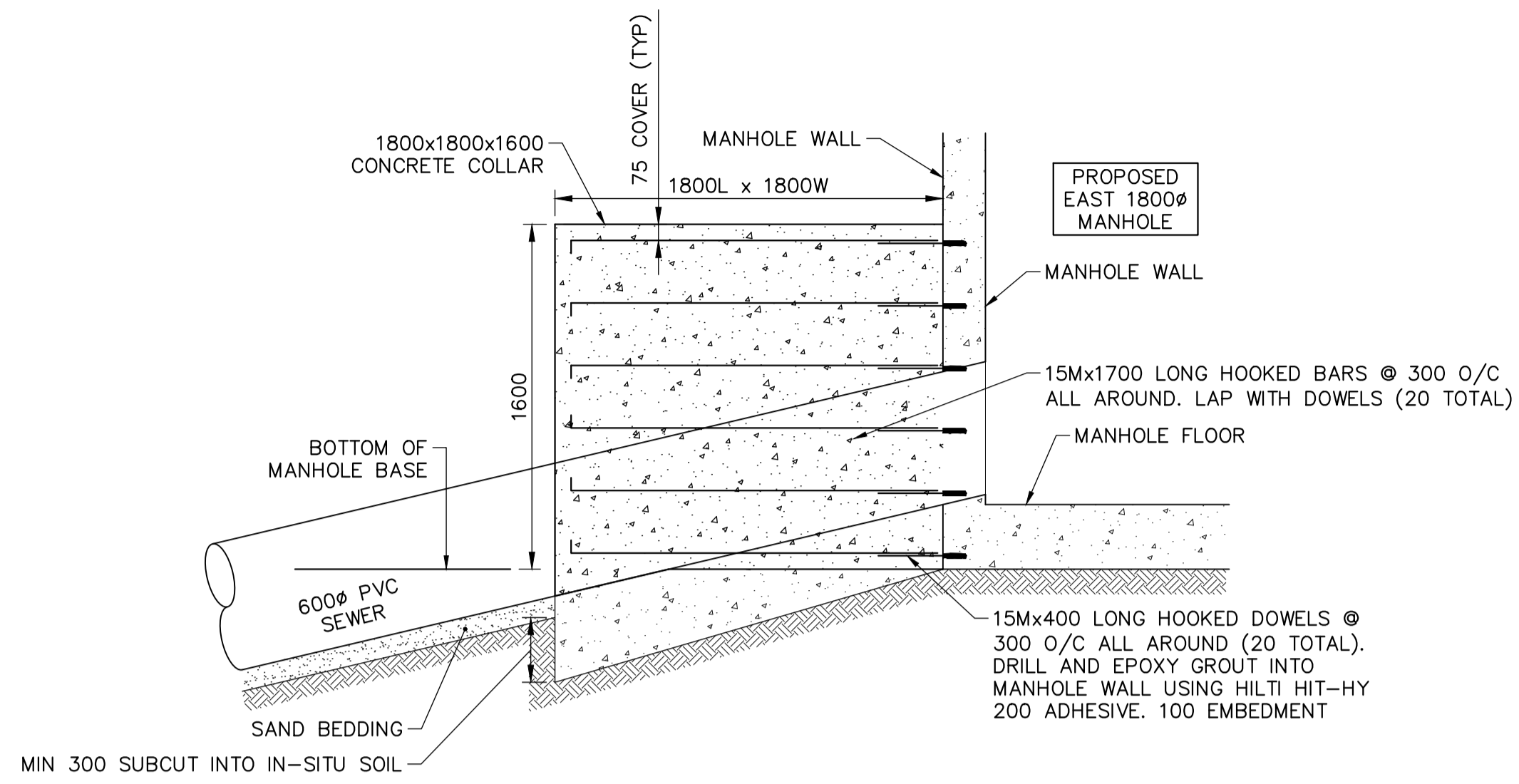
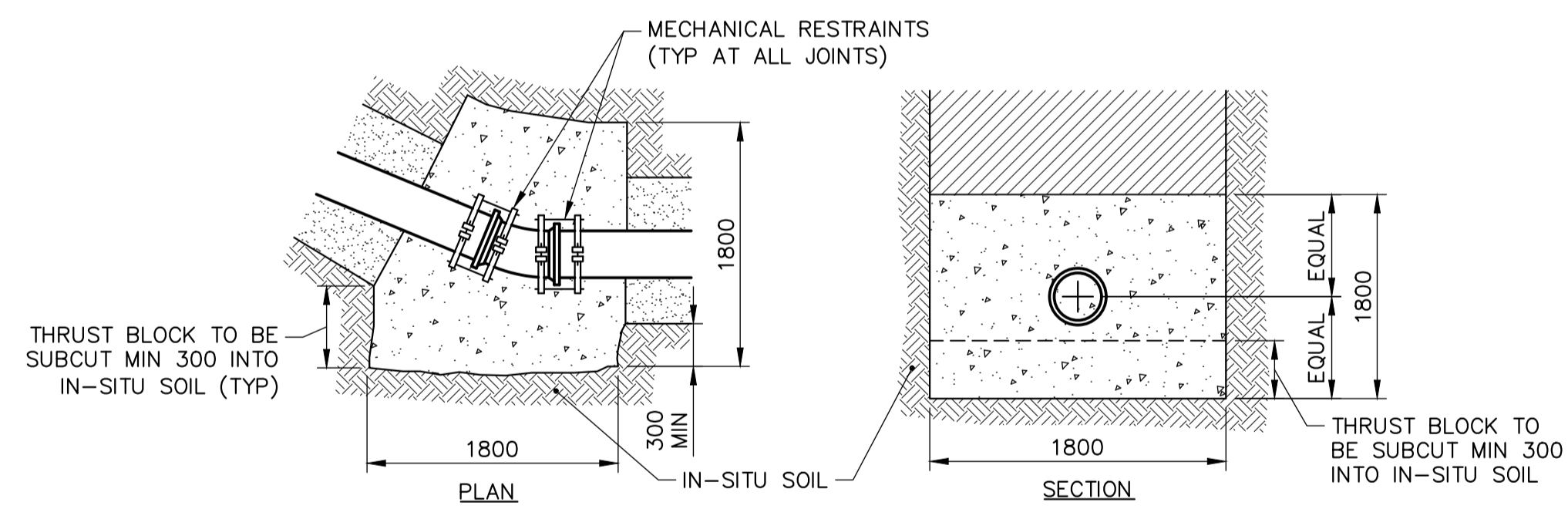


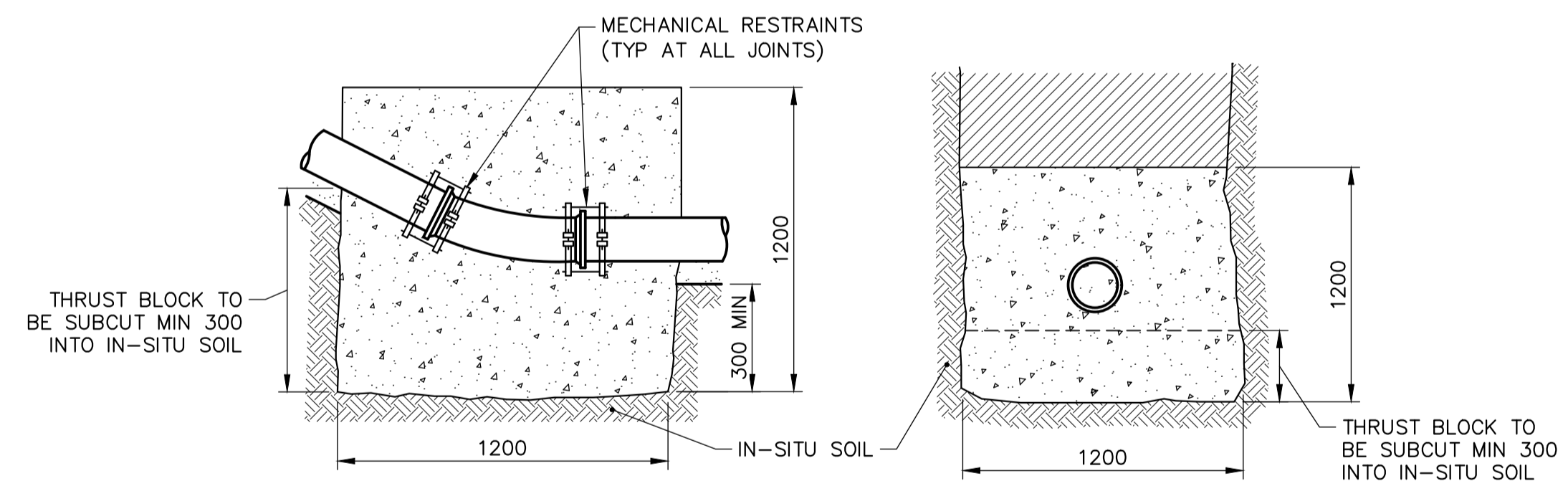
CONCRETE COLLAR AT 1500Ø MANHOLE  
SCALE: 1:25



CONCRETE COLLAR AND THRUST BLOCK AT 1800Ø MANHOLE  
SCALE: 1:25



11.25° AND 22.5° BEND THRUST BLOCK DETAIL  
SCALE: N.T.S.



8.5° AND 13.25° VERTICAL BEND THRUST BLOCK DETAIL  
SCALE: N.T.S.

**ES** ENGINEERS  
GEOSCIENTISTS  
MANITOBA  
Certificate of Authorization  
KGS Group  
No. 245

FOR INDEX PAGE  
SEE DWG 13025

METRIC  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED  
UNDERGROUND STRUCTURES

SUPV. 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.

B.M. ELEV.	NO.	ISSUED FOR TENDER	DATE	BY
	0	ISSUED FOR TENDER	2021 11 22	RBO
		REVISIONS	DATE	BY

<b>KGS GROUP</b>	
DESIGNED BY NGV	CHECKED BY RBO
DRAWN BY GEL	APPROVED BY RBO
SCALE: HORIZONTAL AS NOTED	RELEASED FOR CONSTRUCTION
VERTICAL NA	DATE
DATE 2021 11 22	DATE

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
2021-11-22  
R. B. OFFMAN  
Member  
22870  
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NUMBER  
21-0107-12\_13029

**Winnipeg** THE CITY OF WINNIPEG  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION

PORTAGE AVENUE INTERCEPTOR  
SIPHON REPLACEMENT AT OMAND'S CREEK

MISCELLANEOUS DETAILS  
SHEET 2

SHEET 6 OF 6  
CITY DRAWING NUMBER  
13029