUALIFIED IN ACCORDANCE WITH CSA W47.1 (LATEST). ALL WELDS TO BE 6mm UNLESS NOTED OTHERWISE.
- STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FINISHED AS INDICATED BELOW, UNLESS OTHERWISE NOTED, OR APPROVED EQUAL IN ACCORDANCE WITH B7:
INTERIOR STEEL (INDUSTRIAL)
- SURFACE PREP. TO SP6 (COMMERCIAL BLAST)
- ONE PRIME COAT INTERZING S2 ZINC-RICH EPOXY (2.5 MIL DFT.)
- ONE FINISH COAT INTERGARD 945 HIGH BUILD EPOXY (6.0 MIL DFT.)
5. COLOUR OF STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE AS FOLLOWS:
- STRUCTURAL STEEL - EPOXY PAINT-BLACK
6. FIELD TOUCH-UP PAINT TO CONNECTIONS, WELDS, BURNED OR DAMAGED SURFACES, AND UNFINISHED SURFACES AT COMPLETION OF ERECTION AND SHALL MATCH THICKNESS AS SPECIFIED.

No.	REVISION/DESCRIPTION	BY	DATE
0	ISSUED FOR TENDER		18/1/28



DRAWN	CHECKED	DESIGNED	APPROVED
DATE	2016.04.29	USER	APPROVAL

THE CITY OF WINNIPEG
PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT
MUNICIPAL ACCOMMODATIONS DIVISION
3-65 GARRY STREET, R3C 4K4

PROJECT
REPLACEMENT OF DOMESTIC HOT WATER SYSTEM AT PAN AM POOL
25 POSEIDON BAY

SHEET TITLE
STRUCTURAL BOILER ROOM PLAN DEMOLITION / NEW CONCRETE PAD

SCALE	PROJECT No:	SHEET No:
AS SHOWN	16-0107-026	S04

