



Hamilton

STAFF COMMENTS

HEARING DATE: February 13, 2025

A-24:278 — 16–22 King Street East, Dundas

Recommendation:

Approve — Development Planning

Proposed Conditions:

1. That the proposed development be in accordance with approved Site Plan Application DA-18-077, to the satisfaction of the Director of Development Planning.

Proposed Notes:

A building permit is required for the construction of the proposed a nine (9) storey mixed use building containing a commercial use on the ground floor and residential dwelling unit(s) above.

Be advised that Ontario Building Code regulations may require specific setback and construction types. (Building Engineering)



Development Planning:

Background

The purpose of Minor Variance application A-24:278 is to facilitate Site Plan Control application DA-18-077 and to permit the construction of a nine storey mixed use building consisting of 85 dwelling units with ground floor commercial space and 71 parking spaces provided between surface and a single level of underground parking. Staff note that Site Plan Control application DA-18-077 received conditional approval on October 2, 2018.

Analysis

Urban Hamilton Official Plan

The subject lands are identified as “Community Node” in Schedule E – Urban Structure and are designated as “Mixed Use – Medium Density” in Schedule E-1 – Urban Land Use Designations of the Urban Hamilton Official Plan. Policies E.2.2.5, E.2.2.6, E4.3.3, E.4.6.5 and E.4.6.8 amongst others, is applicable and permits the proposed mixed use development.

Additionally, the subject lands are designated as “Area Specific UD-4” in Map D-2 of Volume 3 of the Urban Hamilton Official Plan and are subject to the policies of found within the UD-4 – Downtown Dundas Core found in Volume 3, Chapter B Section UD-4 1.0 of the Urban Hamilton Official Plan. Policies found in Section UD-4 1.0 state:

- a) no additional parking or residential amenity space is required for additional residential units in buildings constructed prior to October 2000.
- b) The properties surrounding the intersections of King Street West and Sydenham Street, and, the intersection of King Street West and Cross Street/Main Street have been identified as community landmark areas. In these areas, the City shall promote the development of unique or distinctive focal points for the community which shall contribute to and enhance the unique identity and sense of place of the Dundas community. The following design elements shall be promoted when considering redevelopment application in these landmark areas:
 - i) provision of public open space in the form of landscaped areas or urban squares;
 - ii) additional building setbacks from the street;
 - iii) special paving treatments;
 - iv) enhanced street tree planning or landscaped schemes; and,



v) additional building heights above those specified in the zoning bylaw permitted in accordance with the provisions of Section F.1.9 – Bonus Provision and Transfer of Development Rights, of Volume 1 of this Plan.

Staff note that the subject lands are located east of the subject area identified in Policy 1.0 b).

Policies E.2.2.5 and E.2.2.6 state that Urban Nodes, such as Community Nodes, are strategic growth areas and encourage intensification and redevelopment within these areas. The requested variances are to facilitate the addition of a ninth floor to the proposed mixed-use development with a total of 85 dwelling units. Staff note that the original proposal, as submitted as part of DA-18-077, was for an 8 storey building with a total of 68 dwelling units.

Table E.4.3.1 identifies King Street in Dundas, between York Road and Market Street, as being a pedestrian focused street. Policy E.4.3.3 requires, amongst other things, that buildings be built up to the streetline with building or storefronts facing into the pedestrian focused street with “substantial fenestration”. While the proposed building does not front directly on to the street, variance 2 is requested to permit a 3 metre setback for the podium as designed. Additionally, variance 4 is requested to permit a slight decrease in the minimum required glazing along King Street from 50% to 48%. It is staff’s opinion that these variances maintain the intent of the pedestrian focused street design policies, and would result in a more pedestrian friendly and activated streetscape.

Policy E.4.6.8 allows an increase in height up to 12 storeys instead of the permitted 6 storeys, provided that it is demonstrated that the development: provides a mix of unit sizes to accommodate a range of household and income sizes; incorporates sustainable building and design principles; there are no adverse shadow impacts on neighbouring residential uses; gradual stepbacks from neighbouring low-rise uses are incorporated in the building design; and the building is stepped back from the street to minimize the height appearance from the street where necessary.

Variance 1 is required to permit a maximum height of 30.5 metres and variance 3 is required to permit the increase in gross floor area as a result of the ninth floor and location of the transformer on the ground floor. Staff note that the proposed ninth floor maintains the same or similar setbacks and stepbacks as the existing sixth to eighth floors, mitigating potential shadowing impacts on neighbouring properties and the height appearance from King Street East. Additionally, the proposed ninth floor is to consist of eight dwelling units, including three 3 bedroom units and two 2 bedroom units. The transformer location on the ground floor is as required by Alectra, resulting in reduced ground floor commercial space. However, 211 square metres of ground floor commercial space is proposed to front on to King Street East.



Hamilton

STAFF COMMENTS

HEARING DATE: February 13, 2025

Archaeology

Staff comments addressed as part of Site Plan Control Application DA-18-077.

Cultural Heritage

Staff comments addressed as part of Site Plan Control Application DA-18-077.

Based on this analysis, staff are of the opinion that variances 1 and 3 meet the criteria found in Policy E.4.6.8, and maintain the general intent of the Urban Hamilton Official Plan.

City of Hamilton Zoning By-law No. 05-200

The subject lands are zoned Mixed Use Medium Density – Pedestrian Focus (C5a, 555) Zone in City of Hamilton Zoning By-law No. 05-200. The proposed mixed use development is a permitted use.

Variations 1 and 2

5. A maximum building height of 30.5 metres shall be permitted instead of the maximum building height of 25.0 metres.

6. A front yard setback of 3.0 metres shall be permitted for the portion of a building exceeding 16.5 metres in height instead of the minimum required front yard setback of 3.0 metres for the portion of a building exceeding 16.5 metres in height.

The intent of these provisions is to maintain a consistent built form and streetscape and to mitigate shadow and visual impacts on neighbouring properties and the streetscape.

Regarding variance 1, Staff note that the existing zoning permits a maximum height of 25.0 metres, or eight storeys, whereas the applicant is proposing a ninth storey to facilitate the addition of more dwelling units for a total of 85 dwelling units. The proposed ninth floor maintains the setbacks from floors six to eight; being an 18.8 metre rear yard setback and a 7.1 metre front yard setback. Staff further note the surrounding built form is a mix of mid and low rise buildings. The neighbouring mid rise buildings are typically six storeys in height.

Staff are of the opinion that the additional ninth storey is compatible with the built form along King Street East in downtown Dundas and potential impacts are mitigated by maintaining the same setbacks as the eighth floor. Staff support the variance.

Regarding variance 2, the requested variance would permit a 3 metre setback for the fourth floor of the building's podium, consistent with the first three floors. Staff note that similar mid rise mixed use developments along King Street East maintain a close setback to the streetline, between approximately 2.5 and 3 metres. Staff are of the opinion that variance 2 is consistent with the existing



Hamilton

character and built form along King Street East and that the reduced setback will allow for a more consistent street wall. Staff support the variance.

Variance 3.

7. A maximum gross floor area of 8,273 square metres and a minimum of 2.5% gross floor area used for commercial purposes shall be permitted instead of the required total gross floor area of 7,623 square metres and a minimum of 6.0% gross floor area used for commercial purposes.

The intent of this provision is to maintain a proportion of commercial space to total gross floor area of the building to ensure an active, pedestrian friendly streetscape fronted by commercial spaces.

Staff note that the increase in gross floor area is to permit the proposed ninth floor. Additionally, the transformer location on the ground floor is as required by Alectra, resulting in reduced ground floor commercial space. The reduction in commercial ground floor space is also to provide vehicular egress and ingress via King Street East. However, 211 square metres of ground floor commercial space is proposed to front on to King Street East.

It is staff's opinion that the intent of this provision is maintained as a significant amount of ground floor commercial space is still to be provided along King Street East. Staff support the variance.

Variance 4

8. A Minimum 48% of the area of the ground floor façade along the King Street West lot line shall be composed of windows and doors shall be permitted instead of the minimum required 50% of the area of the ground floor façade along the King Street West lot line shall be composed of windows and doors.

The intent of this provision is to ensure there is a minimum amount of glazing facing the street to activate the public realm and create a pleasant pedestrian environment.

Similar to variance 3, the minimum 50% glazing in the front façade cannot be met due to the required location of the transformer and vehicular access. However, staff are of the opinion that the proposed design achieves the intended goal of this provision and maintains an activated and pedestrian friendly streetscape. Staff support the variance.

Staff are of the opinion that the requested variances meet the four tests of a minor variance. Based on the foregoing, **staff recommend approval subject to the recommended condition.**



Hamilton

Zoning:

Recommendation:	Comments Only
Proposed Conditions:	
Comments:	1. Please note, through further correspondence with the applicant, Balconies proposed from 16.9 metres and above will no longer be considered to encroach into a required Front Yard setback as a result of Variance #2. The comment is provided for clarification purposes.
Notes:	

Development Engineering:

Recommendation:	Comments Only
Proposed Conditions:	N/A
Comments:	Provided the existing drainage pattern is maintained, Development Approvals has no comments.
Notes:	N/A

Building Engineering:

Recommendation:	Comments and Conditions/Notes
Proposed Conditions:	
Comments:	
Notes:	A building permit is required for the construction of the proposed a nine (9) storey mixed use building containing a commercial use on the ground floor and residential dwelling unit(s) above. Be advised that Ontario Building Code regulations may require specific setback and construction types.

Transportation Planning:

Recommendation:	No Comments
Proposed Conditions:	



Hamilton

STAFF COMMENTS

HEARING DATE: February 13, 2025

Comments:	
Notes:	

Please Note: Public comment will be posted separately, if applicable.

February 3, 2025

City of Hamilton
Planning and Economic Development Department
71 Main St W
Hamilton, Ontario
L8P 4Y5

Attention: Committee of Adjustment

File# A-24:278

Re: 16-22 King St E

In response to your correspondence dated January 27, 2025, please be advised that our Engineering Design Department has reviewed the information concerning the above noted Consent Application and our comments are as follows:

- For Residential/Commercial electrical service requirements, the Developer needs to contact our ICI and Layouts Department at 905-798-2634 or 905-798-3370 or visit our web site @ www.alectrautilities.com. To make a service request, [Make a Service Request | Alectra Utilities](#)
- Minimum 4m horizontal clearance from existing O/H line(s) must be maintained at all times as per Alectra Utilities Standard 3-105. Please consult with Alectra Utilities if further clarification is required.
- Relocation, modification, or removal of any existing hydro facilities shall be at the owner's expense. Please contact Alectra Utilities to facilitate this.
- Developers shall be responsible for the cost of civil work associated with duct structures, transformer foundations, and all related distribution equipment.
- Developers to acquire an easement, if required.
- Developers to provide a grade level switching vault room as per Alectra Utilities standard 19-0008 and 37-4010. The Switching Vault Room at grade level shall be accessible by Alectra Line / Operations crew / truck. Access Road shall be paved / gravel with minimum width of 6 meters and 24/7 access, capable of supporting a wheel loading force of 70kN (15,700lbs) per wheel shall be installed by the Developer for vehicle access to the switching vault room. No building overhang is allowed over the vault room, due to operations of maintenance equipment requirements.

- In order for Alectra Utilities to prepare design and procure the materials required to service this site in a timely manner, a minimum of 6 months notification is required. It would be advantages for the developer if Alectra Utilities were contacted at the stage where the new site plan becomes available. Please note that it takes approximately 36-52 weeks to purchase a transformer.

We would also like to stipulate the following:

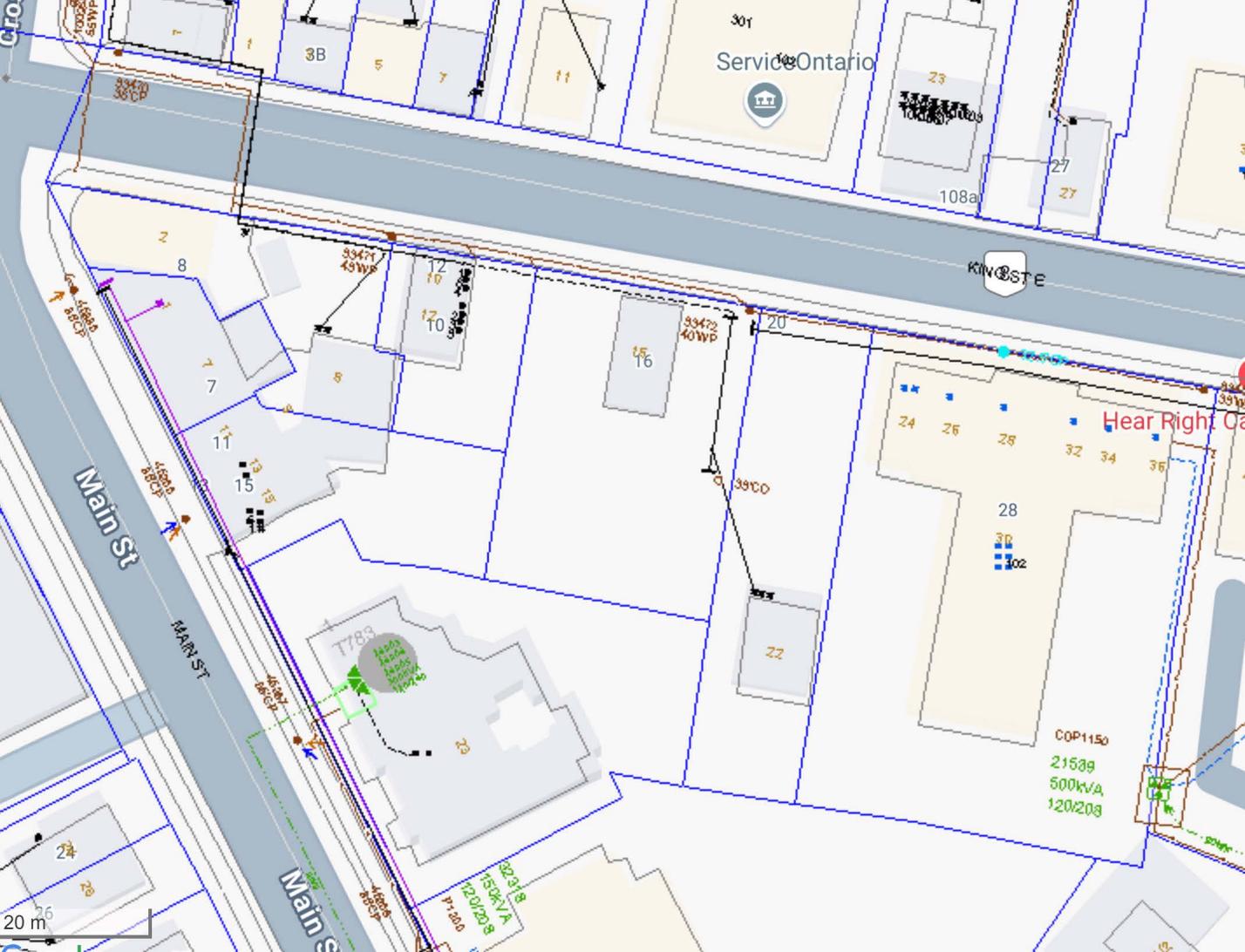
- Do not excavate within two metres of hydro poles and anchors.
- Excavation within one metre of underground hydro plant is not permitted unless approval is granted by an Alectra Utilities representative and is present to provide direct supervision. Cost associated with this task shall be at the owner's expense.
- Alectra Utilities must be contacted if the removal, isolation or relocation of existing plant is required, all cost associated with this work will be at the owners expense.
- CALL BEFORE YOU DIG, arrange for underground hydro cable locate(s) before beginning construction by contacting Ontario One Call @ 1-800-400-2255.
- Clearances from Overhead and Underground existing electrical distribution system on our adjacent to the property must be maintained in accordance to:
 - Ontario Building Code (1997) Section 3.1 (3.1.18.1)
 - Electrical Safety Code Rule 75-312
 - Occupational Health and Safety Act (OH&SA) – Construction Projects (Electrical Hazards)
 - CSA Standard C22.3 No. 1:20, Overhead System
 - CSA Standard C22.3 No. 7:20, Underground Systems

We trust that you will find this information satisfactory and that the information contained within will be provided to the owner of this project. Should you have any questions regarding this response, please contact Charles Howell at 905-798-2517 in our Engineering Design Department.

Sincerely,

Mark Jakubowski

Mark Jakubowski
Supervisor, Design, Customer Capital



Service Ontario

KING ST E

Main St

MAIN ST

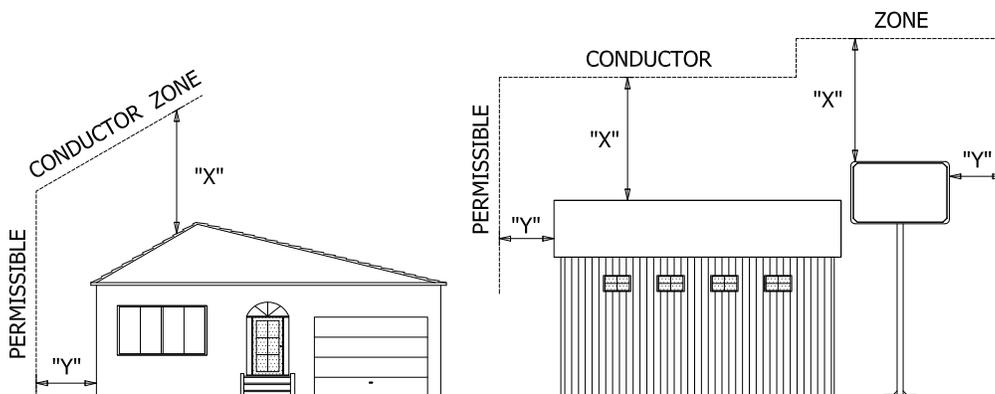
Main St

Hear Right Ca

COP1150
21539
500kVA
120/208

32-218
125kVA
120/208
P-200

20 m



- UNDER NO CIRCUMSTANCES SHALL A CONDUCTOR BE PERMITTED TO PENETRATE THE ENVELOPE SHOWN BY THE DOTTED LINE.

SYSTEM VOLTAGE	MINIMUM HORIZONTAL CLEARANCE DIMENSION "Y"	MINIMUM VERTICAL CLEARANCE DIMENSION "X"
0 - 750 V*	2.0 m (SEE NOTE 1)	4.5 m (SEE NOTE 3)
OVER 750 - 50000 V	4.0 m (SEE NOTE 2)	7.0 m (SEE NOTE 4)

* - INCLUDES MULTI-GROUNDED NEUTRALS

NOTES:

1. THIS CLEARANCE IS MADE UP OF A 1.0 m MINIMUM APPROACH CLEARANCE PLUS A 1.0 m ALLOWANCE FOR CONDUCTOR SWING. WHERE CONDUCTOR PASS IN FRONT OF A WINDOW OR OTHER OPENING, THIS 2.0 m CLEARANCE SHOULD BE INCREASED TO 2.5 m. WHERE BUILDINGS EXCEED 3 STOREYS OR 15.0 m IN HEIGHT, THE 2.0 m CLEARANCE SHOULD BE INCREASED TO 3.0 m TO ALLOW FOR RAISING OF LADDERS BY THE LOCAL FIRE DEPARTMENT.
2. THIS CLEARANCE IS MADE UP OF A 3.0 m MINIMUM APPROACH CLEARANCE PLUS A 1.0 m ALLOWANCE FOR CONDUCTOR SWING.
3. THIS DIMENSION PROVIDES 1.0 m MINIMUM APPROACH CLEARANCE FROM A 2.0 m TALL WORKMAN, PLUS A 1.5 m ALLOWANCE FOR CONDUCTOR SAG. (BASED ON AVERAGE SPAN OF 40 m)
4. THIS DIMENSION PROVIDES 3.0 m MINIMUM APPROACH CLEARANCE FROM A 2.0 m TALL WORKMAN, PLUS A 2.0 m ALLOWANCE FOR CONDUCTOR SAG. (BASED ON AVERAGE SPAN OF 40 m).
5. THE ABOVE CLEARANCES ARE MINIMUM VALUES. EFFORTS SHOULD BE MADE TO INCREASE THESE CLEARANCES ABOVE THOSE SHOWN, WHERE POSSIBLE. TO KEEP WORKMEN AND THEIR EQUIPMENT ON THE BUILDING ETC., AT THE MINIMUM CLEARANCE SHOWN, DIMENSION "X" AND "Y" ARE TO BE INCREASED BY THE REQUIRED WORKING DISTANCE.

No.	Revision	Drawn by	Checked by	Apprd by	Date	Std. No. (1 of 9)	19-0008
-	-	-	-	-	-		

1. General

This covers the requirements in the planning and construction of a standard electrical equipment vault room at the specified grade level location agreed by both Alectra and the Customer.

It depends on the electrical connections as referred under subsection 4, there are two (2) types of vault room design covered by this standard, namely:

1.1 Transformer Vault

A minimum floor area of 9 m x 10 m is required for this type of vault room. Typical arrangement is normally associated with Alectra-owned transformers and switching equipment.

1.2 Switching Vault

A minimum floor area of 7 m x 7 m is required for this type of vault room. Typical arrangement is normally associated with Alectra-owned switchgear.

2. Customer Responsibilities

All portions of the installation, as detailed under subsection 3; Construction of Vaults; Items 3.1 to 3.17, inclusive, shall be the responsibility of the Customer.

The Customer-owned electrical or substation room shall be located adjacent to the electrical equipment vault room.

3. Construction of Vaults

3.1 Regulatory Bodies

Customer’s portions of vaults shall be structurally, electrically, and mechanically constructed according to the latest edition of the following:

- 3.1.1** Ontario Electrical Safety Code
- 3.1.2** Ministry of Consumer and Commercial Relations
- 3.1.3** Ontario Building Code
- 3.1.4** Municipal Building Code
- 3.1.5** Municipal Plumbing Code
- 3.1.6** Standards 19-2201, 19-2203 to 19-2205 and 37-4010 that are typical, meet these requirements. If other vault designs are employed, they must be approved by Alectra.
- 3.1.7** Alectra’s regulations respecting Electrical Equipment, Conditions of Service and the Supply of Electrical Energy

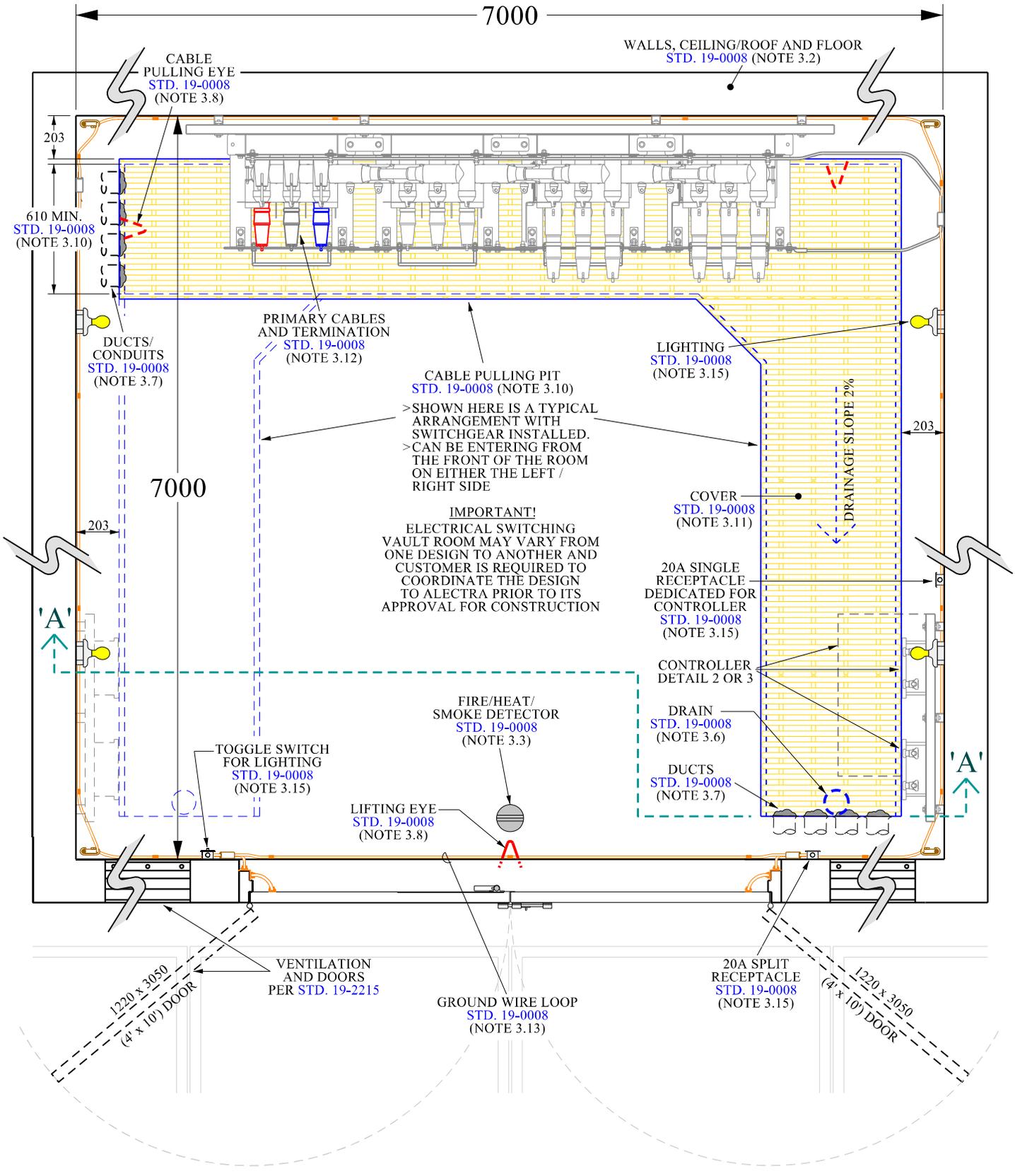


Construction Standard Certificate of Approval
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04
Shereez Ali 04/2022
Name Date
Signature & Professional Designation P.Eng., PMP

ORIGINAL
Drawn by: Ar.C.
Checked by: S.I.
Approved by: A.I.
Date: Apr-2022

**ELECTRICAL
EQUIPMENT VAULT ROOM
REQUIREMENTS**
(UP TO 27.6/16 kV)

No.	Revision	Drawn by	Checked by	Apprvd by	Date
-	-	-	-	-	-



Construction Standard Certificate of Approval		ORIGINAL
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04		Drawn by: Ar.C.
Shereez Ali	04/2022	Checked by: S.I.
Name	Date	Approved by: A.I.
<i>AW</i>	P.Eng., PMP	Date: Apr-2022
Signature & Professional Designation		

Title: **WALL-MOUNTED SOLID DIELECTRIC SWITCHGEAR IN A 7.0 m x 7.0 m VAULT ROOM**
4.16/2.4 kV TO 27.6/16 kV

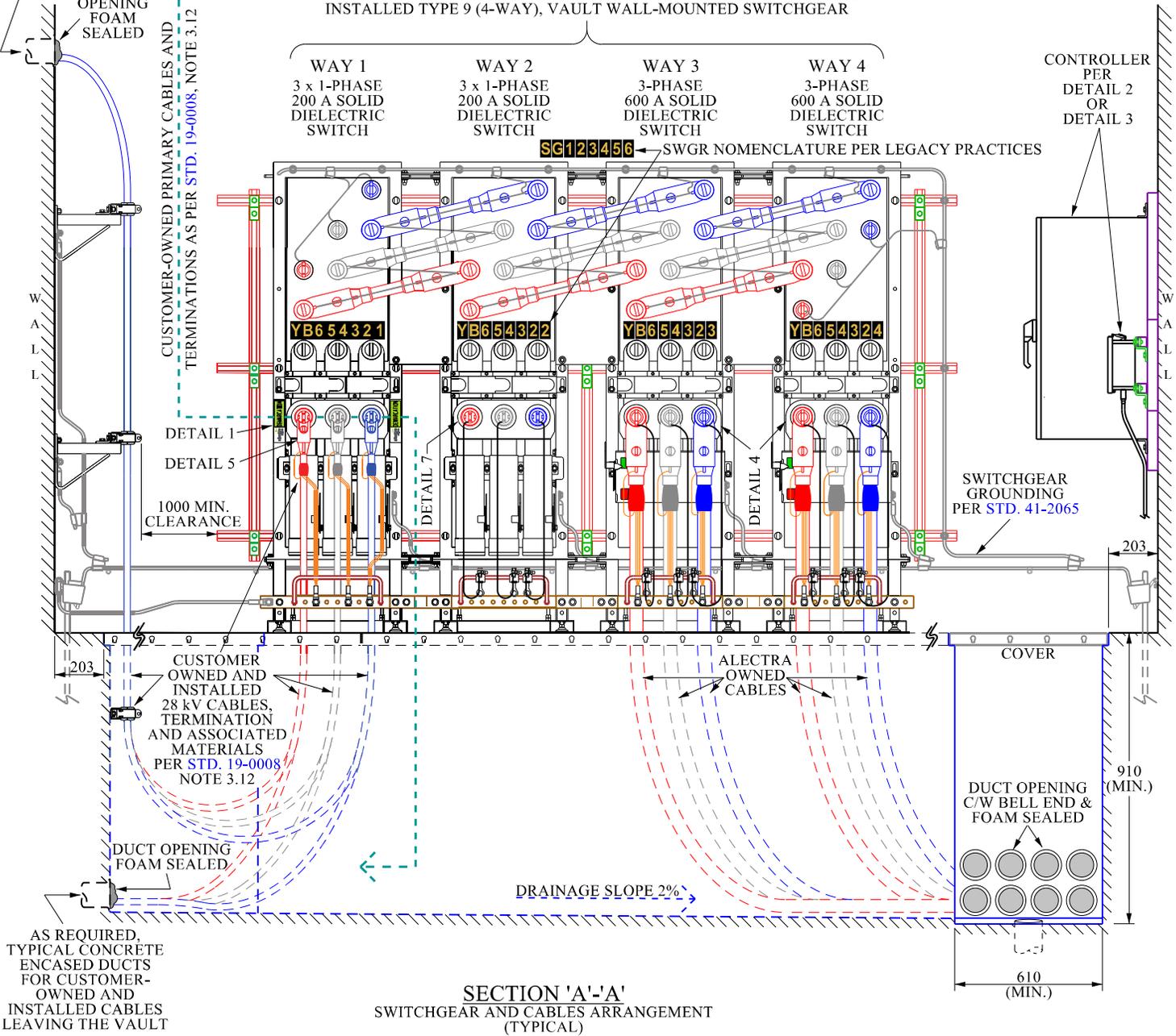
No.	Revision	Drawn by	Checked by	Appr'd by	Date
-	-	-	-	-	-

AS REQUIRED,
TYPICAL CONCRETE
ENCASED CONDUIT
FOR CUSTOMER-
OWNED AND
INSTALLED CABLES
LEAVING THE VAULT

IMPORTANT!

15 kV OR 35 kV SWITCHGEAR (MAX. 6-WAY, **STD. 2-1709**)
MAY DIFFER FROM ONE INSTALLATION TO ANOTHER.
THE SELECTION, ARRANGEMENT AND ORIENTATION OF
SWITCHGEAR REQUIRE ALECTRA'S SYSTEM PLANNING,
PROTECTION & CONTROL AND NETWORK OPERATIONS
APPROVALS PRIOR TO VAULT ROOM CONSTRUCTION

SHOWN HERE IS A TYPICAL ARRANGEMENT OF ALECTRA-OWNED AND
INSTALLED TYPE 9 (4-WAY), VAULT WALL-MOUNTED SWITCHGEAR



SECTION 'A'-'A'
SWITCHGEAR AND CABLES ARRANGEMENT
(TYPICAL)



Construction Standard Certificate of Approval	ORIGINAL
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04	Drawn by: Ar.C.
Shreeez Ali 04/2022	Checked by: S.I.
Name Date	Approved by: A.I.
<i>Signature</i> P.Eng., PMP	Date: Apr-2022
Signature & Professional Designation	

Title:
**WALL-MOUNTED
SOLID DIELECTRIC SWITCHGEAR
IN A 7.0 m x 7.0 m VAULT ROOM**
4.16/2.4 kV TO 27.6/16 kV

No.	Revision	Drawn by	Checked by	Apprvd by	Date
-	-	-	-	-	-

DETAIL 1
LABEL (x2) SUPPLIED BY ALECTRA, #992301

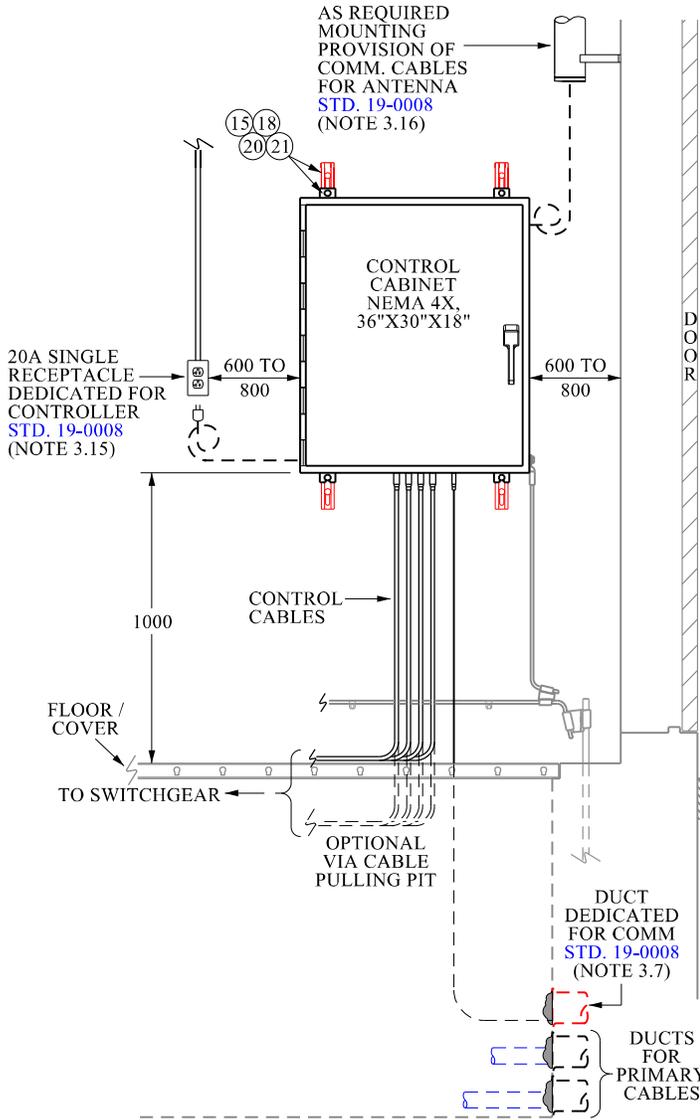


#992301

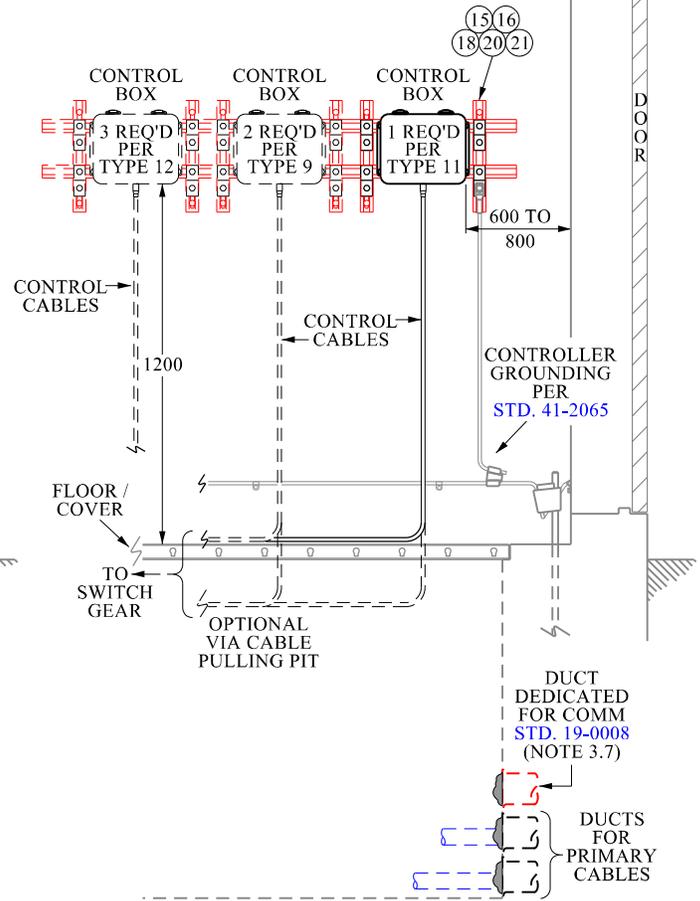
DEMARCATION POINT

AT THE PRIMARY BUSHING TERMINALS

NOTE: CUSTOMER OWNS THE PRIMARY CABLES AND TERMINATIONS AS PER ALECTRA SPECIFICATIONS AND STANDARDS.



No. OF CONTROL BOX	4-WAY SWITCHGEAR		
	TYPE 9	TYPE 11	TYPE 12
	2	1	3



DETAIL 2
CONTROLLER SUPPLIED W/
SCADA-CONTROLLED
SWITCHGEAR

DETAIL 3
CONTROLLER SUPPLIED W/
MANUALLY-CONTROLLED
SWITCHGEAR



Construction Standard Certificate of Approval
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04

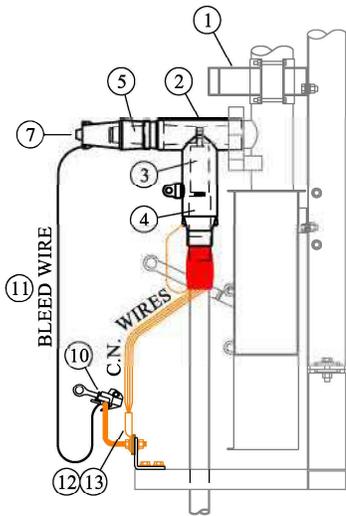
Shereez Ali 04/2022
Name Date
Signature & Professional Designation P.Eng., PMP

ORIGINAL

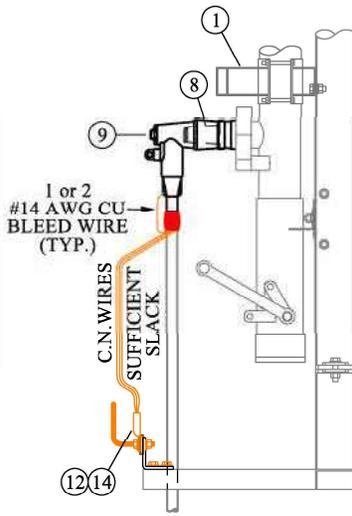
Drawn by: Ar.C.
Checked by: S.I.
Approved by: A.I.
Date: Apr-2022

Title: **WALL-MOUNTED SOLID DIELECTRIC SWITCHGEAR IN A 7.0 m x 7.0 m VAULT ROOM**
4.16/2.4 kV TO 27.6/16 kV

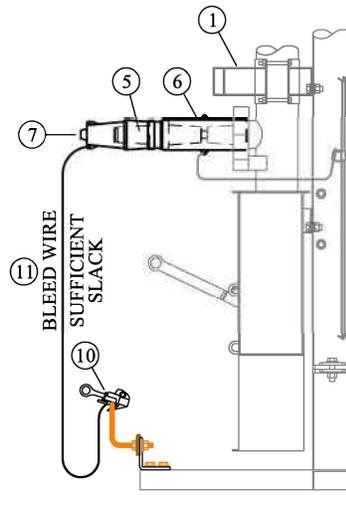
No.	Revision	Drawn by	Checked by	Apprvd by	Date
-	-	-	-	-	-



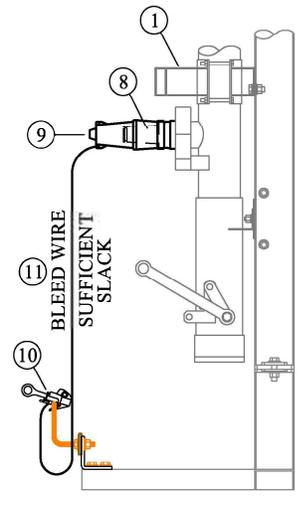
DETAIL 4
600 A CABLE TERM
(1000 kCMIL AL, 28 kV CABLE)



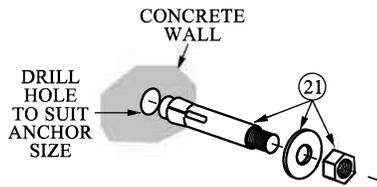
DETAIL 5
200 A CABLE TERM
(1/0 AWG AL, 28 kV CABLE)



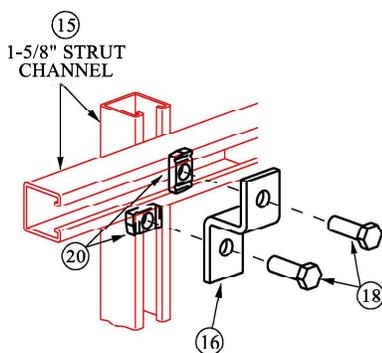
DETAIL 6
600 A BUSHING TERM
(UNUSED)



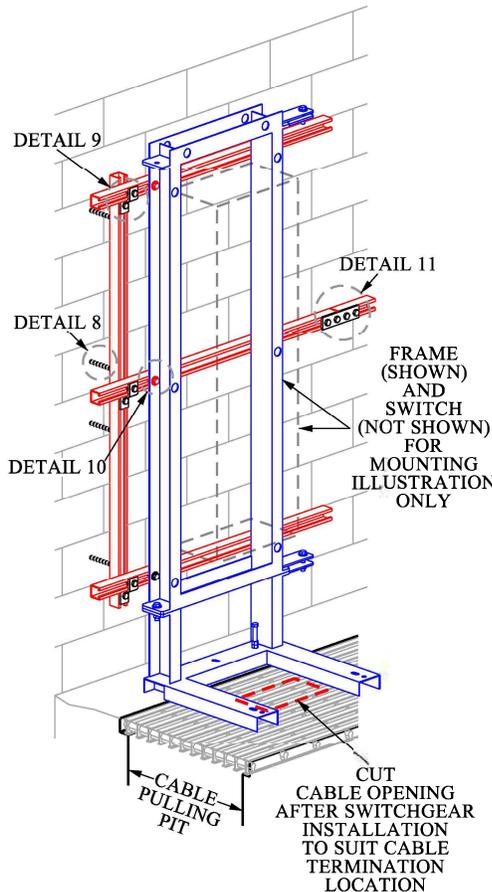
DETAIL 7
200 A BUSHING TERM
(UNUSED)



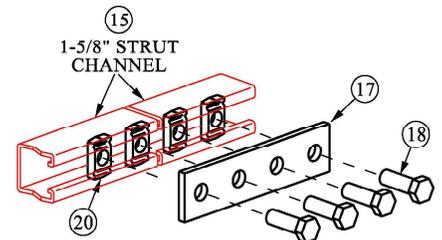
DETAIL 8
ANCHORING (TYP.)



DETAIL 9
1-5/8" STRUT
CHANNEL
ASSEMBLY



DETAIL 10
SWITCHGEAR'S
WALL-MOUNTING
(6 REQUIRED PER WAY)



DETAIL 11
1-5/8" STRUT
CHANNEL
EXTENSION

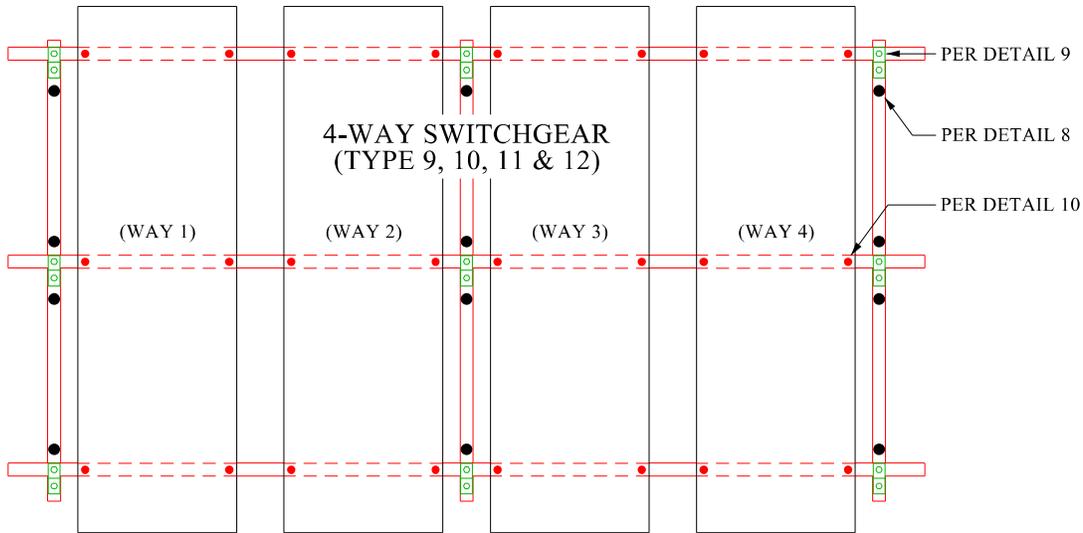


Construction Standard Certificate of Approval
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04
Shreez Ali 04/2022
Name Date
Signature & Professional Designation P.Eng., PMP

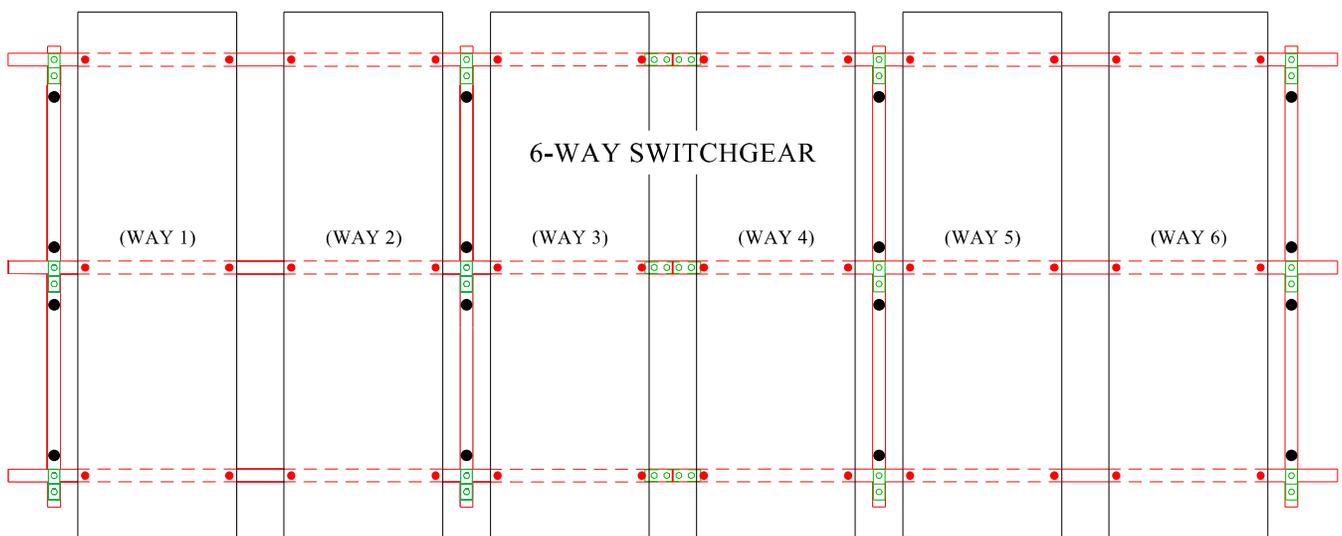
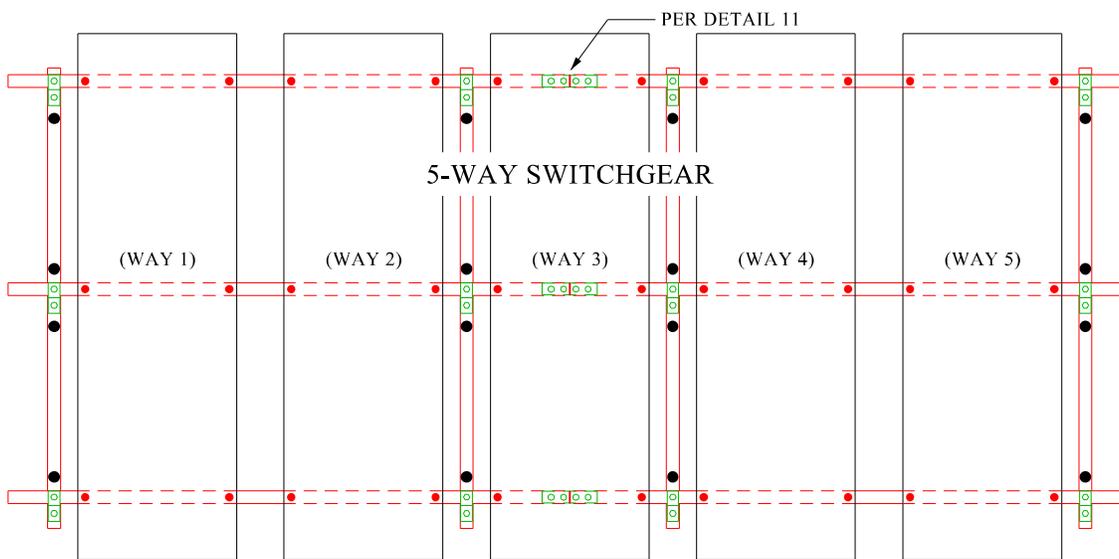
ORIGINAL
Drawn by: Ar.C.
Checked by: S.I.
Approved by: A.I.
Date: Apr-2022

Title:
**WALL-MOUNTED
SOLID DIELECTRIC SWITCHGEAR
IN A 7.0 m x 7.0 m VAULT ROOM**
4.16/2.4 kV TO 27.6/16 kV

No.	Revision	Drawn by	Checked by	Apprvd by	Date
-	-	-	-	-	-



DETAIL 12
SWITCHGEAR
WALL MOUNTING



Construction Standard Certificate of Approval

The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04

Shereez Ali 04/2022
Name Date
Signature & Professional Designation P. Eng., PMP

ORIGINAL

Drawn by: Ar.C.
Checked by: S.I.
Approved by: A.I.
Date: Apr-2022

Title:

**WALL-MOUNTED
SOLID DIELECTRIC SWITCHGEAR
IN A 7.0 m x 7.0 m VAULT ROOM**
4.16/2.4 kV TO 27.6/16 kV

No.	Revision	Drawn by	Checked by	Apprvd by	Date
-	-	-	-	-	-

BILL OF MATERIALS (SWITCHGEAR)

No.	ITEM/STD. #	DESCRIPTION	QUANTITY (PER SWITCHGEAR)					
			TYPE 9*	TYPE 10*	TYPE 11*	TYPE 12*	5-WAY	6-WAY
1	STD. 2-1709	SWITCHGEAR, SD, WALL-MOUNTED	1	1	1	1	1	1
2	STD. 2-3366	ELBOW, 600 A	SELECTION AND QUANTITY OF CUSTOMER-OWNED AND INSTALLED CABLE TERMINATION MAY VARY. REFER TO STD. 37-0030 FOR SELECTION AND QUANTITY OF ALECTRA-OWNED AND INSTALLED CABLE TERMINATION.					
3		LUG, COMPRESSION, AL						
4		ADAPTER, CABLE						
5		PLUG, REDUCING TAP						
6		BUSHING EXTENDER 600 A						
7		CAP, INSULATING, 200 A						
8	STD. 2-3368	INSERT, BUSHING, 200 A						
9		ELBOW, 200 A						
10	STD. 41-3010 , DETAIL 3	CLAMP, HOTLINE,CU/AL						
11		BLEED WIRE,#14CU,40KV DC						
12	STD. 2-1011	FASTENER ASSEMBLY, 1/2"						
13	330308	CONN LUG CU 250 MCM CU 2HOLE						
14	330739	CONN LUG CU #2AWG COMP 1HOLE						
<i>Not Shown</i>	990159	STICKER-KEEP OUT-VAULT DOOR	1					
	990353	LABEL, 'NOTICE DNB DOORWAY'	1					
	990243	PADLOCK SOLID BRASS BODY	1					
	992301	LABEL DEMARCATION PT SWGR	2					

BILL OF MATERIALS (SWITCHGEAR WALL MOUNTING, PER DETAIL 12)

No.	ITEM/STD. #	DESCRIPTION	QUANTITY / SWITCHGEAR		
			4-WAY*	5-WAY	6-WAY
15**	110328	CHANNEL,1-5/8"x10',SLOTTED	6	7	7
16	110326	FITTING-Z,3HOLE,1-5/8 CHAN	9	12	12
17	110881	PLATE EXT,4HOLE,1-5/8 CHAN	-	3	3
18	110325	SCREW,HEX,1/2X1.5,1-5/8CHAN	48	72	84
19	990381	WASHER SIL BRZE SPLIT 1/2	24	30	36
20	110324	NUT,SPRING,1/2",1-5/8CHAN	48	72	84
21	990220	ANCHOR, SLEEVE, 1/2"X4"	12	16	16

* - 4-WAY SWITCHGEAR IS EITHER TYPE 9, TYPE 10, TYPE 11 OR TYPE 12

** - TO BE CUT TO SUIT SWITCHGEAR AND CONTROLLER WALL FRAMING INSTALLATION

BILL OF MATERIALS (CONTROLLER WALL MOUNTING, PER DETAIL 2 & 3)

No.	ITEM/STD. #	DESCRIPTION	QUANTITY / SWITCHGEAR			
			DETAIL 2 SCADA CONTROLLER	DETAIL 3 MANUAL CONTROLLER		
				TYPE 9	TYPE 11	TYPE 12
15**	110328	CHANNEL,1-5/8"x10',SLOTTED	1	1	1	2
16	110326	FITTING-Z,3HOLE,1-5/8 CHAN	-	8	4	12
18	110325	SCREW,HEX,1/2X1.5,1-5/8CHAN	4	16	8	24
19	990381	WASHER SIL BRZE SPLIT 1/2	4	-	-	-
20	110324	NUT,SPRING,1/2",1-5/8CHAN	4	16	8	24
21	990220	ANCHOR, SLEEVE, 1/2"X4"	4	8	4	12

TYPE OF WALL-MOUNTED SWITCHGEAR (PER [STD. 2-1709](#))

TYPE OF SWITCH	No. OF SWITCHES (PER SWITCHGEAR TYPE)						
	TYPE 9*	TYPE 10*	TYPE 11*	TYPE 12*	5-WAY	5-WAY	6-WAY
600 A, 3-PHASE	2	4	3	1	2	3	3
200 A, 3 x 1-PHASE	2	-	1	3	3	2	3

COMPLETE KITS:
REFER TO [STD. 37-0030](#)



Construction Standard Certificate of Approval
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04
Shereez Ali 04/2022
Name Date
P.Eng., PMP
Signature & Professional Designation

ORIGINAL
Drawn by: Ar.C.
Checked by: S.I.
Approved by: A.I.
Date: Apr-2022

Title:
WALL-MOUNTED SOLID DIELECTRIC SWITCHGEAR IN A 7.0 m x 7.0 m VAULT ROOM
4.16/2.4 kV TO 27.6/16 kV

3.11 Covers

The covers shall be provided for the entire area of cable pulling pit and be flush-mounted on the finished floor (as for switching vault) or on top of concrete sills around it (as for transformer vault). This will be made entirely of pultruded fiberglass grating allowing easy removal for access and excellent airflow and access for light throughout cable pulling pit.

Dependent upon the layout of the cable pulling pit, covers may require mid-support (e.g. I-beam). The Customer shall indicate details as part of design drawings submission.

The Customer shall supply and install the pultruded fiberglass grating by utilizing the product specification as indicated below:

Manufacturer:	Fibergrate Composite Structures Inc
Website:	www.fibergrate.ca
Series:	T5020
Panel Depth:	2"
Load Bar Spacing:	2"
Stocked Sizes (Width)	3' or 4' (cut to suit cable pulling pit)
Stocked Sizes (Length)	8', 10', 12', 20' or 24' (cut to suit cable pulling pit)
Load Bars / Ft.	6"
Weight / Sq. Ft.	3.30 lbs
Open Area	50 %
Resin	Isophthalic Polyester
Color	Yellow
Loading (24" span)	5940 psf (maximum recommended load)
Loading (36" span)	2880 psf (maximum recommended load)
Loading (48" span)	1620 psf (maximum recommended load)

The Customer shall follow the manufacturer's instruction for safe handling and installation.

3.12 Primary Cables, Terminations and Associated Materials

The Customer-owned primary cables, terminations and associated materials shall be installed by the Customer in accordance with the Ontario Electrical Safety Code and with the following requirements:

3.12.1 Primary cables shall be 28 kV (100 %), CN-jacketed per CSA Std. C68.5 (latest)



Construction Standard Certificate of Approval
The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04
Shereez Ali 04/2022
Name Date
Shereez Ali P.Eng., PMP
Signature & Professional Designation

ORIGINAL
Drawn by: Ar.C.
Checked by: S.I.
Approved by: A.I.
Date: Apr-2022

**ELECTRICAL
EQUIPMENT VAULT ROOM
REQUIREMENTS**
(UP TO 27.6/16 kV)

No.	Revision	Drawn by	Checked by	Apprd by	Date	Std. No.	19-0008 (6 of 9)
-	-	-	-	-	-		

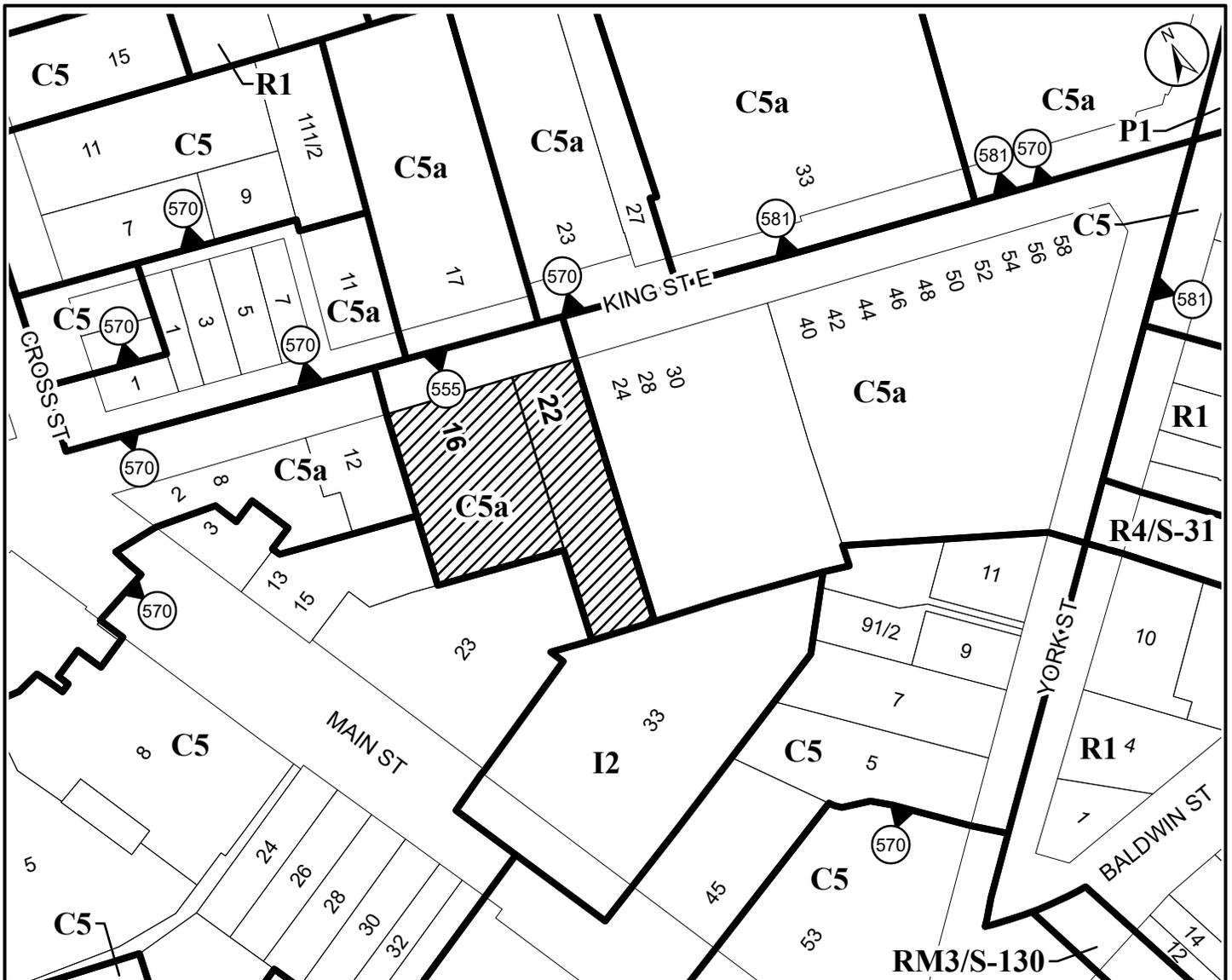
- 3.12.2** Primary cables shall be routed via cable pulling pit and up towards the designated switch location from the switchgear. Allow sufficient length of cables for termination and CN-wires connection at ground busbar.
- 3.12.3** Cable termination shall be made of separable insulated connectors per IEEE Std. 386 (latest) with specific interfaces and requirements as follows:
 - 3.12.3.1 For 200 A interface (regardless of switchgear rating) use 25 kV load-break bushing insert and elbow as per Alectra Standard 37-4010, Detail 5
 - 3.12.3.2 For 600 A interface use dead-break elbow assembly matching the switchgear rating as per Alectra Standard 37-4010, Detail 4.
 - 3.12.3.3 All primary cable terminations, at the advised schedules, shall be accomplished in the presence of Alectra’s Network Operations personnel.
 - 3.12.3.4 All cable terminations shall be tagged and identified from the source and load side complete with phase marking matching on the switchgear.
- 3.12.4** Concentric neutral (CN) wires connectors shall be made of 1/2" copper compression, 1-hole NEMA lugs.
- 3.12.5** Associated clamps, connectors and supports shall be consisted of approved products bearing the certification markings recognized by OESC or approved by Alectra.

3.13 Ground Wire Loop

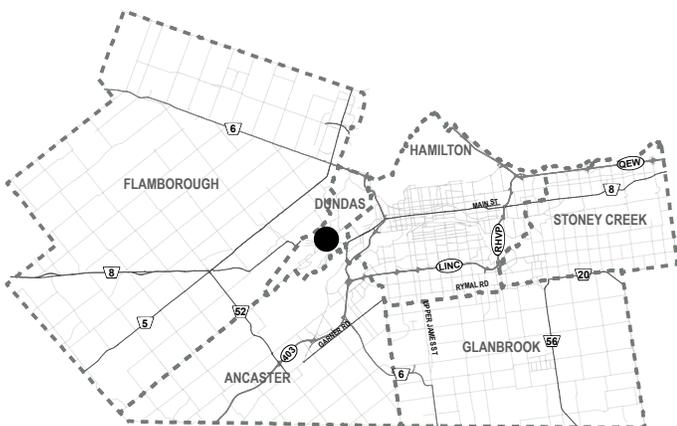
The ground wire loop shall be installed by the Customer in accordance with the Ontario Electrical Safety Code and with the following requirements:

- 3.13.1** Four 20 mm (3/4") x 3000 mm (10'-0") copper or copper-clad ground rods.
- 3.13.2** 2/0 AWG stranded copper conductor continuous circumferential ground loop and metallic bonding.
- 3.13.3** Ground wire loop to be fastened 200 mm (8") above the finished floor at approximately 610 mm (24") intervals.
- 3.13.4** All ground connections except for the grounding and bonding of Alectra owned electrical equipment shall be completed by the Customer.
- 3.13.5** For remote grounding installation refer to Standard 41-2040.

	Construction Standard Certificate of Approval The Construction Standard meets the safety requirements of Section 4 of Regulation 22/04	ORIGINAL Drawn by: Ar.C. Checked by: S.I. Approved by: A.I. Date: Apr-2022	<p style="text-align: center;">ELECTRICAL EQUIPMENT VAULT ROOM REQUIREMENTS</p> <p style="text-align: center;">(UP TO 27.6/16 kV)</p>
	Shereez Ali 04/2022 Name Date  P.Eng., PMP Signature & Professional Designation		



● Site Location



City of Hamilton

Committee of Adjustments

Subject Property



22 King Street East, Dundas
(Ward 13)

File Name/Number:
A-24:278

Date:
February 6, 2025

Technician:
DR

Scale:
N.T.S.

Appendix "A"



Hamilton