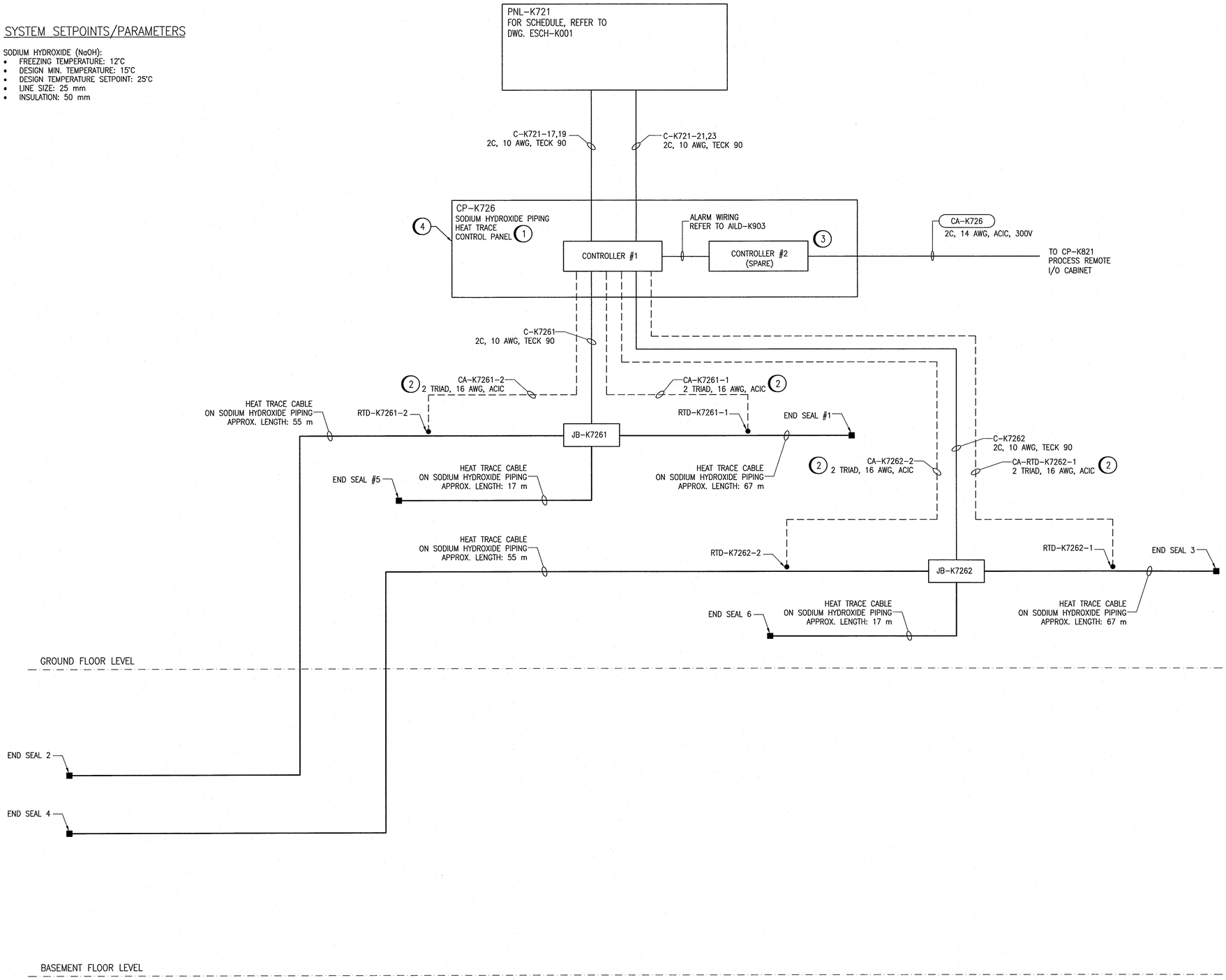
A1 SIZE – 594mm x 841mm

SYSTEM SETPOINTS/PARAMETERS

SODIUM HYDROXIDE (NaOH):

- FREEZING TEMPERATURE: 12°C
- DESIGN MIN. TEMPERATURE: 15°C
- DESIGN TEMPERATURE SETPOINT: 25°C
- LINE SIZE: 25 mm
- INSULATION: 50 mm



GENERAL NOTES:

1. PROVIDE ALUMINUM TAPE OVER HEAT TRACE ALONG ENTIRE PIPE LENGTH FOR PROPER HEAT TRANSFER.
2. PROVIDE A COMPLETE AND FUNCTIONAL INSTALLATION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND WITH THE VENDOR INSTALLATION GUIDE.
3. CABLE LENGTHS SHOWN ARE APPROXIMATE AND SHOULD NOT BE CONSTRUED AS ACCURATE. CONFIRM EXACT LENGTHS ON SITE AND WITH THE PROCESS DRAWING SET.

SPECIFIC NOTES:

(1) PROVIDE HEAT TRACE CONTROL PANEL C/W TWO (2) RAYCHEM 920 SERIES CONTROLLERS. PROVIDE SYSTEM WITHIN A NEMA 4X STAINLESS STEEL ENCLOSURE. THE CONTROLLERS SHALL PROVIDE GROUND FAULT SENSING AND TRIPPING FOR EACH CIRCUIT, C.Ts, AND GENERAL SYSTEM ALARM CONTACT. COMMON ALARM OUTPUT CONTACTS TO BE CONNECTED TO THE PLC, TO INDICATE A FAULT. EACH OF THE FOUR (4) SEPARATE CONTACTORS SHALL BE 30A, 2P, 208V RATED (2 SPARE CONTACTOR IN CONTROLLER #2)

(2) RTD CABLE SHALL BE STRANDED COPPER CONDUCTORS, TWISTED TRIADS, INDIVIDUALLY SHIELDED PLUS AN OVERALL SHIELD (100% COVERAGE). 1 TRIAD USED, 1 TRIAD SPARE.

(3) REFER TO DWG. 1–0102–AILD–K903 FOR CONNECTION DETAILS OF ALARM OUTPUT CONTACT TO PLC.

(4) REFER TO DWG. EGAD–K006 FOR LOCATION OF HEAT TRACE CONTROL PANEL CP–K726.

LEGEND:

- SELF–REGULATING HEATING CABLE, RAYCHEM P/N: 5BTV2–CR (208V, 1ø)
- RTD CABLE, 2 TRIAD, 16 AWG, ACIC
- POWER CABLE, 2C, 10 AWG, TECK 90
- END SEAL, RAYCHEM P/N: E–150 (LOW PROFILE END SEAL KIT)
- RTD, 100Ω Pt, 3–WIRE, DIGITRACE P/N: RTD4AL
- TEE CONNECTION, RAYCHEM P/N: PMKG–LT (LOW PROFILE TEE KIT)
- JB–Kxxxx — MULTIPLE ENTRY POWER CONNECTION, RAYCHEM P/N: JBM–100–A

REFERENCE DRAWINGS	DESCRIPTION
1–0102–EGAD–K006	HEAT TRACING LAYOUT – GROUND FLOOR
1–0102–EGAD–K005	HEAT TRACING LAYOUT – BASEMENT FLOOR

APEGM Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION – 976–2016	2017/04/05	SLJ	DEB

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: S. JUGANAS	CHECKED BY: E. RYCZKOWSKI
DRAWN BY: S. JUGANAS	APPROVED BY: D. BECKER
SCALE: NTS	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2015/03/09	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
D.E. BECKER
Member 23646
REGISTERED PROFESSIONAL ENGINEER
April 5/2017

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
ELECTRICAL
HIGH RATE CLARIFICATION
SODIUM HYDROXIDE PIPING HEAT TRACE BLOCK DIAGRAM

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1–0102–EBDG–K001	001	00	A1

LAST SAVE: 2017/03/24 – 9:39am
PATH: C:\DWG\1–0102–EBDG–K001.dwg

PLOT DATE: Mar 24, 2017 – 9:39am

FILE NAME: 1–0102–EBDG–K001.dwg