

Méridien Maritime Shipyard
ISV008, Inshore Science Vessel (Bureau véritas Class)

Owner: Canadian Coast Guard

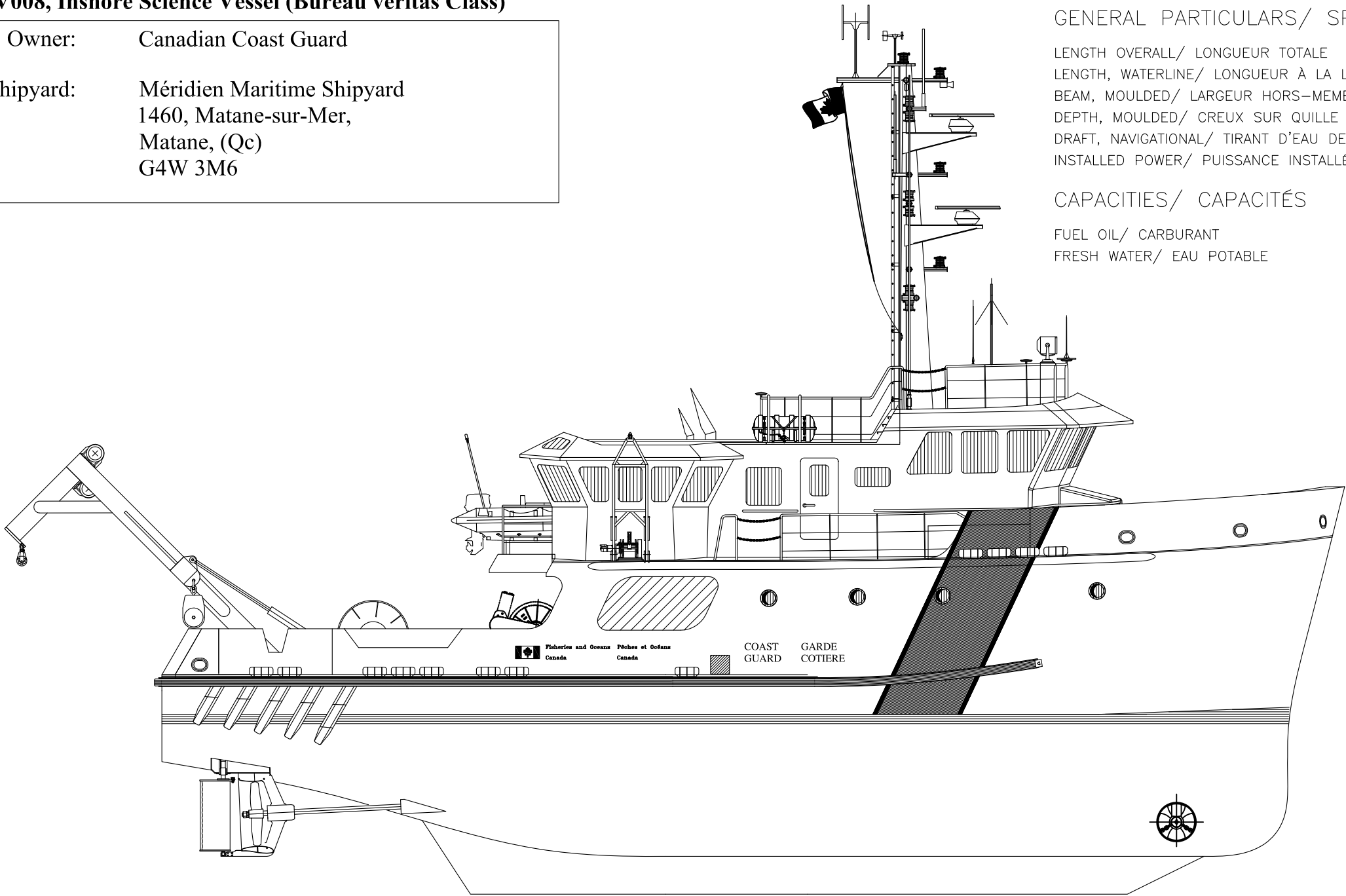
Shipyard: Méridien Maritime Shipyard
1460, Matane-sur-Mer,
Matane, (Qc)
G4W 3M6

GENERAL PARTICULARS/ SPÉCIFICATIONS

LENGTH OVERALL/ LONGUEUR TOTALE	25.0 m
LENGTH, WATERLINE/ LONGUEUR À LA LIGNE DE FLOTTAISON	23.8 m
BEAM, MOULDED/ LARGEUR HORS-MEMBRE	9.2 m
DEPTH, MOULDED/ CREUX SUR QUILLE	3.8 m
DRAFT, NAVIGATIONAL/ TIRANT D'EAU DE NAVIGATION	3.6 m
INSTALLED POWER/ PUISSANCE INSTALLÉE	750 kW

CAPACITIES/ CAPACITÉS

FUEL OIL/ CARBURANT	41.2 m³
FRESH WATER/ EAU POTABLE	6.2 m³



SECTION FD:
INTEGRATED FIRE DETECTION SYSTEM

This following note should not be removed from this drawing:

If for any reasons, modifications/corrections are done to the drawings by third parties, Techsol will not be responsible of possible problems with system's operation.

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TECHSOL Inc.
770A, St-Joseph Est
Québec (QC) G1K 3C3

Cover Sheet
Ship Overview

PROJECT NUMBER P10-0501-FD		DWG. NO. FD00AA		03 REV.
C.T DRAWN	S.L. CHKD	10-08-31 DATE YY-MM-DD	FD00BA CON. ON DWG.	

MERIDIEN MARITIME /CCG ISV008				SECTION FD: INTEGRATED FIRE DETECTION SYSTEM																		CONFIDENTIAL, PROPERTY OF TECHSOL			
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<div><div><div><div>00</div><div>SHEET</div></div><div>First Pages</div><div>DESCRIPTION</div><div>REV</div><div>FD00AA Cover Sheet03</div><div>FD00BA Content03</div><div>FD00EA Revision Listing & Description03</div><div>FD00FA Legend and Symbols Used01</div><div>FD00GA System Configuration Overview (1/2)02</div><div>FD00GB System Configuration Overview (2/2)01</div></div><div><div><div>03</div><div>SHEET</div></div><div>Spare</div><div>DESCRIPTION</div><div>REV</div></div></div> <div><div><div>01</div><div>SHEET</div></div><div>Detectors Connection</div><div>DESCRIPTION</div><div>REV</div><div>FD01AA NFS-640 Panel Connections02</div><div>FD01AB LCD-80 Connections01</div><div>FD01BA Zone #1 : Wheelhouse & Accommodation Stairway01</div><div>FD01CA Zone #2 : Lower Accommodation Hold Deck02</div><div>FD01DA Zone #3 : Accommodation Main Deck02</div><div>FD01EA Zone #4 : Dry & Wet Lab, Wet Gear02</div><div>FD01FA Zone #5 : Engine Room Stairway & Engine Room02</div><div>FD01GA Zone #6 : Workshop & Aux. Machinery & Steering Gear Compart.01</div></div> <div><div><div>ZZ</div><div>SHEET</div></div><div>Mechanical Layouts</div><div>DESCRIPTION</div><div>REV</div><div>FDZZAA Fire Detections System Panel - Mechanical Layout01</div></div> <div><div><div><div><div><div>TECHSOL</div><div>TECHSOL Inc. 770A, St-Joseph Est Québec (QC) G1K 3C3</div></div><div><div><div>P10-0501-FD</div><div>DWG. NO.</div></div><div>FD00BA</div></div><div><div><div>C.T. DRAWN</div><div>S.L. CHKD</div><div>10-08-31 DATE YY-MM-DD</div><div>CON. ON DWG.</div></div><div>FD00EA</div></div></div><div>03 REV.</div></div></div></div>																									

MERIDIEN MARITIME / CCG ISV008			SECTION FD: INTEGRATED FIRE DETECTION SYSTEM																				CONFIDENTIAL, PROPERTY OF TECHSOL		

MERIDIEN MARITIME /CCG ISV008

SECTION FD: INTEGRATED FIRE DETECTION SYSTEM

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
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
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
ELECTRICAL GENERAL SYMBOL LEGEND




Manual Circuit Breaker




Fuse 2 amps Fast Acting




Fuse 2 amps Slow Blow




Mushroom Head Push Button NC




Push Button NO




2 Positions Selector Switch NO




Pilot Light DEL




Relay or Contactor Coil




Relay or Contactor Contact NO



Relay or Contactor Contact NC




Voltage Transformer




Ground


SYSTEM SPECIFIC SYMBOL LEGEND




Adressable Heat Detector 135°F




Adressable Heat Detector 135°F Rate Of Rise




Adressable Heat Detector 190°F




Explosion Proof Heat Detector




Adressable Smoke Detector




Adressable Fire Pull Station




Fire Pull Station




Horn & Strobe




Bell



Horn



Isolator

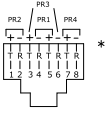


Adressable Module

Ethernet Cable Wiring Configuration

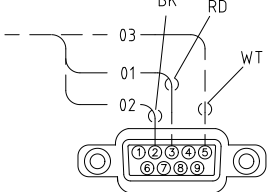
Standard 4-Pair Wiring Color Codes

Pair 1	t	r	White/Blue
Pair 2	t	r	White/Orange
Pair 3	t	r	White/Green
Pair 4	t	r	White/Brown



×Use metal plated RJ-45 connectors only
and tie the cable shield to the metal

Ethernet Cable Wiring Configuration



(Ethernet Server DB-9 Female Connector)

AWG

PAIR/TRIPLE CABLE TYPE DESCRIPTION

TPISOS16-4

Quantity of Pairs

AWG Wiring Gage

With Overall Shield

With Individual Shield

TP=Twisted Pair

TT=Twisted Triple

MULTICONDUCTOR CABLE TYPE DESCRIPTION

3c#12AWG

AWG Wiring Gage

Quantity Of Conductors

mm²

PAIR/TRIPLE CABLE TYPE DESCRIPTION

TPISOS-1.5mm²-4

Quantity of Pairs

Wiring Size

With Overall Shield

With Individual Shield

TP=Twisted Pair

TT=Twisted Triple

MULTICONDUCTOR CABLE TYPE DESCRIPTION

2c-2.5mm²

Wiring Size

Quantity Of Conductors

Ethernet Cable With Overall Shield

Cot5—OS Ethernet

Special Cable

belden, XXXX Genius

SAME DRAWING REFERENCE DESCRIPTION

[04G]

Sheet Vertical Reference

Sheet Horizontal Reference

OTHER DRAWING REFERENCE DESCRIPTION

[FD00HA04G]

Sheet Vertical Reference

Sheet Horizontal Reference

OtherDrawing Sheet Number

EXTERNAL CABLE DESCRIPTION

FD—001/P

Cable Type (/P: Power, /S: Signal, /C: Communication)

Sequential Number

System Type (FD: Fire Detection)

INTERNAL CABLE DESCRIPTION

FD01AA—01

Sequential Number

Drawing Sheet Number

RELAYS AND CONTACTORS CONTACTS REFERENCE DESCRIPTION

Normally Open Contact Shown

On Drawing FD01AA, Horiz. Ref 06, Vert. Ref G

Spare Normally Open Contacts

CR01-FD01CA

FD01AA06G

FD01AA04G


The number of lines determine the number of poles

Normally Close Contact Shown

On Drawing AM01AA, Horiz. Ref 04, Vert. Ref G

Spare Normally Close Contacts

Legend and Symbols Used



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Québec (QC) G1K 3C3

PROJECT NUMBER

P10-0501-FD

F.T. DRAWN

S.L. CHKD

10-08-31

DATE YY-MM-DD

CON. ON DWG.

FD00GA

DWG. NO.

FD00FA

REV.

01

GENERAL NOTES

1. Dashed Lines (external Wiring) Are Wired By Shipyard

2. All Internal Wiring is 16 AWG Type TEW 105 Deg C Unless Specified

3. All Control Wires Are Identified At Both Ends

4. All Relays are showns de-energized

5. Level, pressure, & flow switches are showns at rest state

6. Temperature switches are showns at 20 deg C ambient Temperature.

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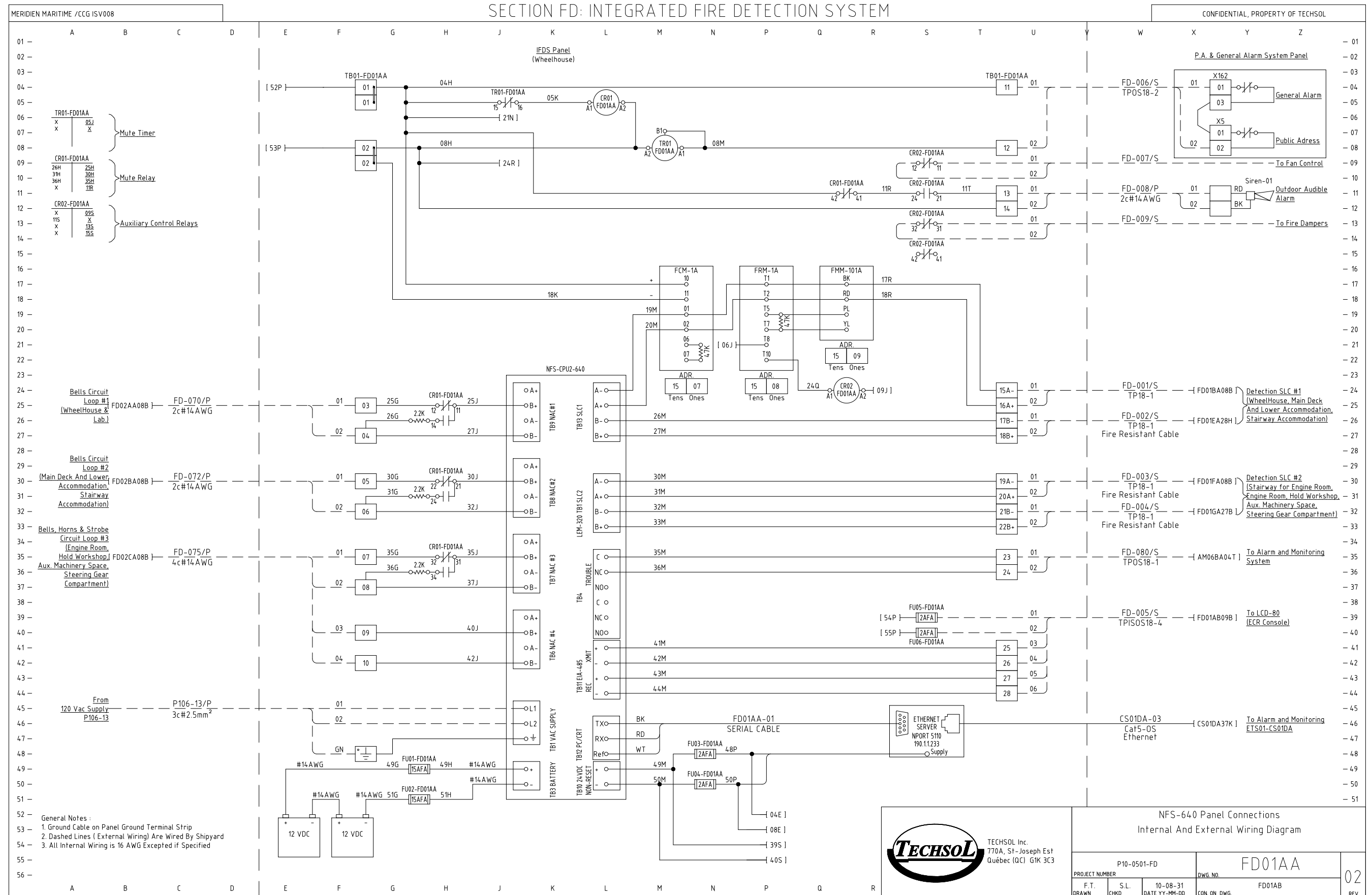
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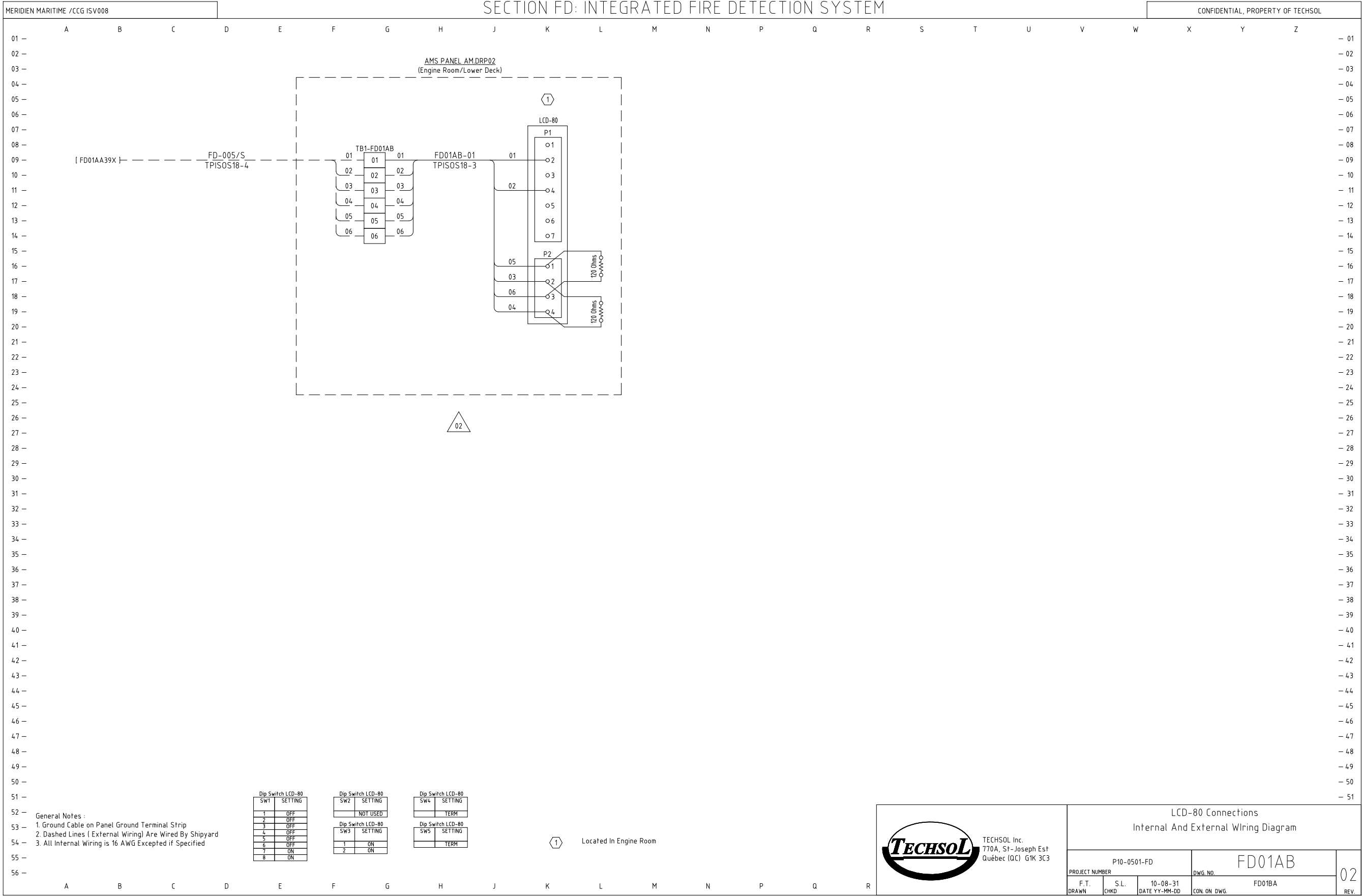
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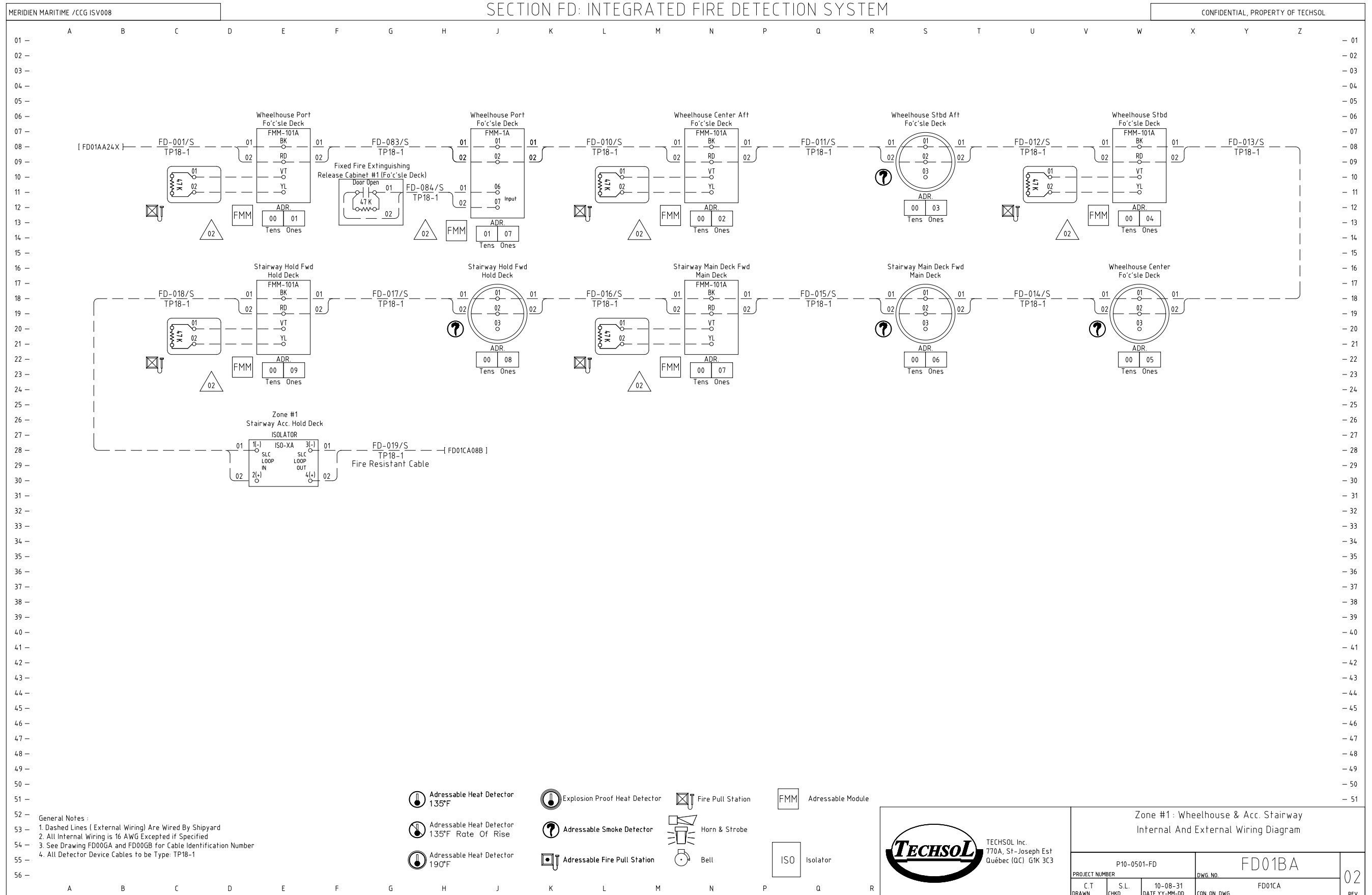


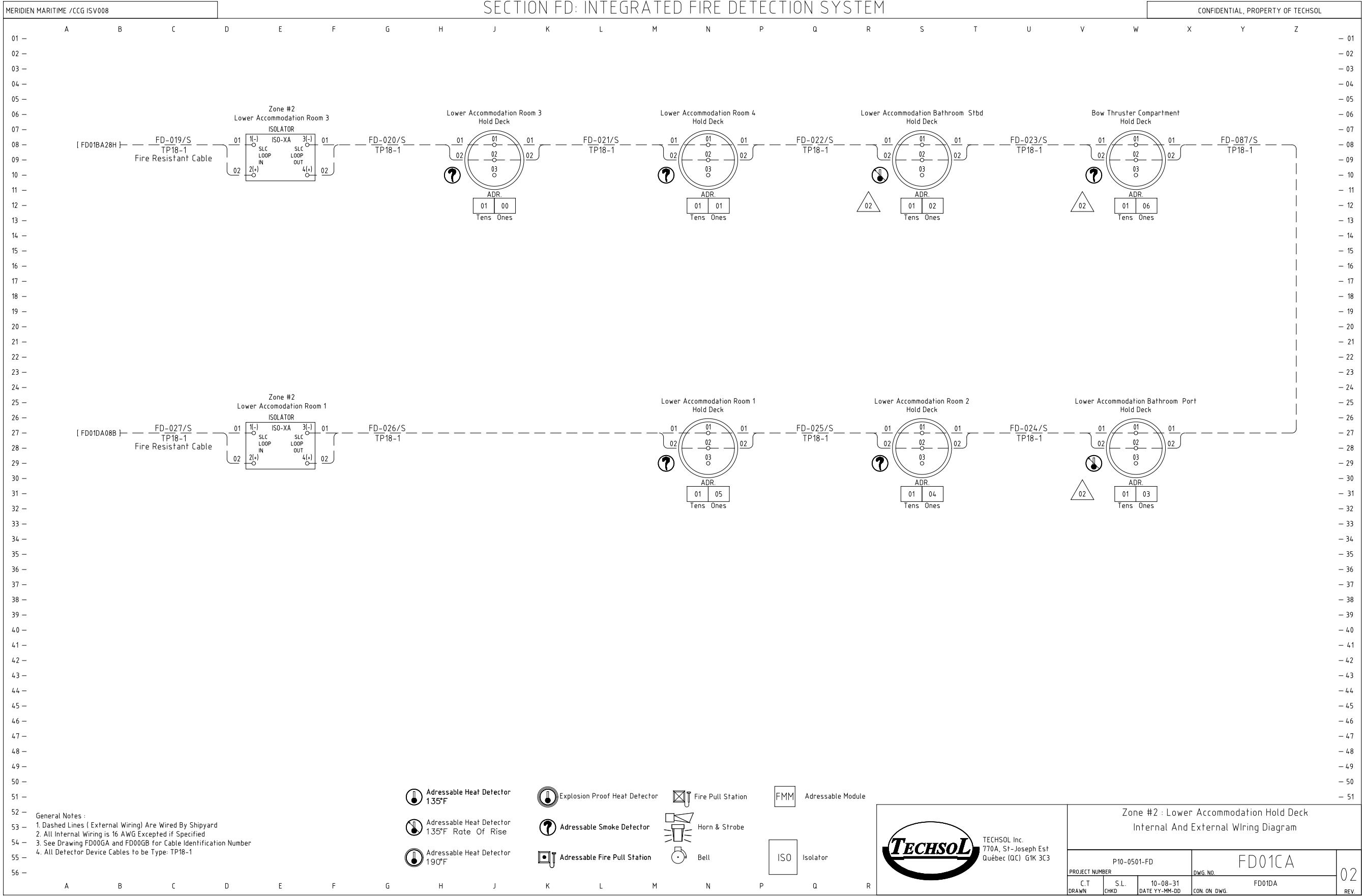


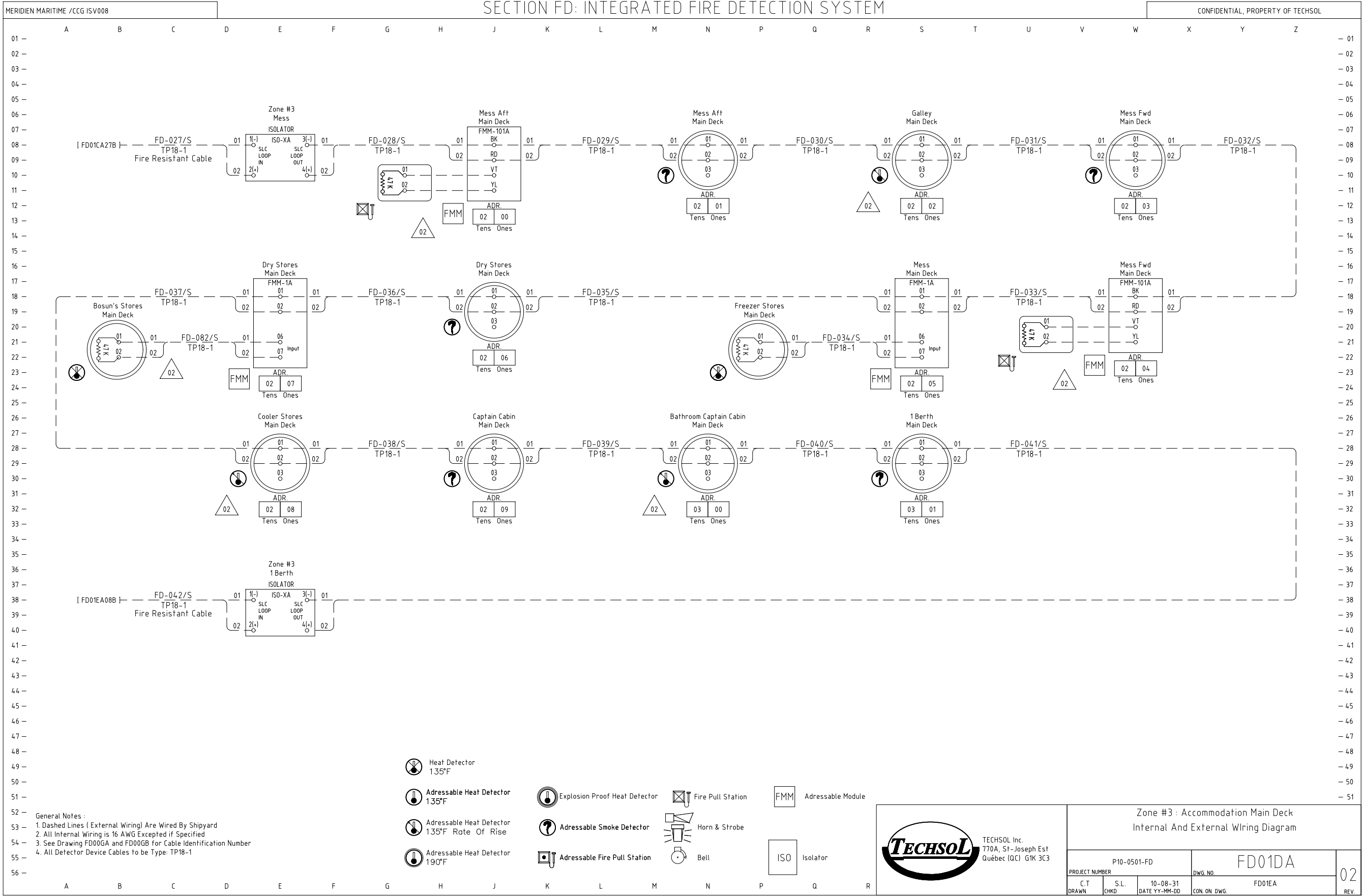


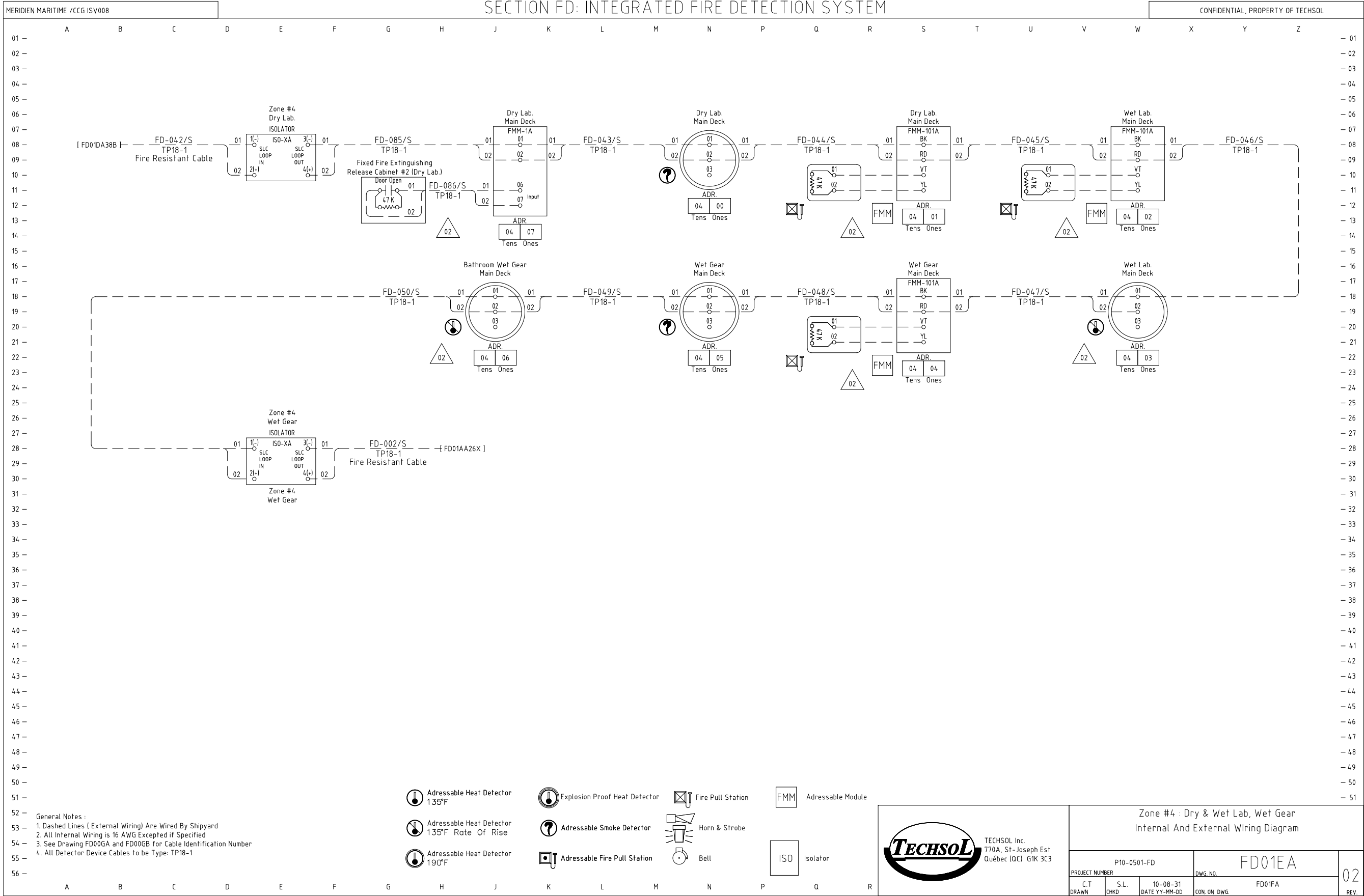
SECTION FD: INTEGRATED FIRE DETECTION SYSTEM

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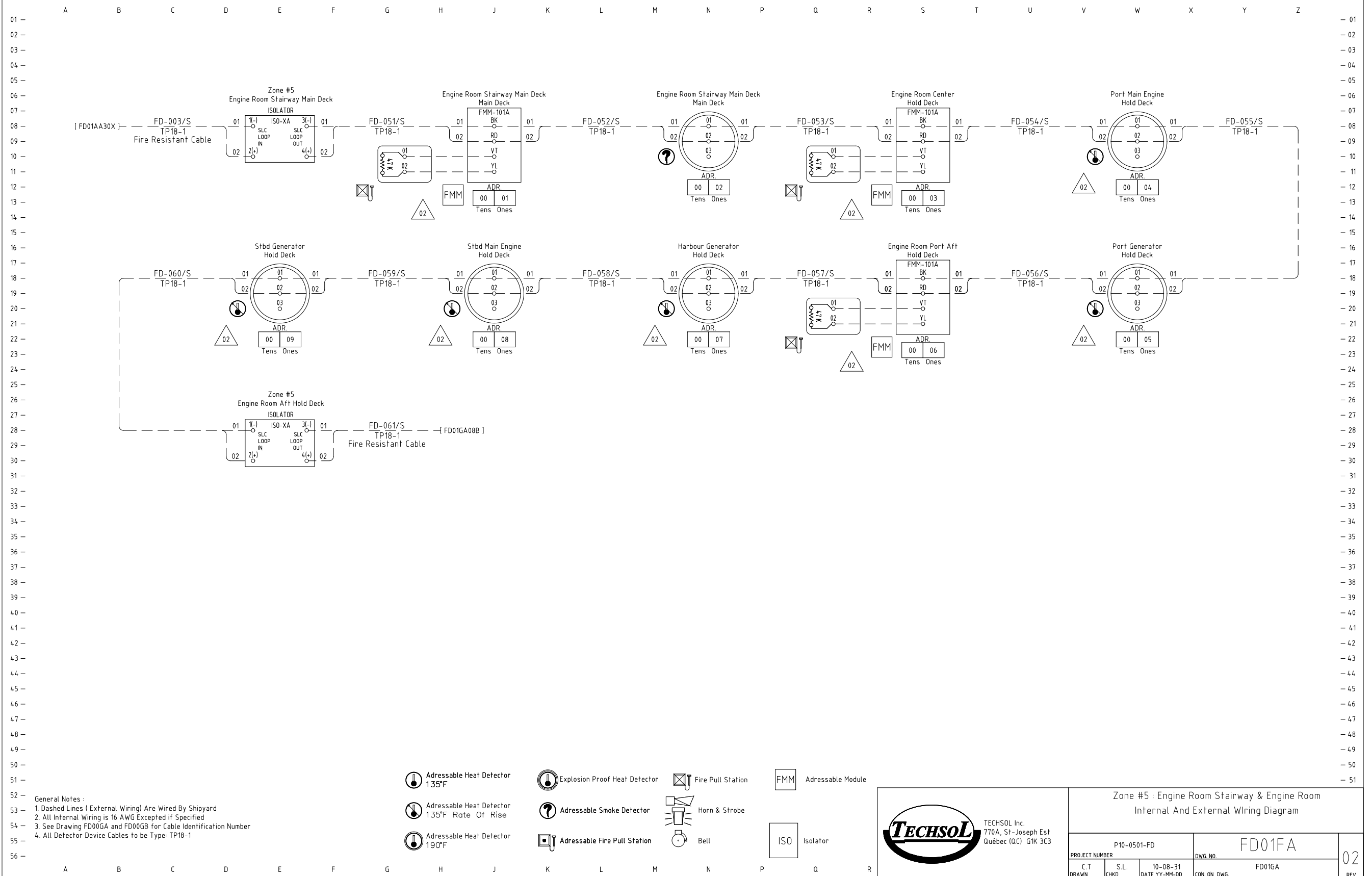


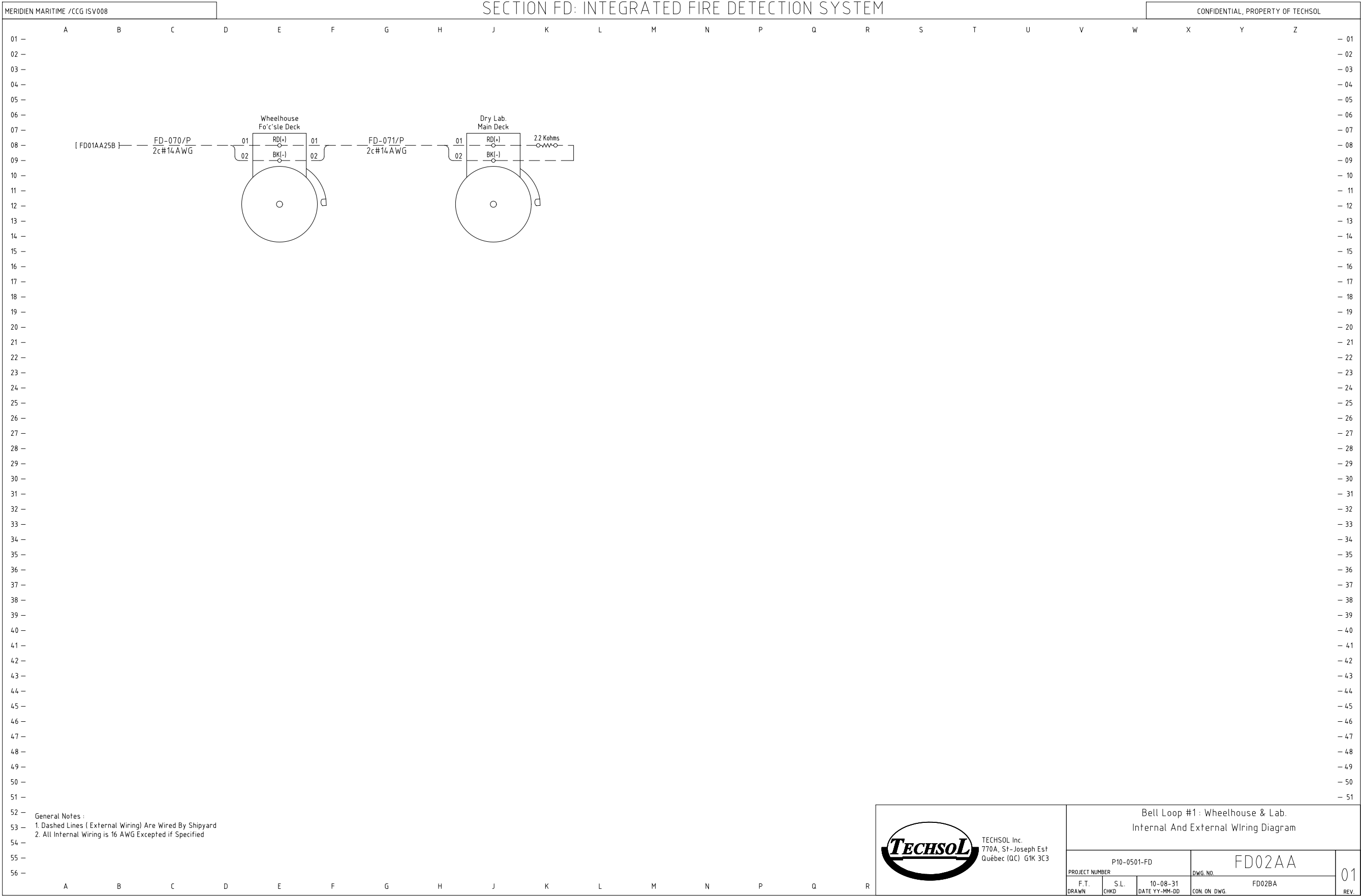




SECTION FD: INTEGRATED FIRE DETECTION SYSTEM

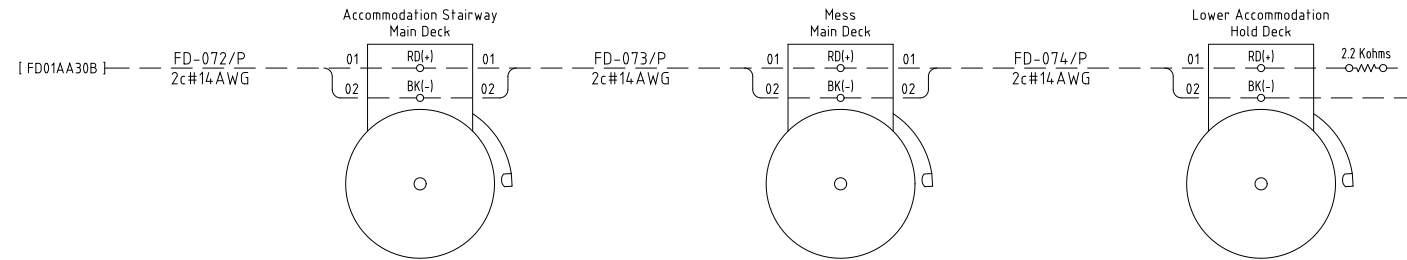
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SECTION FD: INTEGRATED FIRE DETECTION SYSTEM

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General Notes :

1. Dashed Lines (External Wiring) Are Wired By Shipyard
2. All Internal Wiring is 16 AWG Excepted if Specified



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770A, St-Joseph Est
Québec (QC) G1K 3C3

Bell Loop #2 : Main & Hold Deck Accommodation Internal And External Wlring Diagram

PROJECT NUMBER	P10-0501-FD
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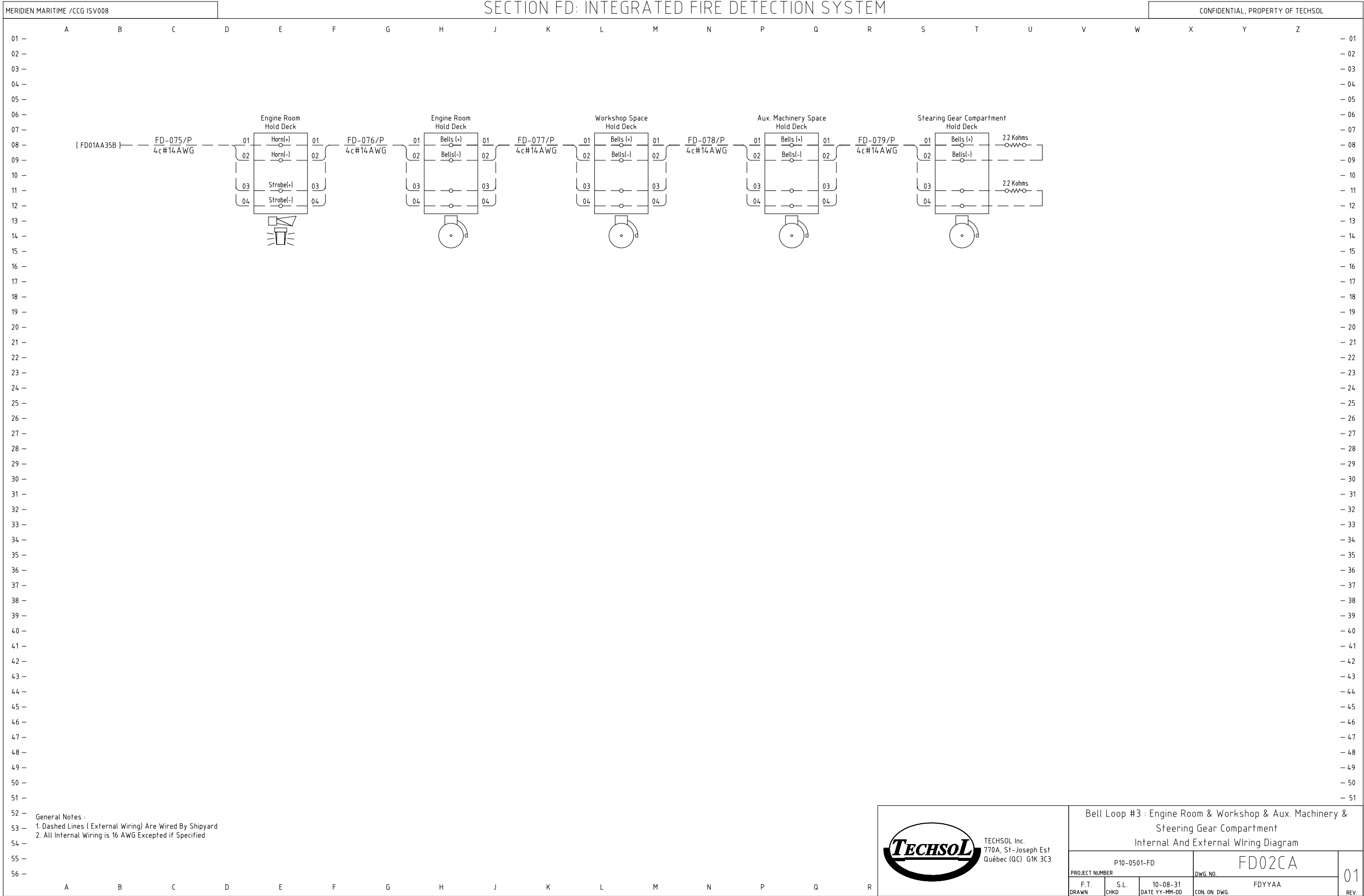
DWG. NO.

FD02BA

CON. ON DWG.	FD02CA
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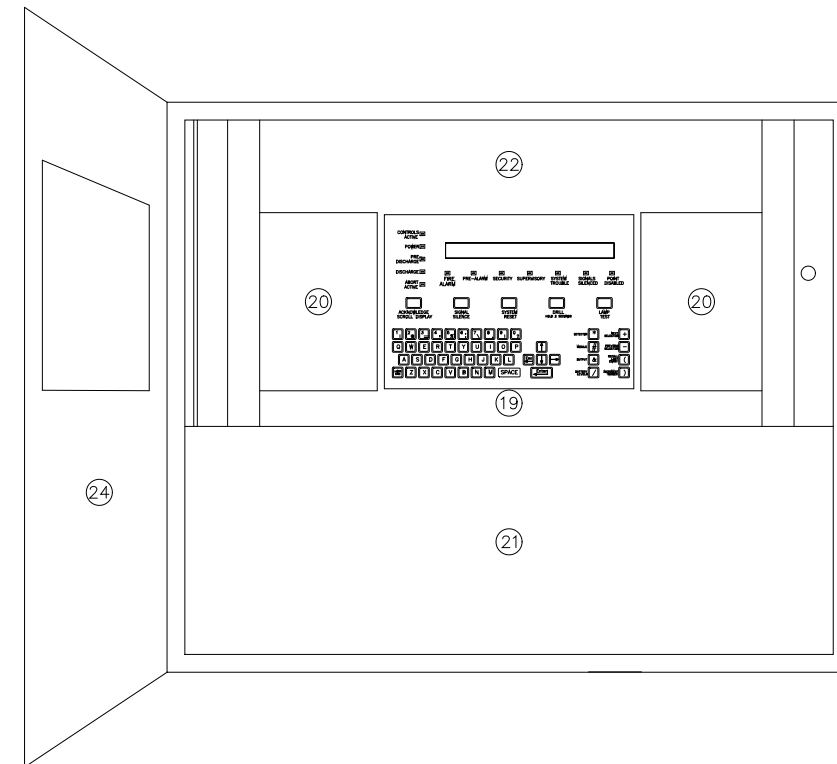
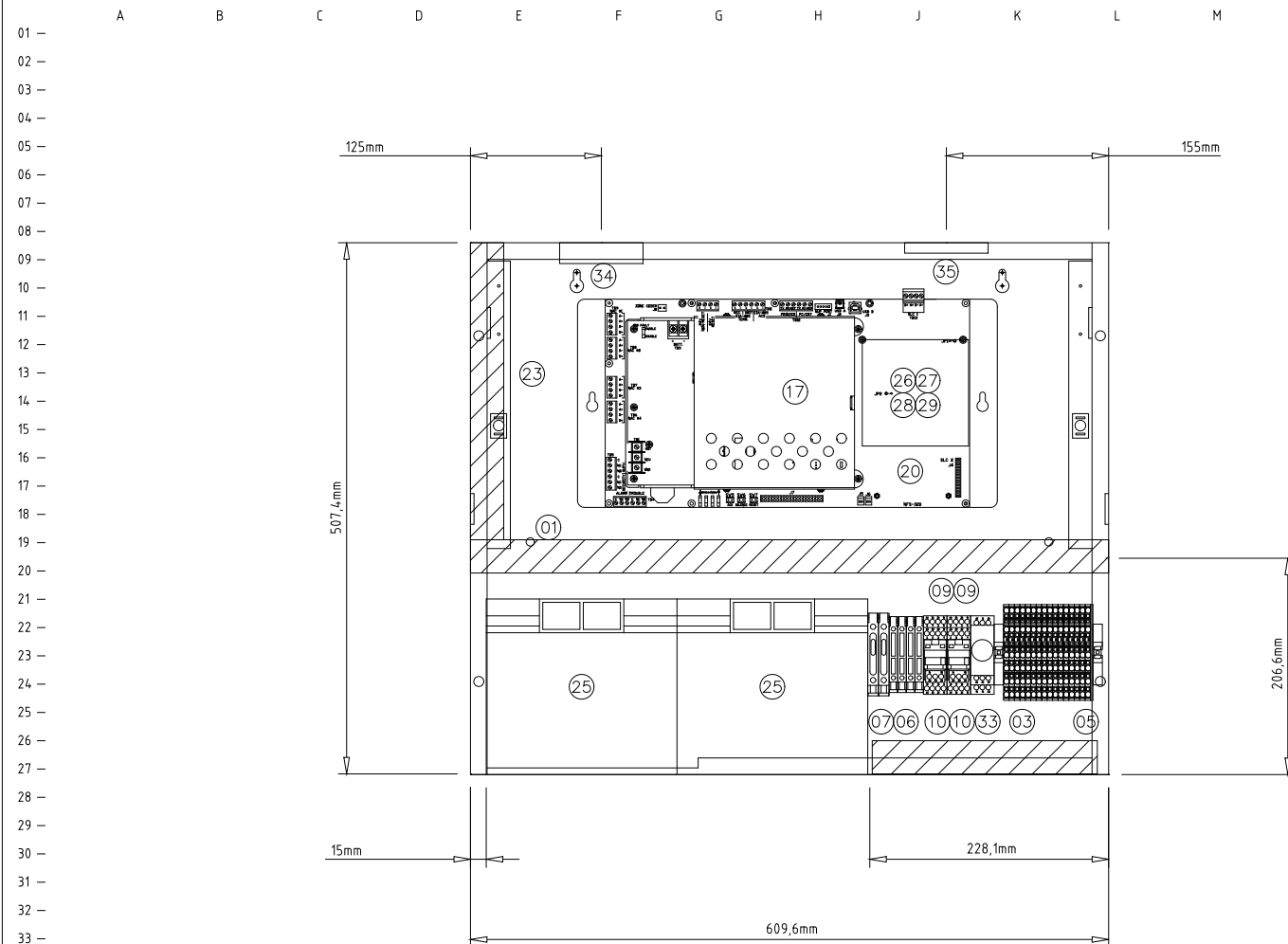
REV.



SECTION FD: INTEGRATED FIRE DETECTION SYSTEM

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LIST OF MATERIAL				
Item	Manufacturer	Model	Description	Qty
1	Panduit	N/A	Duct, 1.250" x4"	3
2	Phoenix Contact	3022218	End Terminal CLIPFIX 35	3
3	Phoenix Contact	3031306	STTB 2.5-TWIN Terminal	15
4	Phoenix Contact	3030514	STTB 2.5-TWIN Cover	2
5	Phoenix Contact	3031380	STTB 2.5-TWIN-PE Terminal	1
6	Phoenix Contact	3004265	UK 5-HESI - 24Vdc	4
7	Phoenix Contact	3004265	UK 6.3-HESI - 24Vdc	2
8				1
9	Releco	C9-AA0DX-24V	Relay 24Vdc 4 poles	2
10	Releco	S9-M	Relay Base	2
11	Buss	GMA-2A	Fuse 2A	4
12	Buss	AGC-15A	Fuse 15A	2
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LIST OF MATERIAL				
Item	Manufacturer	Model	Description	Qty
17	Notifier	CPU2-640	Control Module for NFS-640E	1
18				
19	Notifier	KDM-R2	Display 80 char	1
20	Notifier	BMP-1	Side Plate CPU-640 KDM-R2 Display	2
21	Notifier	BP-4	Battery Cover	1
22	Notifier	DP-DISP2	Top Slot Plate	1
23	Notifier	SBB-A4	Size 'A' Enclosure	1
24	Notifier	DR-A4	Door, Lock and Key	1
25	Notifier	BAT-12180	Battery 12Vdc 18 Amp Hours	2
26	Notifier	LEM-320	Loop Expansion Module	1
27	Notifier	FCM-1A	Adressable Control Module	1
28	Notifier	FRM-1A	Adressable Relay module	1
29	Notifier	FMM-101A	Adressable module standard mini	1
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31				
32				

LIST OF MATERIAL				
Item	Manufacturer	Model	Description	Qty
33	Panasonic	PM5S-A-24-240V	Timer	1
34	Moxa	NPORT 5110	RS-232 serial device To TCP/IP	1
35	N/A	N/A	Din Rail	3
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TECHSOL Inc.
770A, St-Joseph Est
Québec (QC) G1K 3C3

Fire Detections System Panel Mechanical Layout

P10-0501-FD

F.T.
DRAWN

S.L
CHKD

DATE	10-08-31
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	CON ON DWG
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FDZZAA

DWG. NO.

CON ON DWG

02

DEV