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TECHNICAL MEMORANDUM

Issue Date:	September 19, 2024	**File No.:**	mem_2024.01
To:	Cimir Bains, P.Eng., PMP	**Previous Issue Date:**	September 03, 2024
From:	Joey Balko, P.Eng.	**Project No.:**	2019-3623-00
Client:	Blatchford Renewable Energy		
Project Name:	Blatchford DESS		
Subject:	COE-IM-TMO-0005 - Blatchford District Energy Sharing System - Design & Construction Guideline Amendment		

1 PURPOSE

This memorandum provides updates to the current Blatchford District Energy Sharing System – Design & Construction Guideline (COE-IM-GUIDE-0008) dated February 20, 2024. The following changes to the Guidelines are to be incorporated.

2 SPECIFICATION UPDATES

The following specification sections shall be replaced with the enclosed sections:

- 33 81 29 – Communications Vaults, Pedestals, and Enclosures

3 DETAIL UPDATES

The following detail enclosed shall be added to the guideline details:

- E-02 – Electrical Pull Box Detail with Drain

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19 Sep. 2024
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JB

PERMIT TO PRACTICE
ASSOCIATED ENGINEERING ALBERTA LTD.
RM Signature
Nelson Dos Santos 67380 2024-09-19
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The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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Part 1 General

1.1 SUMMARY

.1 Section Includes:

.1 Underground pull boxes for Distribution Piping System (DPS) piping communication conduit system.

.2 Telecommunications pedestals for Distribution Piping System (DPS) piping instrumentation cable connections.

1.2 RELATED REQUIREMENTS

.1 Section 33 65 76 – Direct Buried Underground Cable Ducts

.2 Section 33 82 13.01 – Copper Communications Distribution Cabling

1.3 REFERENCES – LATEST EDITION

.1 Specification for Underground Enclosure Integrity - ANSI/ SCTE 77 - - Tier 22 / CSA 22.2 No. 344.

.2 Enclosures / Pedestals - CSA C22.2 NO. 94.2

1.4 ACTION AND INFORMATIONAL SUBMITTALS

.1 Product Data:

.1 Provide shop drawings for pull boxes and pedestals.

.2 Submit manufacturer's printed product literature, specifications and datasheet and include product characteristics, performance criteria, physical size, finish, and limitations.

1.5 QUALITY ASSURANCE

.1 Quality assurance submittals: submit following in accordance with Quality Control:

.1 Certificates: signed by manufacturer certifying materials comply with specified performance characteristics and physical properties.

.2 Manufacturer's Instructions: for installation and special handling criteria, installation sequence, and cleaning procedures.

Part 2 Products

2.1 OUTDOOR PULL BOXES

.1 Construction: Non-metallic.

.2 Covers: Suitable for Vehicle Traffic. Rated to ANSI/SCTE-77 Specifications for Underground Enclosure Integrity Tier 15 or 22 “Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic.”

.3 Lid to be marked “DPS”.

.4 Bottom: Open or closed with drain.

2.2 TELECOMMUNICATIONS PEDESTALS

.1 Above ground telephone pedestal:

.1 Construction: Metallic.

.2 Dimensions 900 mm high, 350 mm wide, 275 mm deep.

.3 NEMA Type 3R or IP equivalent minimum environmental rating.

.4 Pad lockable.

.5 ANSI 61 grey.

.6 To be marked “DPS”

.7 Complete with back panel with dinrails for mounting of terminal blocks for connection of Fee-Simple Town-House meters to M-BUS network.

.8 Terminal blocks

.1 Terminals to be CSA approved for 300 V, 10A, accepting #14 AWG - #26 AWG wire, and colored beige or grey.

.2 Spring clamp terminals to be used.

.9 AC-Dandy 6A-DPP or equivalent.

.2 Foundation:

.1 Precast concrete base sized to pedestal with allowance for belowground conduit entry. Knelsen #4-0046 size for pedestal.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

.1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

.1 Open Bottom Pull Boxes and Closed Bottom Pull Boxes (Vaults):

.1 Shall be Placed on 200 mm crushed washed rock. Washed rock at the base of the pull box shall extend a minimum of 2000mm in all directions around the pullbox.

.2 Closed Bottom Vaults shall have a minimum 50mm drainage hole in bottom of the vault to allow water to drain freely.

.3 Conduits in the pull boxes should be sealed in accordance with specification 33 65 76 Direct Buried Underground Cabling Ducts.

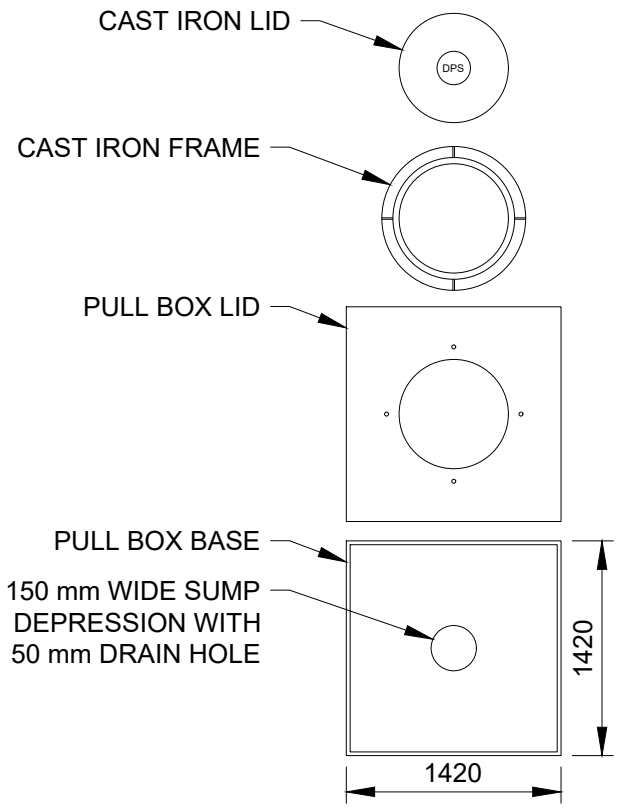
.4 Lid at finished grade.

.2 Pedestals:

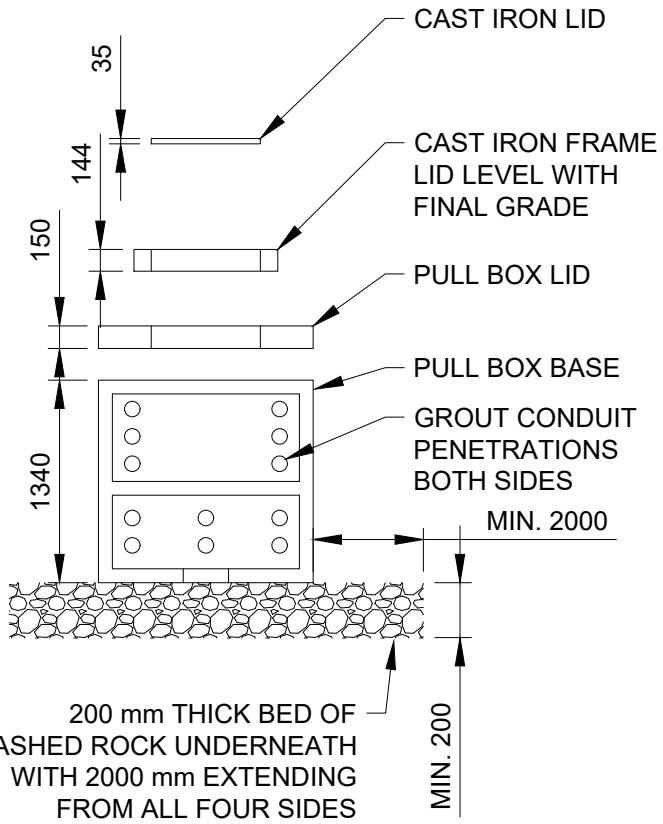
.1 As per Detail E-01 – Typical Junction Pedestal Elevation Detail.

.3 Painted or power-coated surfaces on material supplied or installed under this Contract, which are damaged in any way, i.e., by welding, scraping, cutting, etc., to be thoroughly cleaned, primed with a rust inhibiting primer, and repainted to the original colour.

END OF SECTION



TOP VIEW



FRONT VIEW

NOTE:
VAULT DIMENSIONS ARE APPROXIMATE.

1 TYPICAL DETAIL NTS

PULL BOX WITH DRAIN

PLOT DATE: 9/3/2024 3:30:19 PM
SAVE DATE: 9/3/2024 3:30:16 PM SAVED BY: TARABISHIM
DWG PATH: \\ae.ca\data\workingledm\2019-3623-00\elec\model\pull box with drain.dwg

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AE PROJECT No.	2019-3623-00
SCALE	AS SHOWN
APPROVED	C. BREDO
DATE	2024SEP03
REV	0
DESCRIPTION	ISSUED FOR MEMO

DETAIL

CITY OF EDMONTON
BLATCHFORD RENEWABLE ENERGY

ELECTRICAL
PULL BOX WITH DRAIN