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Revision/Description/Client/Client

**CANADA BORDER SERVICES AGENCY (CBSA)**

Project title/Titre du projet

**CBSA IPIL-RFID Douglas & Pacific Highway Port of Entry**

Consultant Signature Only

Designed by/Concept par  
**AES/NNA**

Drawn by/Dessiné par  
**AES/EH**

PWGC Project Manager/Administrateur de Projets TPSCG  
**JULIAN HO**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architecture et de génie, TPSCG  
**PREETIPAL PAUL**

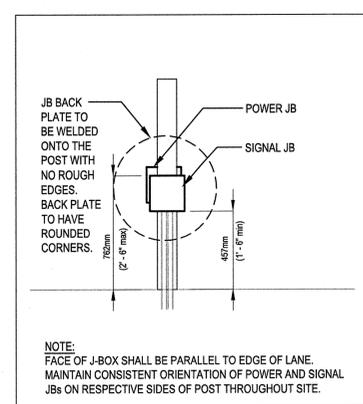
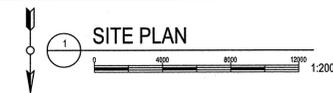
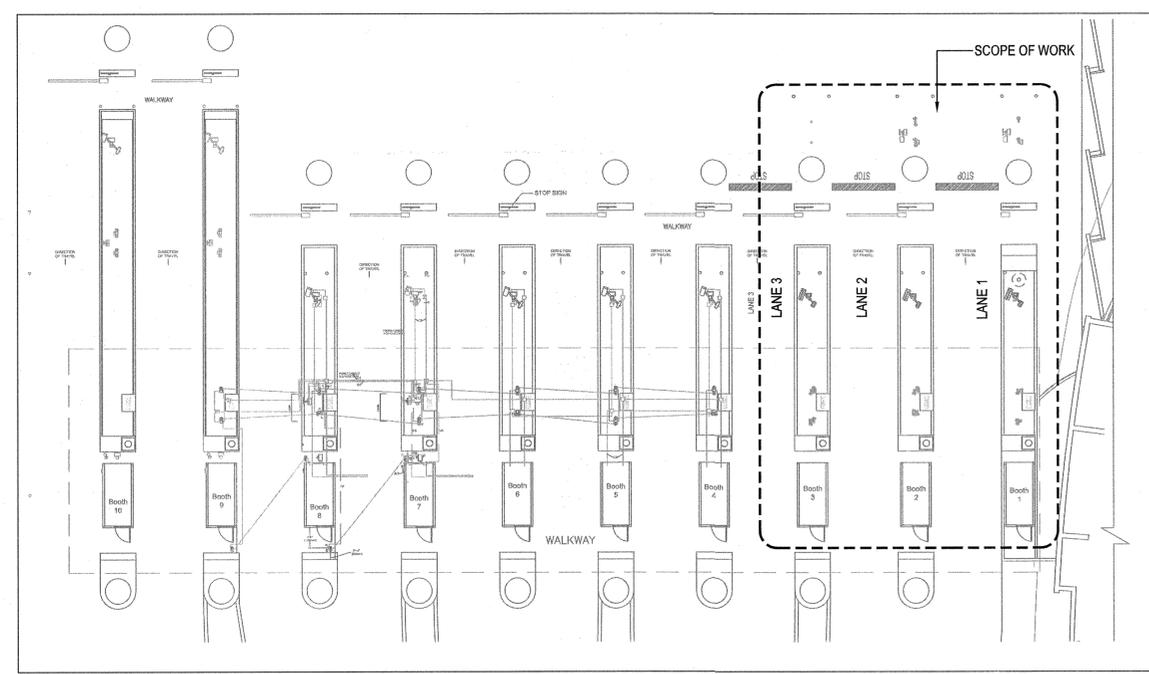
Drawing title/Titre du dessin

**DOUGLAS SITE PLAN (INDICATING SCOPE OF WORK), LEGEND, NOTES AND DETAILS**

Project No./No. du projet  
**R.081242.001**

Sheet/Fauille  
**E100**  
02 OF 09

Revision no./La Révision no.  
**0**



**2 TYPICAL JUNCTION BOX DETAIL**  
E100 0 200 400 600 800 1000 1200 1:20

POST DESIGNATOR (DOUGLAS)					
POST #	NEW OR EXISTING	DIAMETER (mm)	HEIGHT (mm)	STEEL POST CAPPED OR UNCAPPED	MOUNTED DEVICES ON POST
P1	EXISTING	-	-		
P2	EXISTING	-	-		
P3	EXISTING	-	-		CAMERA/STROBE
P4	NEW	103	1219	ROUNDED REMOVABLE END CAP	VEHICLE DETECTION SENSORS
P5	NEW	103	1981	ROUNDED REMOVABLE END CAP	RFID EQUIPMENT
P6	NEW	103	1219	ROUNDED REMOVABLE END CAP	VEHICLE DETECTION SENSORS
P7	EXISTING	-	-		
P8	EXISTING	-	-		
P9	EXISTING	-	-		CAMERA/STROBE
P10	NEW	103	1219	ROUNDED REMOVABLE END CAP	VEHICLE DETECTION SENSORS
P11	NEW	103	1981	ROUNDED REMOVABLE END CAP	RFID EQUIPMENT
P12	NEW	103	1219	ROUNDED REMOVABLE END CAP	VEHICLE DETECTION SENSORS
P13	EXISTING	-	-		
P14	EXISTING	-	-		
P15	EXISTING	-	-		CAMERA/STROBE
P16	NEW	103	1219	ROUNDED REMOVABLE END CAP	VEHICLE DETECTION SENSORS
P17	NEW	103	1219	ROUNDED REMOVABLE END CAP	VEHICLE DETECTION SENSORS
PP1	NEW	152	2261	WELDED ROUND END CAP (CONCRETE FILLED)	PROTECTION POST
PP2	NEW	152	2261	WELDED ROUND END CAP (CONCRETE FILLED)	PROTECTION POST
PP3	NEW	152	2261	WELDED ROUND END CAP (CONCRETE FILLED)	PROTECTION POST
PP4	NEW	152	2261	WELDED ROUND END CAP (CONCRETE FILLED)	PROTECTION POST
PP5	NEW	152	2261	WELDED ROUND END CAP (CONCRETE FILLED)	PROTECTION POST
PP6	NEW	152	2261	WELDED ROUND END CAP (CONCRETE FILLED)	PROTECTION POST

METRIC EQUIVALENTS	
1"	27mm
1 1/2"	41mm
4"	103mm
6"	152mm
24"	608mm
48"	1219mm
72"	1829mm
78"	1981mm
89"	2261mm

**NOTES AND SPECIAL INSTRUCTIONS:**

- ALL WORK TO BE CONDUCTED WITH THE EXPRESS PERMISSION OF THE DEPARTMENTAL REPRESENTATIVE.
- UPON AWARD OF CONTRACT, THE CONTRACTOR WILL PROVIDE A DETAILED SCHEDULE OF THE WORK AT EACH SITE AND LANE. THIS SCHEDULE WILL HAVE TO BE APPROVED BY THE DEPARTMENTAL REPRESENTATIVE PRIOR TO START OF WORK.
- ONLY AFTER ITEM #2 ABOVE IS COMPLETED AND APPROVED, THEN AND ONLY THEN, WILL THE REMOVAL AND REPLACEMENT OF THE EXISTING JUNCTION BOXES BE STARTED (i.e. WORK FROM CAMERA POST TO BOOTH).
- IN TERMS OF SEQUENCE, ALL CIVIL AND ELECTRICAL WORK (ONE SITE / ONE LANE AT A TIME) FROM THE CAMERA POSTS AND BEYOND, IS TO BE COMPLETED FIRST.
- ROUTING OF ALL NEW CONDUITS TO BE DONE IN SUCH A MANNER THAT AFFORD THE LEAST DISRUPTION TO SITE OPERATION DURING CONSTRUCTION. CONFIRM ROUTING OF ALL UNDERGROUND CONDUITS WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO TRENCHING.
- CO-ORDINATE WITH CIVIL CONTRACT WITH REGARDS TO UNDERGROUND CONDUITS IN CONCRETE-PROVIDE ALL CUTTING AND PATCHING.
- TAKE NOTE THAT:
  - FROM CAMERA POST TO BOOTH:
    - ALL EXISTING JUNCTION BOXES TO BE REMOVED AND REPLACED WITH NEW JUNCTION BOXES.
    - SEPARATE JUNCTION BOXES FOR POWER AND FOR SIGNAL CIRCUITS.
    - JUNCTION BOXES TO BE PVC, 152mm x 152mm x 103mm, ONE FOR POWER WIRING AND ONE FOR SIGNAL WIRING ON THE OPPOSITE SIDE OF EACH POST (MAINTAIN CONSISTENT PLACEMENT AND ORIENTATION THROUGHOUT PROJECT). LAMICOID LABELING IS REQUIRED ON EACH JB. LABELS TO BE AFFIXED USING CONTACT CEMENT ADHESIVE. LAMICOID LABELS ON JBS SHALL INDICATE EITHER "POWER" OR "SIGNAL" AS APPLICABLE.
    - REMOVE EXISTING JBS AND BACKPLATES, GRIND SURFACE TO MAKE SMOOTH, PAINT TO MATCH, AND THEN INSTALL NEW JBS. LAMICOID LABELING IS REQUIRED ON EACH JB. LABELS TO BE AFFIXED USING CONTACT CEMENT ADHESIVE. LAMICOID LABELS ON JBS SHALL INDICATE EITHER "POWER" OR "SIGNAL" AS APPLICABLE.
    - THE TWO JUNCTION BOXES TO BE MOUNTED ON THE OPPOSITE SIDES OF THE RESPECTIVE POST.
    - ANY EXISTING ENTERING AND EXITING CONDUIT AT THE JUNCTION BOX LOCATION TO BE SUITABLY RE-POSITIONED AND LIQUID-TITE FLEXIBLE CONDUIT INSTALLED AT THE JUNCTION BOX TO ALLOW RE-CONNECTION.
    - PROVIDE 1.8m OF COILED POWER CONDUCTORS ASSOCIATED WITH THE POWER JUNCTION BOXES.
    - SIGNAL CABLES WILL BE SUPPLIED AND INSTALLED BY OTHERS. PROVIDE CONTINUOUS PULL STRING IN THE SIGNAL CONDUITS.
    - ALL UNDERGROUND CONDUITS TO BE AT 450mm DEPTH IN ACCORDANCE WITH TABLE 53 OF THE CANADIAN ELECTRICAL CODE.
  - FROM CAMERA POST TO BEYOND:
    - PROVIDE ALL NEW POWER AND SIGNAL CONDUITS.
    - ALL CONDUITS TO BE MINIMUM 27mm DIAMETER. UNDERGROUND CONDUITS TO BE RPVC. ABOVE GROUND SURFACE MOUNTED ALONG THE CONCRETE CURBS TO BE RGS.
    - ALL NEW POSTS REQUIRED.
    - ALL NEW JUNCTION BOXES (FOR POWER AND SIGNAL) REQUIRED. JUNCTION BOXES TO BE PVC, 152mm x 152mm x 103mm, ONE FOR POWER WIRING AND ONE FOR SIGNAL WIRING ON THE OPPOSITE SIDE OF EACH POST (MAINTAIN CONSISTENT PLACEMENT AND ORIENTATION THROUGHOUT PROJECT). LAMICOID LABELING IS REQUIRED ON EACH JB. LABELS TO BE AFFIXED USING CONTACT CEMENT ADHESIVE. LAMICOID LABELS ON JBS SHALL INDICATE EITHER "POWER" OR "SIGNAL" AS APPLICABLE.
    - 120V POWER CONDUCTORS, #12 AWG COPPER IN THE POWER CONDUITS.
    - PROVIDE 1.8m OF COILED POWER CONDUCTORS ASSOCIATED WITH THE POWER JUNCTION BOXES.
    - SIGNAL CABLES WILL BE SUPPLIED AND INSTALLED BY OTHERS. PROVIDE CONTINUOUS PULL STRING IN THE SIGNAL CONDUITS.
    - ALL UNDERGROUND CONDUITS TO BE AT 450mm DEPTH IN ACCORDANCE WITH TABLE 53 OF THE CANADIAN ELECTRICAL CODE.
    - UTILIZE GROUND PENETRATING RADAR TO SCAN NEW TRENCHING ROUTE PRIOR TO TRENCHING FOR NEW UNDERGROUND CONDUITS.