

**DEMOLITION**

**EXISTING BRIDGE**

1. REMOVE EXISTING LIGHTING BRIDGE
2. REMOVE EXISTING W8 BEAM STUB SUPPORTING THE EXISTING BRIDGE.
3. REMOVE EXISTING LIGHTING BRACKETS FROM COLUMNS BELOW THE LIGHTING BRIDGE.
4. REMOVE EXISTING WELDS DEBRIS AND GRIND FACE OF EXISTING COLUMN SMOOTH.
5. RELOCATE EXISTING ROOF DRAIN PIPING TO CLEAR NEW CATWALKS WITH MINIMUM 6'-8" HEADROOM.
6. CUT NEW OPENINGS FOR NEW DOORS TO ACCESS LEFT AND RIGHT CATWALKS

**EXIT DOORS - NORTHEAST**

1. REMOVE EXISTING ELECTRICAL, SIGNS AND SENSORS. PRESERVE FOR RE-INSTALLATION.
2. REMOVE DOOR FRAMES FROM NORTH EAST EXIT.
3. REMOVE CONCRETE HEADER, CUTTING FLUSH TO ROUGH OPENING FOR NEW DOOR FRAME AND HEADER.
4. EXCAVATE TO REMOVE EXISTING CONCRETE WORKS BELOW EXISTING DOORS.

**GENERAL NOTES**

**DESIGN**

1. THE BRIDGE, DECK AND CATWALKS REPLACE EXISTING. STRUCTURES ARE DESIGNED TO PROVIDE SERVICE ACCESS FOR WORKERS TO PLACE AND OPERATE LIGHTING AND SOUND EQUIPMENT.
2. DESIGN LIVE LOAD 50 PSF FOR WORKERS AND TOOLS. BRIDGE SHALL ALSO SUPPORT EQUIPMENT LOADS OF 30 PSF PLUS UP TO 5 POINT LOADS OF 2000 LBS EACH.
3. RAILINGS DESIGNED ACCORDING TO MBCC 2011 LIMIT STATES DESIGN, USING THE FOLLOWING SPECIFIED LOADS AS THE DESIGN BASIS:  
  
GUARDS RAILS:  
HORIZONTAL LOAD: 0.75 kN/M UNIFORM LOAD, OR 1.0kN CONCENTRATED LOAD APPLIED AT ANY POINT.  
VERTICAL LOAD: 1.5 kN/M APPLIED ANY LOCATION TOP RAIL OF GUARDS.
4. LADDER ACCESS IS DESIGNED IN ACCORDANCE WITH ASTM A14.3 "LADDERS-FIXED-SAFETY REQUIREMENTS" AND MANITOBA REGULATION W210.
5. LIGHTING MOUNTS AND GUARDRAILS SPECIFIED WITH TOP RAILS OR POSTS OF HSS1.66 DIAMETER ARE INTENDED TO BE POTENTIAL MOUNTING POINTS FOR LIGHTING FIXTURES. NO SUBSTITUTION IN SIZE IS PERMITTED.

**STRUCTURAL STEEL AND METALS**

1. STRUCTURAL STEEL BEAMS TO CSA G40.21 GRADE 350W
2. STEEL PLATES, CHANNELS AND ANGLES TO CSA G40.21 GRADE 300W
3. HSS STRUCTURAL TUBING TO CSA G40.21 GR 350W OR ASTM A500 GR C.
4. WELD QUALITY TO CSA W59
5. FABRICATOR TO BE CERTIFIED TO CSA W47.1 DIVISION 1 OR 2
6. ALL STEEL TO BE POWDER COATED OR PRIME PAINTED THEN FINISH COATED WITH 2 COATS POLYURETHANE MINIMUM 6 MIL THICKNESS. COLOUR TO BE FLAT BLACK.

**SHEET STEEL DECK**

1. METAL DECK TO BE MINIMUM 22 GAUGE STEEL VIC WEST RD938 OR EQUAL.
2. DECK MATERIAL TO BE ASTM A653, G90 / Z275 HOT DIP GALVANIZED STEEL.

**RUBBER FLOOR MAT**

1. WALKING SURFACES ON THE BRIDGE, CATWALKS AND LIGHTING PLATFORMS SHALL BE ½" THICK RUBBER FASTENED TO SHEET STEEL STRUCTURAL DECK. RUBBER MAT MAY BE NEW RUBBER OR RECYCLED RUBBER LAYED IN CONTINUOUS STRIPS.
2. FASTEN TO STEEL DECK WITH SELF DRILLING SCREWS AT ROWS 18 INCHES ON CENTRE, FASTENING BOTH EDGES AND TO EVERY SECOND DECK FLUTE.

**PLYWOOD**

3. PLYWOOD FOR DECK ABOVE STAGE CEILING TO BE 3/8" THICK 4 PLY DOUGLAS FIR PLYWOOD MANUFACTURED TO CSA 0121.
4. PLYWOOD FOR LIGHTING PLATFORMS TO BE 5/8" THICK 7 PLY DOUGLAS FIR PLYWOOD MANUFACTURED TO CSA 0121.
5. PLYWOOD SHALL BE PRESSURE TREATED TO CSA 080 "WOOD PRESERVATION".
6. PLYWOOD SHALL BE INSTALLED WITH LONGITUDINAL DIMENSION PARALLEL TO METAL DECK FLUTES, SPANNING THE STRUCTURAL STEEL SUPPORTS. ROWS SHALL HAVE OFFSET JOINTS.
7. INSTALL WITH #10 - 12 X 1 ¼" NOMINAL BUGLE HEAD SCREWS SET FLUSH TO PLYWOOD SURFACE. MINIMUM 4 ROWS PER SHEET, FASTENED MINIMUM VERY SECOND DECK FLUTE.

**ACCOUSTIC FINISH**

1. THE UNDERSIDES OF CATWALKS, LIGHTING PLATFORMS AND BRIDGE WALKWAYS SHALL BE COATED WITH A 1" THICKNESS OF SONASPRAY 'FC' ACCOUSTICAL FINISH BY SOPREMA, OR EQUAL. ACCOUSTICAL PERFORMANCE FOR REDCTION OF REFLECTIVE SOUND SHALL MEET ASTM C423.

**DOORS**

1. NEW DOORS TO CATWALKS SHALL BE 3' X 7' STEEL FLAT PANELS, INSULTATED WITH HOLLOW METAL FRAMES.
2. FRAMES AND DOOR PANELS SHALL BE PRIMED AND FINISH COATED WITH MINIMUM 6 MIL URETHANE.
3. DOORS SHALL BE FITTED WITH PASSAGE SETS AND KEYED DEAD BOLT LOCKS KEYED FROM THE INSIDE.

**NORTH EAST EXIT DOOR ASSEMBLY**

1. FABRICATE AND INSTALL NEW STRUCTURAL STEEL DOOR FRAME WITH ROUGH OPENINGS FOR THREE DOUBLE DOORS 6' X 7'. COORDINATE WITH DOOR SUPPLIER.
2. DOOR FRAME ASSEMBLY TO BE FITTED WITH LIFTING LUGS TO PERMIT COMPLETE ASSEMBLY WITH DOORS IN PLACE TO BE LIFTED AND SET ASSIDE FOR EQUIPMENT ACCESS.
3. HSS TO BE CSA G40.21 350W OR ASTM A50 GRADE C.
4. STEEL PLATES, ROLLED CHANNELS AND ANGLES TO BE CSA G40.21 GRADE 300W.
5. WELDED FABRICATION TO CSA W59
6. FABRICATOR CERTIFICATION TO CSA W47.1 DIV 1 OR 2.

**CONCRETE WORKS**

1. PRIOR TO EXCAVATING ENSURE THERE ARE NO CONFLICTING SURFACE OR SUBSURFACE UTILITIES.
2. EXCAVATE TO GRADES INDICATED FOR INSTALLATION OF COMPACTED BASE.
3. COMPACT SUBGRADE TO MINIMUM 98% STANDARD PROCTOR DENSITY TO ACHIEVE MINIMUM 2500 PSF BEARING CAPACITY.
4. GRANULAR FILL TO BE CLASS "A" BASE, 12" MINIMUM THICKNESS, PLACED IN MAXIMUM 3" LIFTS, GRADED PER TABLE 1, COMPACTION TO MINIMUM 98% STANDARD PROCTOR DENSITY
5. REINFORCING STEEL TO BE DEFORMED BARS TO CSA G30.18 GRADE 400W
6. CONCRETE TO BE 30 MPA WITH TYPE 50 SULPHATE RESISTANT CEMENT
7. MAXIMUM CONCRETE SLUMP: 3-1/2".  
AIR ENTRAINMENT: 3%
8. BACK FILL THE FOOTING WITH COMPACTED CLASS 'A' BASE TO 98% PROCTOR DENSITY.
9. SHOP DRAWINGS FOR REINFORCING STEEL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.

**TABLE 1**

GRANULAR BASE COURSE PASSING STANDARD SIEVES	CLASS "A"
37.5 MM SIEVE	
25 MM SIEVE	
19 MM SIEVE	100 %
16 MM SIEVE	80 - 100%
5 MM SIEVE	40 - 70 %
2 MM SIEVE	25 -55 %
525UM SIEVE	15 - 30 %
75 UM SIEVE	8 - 15 %

0	ISSUED FOR TENDER	JC	NOV. 28/2023
NO.	REVISIONS	BY	DATE



PROJECT	RAINBOW STAGE
LOCATION	WINNIPEG, MANITOBA
DRAWING TITLE	PROJECT GENERAL NOTES

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CHECKED BY	FAR	DATE		2022031-SI.0			0