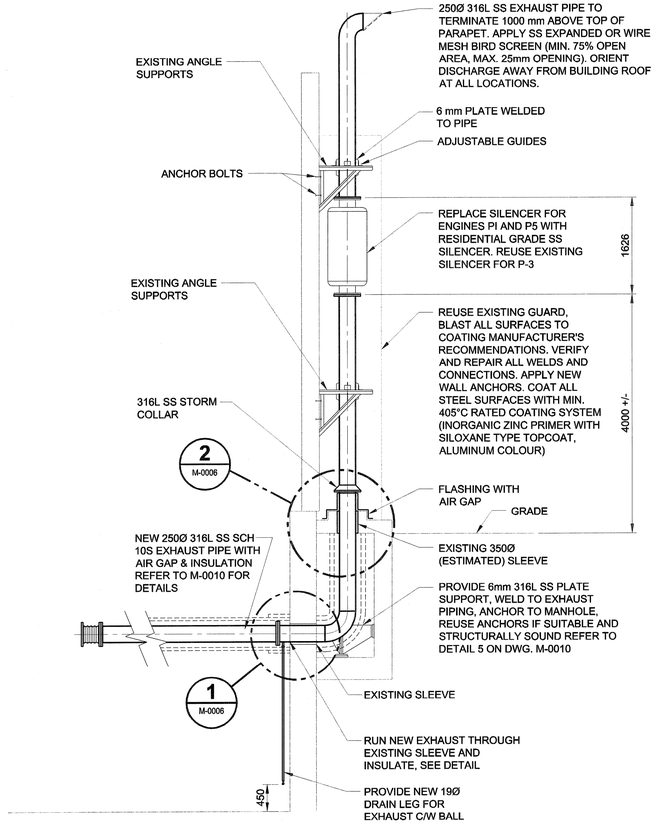
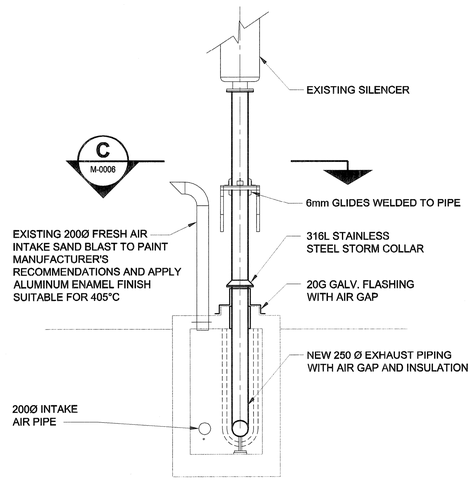


SECTION A M-0005

0 500 1000 1500 mm SCALE 1:50

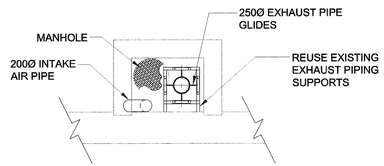
TYPICAL FOR ENGINES P1, P3, & P5



SECTION B M-0005

0 500 1000 1500 mm SCALE 1:50

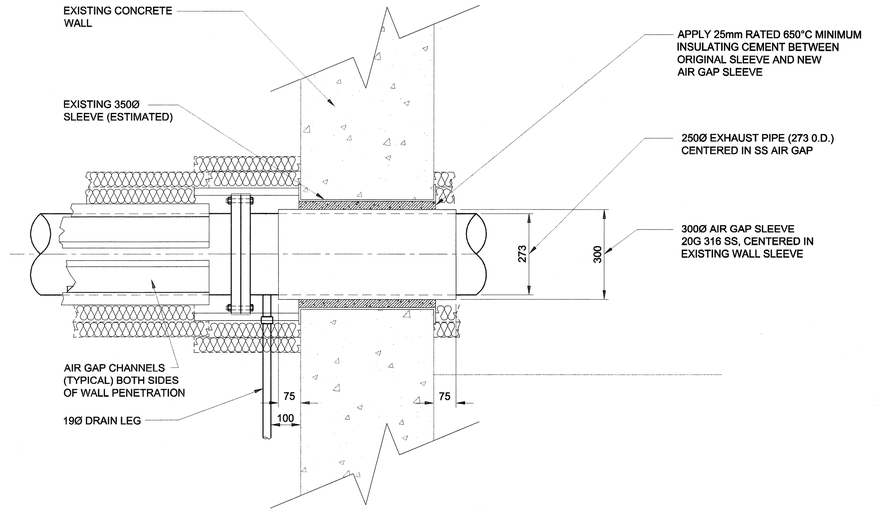
TYPICAL FOR ENGINES P1, P3 & P5



SECTION C M-0006

0 500 1000 1500 mm SCALE 1:50

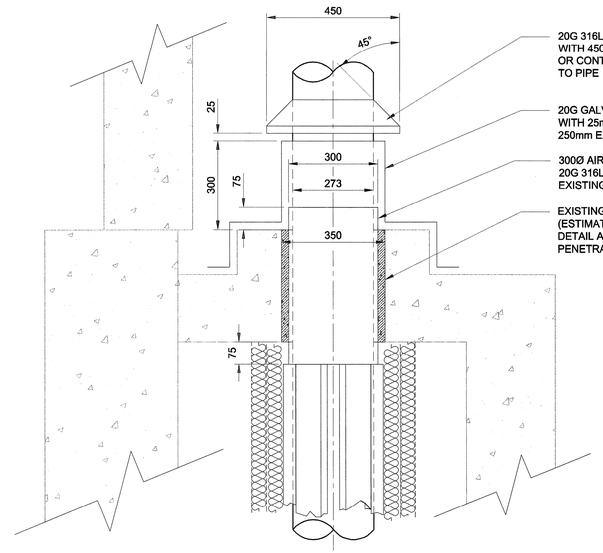
TYPICAL FOR ENGINES P1, P3 & P5



WALL PENETRATION 1 M-0006

0 100 200 300 mm SCALE 1:10

TYPICAL ALL LOCATIONS



CURB PENETRATION 2 M-0006

0 100 200 300 mm SCALE 1:10

TYPICAL ALL LOCATIONS

NOTE:

1. EXHAUST PIPE EXPANSION JOISTS TO PROVIDE A MINIMUM OF 37mm (1.5") AXIAL AND 12mm (0.5") LATERAL DEFLECTION UNLESS OTHERWISE NOTED.
2. FLANGED EXPANSION JOISTS SHALL BE USED.
3. EXHAUST PIPE SUPPORTS TO BE ROLLER TYPE EXCEPT WHERE SHOWN AS FIXED.
4. FIXED SUPPORTS SHALL PREVENT MOTION OF PIPE AT THAT LOCATION. DETAILS ON 1-0630A-D-M0011
5. STAINLESS STEEL WELDING SHALL BE ACCORDING TO ANSI/AWS D10.4-86(52000). SUBMIT PROPOSED FILLER MATERIAL AND PROCEDURE PRIOR TO WELDING.
6. ALL AIR INTAKE PIPING SUPPORTS TO BE ROLLER TYPE.
7. FINAL LOCATION OF EXHAUST AND COMBUSTION AIR PIPING TO BE ADJUSTED TO SUIT ENGINE SELECTION.

DRN	CHK	DES	ENG	IDR
		CC		

UMA | AECOM REVIEW

NO.	REVISIONS	DATE	BY
C	ISSUED FOR BID	07/06/15	RJP
B	ISSUED FOR 99% REVIEW	07/05/04	RJP
A	ISSUED FOR 75% REVIEW	07/03/15	RJP

B.M. ELEV.
FIELD BOOK #:
POSTED TO LBIS

UMA | AECOM

DESIGNED BY CAC	CHECKED BY -----
DRAWN BY RJP	APPROVED BY -
HOR. SCALE AS NOTED VERTICAL AS NOTED	RELEASED FOR CONSTRUCTION
DATE 07/03/09	DATE

FILENAME: D265-199-00_01-M-0006_RX.dwg

ENGINEER'S SEAL
PROVINCE OF MANITOBA
C. Courchaine
C.A.D. COURCHAINE
June 15-07
REGISTERED PROFESSIONAL ENGINEER

APEGM
Certificate of Authorization
UMA Engineering Ltd. (MB)
No. 256 Date: June 15-07

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

McPHILLIPS PUMPING STATION
Contract No.
Natural Gas Engine Drives Replacement
Mechanical - P1, P3, & P5
ENGINE EXHAUST DETAILS

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0640A-D-M0006	001	C	D