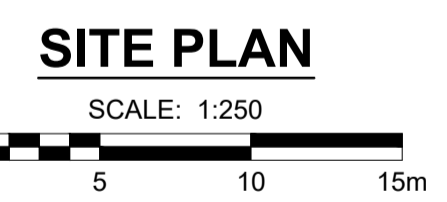
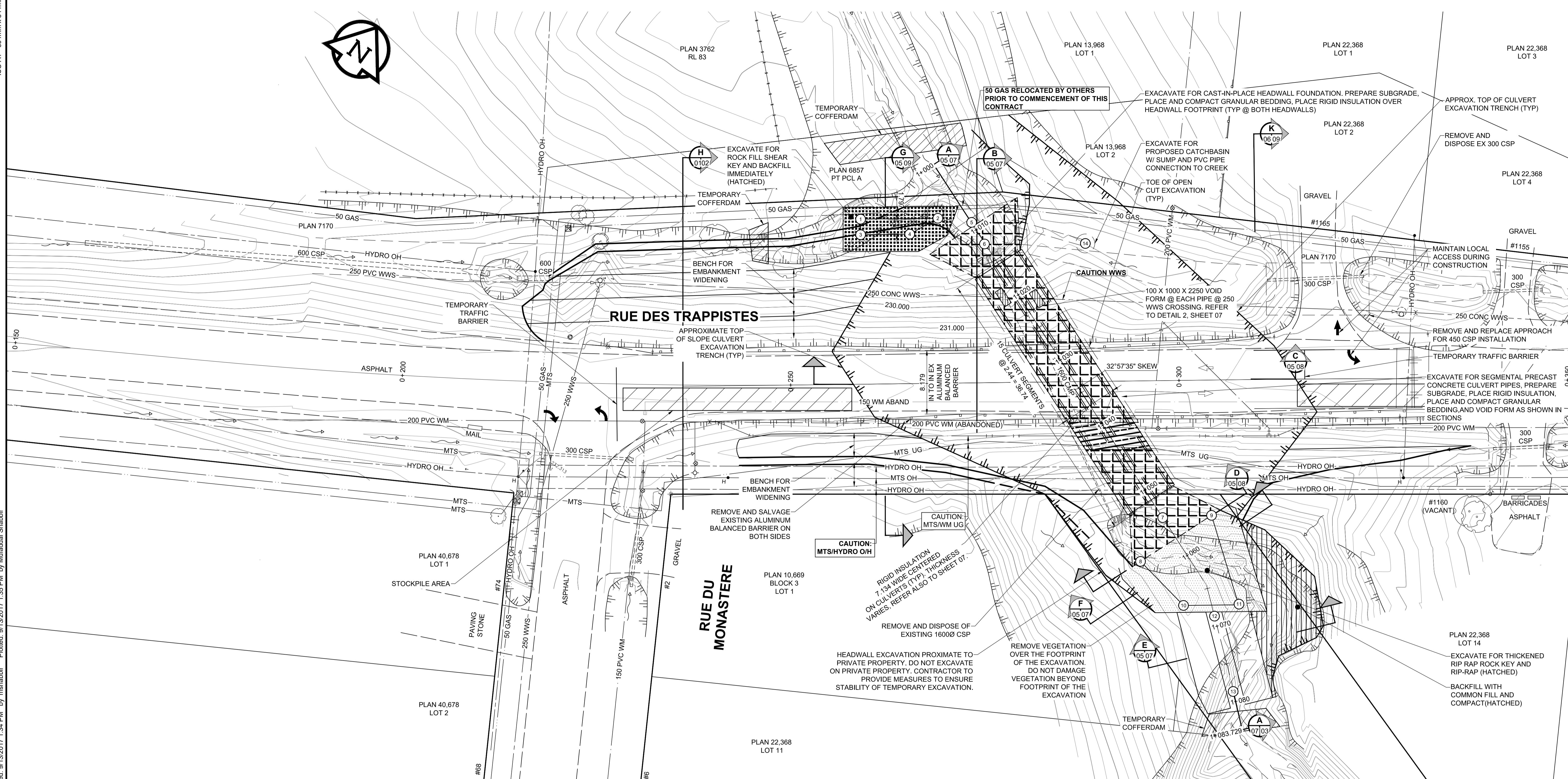
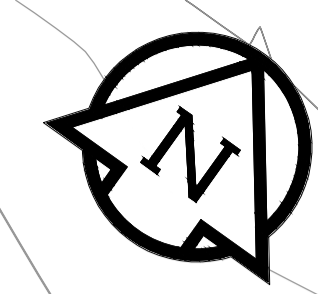


ISO A1 - 594mm x 841mm  
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 Last Saved: 9/13/2017 1:35 PM by Mufaddal Shabbir  
 Plotted: 9/13/2017 1:35 PM by mshabbir



EXCAVATION LAYOUT - COORDINATE TABLE				
POINT NUMBER	DESCRIPTION	NORTHING	EASTING	ELEVATION
01	ROCKFILL SHEAR KEY EXCAVATION	5513716.353	632408.492	223.500
02	ROCKFILL SHEAR KEY EXCAVATION	5513722.242	632416.506	223.500
03	ROCKFILL SHEAR KEY EXCAVATION	5513714.727	632409.657	223.500
04	ROCK FILL SHEAR KEY EXCAVATION	5513718.472	632414.754	223.500
05	CUT-OFF WALL	5513724.344	632420.355	224.250
06	HEADWALL APRON	5513723.046	632423.311	225.375
07	HEADWALL APRON	5513707.770	632462.480	225.325
08	ROCK KEY EXCAVATION	5513701.522	632463.450	224.500
09	ROCK KEY EXCAVATION	5513711.665	632467.429	224.500
10	ROCK KEY EXCAVATION	5513700.131	632471.249	224.500
11	ROCK KEY EXCAVATION	5513704.430	632476.963	224.500
12	CREEK EXCAVATION	5513701.338	632475.293	225.366
13	CREEK EXCAVATION	5513694.848	632482.899	224.866
14	CATCHBASIN EXCAVATION	5513730.667	632433.836	227.147

- 75 THICK INSULATION FOR FROST PROTECTION
- 100 THICK RIGID INSULATION FOR 200 WM FROST PROTECTION
- DEEP EXCAVATION AT ROCKFILL SHEAR KEY FOR SLOPE STABILIZATION
- DEEP EXCAVATION AT THICKENED RIP RAP ROCK KEY FOR SLOPE STABILIZATION
- BACKFILL WITH COMMON FILL
- TEMPORARY COFFERDAM

**NOTES**

- EXCAVATION COORDINATES ARE TO BOTTOM OF EXCAVATION/TOP OF NATIVE SOIL BEARING SURFACE.
- EXCAVATION BASE ELEVATION OVER CULVERT LENGTH IS DETERMINED FROM CULVERT PROFILE. REFER TO SHEET 07.
- CONTOUR LINES SHOWN ARE FOR EXISTING GROUND.
- TEMPORARY EXCAVATION OF 3H:1V HAVE BEEN ASSUMED FOR THE CULVERT TRENCH BASED ON PRELIMINARY ENGINEERING. FINAL EXCAVATION SLOPES TO BE DETERMINED BY THE CONTRACTOR'S DELEGATED GEOTECHNICAL ENGINEER. REFER TO GEOTECHNICAL DESIGN DATA, SHEET 02.

**ENGINEERS GEOSCIENTISTS**  
 Certificate of Authorization  
**MORRISON HERSHFIELD**  
 No. 1736

**METRIC**  
 WHOLE NUMBERS INDICATE MILLIMETRES  
 DECIMAL NUMBERS INDICATE METRES

**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.

**MORRISON HERSHFIELD**

DESIGNED BY	DAN	CHECKED BY	BE
DRAWN BY	MS	APPROVED BY	SAL
HOR SCALE		RELEASED FOR CONSTRUCTION	
VERT SCALE		DATE	
1:250			

0 ISSUED FOR TENDER 17/09/15 DAN  
 No. REVISIONS YY/MM/DD BY DATE

PROFESSIONAL'S SEAL  
 PROVINCE OF MANITOBA  
**D.A. NEILSON**  
 ORIGINAL SIGNED 17/09/15 37248  
 REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME  
 5160966-EXCAV-05.DWG

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

**RUE DES TRAPPISTES AT WESTENDORF  
 COULEE CULVERT REPLACEMENT AND  
 ROAD RECONSTRUCTION  
 REMOVALS, EXCAVATION, AND  
 FROST PROTECTION PLAN**

CITY DRAWING NUMBER  
 C372-17-05

SHEET 05 OF 22

DRAWING No. REV  
 05 0

BID OPPORTUNITY No. 698-2017