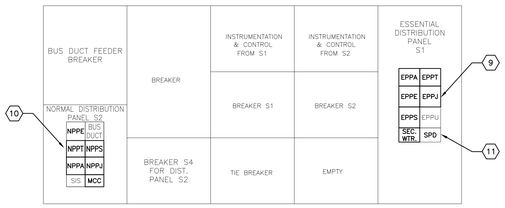

2 EXISTING SWITCHBOARD S1/S2 ELEVATION VIEW
E5 SCALE: 1:25

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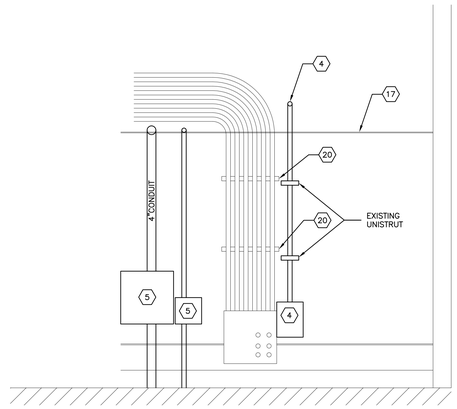

3 SECTION VIEW DEMOLITION
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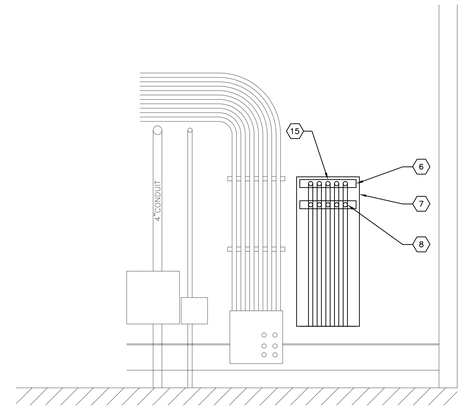

4 SECTION VIEW NEW
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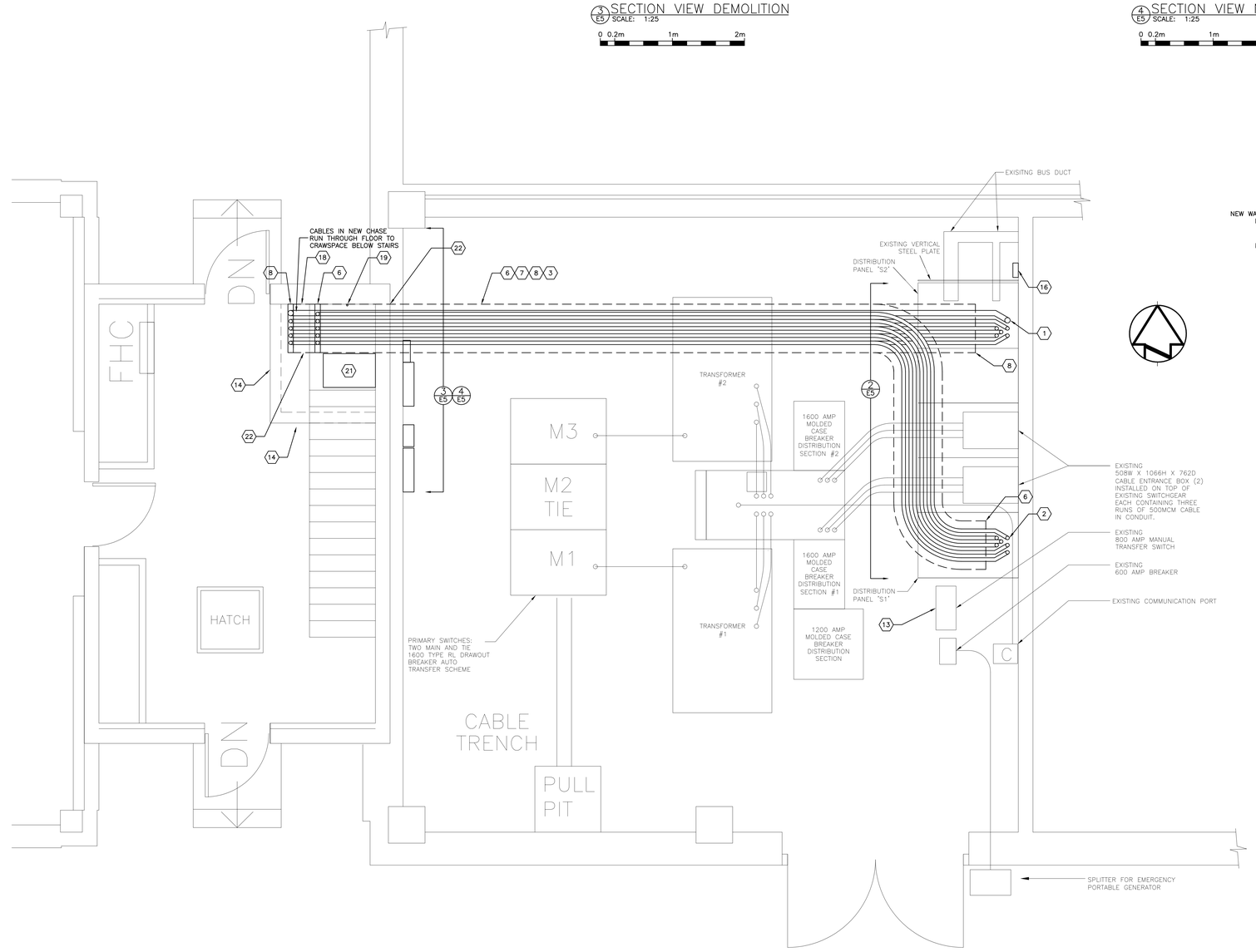

1 BUILDING MHK
E5 SCALE: 1:25

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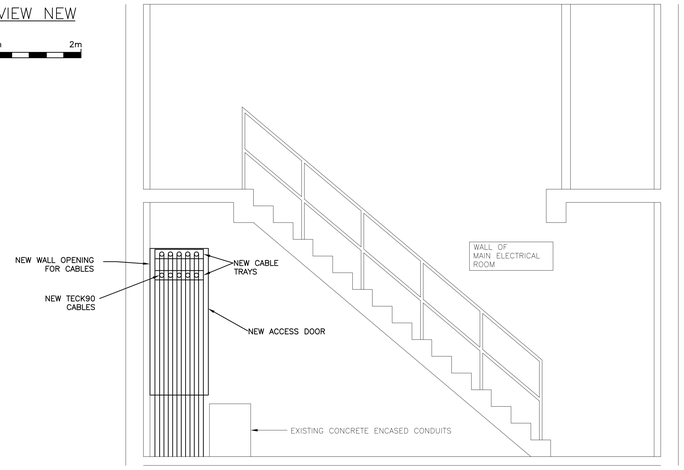

5 ELEVATION VIEW
E5 SCALE: 1:25

0 0.2m 1m 2m

NOTES

1. SIX NEW TECK 90 CABLES TO ENTER TOP REAR OF EXISTING NORMAL DISTRIBUTION SECTION INSTALL IN UPPER TRAY.
2. SIX NEW TECK 90 CABLES TO ENTER TOP REAR OF EXISTING ESSENTIAL DISTRIBUTION SECTION INSTALL IN LOWER TRAY.
3. TWO NEW 610mm (24") WIDE x 75mm (3") HIGH HORIZONTAL CABLE TRAYS VERTICALLY STACKED AT HIGH LEVEL, (3000mm MINIMUM) FROM FLOOR TO LOWEST TRAY. LOWER TRAY TO BE FOR NORMAL POWER CABLES, UPPER TRAY FOR ESSENTIAL CABLES.
4. REMOVE EXISTING CONDUIT AND JUNCTION BOX FOR BUILDING MHS MCC TO MAKE ROOM FOR NEW WALL OPENING. RELOCATE GROUND WIRES AS REQUIRED. PROVIDE TEMPORARY CONNECTION CONSISTING OF TECK CABLE OR WIRES IN RIGID CONDUIT FOR EXISTING FEEDER FOR MHS MCC FROM APPROPRIATE LOCATION IN CRAWLSPACE UNDER BUILDING MHK TO DISTRIBUTION PANEL 'S1' UNTIL NEW FEEDER FOR MHS MCC IS CONNECTED AND FUNCTIONAL. CORE NEW HOLE THROUGH WALL OF ELECTRICAL ROOM TO CRAWLSPACE UNDER STAIRS IF REQUIRED.
5. REMOVE EXISTING CONDUITS, CONDUCTORS, AND JUNCTION BOXES FOR PANEL NPPT–600 AND SECONDARY WATER SUPPLY.
6. INSTALL 610MM (24") WIDE CABLE TRAY FOR ESSENTIAL POWER CABLES BELOW TRAY FOR NORMAL POWER CABLES.
7. PROVIDE 300mm MINIMUM SPACING BETWEEN CABLE TRAYS. MAINTAIN 3 METER MINIMUM CLEARANCE FROM FLOOR TO BOTTOM OF LOWER CABLE TRAY. ROUTING SHOWN IS APPROXIMATE ONLY. ROUTE NEW CABLE TRAYS AS REQUIRED TO ACCOMODATE EXISTING CONDUITS IN ELECTRICAL ROOM. NOTE THAT NOT ALL EXISTING CONDUITS ARE SHOWN ON THIS DRAWING. MAINTAIN 300mm MINIMUM CLEARANCE FROM CEILING.
8. INSTALL 610mm (24") WIDE CABLE TRAY FOR NORMAL POWER CABLES ABOVE TRAY FOR ESSENTIAL POWER CABLES.
9. REPLACE BREAKERS FOR DISTRIBUTION PANELS EPPA, EPPE, EPPJ, EPPS, EPPT, AND SECONDARY WATER SUPPLY.
10. REPLACE BREAKERS FOR DISTRIBUTION PANELS NPPA, NPPE, NPPJ, NPPS, NPPT AND BUILDING MHS MCC.
11. INSTALL NEW 60 AMP, 3 POLE, 600V 25KA BREAKER IN EXISTING EMPTY BREAKER SPACE FOR EXTERNALLY MOUNTED SURGE SUPPRESSOR FOR ESSENTIAL POWER.
12. THIS NOTE NOT USED.
13. MOUNT NEW EXTERNAL SPD (SURGE PROTECTION DEVICE) FOR EMERGENCY POWER BELOW EXISTING TRANSFER SWITCH AND CONNECT TO NEW CIRCUIT BREAKER IN ESSENTIAL POWER DISTRIBUTION PANEL (SEE NOTE 11). USE LOW IMPEDANCE CABLE SUPPLIED BY MANUFACTURER OF SPD. CONDUCTORS TO BE AS SHORT AS POSSIBLE.
14. NEW WALL TO ENCLOSE AREA UNDER EXISTING STAIRS AS FIRE SEPARATION.
15. NEW OPENING IN WALL FOR NEW ELECTRICAL CABLES. REFER TO STRUCTURAL DRAWINGS. INSTALL FIRE STOPPING PER SPECIFICATION SECTION 07 84 00.
16. NEW EXTERNALLY MOUNTED SPD (SURGE PROTECTION DEVICE) FOR NORMAL POWER. CONNECT DIRECTLY TO BUS INSIDE SWITCHBOARD FOR DISTRIBUTION PANEL 'S2'. USE LOW IMPEDANCE CABLE AND FUSED DISCONNECT SUPPLIED BY MANUFACTURER OF SPD. CONDUCTORS TO BE AS SHORT AS POSSIBLE. ROUTE CONDUIT THROUGH EXISTING STEEL PLATE AT END OF DISTRIBUTION PANEL.
17. REMOVE EXISTING CONDUIT AND RELOCATE AS REQUIRED TO MAKE ROOM FOR NEW WALL OPENING.
18. PROVIDE 300mm (12") SPACING BETWEEN CABLE TRAYS.
19. RELOCATE EXISTING VERTICAL 21mm CONDUIT ON WALL IF REQUIRED.
20. CUT EXISTING CHANNELS CLOSE TO CONDUIT CLAMPS. AS REQUIRED, TO MAKE ROOM FOR WALL OPENING.
21. EXISTING CONCRETE ENCASED CONDUITS FROM ELECTRICAL ROOM TO CRAWLSPACE TO REMAIN.
22. PERFORM LOCATES USING X–RAY OR GROUND PENETRATING RADAR TO CONFIRM THAT NO EXISTING SERVICES WILL BE HIT, PRIOR TO CUTTING WALL OR FLOOR.

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

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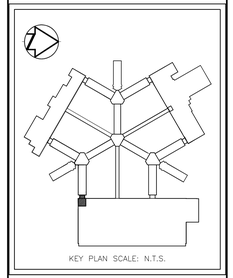

revision		date
04		
03		
02		
01	ISSUED FOR BID	2013–08–15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A Detail No. No. du détail
B drawing no. – where detail required dessin no. – où détail exige
C drawing no. – where detailed dessin no. – où détaillé

project title / titre du projet
BATH Ontario
MILLHAVEN INSTITUTION
HWY. 33, BATH, ON
K0H 1G0
ELECTRICAL DISTRIBUTION SYSTEM UPGRADE

drawing title / titre du dessin
MAIN ELECTRICAL ROOM PLAN

drawn by / dessine par: K. ROBINSON
designed by / conc par: R. FERGUSON
approved by / approuve par: R. VOS
bid / offre: K. HAQUE
project manager / administrateur de projets
project date / date du projet: 2013–05–27
project no. / no. du projet: R.053529.001
drawing no. / dessine no.: E–5