



- ELECTRICAL DRAWING LIST:**
- E1 ELECTRICAL SITE PLAN, DRAWING LIST AND SYMBOL SCHEDULE
  - E2 NORTH-WEST BASTION EXISTING, NEW ELECTRICAL PLAN AND DETAILS
  - E3 BIG HOUSE - BASEMENT AND ATTIC EXISTING/DEMOLITION LIGHTING PLAN
  - E4 BIG HOUSE - BASEMENT AND MAIN FLOOR EXISTING/DEMOLITION POWER AND NEW LIFE SAFETY SYSTEMS PLAN
  - E5 BIG HOUSE - BASEMENT AND MAIN FLOOR - NEW LIGHTING PLAN
  - E6 BIG HOUSE - BASEMENT AND MAIN FLOOR - NEW POWER PLAN
  - E7 BIG HOUSE - BASEMENT AND MAIN FLOOR - NEW HEATING PLAN
  - E8 BIG HOUSE - BASEMENT AND MAIN FLOOR - NEW FIRE ALARM PLAN
  - E9 BIG HOUSE - EXISTING/DEMOLITION AND NEW ELECTRICAL ROOM LAYOUT
  - E10 FURLOFT - BASEMENT AND MAIN FLOOR - EXISTING/DEMOLITION ELECTRICAL PLAN
  - E11 FURLOFT - ATTIC SPACE AND SECOND FLOOR - EXISTING/DEMOLITION POWER AND FIRE ALARM PLAN
  - E12 FURLOFT - BASEMENT AND MAIN FLOOR NEW LIGHTING, POWER AND LIFE SAFETY SYSTEMS PLAN
  - E13 FURLOFT - SECOND FLOOR AND ATTIC SPACE NEW LIGHTING, POWER AND LIFE SAFETY SYSTEMS PLAN
  - E14 MEN'S HOUSE MAIN FLOOR AND ATTIC SPACE EXISTING/DEMOLITION ELECTRICAL PLAN
  - E15 MEN'S HOUSE MAIN FLOOR AND ATTIC SPACE NEW LIGHTING, POWER AND LIFE SAFETY SYSTEMS PLAN
  - E16 STOCKADE EXISTING PARTIAL SINGLE LINE DISTRIBUTION DIAGRAM
  - E17 STOCKADE NEW PARTIAL SINGLE LINE DISTRIBUTION DIAGRAM
  - E18 FIRE ALARM RISER DIAGRAM
  - E19 ELECTRICAL DETAILS-1
  - E20 ELECTRICAL DETAILS-2
  - E21 BIG HOUSE LIGHTING CONTROL SCHEMATIC
  - E22 ELECTRICAL SCHEDULES
  - E23 PANELBOARD DIRECTORY-1
  - E24 PANELBOARD DIRECTORY-2

- TELECOMMUNICATIONS DRAWING LIST:**
- T1 BIGHOUSE BASEMENT AND MAIN FLOOR TELECOMMUNICATIONS DEMOLITION PLAN
  - T2 BIGHOUSE BASEMENT AND MAIN FLOOR TELECOMMUNICATIONS NEW CONSTRUCTION AND INTRUSION ALARM SINGLE LINE DIAGRAM
  - T3 FURLOFT BASEMENT AND MAIN FLOOR SECURITY DEMOLITION PLAN
  - T4 FURLOFT SECOND FLOOR SECURITY DEMOLITION PLAN
  - T5 FURLOFT BASEMENT AND MAIN FLOOR SECURITY NEW CONSTRUCTION PLAN
  - T6 FURLOFT SECOND FLOOR SECURITY NEW CONSTRUCTION PLAN AND INTRUSION ALARM SINGLE LINE DIAGRAM
  - T7 MEN'S HOUSE MAIN FLOOR - DEMOLITION AND NEW CONSTRUCTION PLAN AND INTRUSION ALARM SINGLE LINE DIAGRAM

- NOTES:**
- ELECTRICAL CONTRACTOR TO CONTACT AND CONFIRM WITH AUTHORITIES ALL EXISTING SITE SERVICES OUTSIDE OF STOCKADE BEFORE DIGGING. ALL U/G SERVICES WITHIN STOCKADE TO BE LOCATED BY CONTRACTOR. MARK UP ALL SERVICES IN ADVANCE AND INCLUDE ALL COSTS IN TENDER PACKAGE BEFORE SUBMITTING PRICE.
  - ELECTRICAL CONTRACTOR TO ARRANGE, COORDINATE AND CONFIRM WITH MANITOBA HYDRO FOR PRE-INSPECTION OF SITE READY EQUIPMENT AND ASSIST FOR FINAL CONNECTION OF SERVICES. THE ENTIRE INSTALLATION TO BE TO THE FULL SATISFACTION OF PARKS CANADA, DEPARTMENTAL REPRESENTATIVE AND ALL AUTHORITIES HAVING JURISDICTION.
  - ALL REQUIRED EXCAVATION TO BE VIA SOFT DIGGING MEANS IE POWERVAC. ANY DAMAGE TO EXISTING U/G CABLES TO BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO COST TO PWGSC OR PARKS CANADA. NO SPLICING OF U/G CABLES WILL BE PERMITTED.
  - PARKS CANADA TO BE PRESENT DURING ALL EXCAVATION.

- SYMBOL SCHEDULE:**
- LINETYPE DENOTES EXISTING DEVICE
  - E - DENOTES EXISTING TO REMAIN
  - R - DENOTES EXISTING TO BE RELOCATED
  - D - DENOTES EXISTING TO BE DISCONNECTED AND REMOVED
  - - DOWNLIGHT LUMINAIRE
  - ▭ - SURFACE MOUNT LUMINAIRE
  - | — STRIP STYLE LUMINAIRE
  - | — LED PERIMETER COVE LIGHT
  - | — TRACK HEAD LUMINAIRE
  - NL - NIGHT LIGHT
  - ⌘ - ONE GANG SWITCH
  - ⌘ - SPECIAL RECEPTACLE
  - ⌘ - DUPLEX RECEPTACLE
  - ⌘ - GROUND FAULT TYPE RECEPTACLE MOUNTED AT COUNTER HEIGHT
  - ⌘ - RECEPTACLE MOUNTED IN FLOOR
  - ⊙ - JUNCTION BOX
  - DO - DENOTES DOOR OPERATOR
  - ⊙ - WALL BOX DIMMER
  - ⊙ - MOTOR CONNECTION C/W DISCONNECT
  - ⊙ - MECHANICAL EQUIPMENT CONNECTION C/W DISCONNECT
  - ⊙ - PANELBOARD
  - ⊙ - THERMOSTAT
  - ⊙ F - IN FLOOR
  - ⊙ - UNIT HEATER
  - ⊙ - EMERGENCY LIGHTING BATTERY BANK C/W DUAL REMOTE HEADS
  - ⊙ - EMERGENCY LIGHTING DUAL REMOTE HEADS
  - ⊙ - EMERGENCY LIGHTING SINGLE REMOTE HEAD
  - ⊙ - PICTOGRAM TYPE EGRESS SIGN
  - ⊙ - FIRE ALARM SMOKE DETECTOR
  - ⊙ - FIRE ALARM SMOKE DUCT DETECTOR
  - DW - DUCT WORK
  - ⊙ - FIRE ALARM PULL STATION
  - ⊙ - END OF LINE DEVICE
  - ⊙ - FIRE ALARM BELL
  - ⊙ - FIRE ALARM HEAT DETECTOR
  - ⊙ - SPRINKLER TAMPER SWITCH
  - ⊙ - SPRINKLER FLOW SWITCH
  - ⊙ - ISOLATION MODULE
  - ⊙ - FIRE ALARM HORN
  - ⊙ - FIRE ALARM STROBE
  - ⊙ - FIRE ALARM HORN/STROBE
  - ⊙ - FIRE ALARM COMMUNICATIONS CABLE
  - ⊙ - SPEAKER
  - ⊙ - SURFACE MOUNT FIRE ALARM REMOTE ANNUNCIATOR

**ESTIMATED ELECTRICAL LOAD:**

**BIG HOUSE**  
 HEATING - 113.2kW TOTAL CONNECTED  
 LIGHTING - 11.428kW TOTAL CONNECTED  
 POWER - 22.7kW TOTAL CONNECTED  
 MECHANICAL - 5.91kW TOTAL CONNECTED  
 BIG HOUSE TOTAL CONNECTED - 153.238kW  
 BIG HOUSE DEMANDED - 140.23kW

**FURLOFT**  
 HEATING - 138.75kW TOTAL CONNECTED  
 LIGHTING - 1.0kW TOTAL CONNECTED  
 POWER - 13.8kW TOTAL CONNECTED  
 MECHANICAL - 1.6kW TOTAL CONNECTED  
 FURLOFT TOTAL CONNECTED - 153.55kW  
 FURLOFT DEMANDED - 147.8kW

**MEN'S HOUSE**  
 HEATING - 42.4kW TOTAL CONNECTED  
 LIGHTING - 0.1kW TOTAL CONNECTED  
 POWER - 12.6kW TOTAL CONNECTED  
 MECHANICAL - 1.6kW  
 MEN'S HOUSE TOTAL CONNECTED - 56.7kW  
 MEN'S HOUSE DEMANDED - 49.95kW

**EXISTING PEAK DEMAND LOAD - 121kW**  
 FUTURE PROVISION 25% - 114.745kW

TOTAL ANTICIPATED - 573.725kW

RECOMMENDED MAIN SERVICE SIZE - 800A, 347/600V/3Ø/4W  
 MINIMUM INTERRUPTING CAPACITY - 25KA RMS SYMMETRICAL

**HERITAGE CONSERVATION:**  
 LOWER FORT GARRY IS A NATIONAL HISTORIC SITE. DUE TO ITS UNIQUE HISTORICAL SIGNIFICANCE, SPECIAL PROCEDURES AND PRECAUTIONS ARE TO BE USED IN SELECTIVE DEMOLITION AND RESTORATION. REFER TO SPECIFICATION SECTION 01 35 91 HISTORIC TREATMENT PROCEDURES.



Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

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**APEGM**  
 Certificate of Authorization  
 HDK Consulting Incorporated  
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Approved by/Approve par HCC		
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PWGSC Project Manager/Administrateur de Projets TPSCG CHRISTINA KOVACS		
PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSCG		
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