

| PANEL ID: CDP-E1  |             | AMPS: 225                               | VOLTS: 600V                           | PHASE: 3Ø | WIRE: 3      | SURF. MOUNT <input checked="" type="checkbox"/> | TOP FED <input type="checkbox"/> |   |              |           |            |      |                        |      |   |  |
|---|-------------|---|---------------------------------------|-----------|--------------|---|----------------------------------|---|--------------|-----------|------------|------|------------------------|------|---|--|
| DESCRIPTION: ESSENTIAL  |             | LOCATION: SERVICE BUILDING ELEC. RM     |                                       |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |
| MFG / MODEL: WESTINGHOUSE PRL4  |             | INTERRUPTING RATING: 25 KA (SEE NOTE 2) |                                       |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |
| MAIN BREAKER: N/A   |             | INST. SETTINGS: N/A                     |                                       |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |
| CCT.  | DESCRIPTION | NOTE                                    | WIRE (AWG)                            | BRKR AMPS | LOAD (VA)    | A   | B                                | C | LOAD (VA)    | BRKR AMPS | WIRE (AWG) | NOTE | DESCRIPTION            | CCT. |   |  |
| 1   | UPS-G1      |   | 8                                     | 40        | 5000         |   |                                  |   |              |           |            |      | SPACE                  | 2    |   |  |
| 3   | UPS-G1      |   |                                       |           | 5000         |   |                                  |   |              |           |            |      | SPACE                  | 4    |   |  |
| 5   | UPS-G1      |   |                                       |           | 5000         |   |                                  |   |              |           |            |      | SPACE                  | 6    |   |  |
| 7   | UPS-M1      |   | 6                                     | 40        | 5000         |   |                                  |   |              |           |            |      | SPACE                  | 8    |   |  |
| 9   | UPS-M1      |   |                                       |           | 5000         |   |                                  |   |              |           |            |      | SPACE                  | 10   |   |  |
| 11  | UPS-M1      |   |                                       |           | 5000         |   |                                  |   |              |           |            |      | SPACE                  | 12   |   |  |
| 13  | SPACE       |   |                                       |           |              |   |                                  |   |              |           |            |      | SPACE                  | 14   |   |  |
| 15  | SPACE       |   |                                       |           |              |   |                                  |   |              |           |            |      | SPACE                  | 16   |   |  |
| 17  | SPACE       |   |                                       |           |              |   |                                  |   |              |           |            |      | SPACE                  | 18   |   |  |
| 19  | SPARE       |   |                                       | 40        | 17700W       |   |                                  |   | 17700W       | 60        | 6          |      | 45kVA XFMR-2P RM. P102 | 20   |   |  |
| 21  | SPARE       |   |                                       |           | 17700W       |   |                                  |   | 17700W       |           |            |      |                        | 22   |   |  |
| 23  | SPARE       |   |                                       |           | 17700W       |   |                                  |   | 17700W       |           |            |      |                        | 24   |   |  |
| 25  | SPARE       |   |                                       | 60        | 8700W        |   |                                  |   | 8700W        | 60        | 6          |      | 45kVA XFMR-4P RM. P102 | 26   |   |  |
| 27  | SPARE       |   |                                       |           | 8700W        |   |                                  |   | 8700W        |           |            |      |                        | 28   |   |  |
| 29  | SPARE       |   |                                       |           | 8700W        |   |                                  |   | 8700W        |           |            |      |                        | 30   |   |  |
| TOTAL CONNECTED LOAD:   |             |   | KVA                                   |           | PHASE A: KVA |   | A                                |   | PHASE B: KVA |           | A          |      | PHASE C: KVA           |      | A |  |
| NOTES:  |             |   | NOTE LEGEND:                          |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |
| 1. WATT LOADS COPIED FROM EXISTING DRAWINGS.  |             |   | AFCI ARC FAULT CIRCUIT INTERRUPTOR    |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |
| 2. NEW BREAKERS ARE REQUIRED TO HAVE A 25KA INTERRUPTING RATING TO ADDRESS POTENTIAL FUTURE RECONFIGURATION OF THE ESSENTIAL POWER DISTRIBUTION SYSTEM. |             |   | GFCI GROUND FAULT CIRCUIT INTERRUPTOR |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |
|   |             |   | LOCK LOCKED BREAKER                   |           |              |   |                                  |   |              |           |            |      |                        |      |   |  |

| PANEL ID: PNL-2B  |                                   | AMPS: 150                           | VOLTS: 347/600V                       | PHASE: 3Ø | WIRE: 4      | SURF. MOUNT <input checked="" type="checkbox"/> | TOP FED <input type="checkbox"/> |   |              |           |            |      |                                     |      |   |  |
|---|-----------------------------------|-------------------------------------|---------------------------------------|-----------|--------------|---|----------------------------------|---|--------------|-----------|------------|------|-------------------------------------|------|---|--|
| DESCRIPTION: ESSENTIAL  |                                   | LOCATION: SERVICE BUILDING ELEC. RM |                                       |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |
| MFG / MODEL: WESTINGHOUSE XXXX                                      |                                   | INTERRUPTING RATING: 25 KA          |                                       |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |
| MAIN BREAKER: 40A, HFD SERIES                                       |                                   | INST. SETTINGS: N/A                 |                                       |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |
| CCT.  | DESCRIPTION                       | NOTE                                | WIRE (AWG)                            | BRKR AMPS | LOAD (VA)    | A   | B                                | C | LOAD (VA)    | BRKR AMPS | WIRE (AWG) | NOTE | DESCRIPTION                         | CCT. |   |  |
| 1   | LIGHTING BOILER RM B103, B105     |                                     | 15                                    | 15        | 584          |   |                                  |   | 700W         | 15        |            |      | LIGHTING STAIRWELL B101, B104, B112 | 2    |   |  |
| 3   | LGTS RM B107,B109,B116,B120,B121  |                                     | 15                                    | 15        | 800W         |   |                                  |   | 720          | 15        |            |      | LGTS STAIRWELL B102,B110,B115,B123  | 4    |   |  |
| 5   | LIGHTING RM B113, B114, B125      |                                     | 15                                    | 15        | 400          |   |                                  |   | 300W         | 15        |            |      | EXTERIOR LIGHTING                   | 6    |   |  |
| 7   | LGTS WORKSHOP RM B111, B118, B119 |                                     | 15                                    | 15        | 400W         |   |                                  |   | 400W         | 15        |            |      | SUMP PUMP BS79-SMP                  | 8    |   |  |
| 9   | SPARE                             |                                     |                                       | 15        | 400W         |   |                                  |   | 400W         |           |            |      |                                     | 10   |   |  |
| 11  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 12   |   |  |
| 13  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 14   |   |  |
| 15  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 16   |   |  |
| 17  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 18   |   |  |
| 19  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 20   |   |  |
| 21  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 22   |   |  |
| 23  | SPARE                             |                                     |                                       | 15        |              |   |                                  |   |              |           |            |      |                                     | 24   |   |  |
| TOTAL CONNECTED LOAD:   |                                   |                                     | KVA                                   |           | PHASE A: KVA |   | A                                |   | PHASE B: KVA |           | A          |      | PHASE C: KVA                        |      | A |  |
| NOTES:  |                                   |                                     | NOTE LEGEND:                          |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |
| 1. WATT LOADS COPIED FROM EXISTING DRAWINGS EXCEPT FOR THOSE NOTED. |                                   |                                     | AFCI ARC FAULT CIRCUIT INTERRUPTOR    |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |
|   |                                   |                                     | GFCI GROUND FAULT CIRCUIT INTERRUPTOR |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |
|   |                                   |                                     | LOCK LOCKED BREAKER                   |           |              |   |                                  |   |              |           |            |      |                                     |      |   |  |

| PANEL ID: PNL-4B  |                              | AMPS: 100                           | VOLTS: 120/208V                       | PHASE: 3Ø | WIRE: 4      | SURF. MOUNT <input checked="" type="checkbox"/> | TOP FED <input type="checkbox"/> |   |              |           |            |      |              |      |   |  |
|---|------------------------------|-------------------------------------|---------------------------------------|-----------|--------------|---|----------------------------------|---|--------------|-----------|------------|------|--------------|------|---|--|
| DESCRIPTION: ESSENTIAL  |                              | LOCATION: SERVICE BUILDING ELEC. RM |                                       |           |              |   |                                  |   |              |           |            |      |              |      |   |  |
| MFG / MODEL: WESTINGHOUSE PRL1                                      |                              | INTERRUPTING RATING: XX KA          |                                       |           |              |   |                                  |   |              |           |            |      |              |      |   |  |
| MAIN BREAKER: 60A   |                              | INST. SETTINGS: N/A                 |                                       |           |              |   |                                  |   |              |           |            |      |              |      |   |  |
| CCT.  | DESCRIPTION                  | NOTE                                | WIRE (AWG)                            | BRKR AMPS | LOAD (VA)    | A   | B                                | C | LOAD (VA)    | BRKR AMPS | WIRE (AWG) | NOTE | DESCRIPTION  | CCT. |   |  |
| 1   | EXIT LIGHTS                  |                                     | 15                                    | 15        | 315          |   |                                  |   | 200          | 15        |            |      | EXIT LIGHTS  | 2    |   |  |
| 3   | GENERATOR VENT TRANSFORMER   |                                     |                                       | 15        | 200W         |   |                                  |   |              | 15        |            |      | SPARE        | 4    |   |  |
| 5   | RECEPTACLE GENERATOR RM B109 |                                     | 15                                    | 15        | 400W         |   |                                  |   | 1200         | 15        |            |      | FDP-B        | 6    |   |  |
| 7   | SPARE                        |                                     |                                       | 15        |              |   |                                  |   | 1200         | 15        |            |      | FDP-B        | 8    |   |  |
| 9   | SPARE                        |                                     |                                       | 15        |              |   |                                  |   | 1200         | 15        |            |      | FDP-B        | 10   |   |  |
| 11  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 12   |   |  |
| 13  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 14   |   |  |
| 15  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 16   |   |  |
| 17  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 18   |   |  |
| 19  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 20   |   |  |
| 21  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 22   |   |  |
| 23  | SPACE                        |                                     |                                       |           |              |   |                                  |   |              |           |            |      | SPACE        | 24   |   |  |
| TOTAL CONNECTED LOAD:   |                              |                                     | KVA                                   |           | PHASE A: KVA |   | A                                |   | PHASE B: KVA |           | A          |      | PHASE C: KVA |      | A |  |
| NOTES:  |                              |                                     | NOTE LEGEND:                          |           |              |   |                                  |   |              |           |            |      |              |      |   |  |
| 1. WATT LOADS COPIED FROM EXISTING DRAWINGS EXCEPT FOR THOSE NOTED. |                              |                                     | AFCI ARC FAULT CIRCUIT INTERRUPTOR    |           |              |   |                                  |   |              |           |            |      |              |      |   |  |
|   |                              |                                     | GFCI GROUND FAULT CIRCUIT INTERRUPTOR |           |              |   |                                  |   |              |           |            |      |              |      |   |  |
|   |                              |                                     | LOCK LOCKED BREAKER                   |           |              |   |                                  |   |              |           |            |      |              |      |   |  |

|     |   |
|-----|---|
| NO. | CONSTRUCTION NOTES                      |
| 1   | INSTALL 40A CUTLER-HAMMER HFD BREAKERS. |

NOTES:  
1. SUPERCEDES PART OF SEP-907.



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

|                 |                       |   |               |
|-----------------|-----------------------|---|---------------|
|                 |                       | SNC-LAVALIN INC.<br>148 Nature Park Way<br>Winnipeg, MB, Canada R3P 0X7<br>204-786-8080 |               |
| DESIGNED BY:    | T. CHURCH             | CHECKED BY:   | C. REIMER     |
| DRAWN BY:       | S. COATES             | APPROVED BY:  | C. REIMER     |
| SCALE:          | N.T.S.                | RELEASED FOR CONSTRUCTION BY:   | N. HARRINGTON |
| DATE:           | 2009/09/17            | DATE:   | 2011/03/11    |
| CONSULTANT NO.: | 112577-0106-47DD-0302 |   |               |

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  
 PANEL SCHEDULES  
 SERVICE BUILDING ELECTRICAL ROOM  
 CITY DRAWING NUMBER: 1-0102B-E0008  
 SHEET: 001  
 REV: 00  
 SIZE: A1