

RECONSTRUCTION PLAN

SCALE: 1:100

# FOUNDATIONS (C.I.P. CONCRETE PILES):

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS AND THE PILING SPECIFICATION.
- FOUNDATIONS SHALL BE CAST—IN—PLACE CONCRETE FRICTION PILES AS SHOWN ON DRAWINGS.
- CONCRETE PILES HAVE BEEN DESIGNED FOR AN SLS AND ULS SKIN FRICTION VALUE OF 13kPa.
- . INSTALLATION OF ALL CONCRETE PILES SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA, PRIOR TO PLACEMENT OF CONCRETE.
- 5. THE PILING CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND SERVICES IN PILING AREA WHETHER SHOWN OR NOT. EXPOSE ALL SERVICES CLOSE TO PILING AS REQUIRED.
- PILES SHALL NOT BE MORE THAN 50mm OUT OF POSITION LATERALLY AT THE TOP AND NOT MORE THAN 2% OUT OF PLUMB.
- REINFORCE ALL PILES AS DETAILED ON THE DRAWINGS. REFER TO CONCRETE NOTES FOR CONCRETE REQUIREMENTS. INSTALL EACH PILE AS A CONTINUOUS
- 8. VIBRATE TOP 4.5m OF CONCRETE IN ALL PILES.
- 9. SLEEVING WHERE REQUIRED SHALL BE INCLUDED IN THE

## REINFORCING STEEL:

SCALE: 1:100

1. REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-09 (R2014). GRADE TO BE 400 MPa.

DEMOLITION PLAN

- REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
- 3. SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAY SIZES, SPACINGS, LOCATIONS & QUANTIFIES 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—66 (2004) UNILESS 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:

C.I.P. PILES	75mm
PILE CAPS	75mm
WALL BEAMS (SIDES)	38mm
WALL BEAMS (BOTTOM)	64mm
SLAB-ON-GRADE (TOP)	50mm
SLAB-ON-GRADE (BOTTOM)	75mm

### CONCRETE:

- 1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1-09 (R2014). SEE BELOW
- ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE DESIGN ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED.
- 3. MIX WATER SHALL BE POTABLE.
- DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S269.3-M92 (R2013). ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO

  TO SECOND T
- 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.
- SAWCUTS TO BE 3mm WIDE X 25mm DEEP, SPACED AS NOTED ON DRAWINGS, WITHIN 24 HOURS OF POUR.
- GROUT REINFORCING DOWELS WITH EPOXY GROUT HILTI HIT-HY200 MAX, OR APPROVED EQUAL.
- BONDING AGENTS SHALL BE USED TO ADHERE NEW CONCRETE TO EXISTING CONCRETE OR STEEL. ACCEPTABLE PRODUCT: SIKADUR 32 HI—MOD (EPOXY), SIKA LATEX R (ACRYLIC, MIX INTO GROUT) OR
- THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- 13. THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING

## CONCRETE MIX DESIGNS:

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

C.I.P. PILES. PILE CAPS AND WALL BEAMS:

ENTRAINED AIR CONTENT

EXPOSURE CLASS	5-2
MIN. 28 DAY COMP. STRENGTH	30 MP
MIN. 56 DAY COMP. STRENGTH	32 MP
CEMENT TYPE	HS
MAX. W/C RATIO	0.45
LULY LOCDECLITE CITE	20

#### EXTERIOR SLABS (NON-STRUCTURAL):

MIN. 28 DAY COMP. STRENGTH CEMENT TYPE	32 MPa GU
MAX. W/C RATIO	0.45
MAX. AGGREGATE SIZE	20mm
ENTRAINED AIR CONTENT	5%-8%

4%-7%



A YY/MM/DD REVISIONS / ISSUE SCATLIFF + MILLER + MURRAY Inc. AIR CANADA WINDOW PARK

SITE REDEVELOPMENT WINNIPEG, MB

18-0109-008 SO1

STRUCTURAL DEMOLITION & RECONSTRUCTION PLANS, SECTIONS & DETAILS

AUTHENTICATION FOR CURRENT REVISION

GROUP CONSULTING ENGINEERS

18/05/07 MBB 18/09/07 A

**PRELIMINARY** NOT TO BE USED FOR CONSTRUCTION