



Revision/Revisión	Description/Description	Date/Date
0	ISSUED FOR TENDER	2015/10/22

FORT BATTLEFORD PALISADE REPLACEMENT

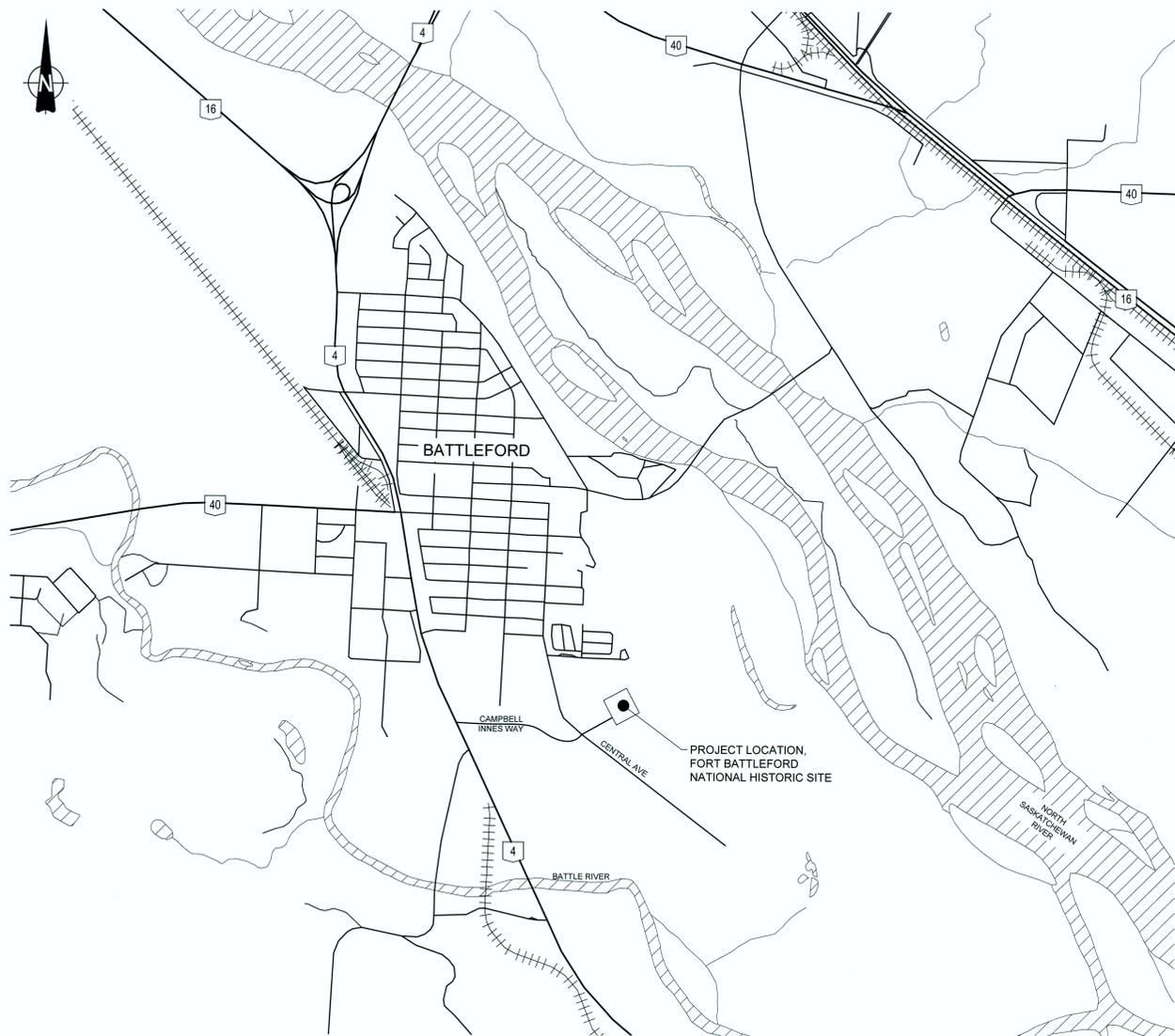
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Client/client
Public Works and Government Services Canada
Drawing title/Titre du dessin

LOCATION PLAN, KEY PLAN, AND GENERAL NOTES



KEY PLAN VIEW
N.T.S.



LOCATION PLAN VIEW
Scale: 0 20 40 60 80 1000

GENERAL NOTES:

A. COORDINATION

1. THE EXISTING GRADE AROUND THE EXISTING PALISADE IS CONSIDERED A LEVEL 1 CULTURAL RESOURCE. EXISTING GRADE ON BOTH SIDES OF THE PALISADE STOCKADE ARE TO REMAIN UNDISTURBED AT ALL TIMES DURING CONSTRUCTION.
2. PRESENT GRADE AROUND THE STOCKADE SHALL BE MAINTAINED. LIMIT THE USE OF HEAVY, TRACKED EQUIPMENT TO THOSE AREAS WHICH HAVE BEEN PREVIOUSLY DISTURBED. REFER TO THE FORT BATTLEFORD NATIONAL HISTORIC SITE "CULTURAL RESOURCE INVENTORY AND CUMULATIVE IMPACT ANALYSIS ADDENDUM" SITE PLAN DATED APRIL, 2008 FOR INFORMATION ON CULTURAL RESOURCES WITHIN THE FORT BATTLEFORD SITE AND/OR COORDINATE WITH PARKS CANADA STAFF AND THE DEPARTMENT REPRESENTATIVE.
3. CONTRACTOR SHALL PERFORM ALL WORK WITH HEAVY MACHINERY AND/OR TRACKED VEHICLES FROM ACCESS MATTING IN ORDER TO MINIMIZE DISTURBANCE TO THE EXISTING GRADE. THE AMOUNT OF ACCESS MATTING SUPPLIED AND INSTALLED IS THE RESPONSIBILITY OF THE CONTRACTOR.

C. DESIGN CRITERIA

- a. DESIGN CODE: NBCC 2010
- b. IMPORTANCE CATEGORY: NORMAL
- c. DESIGN LOADS (SPECIFIED)
 - i. DEAD LOAD = MATERIAL SELF WEIGHT
 - ii. WIND LOAD 1/50 = 0.48 KPa

D. MATERIALS

1. CONCRETE
 - a. CONCRETE: TO CSA A23.1, Fc = 35MPa.
 - b. EXPOSURE CLASS S-1, MAX W/C M RATIO = 0.40.
 - c. MAX AGGREGATE SIZE 10 mm, AIR CONTENT CATEGORY "2", CONSOLIDATE CONCRETE USING INTERNAL VIBRATORS.
2. STEEL
 - a. ALL STEEL MEMBERS SHALL BE HOT-DIP GALVANIZED TO CANCSA G164.
 - b. STEEL PLATES TO CSA G40.21M, GRADE 300W OR BETTER.
 - c. BOLTS AND LAG SCREWS TO ASTM B18.2.1, GRADE 2.
 - d. LAG SCREWS SHALL BE INSTALLED IN PRE DRILLED HOLES AS PER CSA D86 AND CONTRACT SPECIFICATIONS.

E. EXISTING PALISADE

1. UNLESS DIRECTED OTHERWISE BY THE DEPARTMENTAL REPRESENTATIVE, DISMANTLE AND DISPOSE OF ALL EXISTING PALISADE MATERIALS AS INDICATED INCLUDING STOCKADE FENCING, BASTIONS, AND GATES.
2. IF DIRECTED DO NOT REMOVE SECTIONS OF THE EXISTING PALISADE AS IDENTIFIED BY THE DEPARTMENTAL REPRESENTATIVE.
3. THE CONTRACTOR SHALL REMOVE ALL METAL FASTENING DEVICES AS REQUIRED BY THE DISPOSAL SITE FOR ACCEPTANCE. THE REMOVAL AND DISPOSAL OF METAL FASTENINGS WILL BE CONSIDERED A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER THIS CONTRACT.
4. THE CONTRACTOR SHALL LOAD, TRANSPORT AND DISPOSE OF ALL UNSALVAGED TREATED TIMBER MATERIALS IN AN ENVIRONMENTALLY FRIENDLY MANNER. SUPPLY THE DEPARTMENTAL REPRESENTATIVE WITH A COPY OF THE CERTIFICATE OF DISPOSAL.
5. CONTRACTOR SHALL SALVAGE ALL EXISTING SIGNAGE, SECURITY CAMERAS, AND ELECTRICAL BOXES FOR RE-INSTALLATION FOLLOWING STOCKADE RECONSTRUCTION. COORDINATE WITH PARKS CANADA STAFF AND THE DEPARTMENTAL REPRESENTATIVE.

F. WOOD

- a. ALL WOOD PRODUCTS TO CONFORM TO THE FOLLOWING CURRENT STANDARDS:
 - i. CANCSA 015 - WOOD UTILITY POLES AND REINFORCING STUDS
 - ii. CANCSA 080 SERIES - CLASS 1 WOOD PRESERVATION TO UC-4.2
 - iii. CANCSA 0141
 - iv. CSA 0322 - PROCEDURE FOR CERTIFICATION OF PRESSURE TREATED WOOD FOR USE IN PRESERVED WOOD FOUNDATIONS FOR CANADIAN LUMBER.
 - v. ALL WOOD TO BE INTERIOR DOUGLAS FIR DIMENSIONAL LUMBER TO BE ROUGH CUT, #1 GRADE OR BETTER WITH MAX 19% MOISTURE CONTENT. FOR GATES, SUPPLY CUSTOM ROUGH CUT TIMBER TO THE DIMENSIONS INDICATED ON THE PLANS.
 - vi. NUGA STANDARD GRADING RULES FOR CANADIAN LUMBER.
- b. TIMBER POSTS TO BE SUPPLIED AT THE AVERAGE DIAMETER INDICATED ON THE DRAWINGS. THE BASE OF THE MAIN SUPPORT POSTS SHALL BE TO OR GREATER THAN THE DIAMETER INDICATED. "OFF CUT" TIMBER POSTS ARE ACCEPTABLE.

G. DESIGN CRITERIA

- a. ALL STOCKADE POSTS AND SAWN TIMBER WHALERS AND SILLS TO BE "CCA" PRESSURE TREATED TO 6.4 KG/CM³ M.
- b. ALL SAWN TIMBER FOR GATES TO BE PRESSURE TREATED WITH COPPER AZOLE TO 10 KG/CM³ M.
- c. APPLY TWO COATS OF COPPER NAPHTHATE TO ANY CUTS IN WOOD MEMBERS.
- d. BELOW GRADE POSTS TO BE WRAPPED USING COOPER BORATE (CU-BOR) POUCHES. INSTALL AS PER MANUFACTURER RECOMMENDATIONS.
- e. FOR INTERIOR DOUGLAS FIR POSTS, ALTERNATE LOG ORIENTATIONS FROM BUTT-UP TO BUTT-DOWN.
- f. INSTALL NAILS AND SPIKES WITH THE FOLLOWING MINIMUM SPACING:

NAIL	MIN END	MIN EDGE	MIN SPACING
Ø	DISTANCE	DISTANCE	PARALLEL TO GRAIN
6.4mm	115mm	40mm	155mm

LEGEND:

- UNDERGROUND POWER
- STOCKADE SECTION
- ALTERNATE STOCKADE SECTION
- RAILROAD TRACK
- BODY OF WATER
- POTENTIAL CONTRACTOR LAYDOWN AREA
- SITE SIGN
- ELECTRICAL BOX