

### **GENERAL NOTES:**

- 1. SITE VERIFY ALL DIMENSIONS, ELEVATIONS, PREFABRICATION OF ANY BUILDING OR STRUCTURAL COMPONENT.
- EQUIPMENT, ETC. AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- ETC. SHALL BE CARRIED OUT IN ACCORDANCE BYLAWS AND ORDINANCES.
- ADEQUATE PROTECTION FOR THE EXISTING FACILITY/PROPERTY TO PREVENT PHYSICAL KIND, AS A RESULT OF DEMOLITION, CONSTRUCTION AND RELATED ACTIVITIES.
- 5. TIME AND DURATION OF ANY NECESSARY SERVICE, EQUIPMENT, ETC. SHALL BE COORDINATED WITH. AND APPROVED BY THE REQUIRED) PRIOR TO EACH ACTUAL OCCURRENCE.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION, OR AS SOON AS IT IS DISCOVERED.
- 7. CONTRACTOR TO SCHEDULE REINFORCEMENT

#### EXCAVATION & BACKFILL:

- AND ORGANICS IN AREAS THAT REQUIRE TO 95% STANDARD PROCTOR DENSITY. SUB-EXCAVATE AND REPAIR ALL AREAS EXHIBITING UNSUITABLE DEFLECTIONS.
- BE COMPACTED TO 98% STANDARD PROCTOR DENSITY IN MAXIMUM 150mm LIFTS.
- ON FROZEN SUBGRADE.
- 4. SUB-GRADE, SUB-BASE AND BASE COURSE BE AS PER CITY OF WINNIPEG SPECIFICATION CW3110, SPECIFICATION UNLESS NOTED.
- 5. SUBGRADE AND BASE COURSE INSTALLATION SHALL BE INSPECTED AND APPROVED BY A PROVINCE OF MANITOBA, AT CONSTRUCTION ENGINEER, BEFORE WORK IS TO COMMENCE.
- 6. CONTRACTOR SHALL ARRANGE AND PAY FOR INSTALLING REINFORCEMENT.

#### CONCRETE MIX DESIGNS:

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

EXTERIOR SLABS (STRUCTURAL):

EXPOSURE CLASS C-1MIN. 56 DAY COMP. STRENGTH 35 MPa

MIN. 300mm COMPACTED GRANULAR A-BASE MATERIAL PLACED IN MAX. 150mm LIFTS, COMPACTED TO 98% SPD

- PANEL DOOR

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

ELECTRICAL PANEL

600mm EDGE DISTANCE IN

FRONT OF PANEL DOOR TO

SURFACE. 150mm EDGE

10M @ 200mm 0/C E.W.

RESTORE TO ORIGINAL

TOP & BOT.

CONDITION

6 MIL.POLY

SLOPE DN.

NOTE:

V.P.

PROVIDE CONCRETE WORKING

DISTANCE ALL OTHER SIDES.

(REFER TO ELECTRICAL DRAWING REF. 2)

REFER TO ELECTRICAL DRAWING REF.1 FOR FINAL EQUIPMENT LOCATIONS. EQUIPMENT DIMENSIONS AND LOCATION TO BE VERIFIED WITH CERTIFIED EQUIPMENT SHOP DRAWINGS PRIOR TO CONCRETE POUR.

800	B.M. ELEV.					KGS GROUP				ENGINEER'S SEAL	
FIGINEERS GEOSCIENTISTS MANITOBA ficate of Authorization KGS Group No. 245							DESIGNED BY DRAWN BY	D. SCHMIDT E. MALANG	CHECKED BY APPROVED BY	C. SIEPMAN C. SIEPMAN	CONSULTANT DRAWING NUMBER
	0 NO.	ISSUED	FOR CONSTRUCTION REVISIONS		24/01/11 DATE	BY	SCALE: HORIZONTAL VERTICAL DATE	AS SHOWN 2023/03/07	RELEASED F CONSTRUCT		

NOTE:

RESTORE ALL DISTURBED SURFACES IMPACTED

CONDITIONS PRIOR TO CONSTRUCTION, WITH THE

BY CONSTRUCTION ACTIVITIES TO ORIGINAL

EXCEPTION OF MODIFICATIONS/UPGRADES

INDICATED ON THE CONTRACT DRAWINGS.

DETAILS. QUANTITIES AND CONDITIONS PRIOR TO START OF ANY DEMOLITION, CONSTRUCTION OR

2. SHIP, STORE, HANDLE, ERECT, INSTALL, ETC. ALL BUILDING MATERIALS. COMPONENTS. FIXTURES.

3. ALL DEMOLITION, FABRICATION, CONSTRUCTION, WITH ALL PERTINENT BUILDING CODES, AND LOCAL

4. EACH TRADE SHALL BE RESPONSIBLE TO PROVIDE DAMAGE AND LOSS OF VALUE OR USE OF ANY

DISRUPTION IN THE USE OF ANY ROOM, SPACE, OWNER AT THE START OF THE PROJECT. PROVIDE OWNER WITH MINIMUM ONE WEEK NOTICE (OR AS

NOTIFY THE OWNER AND THE DESIGN ENGINEER OF ANY PREVIOUSLY UNNOTICED PRE-EXISTING FLAW OR CONDITION THAT MIGHT INCREASE THE SCOPE OF WORK OR COMPROMISE NEW CONSTRUCTION,

INSPECTIONS WITH CONSULTANT AT LEAST 24 HRS BEFORE CONCRETE POUR. 24 HRS NOTICE TO BE GIVEN TO CONSULTANT PRIOR TO INSPECTION.

1. REMOVE ALL FILL MATERIALS, DELETERIOUS SOILS GRANULAR BASE MATERIALS. COMPACT SUBGRADE

2. GRANULAR BASE TO BE PLACED ON GRADE SHALL

3. DO NOT COMPACT FROZEN BACKFILL OR PLACE

MATERIALS AND CONSTRUCTION METHODS SHALL

GEOTECHNICAL ENGINEER, REGISTERED IN THE PHASES AS DETERMINED BY THE GEOTECHNICAL CONTRACTOR SHALL PAY COST OF INSPECTIONS.

COMPACTION TESTING. PROVIDE COMPACTION TEST REPORTS TO CONSULTANT FOR REVIEW PRIOR TO

## **REINFORCING STEEL:**

- 1. REINFORCING STEEL SHALL BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-09 (R2014). GRADE 400 MPa.
- 2. 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 INDICATED 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-66 (2004) UNLESS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) AS REQUIRED, UNLESS NOTED.
- 4. 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.
- 5. PROVIDED MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

SLAB-ON-GRADE (TOP/BOT/SIDES) 60mm

# <u>CONCRETE:</u>

- 1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1-09. SEE BELOW FOR MIX REQUIREMENTS.
- 2. 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.
- 4. DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S269.1-09. ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
- 5. CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1-09.
- 6. FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
- 7. PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- 8. 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.
- 9. LOCATE AND FABRICATE ALL CONSTRUCTION JOINTS, CONTROL JOINTS AND EXPANSION JOINTS AS DETAILED ON THE DRAWINGS. JOINTS NOT SHOWN SHALL BE APPROVED BY THE DESIGN ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE.
- 10. ALL EXPOSED CORNERS TO HAVE 25mm CHAMFER UNLESS NOTED.
- 11. THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1-09.
- 12. THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING ANY CONCRETE
- 13. CONCRETE STRENGTH TESTS SHALL BE ARRANGED BY THE CONTRACTOR. PROVIDE ONE SET OF TEST CYLINDERS IN ACCORDANCE WITH CSA A23.1-09 FOR EVERY 50 CUBIC METERS OF CONCRETE PLACED AND A MINIMUM OF ONE SET PER STRUCTURAL COMPONENT.

