



- LEGEND:**
- LOSS OF MORTAR SURFACE REPAIR
  - DELAMINATION
  - SPALL
  - CRACK

**ENGINEERS GEOSCIENTISTS**  
Certificate of Authorization  
**MORRISON HERSHFIELD**  
No. 1736  
**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

- GENERAL NOTES:**
- CLOSE INSPECTION OF CAP ABOVE COLUMN 11 TO THE WEST EDGE ON NORTH FACE NOT COMPLETED AS IT WAS INACCESSIBLE.
  - DEFECTS MAPPED OCTOBER 5, 2017.
  - CONTRACTOR TO UNDERTAKE DELAMINATION SURVEY WITH RESIDENT ENGINEER TO CONFIRM EXTENTS OF DEFECTS.
  - REPAIRS TO BE COMPLETED TO DELAMINATED, SPALLED, AND CRACKED CONCRETE PRIOR TO INSTALLING AND APPLYING ECE TREATMENT. REFER TO SHEET 99 FOR REPAIR DETAILS.
  - SEE SHEET 92 FOR COLUMN DEFECT MAPS.

**LOCATION APPROVED**  
UNDERGROUND STRUCTURES  
SUPR. U/G STRUCTURES COMMITTEE DATE  
**NOTE:**  
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

DESIGNED BY	AG	CHECKED BY	BAP
DRAWN BY	AH	APPROVED BY	BE
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	N/A
VERT SCALE	AS SHOWN		
No. REVISIONS	YYMMDD	DATE	DATE

PROFESSIONAL'S SEAL  
**B.A.F. PHILLIPS**  
Member  
32723  
CONSULTANT FILE NAME  
W160034 - DD SU, DWG

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**EMPRESS STREET PROJECT**  
OVERPASS REHABILITATION WORKS  
SUBSTRUCTURE  
NORTH PIER CAP DEFECT MAP  
AND SURFACE REPAIRS

CITY DRAWING NUMBER  
P-3494-91  
SHEET 91 OF 168  
DRAWING No. REV  
91 D

BID OPPORTUNITY No. 602-2018

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