

ENGINE BASE DETAIL SCALE: N.T.S.

## **GENERAL NOTES:**

- 1. PERFORM WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND
- 2. GAS PIPING AND EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH THE GAS CODE CAN/CSA B149.1.
- 3. REVIEW EQUIPMENT LOCATIONS WITH THE CITY PRIOR TO INSTALLATION.
- 4. EQUIPMENT LOCATIONS, DUCT AND PIPE ROUTING INDICATED ON THE DRAWINGS IS APPROXIMATE ONLY. CONFIRM IN THE FIELD. REROUTE DUCTWORK AND PIPING AS REQUIRED TO ELIMINATE FIELD INTERFERENCES WITH BUILDING STRUCTURES, ELECTRICAL, ETC. CONFIRM CHANGE WITH THE CITY. WHERE DIMENSIONS ARE INDICATED FOR PIPING, DUCTWORK, DUCT SIZES, EQUIPMENT SIZES, ETC, THESE ARE FOR BIDDING PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING EQUIPMENT AND COMMENCING INSTALLATION WITHOUT EXTRA CHARGES TO THE PROJECT. THE CONTRACTOR IS RESPONSIBLE TO ENSURE ALL EQUIPMENT, DUCTWORK AND PIPING FITS IN THE SPACE AVAILABLE AND TO MAINTAIN THE GENERAL DESIGN INTENT FOR THE SYSTEMS.
- 5. PROVIDE ALL REQUIRED WALL PENETRATIONS. FIRE SEAL ALL PENETRATIONS THROUGH FIRE WALLS. SEAL ALL PENETRATIONS THROUGH WALLS AIR AND WATER TIGHT.
- 6. MAINTAIN SERVICE CLEARANCE FOR ALL EQUIPMENT AS RECOMMENDED BY SUPPLIER.
- 7. CONTRACTOR TO SIZE AND PROVIDE NEW GAS PIPING TO ALL NEW EQUIPMENT. PAINT PIPING YELLOW.
- 8. MOVE MISCELLANEOUS PIPING AS REQUIRED TO REMOVE EXISTING ENGINE AND INSTALL NEW ONE.

## **KEY NOTES:**

- PROVIDE NEW ENGINE C/W STEEL BASE. CUT EXISTING CONCRETE BASE DOWN AS REQUIRED TO LINE UP NEW ENGINE WITH EXISTING RIGHT ANGLE GEAR DRIVE. NEW STEEL BASE SHALL BE BOLTED INTO EXISTING CONCRETE BASE, MODIFY CONCRETE TO SUIT. REFER TO ENGINE BASE DETAIL ON THIS DRAWING.
- NEW 4"ø ENGINE EXHAUST PIPE OUT SIDEWALL. SEAL NEW WALL PENETRATION AIR AND WATER TIGHT. ENSURE COMBUSTION AIR EXHAUST IS MIN. 8ft ABOVE GROUND LEVEL.
- PROVIDE NEW GAS MONITORING SYSTEM WITH REMOTE GAS DETECTOR AND AUDIBLE/VISIBLE ALARM LOCATED IN THE PUMP ROOM. REFER TO CONTROLS DRAWING MO3 FOR SEQUENCE OF OPERATION. CARBON MONOXIDE DETECTOR TO BE MOUNTED 5ft ABOVE PUMP ROOM FLOOR. METHANE DETECTOR TO BE MOUNTED 1ft BELOW ENGINE ROOM CEILING.
- EXISTING VENTILATION FAN AND CONTROLS TO REMAIN.
- TIE IN EXISTING 1 1/2" WATER AND 2" GAS LINES TO NEW ENGINE COOLING SYSTEM AND FUEL SYSTEM CONNECTIONS. PIPE ENGINE COOLING SYSTEM DISCHARGE TO EXISTING FLOOR DRAIN.
- PROVIDE NEW CENTRIFUGAL CLUTCH, STUB SHAFT, UNIVERSAL JOINT ASSEMBLY AND FLYWHEEL PLATE. CONTRACTOR TO CONFIRM ALL SHAFT AND OTHER MEASUREMENTS ON SITE.

## **LEGEND:**

**NEW EQUIPMENT** EXISTING EQUIPMENT DOMESTIC COLD WATER PIPING NATURAL GAS PIPING

GAS METER

EXHAUST FAN

F.D. FLOOR DRAIN

MOTORIZED DAMPER

EF SF

SUPPLY FAN NEW AUDIBLE/VISIBLE ALARM

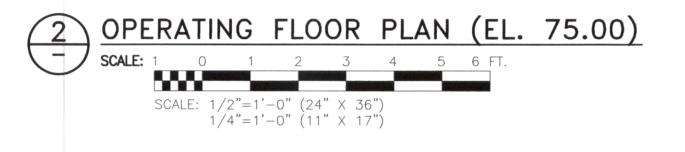
NEW VISIBLE ALARM

NEW CARBON MONOXIDE GAS DETECTOR

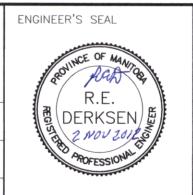
NEW GAS MONITORING SYSTEM

NEW METHANE GAS DETECTOR

APEGIN Certificate of Authorization KGS Group No. 245



	FIELD BOOK #:			KGS GROUP CONSULTING ENGINEERS				ENGINE
				DESIGNED BY	RLG	CHECKED BY	Rad	REGIS
				DRAWN BY	RLR	APPROVED BY	Rap	1
0	ISSUED FOR TENDER	12/11/02 RGS	RUD	HOR. SCALE: VERTICAL:	AS NOTED	RELEASED FOR CONSTRUCTION:		
NO.	REVISIONS	DATE	BY	DATE	12/10/26	DATE		_



M02

Winnipeg



THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

WESTWOOD WASTEWATER PUMPING STATION STANDBY ENGINE AND FORCEMAIN WALL INSERT REPLACEMENT

CITY DRAWING NUMBER

SHEET

NEW MECHANICAL WORKS