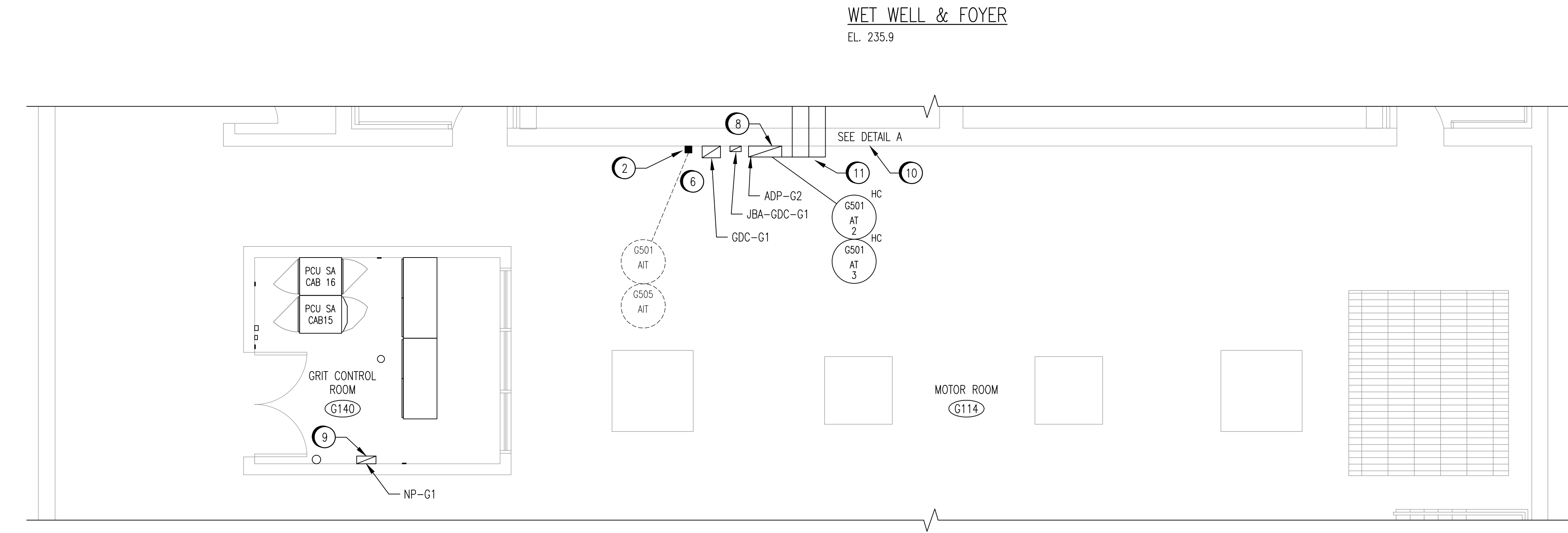
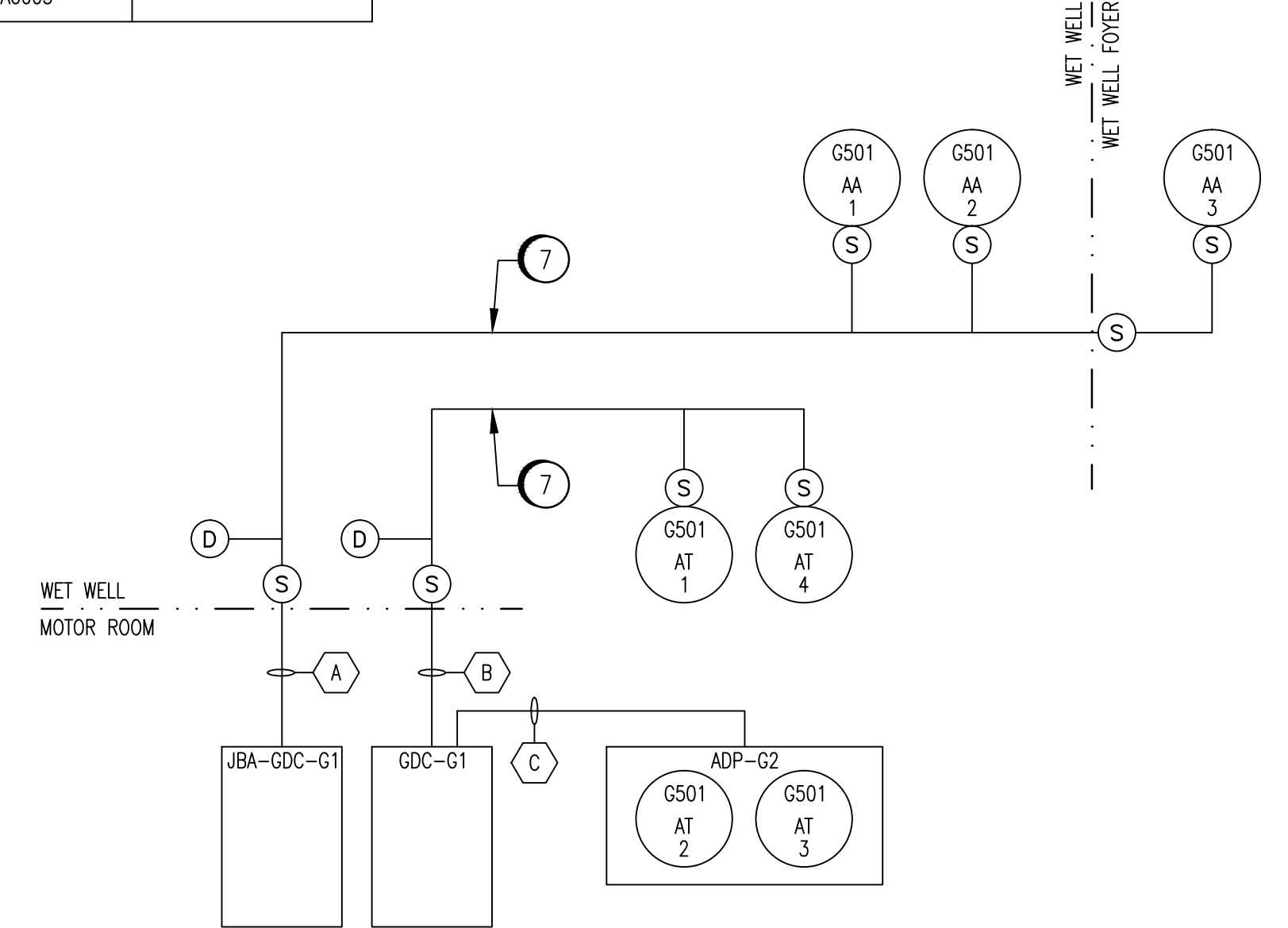
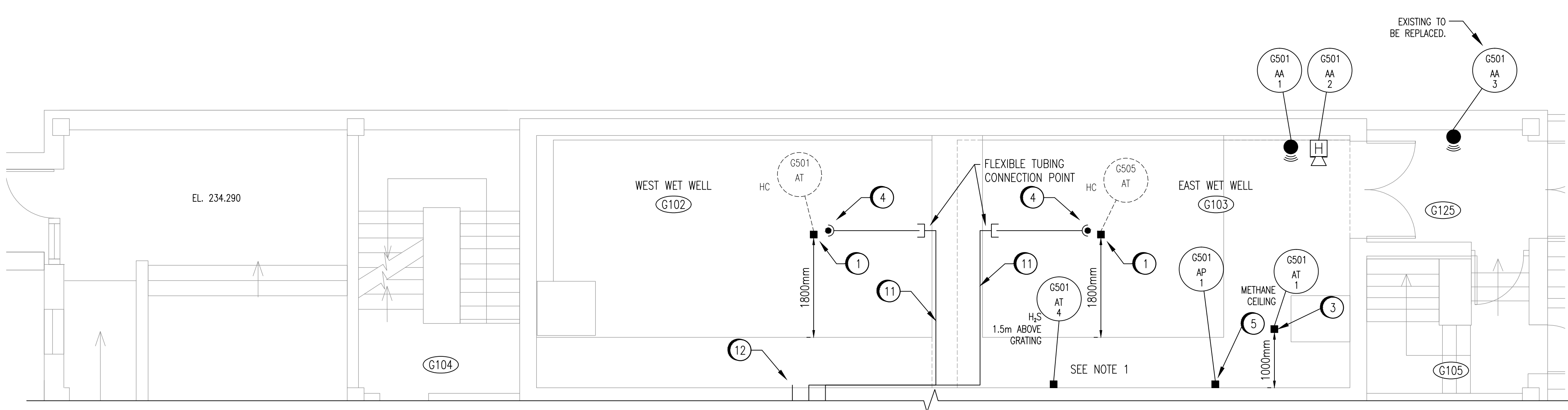


ID	GAS DETECTED	HEIGHT	INSTALLATION DETAIL	NOTES
G501-AT01	METHANE	CEILING	1-0102A-A0004	
G501-AT02	HC	1.5m AFF	N/A	ON SAMPLE PANEL
G501-AT03	HC	1.5m AFF	N/A	ON SAMPLE PANEL
G501-AT04	H <sub>2</sub> S	1.5m ABOVE GRATING	1-0102A-A0005	

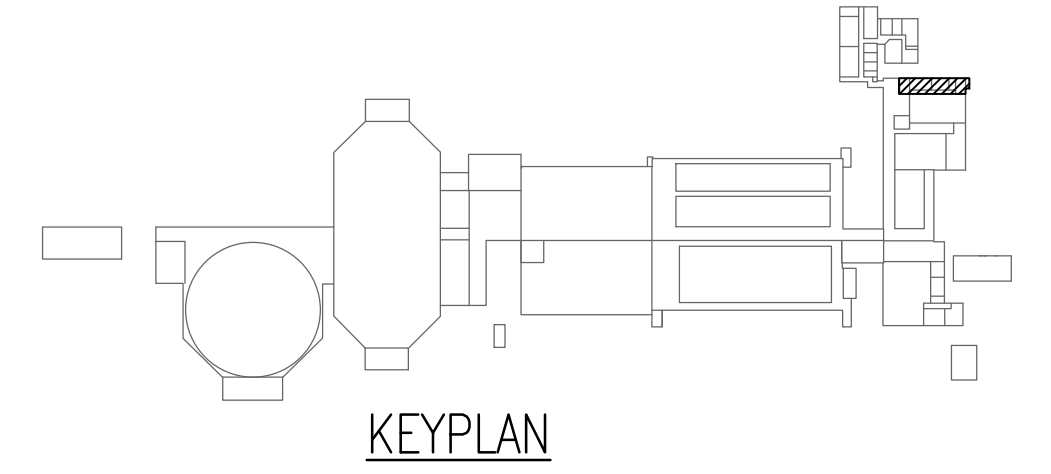
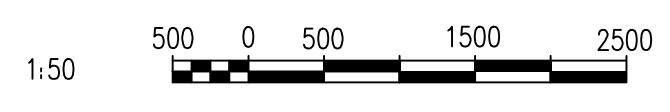
TYPE	SIZE	CABLES	NOTES
A	21mm	2C, 14 AWG, RW90	
B	21mm	2x 1TR, 18 AWG, CIC	
C	21mm	2x 1TR, 18 AWG, CIC	



- CONSTRUCTION NOTES**
- REMOVE EXISTING GAS DETECTION SENSORS AND ALL ASSOCIATED WIRING.
  - REMOVE EXISTING GAS DETECTION CONTROLLERS AND ALL ASSOCIATED WIRING.
  - MOUNT ON CEILING BEAM. SEE DETAIL A ON DRAWING 1-0102A-A0004.
  - HANG FLEXIBLE TEFLON TUBING INTO WET WELL TO A LEVEL OF 1.0m ABOVE WET WELL HIGH LEVEL (10.3m INTO THE WET WELL FROM SUPPORT). USE EXISTING SUPPORT STRUCTURE TO SUSPEND THE TUBING IN THE MIDDLE OF EACH WELL.
  - INSTALL REMOTE CALIBRATION POINT. SEE DETAIL B ON DRAWING 1-0102A-A0004.
  - INSTALL NEW GAS DETECTION CONTROLLER AND JUNCTION BOX. LOCATE SO AS TO BE ABLE TO REUSE WIRING TO FDP-G.
  - ROUTE CONDUIT ON CEILING.
  - MOUNT SAMPLE PANEL ADP-G2 WITH TOP AT 2000mm ABOVE FINISHED FLOOR.
  - CONNECT MODBUS NETWORKING TO PANEL NP-G1.
  - REMOVE EXISTING INSTRUMENT AIR PIPING AND EQUIPMENT. INSTALL NEW PIPING AS SHOWN. INSTALL PLUGS IN OLD TUBING GOING TO WEST AND EAST WET WELL.
  - INSTALL 1/4" STAINLESS STEEL TUBING FROM WET WELL TO SAMPLE PANEL INLET IN MOTOR ROOM. RUN TUBING ALONG CEILING IN WET WELL AND SUPPORT AS REQUIRED WITH UNISTRUT. CONNECT TO TEFLON TUBING AT EDGE OF PLATFORM AS SHOWN.
  - INSTALL 1/4" STAINLESS STEEL TUBING FROM SAMPLE PANEL OUTLET TO WET WELL. ROUTE TUBING IN WET WELL DOWN WALL AND TERMINATE 0.5m ABOVE PLATFORM.

- LEGEND:**
- EXISTING EQUIPMENT TO BE REMOVED
  - [H] HORN
  - [●] STROBE
  - [S] HAZARDOUS SEAL
  - [D] CONDUIT DRAIN

- NOTES:**
- THE WET WELL HYDROCARBON DETECTION IS TO BE LOCATED BOTH AT A LOW LEVEL TO DETECT HEAVIER THAN AIR GASES, AND AT THE UPPER LEVEL TO DETECT LIGHTER THAN AIR GASES.
  - THE WET WELL H<sub>2</sub>S GAS DETECTION ONLY ADDRESSES SAFETY ON THE MAIN WALKWAY LEVEL. PERSONNEL ENTRY TO LOWER LEVELS REQUIRES ADDITIONAL PORTABLE/TEMPORARY GAS DETECTION.
  - INSTALL CONDUIT DRAINS AT THE LOW POINT IN EACH CONDUIT RUN.



DRAWING NUMBER	REFERENCE DRAWINGS
1-0102G-A0051	JUNCTION BOX LAYOUT - JBA-GDC-G1
1-0102G-E0013	ELECTRICAL CLASSIFICATION PLAN
1-0102G-E0015	ELECTRICAL CLASSIFICATION PLAN

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER, BID OPP. 209-2011	2011/03/11	TMC	CJR

ENGINEER'S SEAL  
 ORIGINAL DRAWING SEALED BY:  
 T. M. CHURCH  
 SNC-Lavalin  
 MEMBER # 32682  
 2011/03/25  
 REV. 00

**THE CITY OF WINNIPEG**  
 WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE  
 ESSENTIAL SYSTEM UPGRADES  
 INSTRUMENT LOCATION PLAN  
 GAS DETECTION - WET WELL, FOYER & MOTOR ROOM

CITY DRAWING NUMBER: 1-0102G-A0044  
 SHEET: 001  
 REV: 00  
 SIZE: A1