

# DEPARTMENT OF FISHERIES AND OCEANS CANADA

# ELECTRICAL AND LIFE SAFETY REFURBISHMENTS

## VICTORIA COAST GUARD BASE, VICTORIA, BRITISH COLUMBIA



1 VICTORIA COAST GUARD SITE  
E001 NTS

DRAWING LIST	
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STANTEC PROJECT NO: 115615358



Revision/Revision	Description/Description	Date/Date
5		
4		
3	RE-ISSUED FOR TENDER	2016/02/05
2	ISSUED FOR TENDER	2016/01/27
1	ISSUED FOR 99% REVIEW	2016/01/26
0	ISSUED FOR 33% REVIEW	2016/01/16

DEPARTMENT OF FISHERIES AND OCEANS CANADA  
9860 WEST SAANICH ROAD  
SIDNEY, B.C.

VICTORIA COAST GUARD BASE  
VICTORIA, B.C.  
ELECTRICAL SYSTEMS AND LIFE SAFETY  
REFURBISHMENT

Consultant Signature Only  
Designed by/Concept par  
**A.D.**  
Drawn by/Dessiné par  
**A.G.**  
PWSC Project Manager/Administrateur de Projets TPSGC  
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KEY PLAN AND DRAWING LIST

Project No./No. du projet <b>F1700-150949</b>	Sheet/ Feuille <b>E001</b>	Revision no./ La Révision no. <b>0</b>
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**STRUCTURAL DESIGN NOTES**

- GENERAL**
- ALL CODES REFERENCED ARE TO BE THE LATEST VERSION AT THE DATE OF ISSUE.
  - DESIGN IS BASED ON THE [BRITISH COLUMBIA BUILDING CODE 2012] [NATIONAL BUILDING CODE 2010].
  - READ THESE DESIGN NOTES IN CONJUNCTION WITH THE CONTRACT SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS.
  - OBTAIN ENGINEER'S APPROVAL BEFORE CUTTING, BORING, OR SLEEVEING LOAD-BEARING MEMBERS UNLESS NOTED OTHERWISE.
  - THE STRUCTURAL DRAWINGS ARE FOR THE COMPLETED PROJECT. STABILITY OF THE [EXISTING] [AND/OR] [NEW] STRUCTURE DURING CONSTRUCTION REMAINS THE RESPONSIBILITY OF THE [CONTRACTOR] [TRADE CONTRACTOR].
  - REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SMALL OPENINGS, SLEEVES, RECESSES, DEPRESSIONS, SUMPS, TRENCHES, CURBS, HOUSEKEEPING PADS, EQUIPMENT BASES, AND SLOPES NOT INDICATED ON THE STRUCTURAL DRAWINGS.
  - OPENINGS AND SLEEVES INDICATED ON THE STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY. COORDINATE ALL OPENING LOCATIONS AND DIMENSIONS WITH THE APPROPRIATE CONSULTANT AND THE [SUB-CONTRACTOR] [TRADE CONTRACTOR] PRIOR TO CONSTRUCTION.
  - REVIEW ALL DRAWINGS AND CHECK DIMENSIONS PRIOR TO IMPLEMENTING THE WORK. REPORT ANY DISCREPANCIES TO THE CONSULTANT FOR CLARIFICATION BEFORE PROCEEDING.
  - COORDINATE PLACEMENT AND LOCATION OF ITEMS BY SUBSEQUENT TRADES. RELEVANT TRADES SHALL REVIEW PRIOR TO ERECTION AND/OR INSTALLATION.
  - NOTIFY THE ENGINEER A MINIMUM OF [24] [48] HOURS PRIOR TO ANY REQUIRED SITE REVIEWS.

- EXISTING STRUCTURES**
- THE STRUCTURAL DESIGN IS BASED ON INFORMATION GATHERED FROM THE RECORD DRAWINGS AND FROM LIMITED VISUAL OBSERVATIONS ON SITE.
  - VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS ON SITE PRIOR TO IMPLEMENTING AFFECTED WORK.
  - NOTIFY THE CONSULTANT OF ANY SITE CONDITIONS THAT DIFFER FROM THE CONTRACT DOCUMENTS OR THE RECORD DRAWINGS.
  - SHORE AND UNDERPIN EXCAVATIONS AS REQUIRED TO PREVENT DISTURBANCE TO ADJACENT STRUCTURES, STREETS, SIDEWALKS AND UTILITIES.

- DESIGN LOADS**
- UNLESS NOTED OTHERWISE, THE LOADS NOTED IN TABLES AND ON DRAWINGS ARE UNFACTORED.
  - CLIMATIC INFORMATION: REFER TO CLIMATIC INFORMATION TABLE
  - SITE INFORMATION: REFER TO SITE INFORMATION TABLE
  - DESIGN LOADS: REFER TO DESIGN LOADS TABLE

- FOUNDATION & GEOTECHNICAL NOTES**
- FOUNDATION DESIGN IS BASED ON EXISTING BUILDING FOUNDATION SCHEME PREPARED BY VMA ENGINEER LTD. ON 29/08/01.
  - BEAR ALL FOOTINGS ON UNDISTURBED SOIL, NOTWITHSTANDING THE ELEVATIONS INDICATED ON THE DRAWINGS.
  - BRING OVER-EXCAVATION AND CAVITIES IN THE FOOTING BASE UP TO THE REQUIRED LEVELS WITH 10 MPa CONCRETE.
  - REMOVE ALL ORGANIC MATERIAL FROM THE BUILDING AREA AT THE LOCATION OF THE DIESEL GENSET HOUSEKEEPING PAD.
  - REMOVE ALL LOOSE OR SATURATED MATERIAL AND GROUNDWATER FROM THE BASE OF FOOTING EXCAVATIONS BY APPROVED METHODS PRIOR TO PLACING FOUNDATIONS.
  - PROTECT EXCAVATIONS FOR FOOTINGS FROM RAIN, SNOW, FREEZING TEMPERATURES, STANDING WATER, LOSS OF MOISTURE AND DEGRADATION BY APPROVED METHODS.
  - BEARING SURFACES TO BE INSPECTED IN THE FIELD BY A PROFESSIONAL GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA PRIOR TO PLACING CONCRETE. IMPROVE SUBGRADE AS DIRECTED IN WRITING BY A PROFESSIONAL GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA.
  - BACKFILL MATERIAL TO CONSIST OF GRANULAR FILL AND BE COMPACTED TO 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY IN MAXIMUM LIFTS OF 150 mm.

- CAST-IN-PLACE REINFORCED CONCRETE**
- CONCRETE MATERIALS, QUALITY, MIXING, PLACING, FORMWORK AND OTHER CONSTRUCTION PRACTICES TO CONFORM TO CSA-A23.1.

- SUPPLY CONTROLLED CONCRETE IN ACCORDANCE WITH CSA-A23.1 WITH PROPERTIES NOTED IN CONTROLLED CONCRETE TABLE.
- USE TYPE (GU) CEMENT FOR ALL CONCRETE IN CONTACT WITH NATIVE SOIL.
- MAXIMUM FLY ASH CONTENT NOT TO EXCEED 25% OF THE TOTAL CEMENTITIOUS MATERIAL EXCEPT AS FOLLOWS:
  - CONCRETE FOR FOOTINGS, PILES, COLUMNS, WALLS, GRADE BEAMS: MAXIMUM 40%.
- NOTIFY CONSULTANT 24 HOURS PRIOR TO CONCRETE POURS TO ALLOW FOR REVIEW OF REINFORCEMENT.
- DO NOT USE ADMIXTURES CONTAINING CALCIUM CHLORIDE.

- CONCRETE REINFORCEMENT**
- REINFORCEMENT STEEL TO CONFORM TO CSA-G30-18 GRADE [300] [400].
  - DO NOT WELD REINFORCEMENT UNLESS APPROVED IN WRITING BY THE ENGINEER. REINFORCEMENT TO BE WELDED TO CONFORM TO CSA-G30-18, GRADE [300W] [400W]. WELDING ONLY PERMITTED BY AN ORGANIZATION CERTIFIED TO CSA-W186.
  - NOTIFY THE ENGINEER PRIOR TO CONCRETE PLACEMENT TO ALLOW FOR REVIEW OF REINFORCING.
  - SUBMIT SHOP DRAWINGS AND DETAILS FOR ALL REINFORCEMENT FOR REVIEW PRIOR TO FABRICATION.
  - REINFORCEMENT NOTED WITH 'C' AS C10M IS TO HAVE A STANDARD HOOK AT ONE END. LENGTH OF BAR INDICATED IS EXCLUSIVE OF HOOK LENGTH.
  - REINFORCEMENT NOTED WITH 'E' AS 10M IS TO BE EPOXY-COATED.
  - CLEAR CONCRETE COVER TO REINFORCEMENT - REFER TO CLEAR CONCRETE COVER TO REINFORCEMENT TABLE.
  - STANDARD END HOOK LENGTHS FOR REINFORCING - REFER TO STANDARD END HOOKS TABLE.
  - REINFORCEMENT SPLICES - REFER TO REINFORCEMENT SPLICES TABLE.
    - WHERE SPLICES ARE INDICATED ON THE DRAWINGS, SUCH DIMENSIONS SHALL APPLY.
    - WHERE THE DRAWINGS INDICATE TENSION OR COMPRESSION SPLICES, IT SHALL BE AS INDICATED IN THE REINFORCEMENT SPLICES TABLE.
    - WHERE NO SPLICE OR SPLICE TYPE IS INDICATED ON THESE DRAWINGS, IT SHALL BE A TENSION SPLICE EXCEPT FOR COLUMNS WHICH SHALL BE A COMPRESSION SPLICE.
  - EMBEDMENT OF DOWELS - REFER TO REINFORCEMENT SPLICES TABLE.
    - WHERE EMBEDMENT IS DIMENSIONED ON THE DRAWINGS, SUCH DIMENSIONS SHALL APPLY.
    - WHERE THE DRAWINGS INDICATE TENSION OR COMPRESSION EMBEDMENT, IT SHALL BE AS NOTED IN THE REINFORCEMENT SPLICES TABLE.
    - WHERE NO EMBEDMENT OR EMBEDMENT TYPE IS INDICATED ON THESE DRAWINGS, IT SHALL BE A TENSION EMBEDMENT EXCEPT FOR COLUMNS WHICH SHALL BE A COMPRESSION EMBEDMENT.
  - WELDED WIRE MESH TO CONFORM TO ASTM A497/A497M.
  - REINFORCE ALL INTERIOR AND EXTERIOR SLABS ON GRADE WITH 10M AT 400 mm ON CENTRE UNLESS NOTED OTHERWISE. [SIDEWALKS AND SMALL SLABS TO BE REINFORCED WITH 10M AT 300 mm ON CENTRE UNLESS NOTED OTHERWISE.]
  - OPENINGS IN WALLS AND SLABS - PROVIDE TWO 15M BARS EACH SIDE, ONE EACH FACE, EXTENDING 600mm PAST THE OPENINGS, PLUS TWO 15M DIAGONAL BARS 1.5 TIMES THE LENGTH OF SHORTEST SIDE OF OPENING OR MINIMUM 500 mm AND MAXIMUM 1500 mm IN LENGTH AT EACH CORNER.
  - DO NOT CUT REINFORCEMENT AT OPENINGS WHERE IT CAN BE SPREAD CONTINUOUS AROUND OPENING. TYPICAL BEAM REINFORCEMENT UNLESS OTHERWISE NOTED - TOP REINFORCEMENT TO BE CONTINUOUS OVER SUPPORTS; SPLICE 450 mm AT MIDSPAN. BOTTOM REINFORCEMENT TO BE CONTINUOUS BETWEEN SUPPORTS; SPLICE 450mm AT SUPPORTS.
  - ALL REINFORCEMENT TO BE SUPPORTED AT 900mm MAXIMUM SPACING.

- CONDUITS, PIPES & SLEEVES EMBEDDED IN CONCRETE**
- CENTERLINE SPACINGS BETWEEN 3 DIAMETERS AND 100mm CLEAR.
  - CENTERLINE SPACINGS BETWEEN PARALLEL CONDUIT AND REINFORCING BARS TO BE 3 DIAMETERS.
  - ADDED REINFORCING AT POINT OF CONGESTION AS DIRECTED BY THE STRUCTURAL ENGINEER
  - FOR CONDUIT IN THE PLANE OF:
    - SLABS AND WALLS:
      - LOCATE BETWEEN TOP AND BOTTOM, OR EACH FACE OF REINFORCING
      - MAXIMUM SIZE IN ONE LAYER TO BE NOT MORE THAN 1/3 CONCRETE THICKNESS
      - MAXIMUM SIZE OF EACH CONDUIT IN TWO LAYERS CROSSING TO BE NOT MORE THAN 1/4 CONCRETE THICKNESS
      - THREE LAYERS CROSSING WILL NOT BE PERMITTED
    - FOOTINGS AND MATS:
      - THE MAXIMUM SIZE OF CONDUIT NOT TO EXCEED 150mmØ UNLESS OTHERWISE APPROVED BY

- STRUCTURAL ENGINEER. CONDUIT TO BE LOCATED BETWEEN TOP AND BOTTOM LAYERS OF REINFORCING.
- NO REINFORCING STEEL SHALL BE CUT
  - NO SLEEVES WITHIN DROP PANELS BEYOND THOSE SHOWN ON SXXX
  - SPACING OF SLEEVES (150mm MAX Ø) THROUGH FLAT SLABS TO BE NOT LESS THAN THE FOLLOWING (SEE BELOW DIAGRAM):

- CONCRETE FORMWORK**
- DESIGN, FABRICATION, ERECTION, AND OTHER CONSTRUCTION PRACTICES TO CONFORM TO CAN/CSA-S269.3.
  - PROVIDE VOID FORM BELOW ALL STRUCTURAL SLABS AT GRADE, WALLS, GRADE BEAMS, PILE CAP, AND WHERE SHOWN ON THE DRAWINGS PRIOR TO INSTALLATION OF REINFORCEMENT.
    - STRUCTURAL SLABS AT GRADE - [PLYWOOD] [6 mm HARDBOARD] OVER BIODEGRADABLE WAX MAT CARDBOARD. COMPLETE WITH MOISTURE RESISTANT TREATED PAPER FACES, WITH SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF WET CONCRETE UNTIL INITIAL SET. PROVIDE 12 mm THICK PRESSURE TREATED PLYWOOD AROUND PERIMETER OF SLAB TO PROTECT VOID SPACE.
    - OTHER LOCATIONS - EXPANDED POLYSTYRENE CRUSHABLE FILL MATERIAL.
  - PROVIDE CAMBER OF [SPAN/600] FOR ALL BEAMS AND GIRDERS WITH A SPAN GREATER THAN OR EQUAL TO [8] m. CAMBER BOTH THE TOP AND UNDERSIDE OF CONCRETE TO MAINTAIN SPECIFIED DEPTH UNLESS NOTED OTHERWISE.
  - LEAVE FORMS IN PLACE OR PROVIDE SHORING FOR ALL SLABS, BEAMS, AND GIRDERS UNTIL CONCRETE HAS REACHED SPECIFIED 28-DAY COMPRESSIVE STRENGTH.
  - REFER TO SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR CHAMFERS ON CORNERS FOR BEAMS, COLUMNS, AND WALLS.

- TOLERANCES & SURVEY CONTROL**
- TOLERANCE SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND SPECIFICATIONS EXCEPT AS NOTED HERE:
  - COLUMN OFFSET BETWEEN FLOOR LEVELS TO NOT EXCEED +/- 6mm FROM INTENDED ALIGNMENT.
  - COLUMN HEIGHT TO UNDERSIDE OF SLAB OR BEAM +0mm TO -100mm. COLUMN SHOULD NOT EXTEND INTO SLAB OR SLAB BAND.
  - REPAIR COLUMNS THAT ARE CAST TOO HIGH BY CHIPPING DOWN TO LEVEL WITH THE UNDERSIDE OF SLAB. THE CENTRAL PORTION OF THE COLUMN INSIDE THE REBAR CAGE MAY BE LOPED UPWARD AT 45 DEGREES MAXIMUM BUT NO PART OF THE COLUMN SHALL BE HIGHER THAN 50mm ABOVE THE BOTTOM OF THE SLAB.
  - PROVIDE SURVEY CONTROL AND MEASUREMENTS IN ACCORDANCE WITH APPLICABLE CODES, THESE NOTES, AND SPECIFICATIONS.
    - PROVIDE BASE POINT FOR SURVEY AT OUTSIDE CORNER OF STAIR OR ELEVATOR SHAFT AND MEASURE ALL SLAB SURVEY FROM SINGLE LOCATION.
    - SURVEY THE FIRST SUSPENDED SLAB ABOVE GRADE AND THE FIRST TYPICAL TOWER FLOOR AS FOLLOWS:
      - FORMWORK BEFORE SLAB IS CAST.
      - SLAB SURFACE WITHIN 18 HOURS OF FINISHING AND BEFORE FORMWORK REMOVAL.
      - IMMEDIATELY AFTER FORMWORK REMOVAL.
      - IMMEDIATELY AFTER RESHORING REMOVAL.
      - 3 MONTHS AFTER RESHORE REMOVAL.
    - SURVEY SLABS AT THE FOLLOWING LOCATIONS:
      - AT COLUMNS, ENDS OF WALLS AND OTHER SUPPORTS.
      - AT SLAB EDGES, CORNERS AND TIPS OF CANTILEVERS.
      - MIDSPAN BETWEEN SUPPORTS.
      - AT ANY NOTICEABLE HIGH POINTS OR LOW POINTS.
    - EACH SURVEY SHOULD RECORD SLAB ELEVATIONS AT THE SAME LOCATION FOR LATER REFERENCE AND ANALYSIS PURPOSES.
    - WHENEVER SLAB IS OUTSIDE TOLERANCE, SURVEY SLAB THICKNESS AT THE FOLLOWING LOCATIONS:
      - AT COLUMNS, ENDS OF WALLS AND OTHER SUPPORTS.
      - AT SLAB EDGES, CORNERS AND TIPS OF CANTILEVERS.
      - MIDSPAN BETWEEN SUPPORTS.
      - AT ANY NOTICEABLE HIGH POINTS OR LOW POINTS.

CLIMATIC INFORMATION	
TO BE READ IN CONJUNCTION WITH DESIGN LOADS DESIGN NOTES	
SNOW LOAD (1/50), Ss	2.1kPa
SNOW LOAD (1/50), Sr	0.2kPa
ONE DAY RAIN (1/50)	91mm
HOURLY WIND PRESSURE (1/10)	0.44kPa
HOURLY WIND PRESSURE (1/50)	0.57kPa
SEISMIC RESPONSE, Ss(0.2)	1.20
SEISMIC RESPONSE, Ss(0.5)	0.82
SEISMIC RESPONSE, Ss(1.0)	0.36
SEISMIC RESPONSE, Ss(2.0)	0.18
SEISMIC RESPONSE, PGA	0.61

SITE INFORMATION	
TO BE READ IN CONJUNCTION WITH DESIGN LOADS DESIGN NOTES	
IMPORTANCE CATEGORY	1.5

GRANULAR AGGREGATE GRADATIONS	
TO BE READ IN CONJUNCTION WITH FOUNDATION AND GEOTECHNICAL DESIGN NOTES	
SIEVE SIZE (mm)	% PASSING BY WEIGHT
25	100
20	95-100
10	60-80
5	40-60
2.5	28-48
0.630	13-29
0.314	9-21
0.160	6-15
0.080	4-10

TYPICAL ABBREVIATIONS	
Key Name	Comments
(E)	"EXISTING"
ALT	"ALTERNATE"
B.B.O.C.	"BEAM BEAR ON COLUMN"
B.L.L.	"BOTTOM LOWER LAYER"
B.U.L.	"BOTTOM UPPER LAYER"
BM	"BEAM"
BOT	"BOTTOM"
BS	"BOTH SIDES"
C/W	"COMPLETE WITH"
CANT	"CANTILEVER"
CLR	"CLEAR"
COL	"COLUMN"
CONC	"CONCRETE"
CONN	"CONNECTION"
CONT	"CONTINUOUS"
CP	"COMPLETE PENETRATION" (WELD)
DIA	"DIAMETER"
DWG	"DRAWING"
DWL	"DOWEL"
E.F.	"EACH FACE"
E.S.	"EACH SIDE"
E.W.	"EACH WAY"
EL	"ELEVATION"
ELEV	"ELEVATION"
FTG	"FOOTING"
H1E	"HOOK ONE END"
H2E	"HOOK TWO ENDS"
HORIZ	"HORIZONTAL"
I.F.	"INSIDE FACE"
L.W.	"LONG WAY"
L.G.	"LONG"
MAX	"MAXIMUM"
MIN	"MINIMUM"
NTS	"NOT TO SCALE"
O.C.	"ON CENTER"
O.F.	"OUTSIDE FACE"
OPNG	"OPENING"
OPP	"OPPOSITE"
PL	"PLATE"
R/W	"REINFORCE WITH"
REINF	"REINFORCING"
S.F.	"STEP FOOTING"
S.W.	"SHORT WAY"
SIM	"SIMILAR"
STAGG	"STAGGERED"
STIRR	"STIRRUPS"
SYMM	"SYMMETRICAL"
T&B	"TOP & BOTTOM"
T.L.L.	"TOP LOWER LAYER"
T.O.	"TOP OF"
T.O.F.	"TOP OF FOOTING"
T.O.S.	"TOP OF STEEL"
T.O.W.	"TOP OF WALL"
T.U.L.	"TOP UPPER LAYER"
THK	"THICK"
TYP	"TYPICAL"
U.N.O.	"UNLESS NOTED OTHERWISE"
U/S	"UNDERSIDE"
VERT	"VERTICAL"
VIF	"VERIFY IN FIELD"
W/	"WITH"

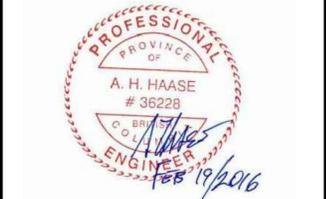
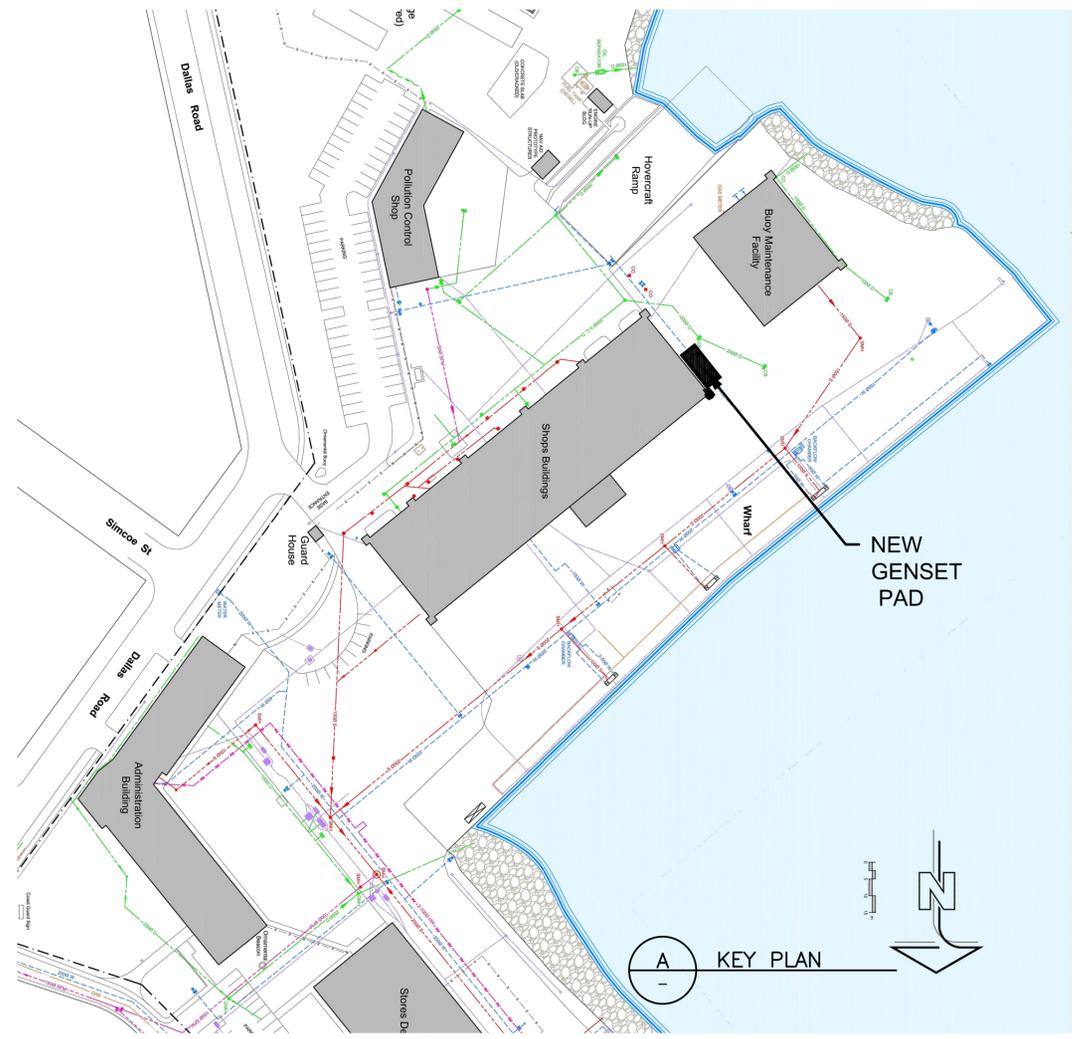
CONTROLLED CONCRETE - EXTERIOR							
TO BE READ IN CONJUNCTION WITH CAST-IN-PLACE REINFORCED CONCRETE DESIGN NOTES							
CONCRETE ELEMENT	CLASS OF EXPOSURE	MIN. COMP. STR. AT 28 DAYS (MPa)	MIN. COMP. STR. AT 56 DAYS (MPa)	MAX. AGGREGATE SIZE (mm)	AIR CONTENT CATEGORY	MAX. W/C RATIO	CEMENT TYPE
DIESEL GENSET SLABS ON GRADE	C-2	32	N/A	20	1	0.45	GU

TO BE READ IN CONJUNCTION WITH CONCRETE REINFORCEMENT DESIGN NOTES							
EXPOSURE CONDITION	EXPOSURE CLASS						
	N	F-1, F-2, S-1, S-2, S-3	C-XL, C-1, C-2, C-3, A-1, A-2, A-3				
CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	-	75 mm	75 mm				

CONTROLLED CONCRETE - INTERIOR							
TO BE READ IN CONJUNCTION WITH CAST-IN-PLACE REINFORCED CONCRETE DESIGN NOTES							
CONCRETE ELEMENT	CLASS OF EXPOSURE	MIN. COMP. STR. AT 28 DAYS (MPa)	MIN. COMP. STR. AT 56 DAYS (MPa)	MAX. AGGREGATE SIZE (mm)	AIR CONTENT CATEGORY	MAX. W/C RATIO	CEMENT TYPE
HOUSEKEEPING PAD	N	25	-	20	-	0.55	GU

REINFORCEMENT SPLICES							
TO BE READ IN CONJUNCTION WITH CONCRETE REINFORCEMENT DESIGN NOTES:							
NOTE 1: THIS TABLE IS BASED ON NORMAL WEIGHT CONCRETE f <sub>c</sub> = 35 MPa AND ON REINFORCING STEEL f <sub>y</sub> = 400 MPa.							
NOTE 2: TOP HORIZONTAL BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 300mm OF CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.							
NOTE 3: FOR STANDARD EMBEDMENT DEPTH INTO CONCRETE, DIVIDE BASIC TENSION LAP SPLICE NUMBERS BY 1.3.							
BAR SIZE	COMPRESSION SPLICE (mm)	TENSION SPLICE (mm)					
		VERTICAL OR BOTTOM HORIZONTAL BARS		TOP HORIZONTAL BARS			
		UNCOATED BARS	EPOXY COATED BARS	UNCOATED BARS	EPOXY COATED BARS		
10M	300	400	600	500	650		
15M	450	550	850	750	950		
20M	600	700	1000	900	1150		
25M	750	1100	1650	1400	1850		
30M	900	1300	1950	1700	2200		
35M	1025	1550	2300	2000	2600		

STANDARD END HOOKS								
TO BE READ IN CONJUNCTION WITH CONCRETE REINFORCEMENT DESIGN NOTES								
BAR SIZE	10M	15M	20M	25M	30M	35M	45M	55M
90 HOOK LENGTH	180	260	310	400	510	640	790	1020
180 HOOK LENGTH	140	180	210	280	390	550	670	860



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0	ISSUED FOR REVIEW		11/10/19
Revision/	Description/Description		Date/Date
Client/client			

Project title/Titre du projet  
**Seaspan VICTORIA, B.C.**

Consultant Signature Only  
Designed by/Concept par  
Drawn by/Dessiné par  
PWGSC Project Manager/Administrateur de Projets TPSGC  
Regional Manager, Architectural and Engineering Services, Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
Drawing title/Titre du dessin

**GENERAL NOTES**

Project No./No. du projet <b>115616059</b>	Sheet/Feuille <b>S-100</b> OF 2	Revision no./La Révision no. <b>2</b>
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Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin

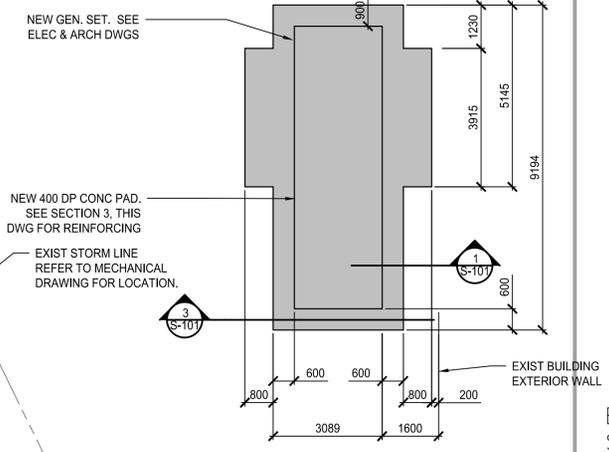
**PLANS AND DETAILS**

Project No./No. du projet: 115616059

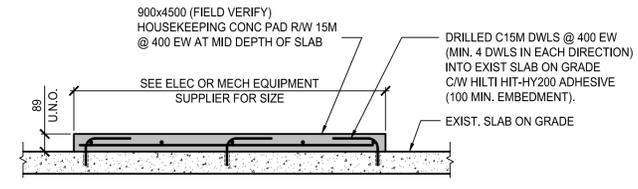
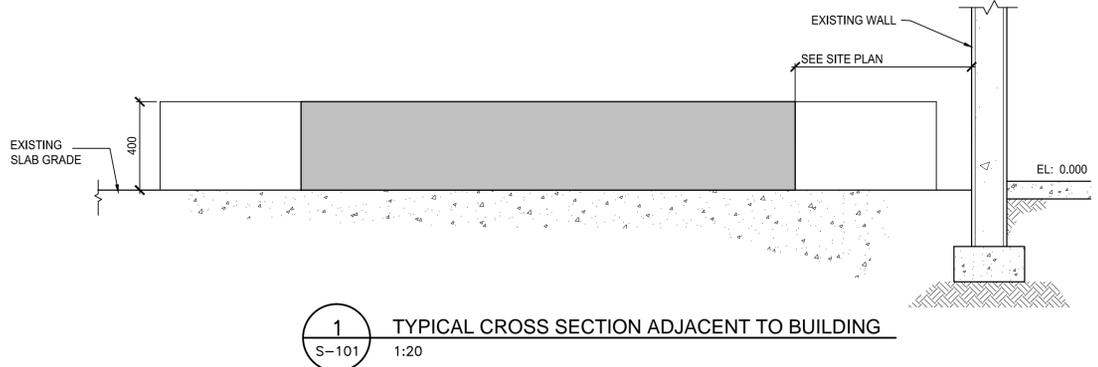
Sheet/Feuille: **S-101** OF 2

Revision no./La Révision no.: **2**

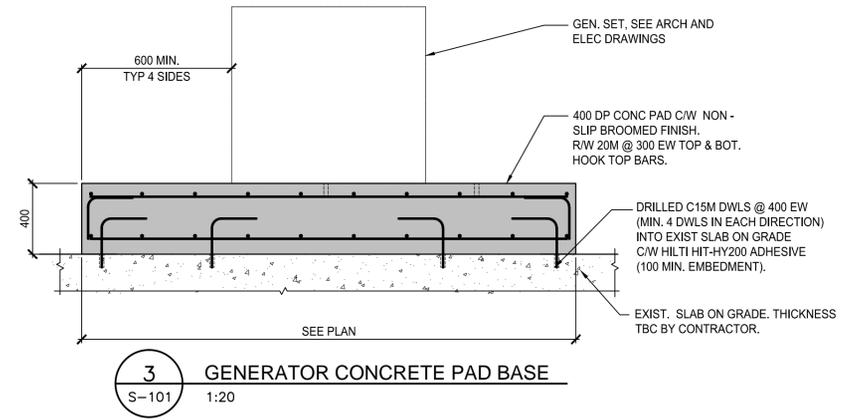
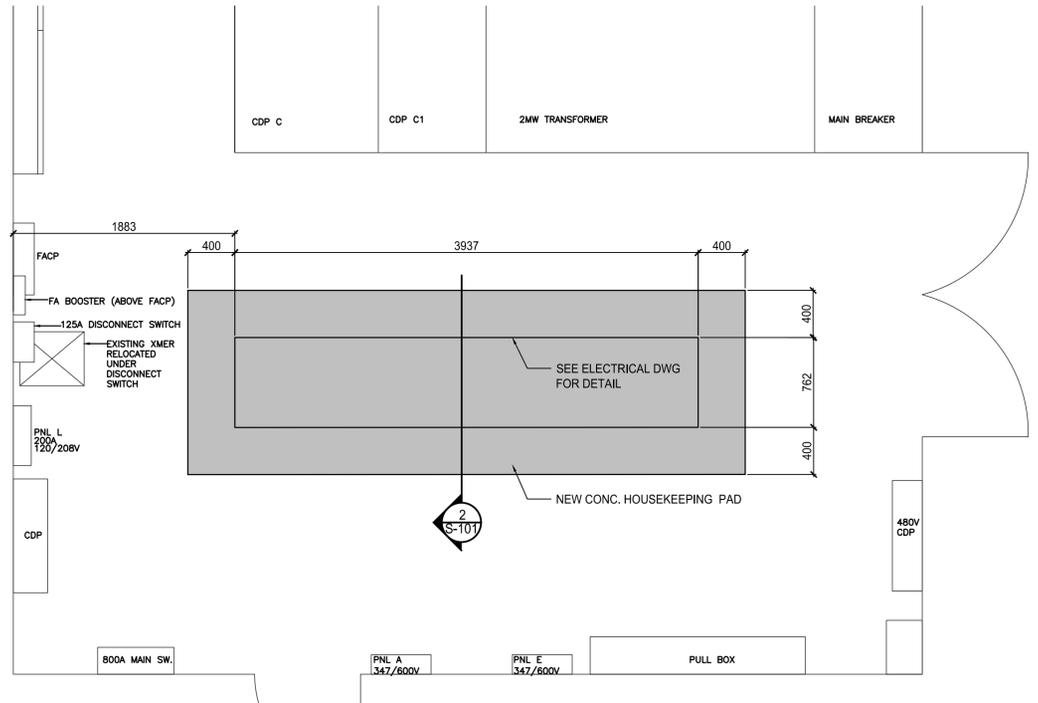
NOTE: TEST CORE AT EXISTING EXTERIOR SLAB ON GRADE AND MAKE GOOD AS REQ'D - 1 TEST CORE SAMPLE ONLY TO VERIFY SLAB DEPTH. ALL ASSOCIATED COSTING TO BE PAID BY THE OWNER.  
NEW JUNCTION BOX REFER TO ELECTRICAL / MECHANICAL DRAWING FOR LOCATION.



**A** GROUND FLOOR PLAN - GENSET PAD LOCATION  
1:100 SEE DRAWING S-100 FOR GENERAL NOTES.



**2** TYPICAL HOUSEKEEPING PAD  
S-101 1:20 AT ELECTRICAL ROOM



**3** GENERATOR CONCRETE PAD BASE  
S-101 1:20



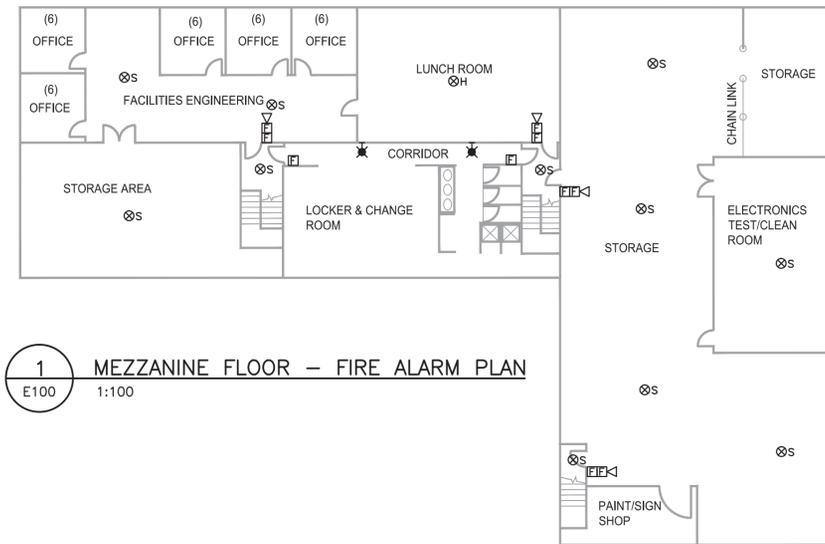


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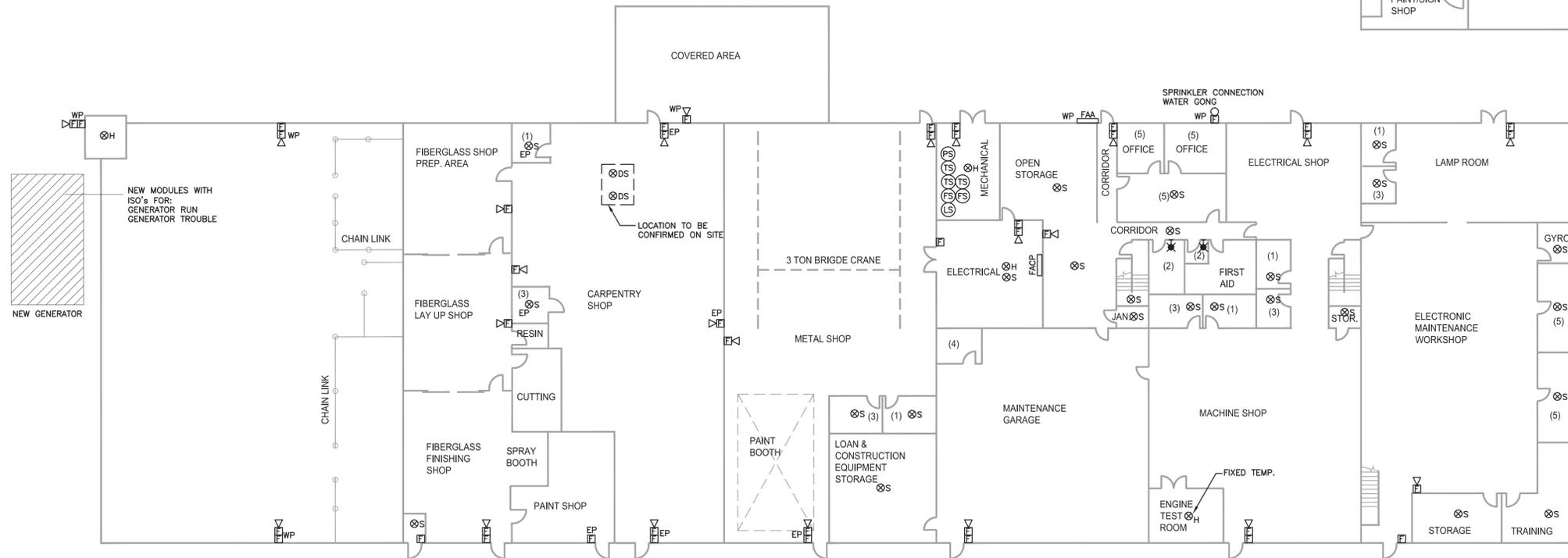
FIRE ALARM SYMBOLS	
[Symbol]	FIRE ALARM MANUAL STATION
[Symbol]	FIRE ALARM BELL
[Symbol]	FIRE ALARM BELL c/w STROBE
[Symbol]	CEILING MOUNTED FIRE ALARM HORN SPEAKER
[Symbol]	WALL MOUNTED FIRE ALARM HORN SPEAKER
[Symbol]	CEILING MOUNTED FIRE ALARM HORN SPEAKER c/w STROBE
[Symbol]	WALL MOUNTED FIRE ALARM HORN SPEAKER c/w STROBE
[Symbol]	CEILING REMOTE EVACUATION STROBE
[Symbol]	WALL MOUNTED REMOTE EVACUATION STROBE
[Symbol]	CEILING MOUNTED FIRE ALARM SPEAKER
[Symbol]	WALL MOUNTED FIRE ALARM SPEAKER
[Symbol]	CEILING MOUNTED FIRE ALARM SPEAKER c/w STROBE
[Symbol]	WALL MOUNTED FIRE ALARM SPEAKER c/w STROBE
[Symbol]	FIRE ALARM PIEZO SOUNDER
[Symbol]	FIRE ALARM PIEZO SOUNDER c/w STROBE
[Symbol]	FIRE ALARM ELECTRONIC HORN/SOUNDER
[Symbol]	FIRE ALARM ELECTRONIC HORN/SOUNDER c/w STROBE
[Symbol]	CARBON MONOXIDE ALARM
[Symbol]	FIRE ALARM HEAT DETECTOR (RATE OF RISE UNLESS OTHERWISE INDICATED)
[Symbol]	FIRE ALARM SMOKE DETECTOR
[Symbol]	FIRE ALARM SMOKE DETECTOR, DUCT MOUNTED
[Symbol]	SMOKE ALARM
[Symbol]	FIRE ALARM ANNUNCIATOR PANEL
[Symbol]	FIRE ALARM CONTROL PANEL
[Symbol]	CENTRAL ALARM & CONTROL FACILITY
[Symbol]	EMERGENCY TELEPHONE
[Symbol]	FIRE ALARM MAGNETIC DOOR HOLD OPEN DEVICE
[Symbol]	FIRE ALARM CONNECTION TO PRESSURE SWITCH
[Symbol]	FIRE ALARM CONNECTION TO FLOW SWITCH
[Symbol]	FIRE ALARM CONNECTION TO TAMPER SWITCH
[Symbol]	FIRE ALARM CONNECTION TO LEVEL SWITCH
[Symbol]	END OF LINE RESISTOR
[Symbol]	FIRE ALARM CONTROL MODULE
[Symbol]	FIRE ALARM MONITOR MODULE
[Symbol]	FIRE ALARM FAULT ISOLATION MODULE
[Symbol]	FIRE ALARM RELAY
[Symbol]	WEATHERPROOF
[Symbol]	EXPLOSION PROOF

DRAWING NOTES	
1.	CONTRATOR TO INSTALL THE NEW SYSTEM AS SHOWN ON THE DRAWINGS. BEFORE DE-COMMISSIONING THE EXISTING SYSTEM, WHERE THERE IS AN OVERLAP BETWEEN THE INSTALLATION AND THE DE-COMMISSIONING, PROVIDE FIRE WATCH.
2.	ALL WIRING MUST BE INSTALLED INSIDE EMT CONDUITS, SURFACE MOUNT IS ACCEPTABLE IN THE WORKSHOPS AND SERVICE ROOMS.

LEGEND:  
 (1) SHOP FOREMAN  
 (2) WASHROOMS  
 (3) SHOP TOOLS LOCKUP  
 (4) OFFICES  
 (5) EQUIPMENT & SYSTEMS MAINTENANCE  
 (6) FACILITIES ENGINEERING



1 MEZZANINE FLOOR - FIRE ALARM PLAN  
E100 1:100



2 MAIN FLOOR - FIRE ALARM PLAN  
E100 1:100



Revision/Revision	Description/Description	Date/Date
5		
4		
3	RE-ISSUED FOR TENDER	2016/02/05
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Client/client  
**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
 9860 WEST SAANICH ROAD  
 SIDNEY, B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE VICTORIA, B.C.**  
**ELECTRICAL SYSTEMS AND LIFE SAFETY REFURBISHMENT**

Consultant Signature Only  
 Designed by/Concept par  
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 Drawn by/Dessine par  
**A.G.**  
 PWGSC Project Manager/Administrateur de Projets TPSGC  
**RANDY BURGIN**  
 Regional Manager, Architectural and Engineering Services  
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Drawing title/Titre du dessin  
**FIRE ALARM PLANS**

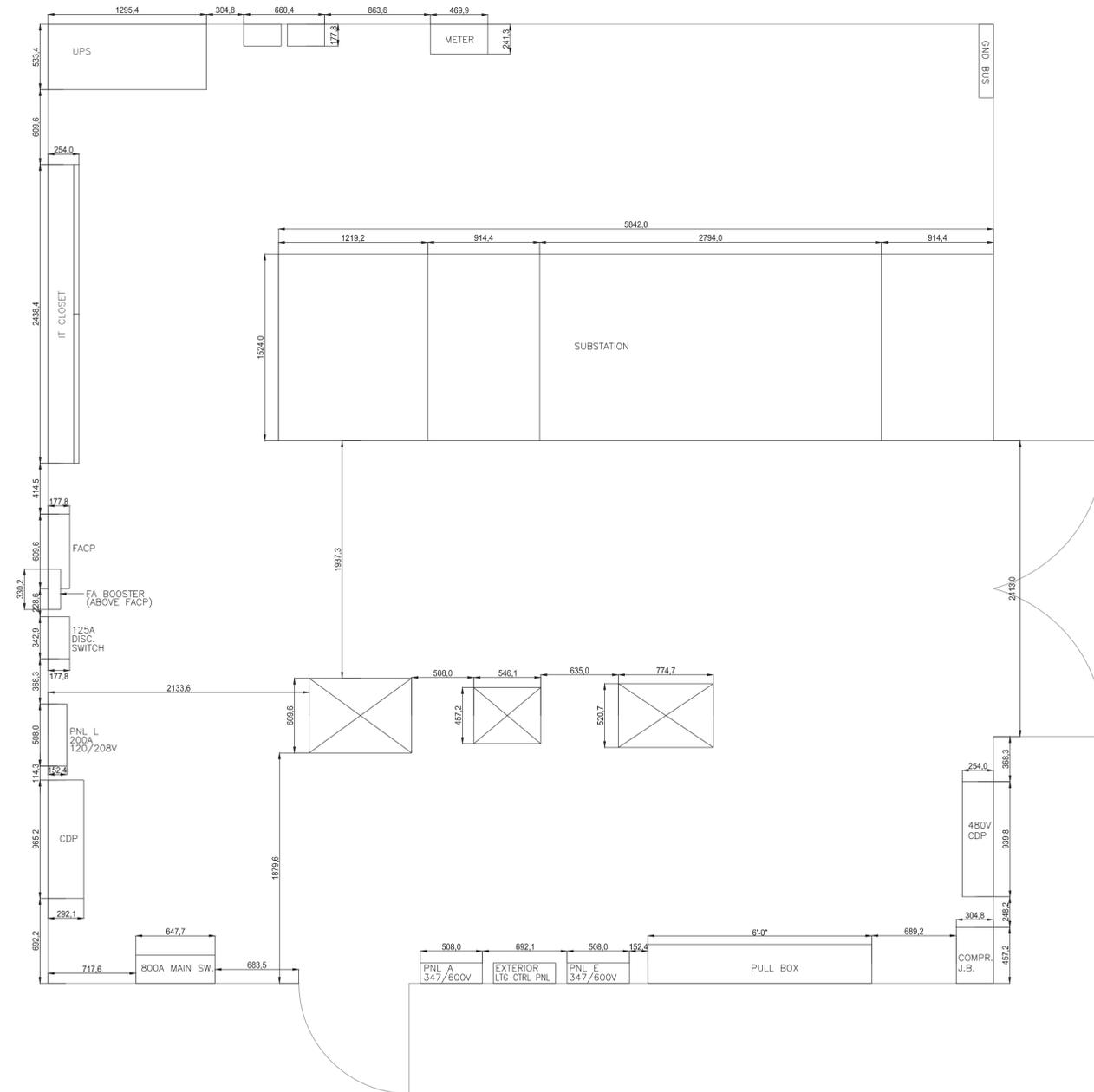
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- DRAWING NOTES:**
- ONLY THE GENERATOR AND AUTOMATIC TRANSFER SWITCH ARE OWNER SUPPLIED. ALL OTHER EQUIPMENT SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS ALONG WITH INSTALLATION OF THE OWNER SUPPLIED EQUIPMENT ARE THE RESPONSIBILITY OF DIVISION 26. PROVIDE ALL NECESSARY ITEMS FOR A COMPLETE AND OPERATIONAL SYSTEM.
  - ALLOW FOR OWNER SUPPLIED EQUIPMENT OFF LOADING IN THE BID PRICE.
  - ALLOW FOR ALL NECESSARY EQUIPMENT, PROGRAMMING, LABOR, WIRING AND CONNECTIONS TO PROVIDE A FULLY OPERATIONAL SYSTEM.
  - DIVISION 26 TO CARRY THE COST OF THE MANUFACTURER'S REPRESENTATIVE TO RE-CERTIFY THE EXISTING SWITCHBOARD AFTER MODIFICATION.
  - ALLOW FOR EXISTING 40 FOOT SEA CAN RELOCATION IN THE EXISTING GENERATOR LOCATION IN THE BID PRICE.
  - CARRY THE COST OF SEISMIC ENGINEER TO CERTIFY ALL ELECTRICAL INSTALLATIONS AND GENERATOR BOLT DOWN. CARRY THE COST OF FIRE ALARM VERIFICATION AND WITNESSING AS PER SCENARIO 1 IN ULC S537 IN THE BID PRICE.
  - PROVIDE FIRE WATCH FOR THE BUILDING AFTER DISABLING THE EXISTING FIRE ALARM SYSTEM.
  - DIMENSIONS SHOWN ARE AS INDICATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND ARRANGEMENT ON SITE.
  - COORDINATE ALL SHUT DOWN AND INSTALLATIONS WITH BC HYDRO AND THE OWNER. PROVIDE MINIMUM 2 WEEKS NOTICE PRIOR TO ANY POWER INTERRUPTION.



**1** ELECTRICAL ROOM EXISTING EQUIPMENT  
E400  
1:25  
0 250 750 1250mm  
1:25



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5		
4		
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9860 WEST SAANICH ROAD  
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**ELECTRICAL SYSTEMS AND LIFE SAFETY REFURBISHMENT**

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Drawn by/Dessine par  
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Drawing title/Titre du dessin  
**ELECTRICAL ROOM EXISTING EQUIPMENT PLAN**

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EXISTING CONDUITS TO BE REMOVED.

EXISTING 480V CDP TO BE REMOVED.

EXISTING COMPRESSOR JUNCTION BOX TO REMAIN.

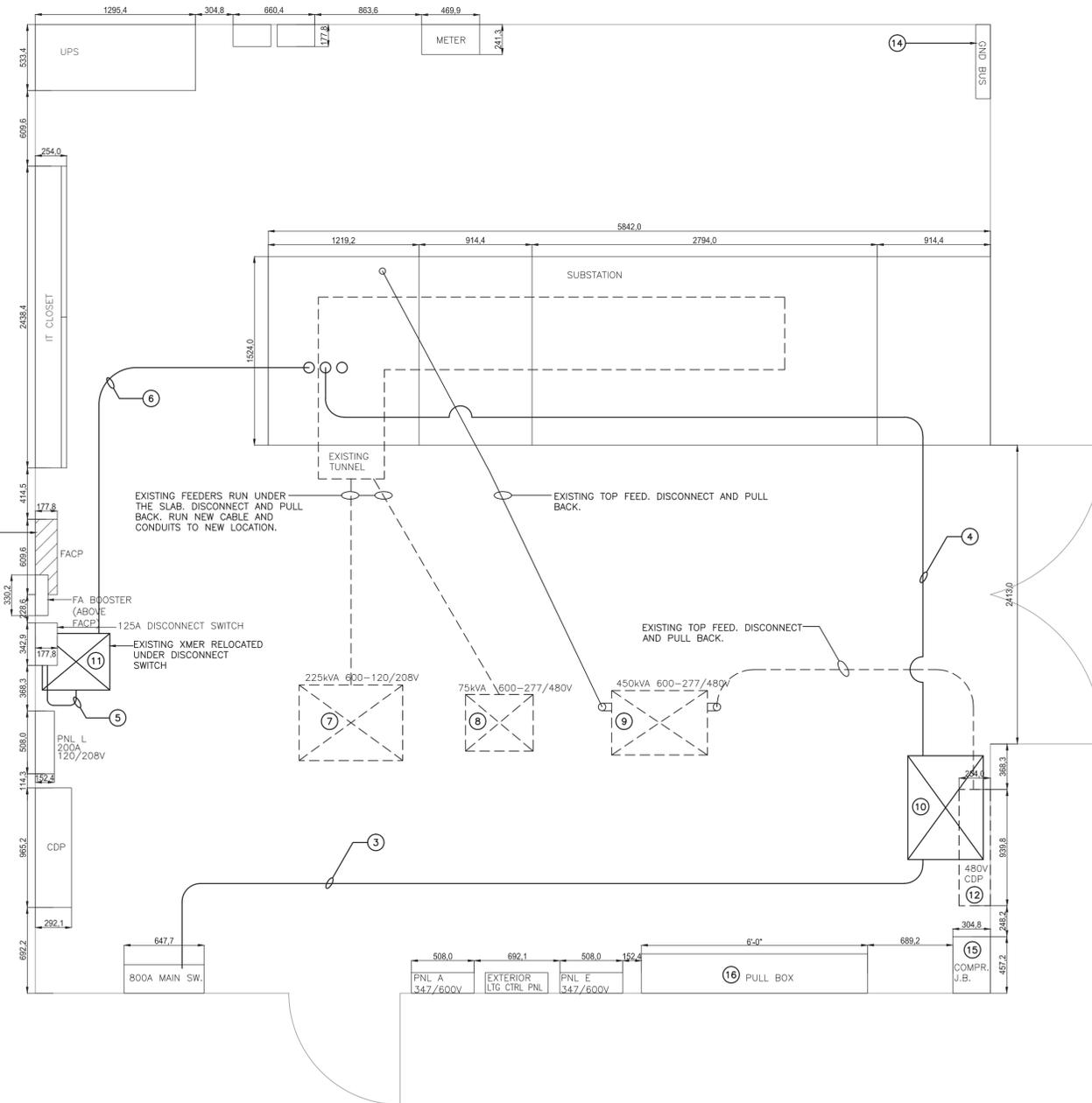
EXISTING 450kVA 600-277/480V XMER TO BE REMOVED.

EXISTING CONDUITS TO BE REMOVED. COIL DISCONNECTED CABLES INSIDE EXISTING PULLBOX.

EXISTING PULLBOX. LABEL AND COIL ALL DISCONNECTED CABLES INSIDE. PROVIDE KNOCKOUT FILLERS WHERE NECESSARY.

**1 ELECTRICAL ROOM RENOVATION PLAN**  
E401 1:25

TO BE REPLACED WITH NEW PANEL. INSTALL THE NEW LOOP c/w ANNUNCIATOR CIRCUITS AND THEN SWAP THE PANELS TO MINIMIZE THE SHUTDOWN TIME. PROVIDE FIRE WATCH FOR THE PERIOD WHEN THE BUILDING IS NOT PROTECTED WITH A FIRE ALARM SYSTEM.



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Drawing title/Titre du dessin

**ELECTRICAL ROOM RENOVATION PLAN**

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**1 ELECTRICAL ROOM RENOVATION PLAN**  
E401 1:25



DRAWING NOTES	
1	N/A
2	N/A
3	SECONDARY 2X[4C-600MCM Cu + 2/0 GREEN INSULATED GROUND] + BOND
4	PRIMARY 4C-350MCM Cu + 1/0 GREEN INSULATED GROUND + BOND
5	SECONDARY 4C #2 AWG Cu + #6 BOND
6	PRIMARY 4C #3 AWG Cu + #6 GREEN INSULATED GROUND + BOND
7	EXISTING LOCATION OF 225kVA 600-120/208V TRANSFORMER. TO BE RELOCATED. REFER TO KEYNOTE 10.
8	EXISTING LOCATION OF 75kVA 600-277/480V TRANSFORMER. TO BE RELOCATED. REFER TO KEYNOTE 11.
9	EXISTING LOCATION OF 450kVA 600-277/480V TRANSFORMER. TO BE REMOVED.
10	NEW LOCATION OF 225kVA 600-120/208V TRANSFORMER.
11	NEW LOCATION OF 75kVA 600-277/480V TRANSFORMER.
12	EXISTING 480V CDP TO BE REMOVED.
13	N/A
14	BUILDING GROUND BUS.
15	EXISTING COMPRESSOR JUNCTION BOX TO REMAIN.
16	EXISTING PULLBOX TO REMAIN.





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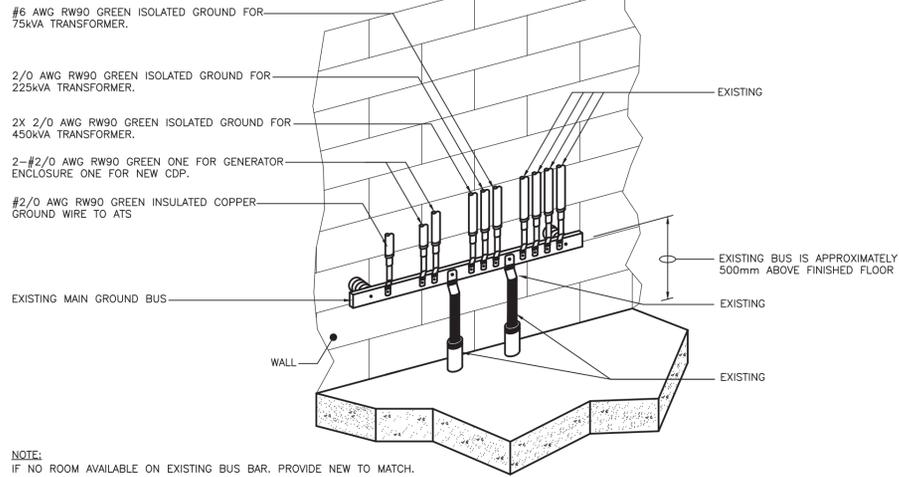
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**ELECTRICAL ROOM NEW EQUIPMENT PLAN**

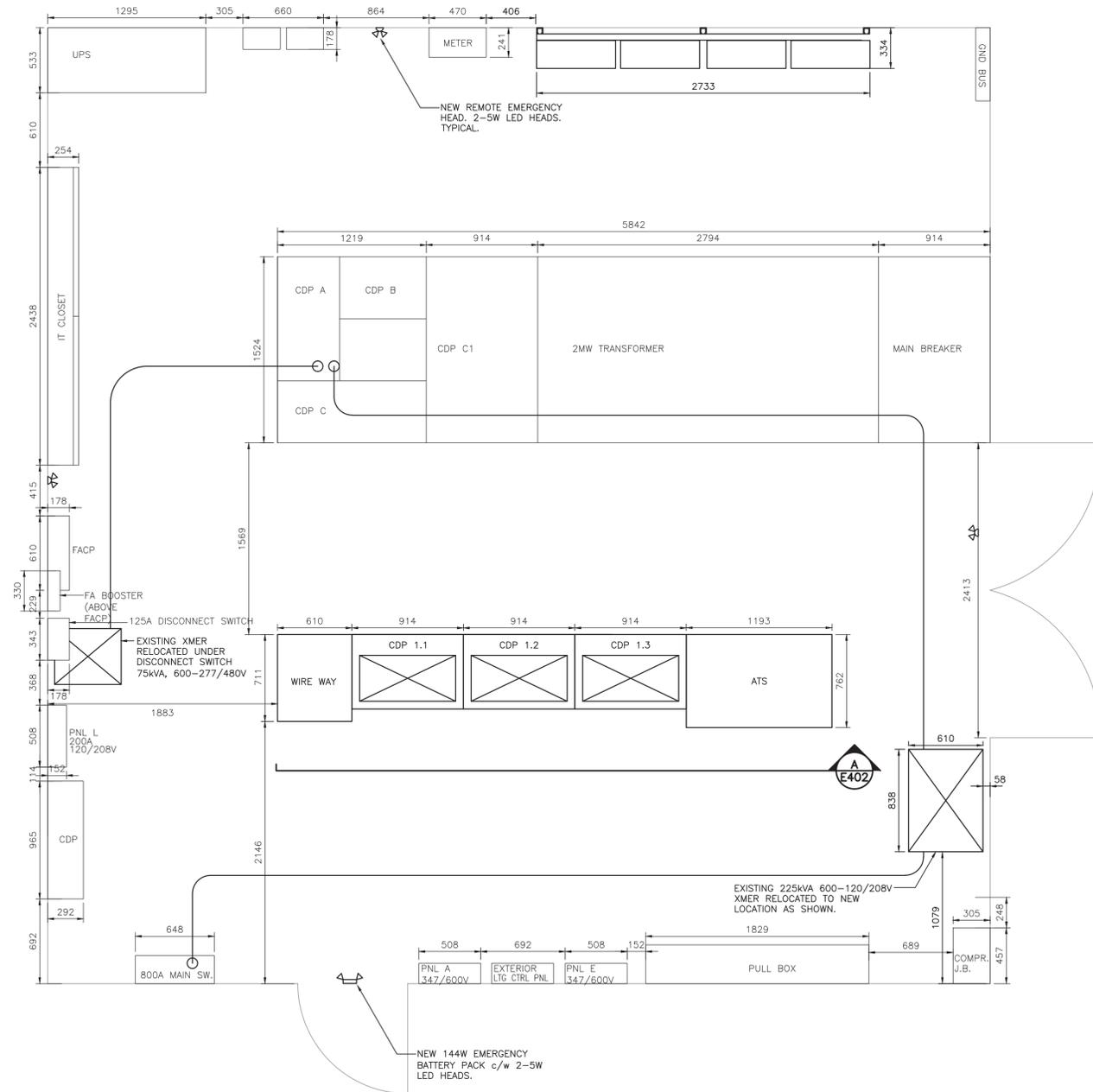
Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
F1700-150949	<b>E402</b>	<b>0</b>

5 OF 10

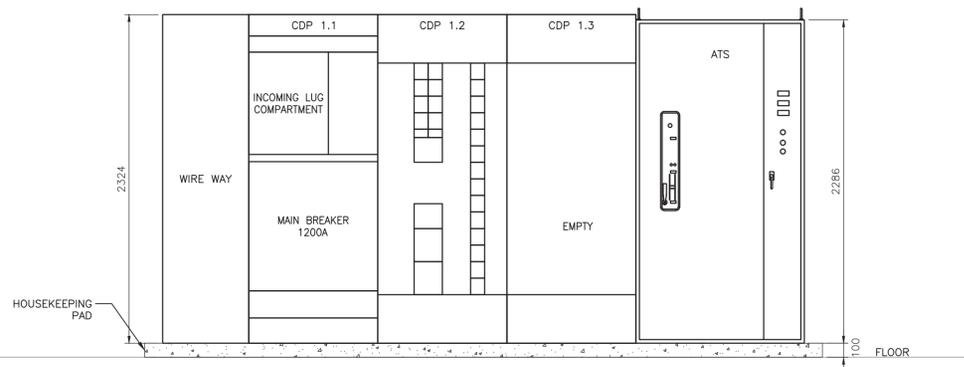


NOTE:  
IF NO ROOM AVAILABLE ON EXISTING BUS BAR, PROVIDE NEW TO MATCH.

**2 GROUND BUS DETAIL**  
E402 NTS



**1 ELECTRICAL ROOM NEW EQUIPMENT LAYOUT**  
E402 1:25



**A ELECTRICAL ROOM NEW EQUIPMENT ELEVATION**  
E402 1:25

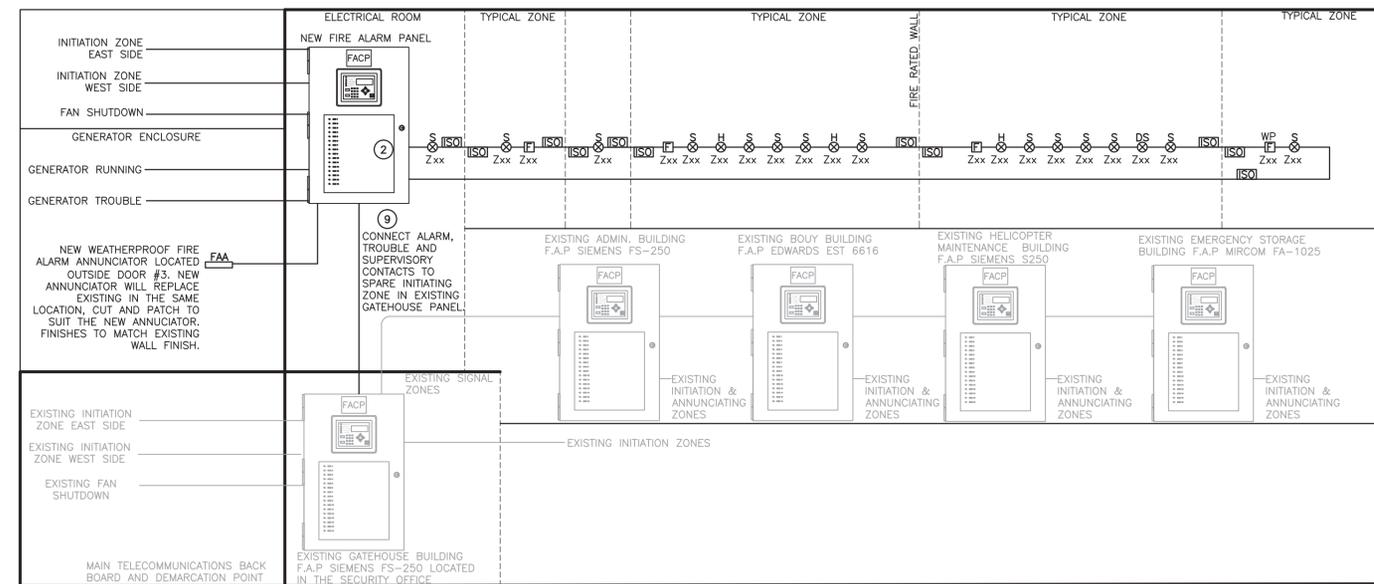


**FIRE ALARM NOTES:**

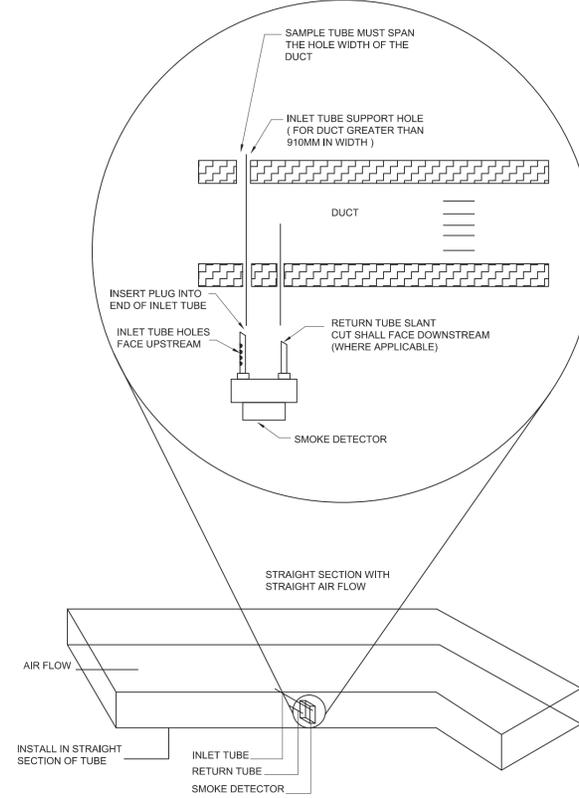
- EXISTING FIRE ALARM ARRANGEMENT TO BE CONFIRMED. FIRE ALARM RISER SHOWN AS EXAMPLE ONLY. NEW PANEL TO BE COMPATIBLE WITH EXISTING SYSTEM FOR MONITORING BY THE EXISTING SIEMENS FS-250 PANEL LOCATED IN THE GATEHOUSE (NEW PANEL TO REPORT ALARM, SUPERVISORY, TROUBLE).
- PROVIDE LABELING FOR ALL THE NEW EQUIPMENT, NEW LABELS TO READ MODULE #, ZONE #, DEVICE #. TYPICAL FOR ALL NEW DEVICES.
- USE WEATHERPROOF ENCLOSURES, HORN/STROBE AND PULL STATION FOR ALL DEVICES LOCATED OUTSIDE THE BUILDING.
- FIRE ALARM SYSTEM SHALL BE A FULLY ADDRESSABLE CLASS A, SINGLE STAGE SYSTEM. EVERY ZONE INDICATED ON FIRE ALARM SCHEDULE IS TO BE INSTALLED WITH ISOLATION MODULES SUCH THAT NOT MORE THAN ONE ZONE CAN BE DISABLED BY A SINGLE WIRING FAULT.
- CONTRACTOR TO SUPPLY ALL MONITORING MODULES FOR AUXILIARY TROUBLE CONTACTS AS REQUIRED.
- ALL FIRE ALARM WIRING SHALL BE IN CONDUIT.
- ALL FIRE ALARM WIRING TO CONFORM TO THE CLASS A STANDARD. PROVIDE DEDICATED SURGE PROTECTION ON CIRCUIT WHERE REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- CONNECT ALARM, TROUBLE AND SUPERVISORY CONTACTS TO SPARE INITIATING ZONE IN EXISTING GATEHOUSE PANEL. USE EXISTING CONDUITS/WIRING WHERE POSSIBLE. PROVIDE NEW AUTODIALER WHERE REQUIRED.

SIGNAL ZONES			FIRE ALARM SCHEDULE		
ZONE	DESCRIPTION	ALARM TYPE	ZONE	DESCRIPTION	ALARM TYPE
SZ1	EAST SIDE ZONE	AUDIO/VISUAL	Z1	ELECTRICAL ROOM - ZONE 1	ALARM
SZ2	WEST SIDE ZONE	AUDIO/VISUAL	Z2	BUILDING AREAS - ZONE 2	ALARM
			Z3	BUILDING AREAS - ZONE 3	ALARM
			Z4	BUILDING AREAS - ZONE 4	ALARM
			Z5	BUILDING AREAS - ZONE 5	ALARM
			Z6	BUILDING AREAS - ZONE 6	ALARM
			Z7	BUILDING AREAS - ZONE 7	ALARM
			Z8	BUILDING AREAS - ZONE 8	ALARM
			Z9	BUILDING AREAS - ZONE 9	ALARM
			Z10	BUILDING AREAS - ZONE 10	ALARM
			Z11	BUILDING AREAS - ZONE 11	ALARM
			Z12	BUILDING AREAS - ZONE 12	ALARM
			Z13	AIR HANDLING UNIT 1 - ZONE 13	ALARM
			Z14	GENERATOR RUNNING - ZONE 14	SUPERVISORY: NON-LATCHING
			Z15	GENERATOR TROUBLE - ZONE 15	SUPERVISORY: NON-LATCHING
			Z16	GENERAL: SUPERVISORY TROUBLE - ZONE 16	SUPERVISORY
			Z17-19	TAMPER SWITCHES	SUPERVISORY
			Z20	PRESSURE SWITCH	SUPERVISORY
			Z21-22	FLOW SWITCHES	ALARM
			Z23	WATER LEVEL LOW	SUPERVISORY
			Z24-Z32	SPARE	

PROVIDE LAMACOID LABEL FOR PULL STATIONS AND EQUIPMENT OUTSIDE THE BUILDING

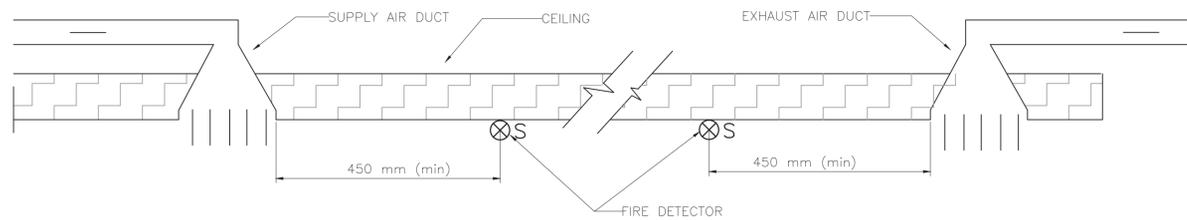


**1 FIRE ALARM RISER DIAGRAM**  
E500 NTS

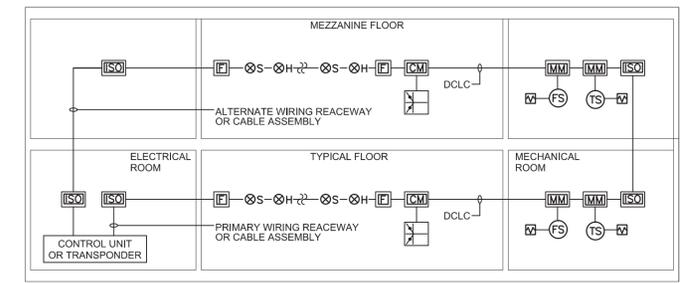


NOTE: DO NOT INSERT PLUG IN THE RETURN/EXHAUST TUBE

**2 TYPICAL SMOKE DUCT DETECTOR INSTALLATION**  
E500 NTS



**3 TYPICAL SMOKE DUCT DETECTOR INSTALLATION**  
E500 NTS



- LEGEND:**
- CM ADDRESSABLE CONTROL DEVICE
  - MM ADDRESSABLE MONITOR DEVICE
  - EXH EXHAUST DAMPER
  - AS ADDRESSABLE SMOKE DETECTOR
  - HS ADDRESSABLE HEAT DETECTOR
  - MS ADDRESSABLE MANUAL STATION
  - ISO ISOLATOR
  - TS TAMPER VALVE
  - FS WATER-FLOW SWITCH
  - CONT CONTINUATION
  - END END OF LINE DEVICE

**4 ACTIVE FIELD DEVICES AND SUPPORTING FIELD DEVICES CONNECTED TO DATA COMMUNICATION LINK STYLE C**  
E500 NTS



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4		
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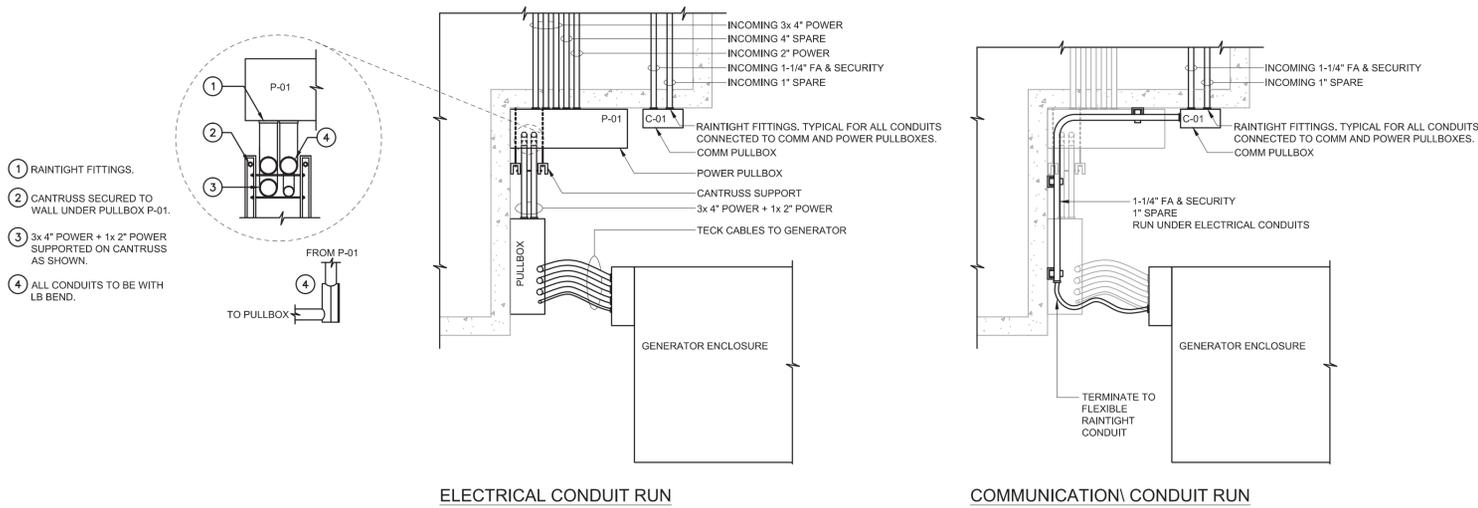
**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
9860 WEST SAANICH ROAD  
SIDNEY, B.C.

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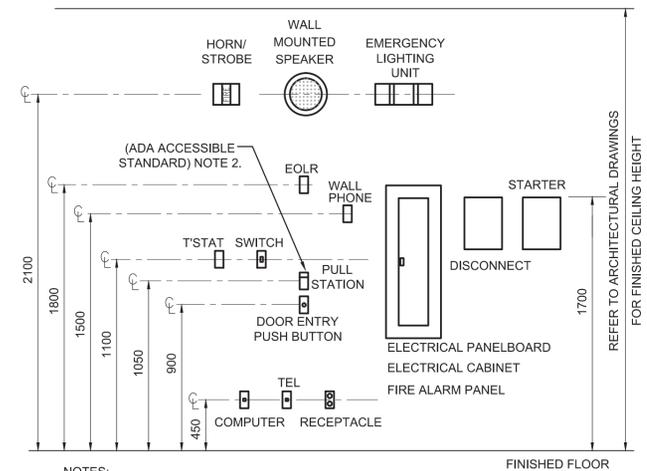
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PWSC Project Manager/Administrateur de Projets TPSCG  
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**FIRE ALARM DETAILS**



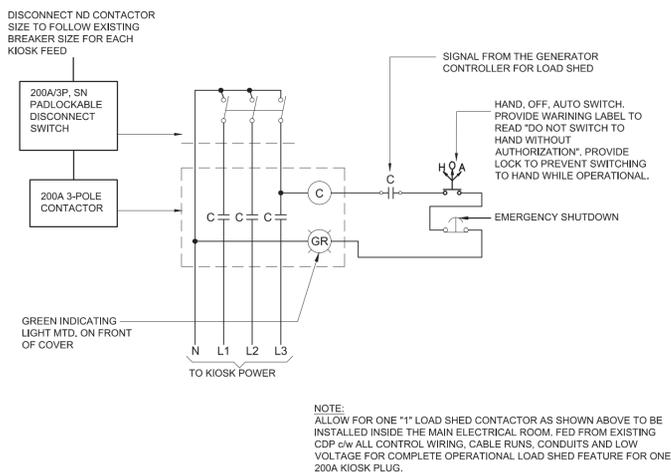


**1 POWER & COMMUNICATION CONDUITS CONNECTION TO GENSET**  
E501 NTS

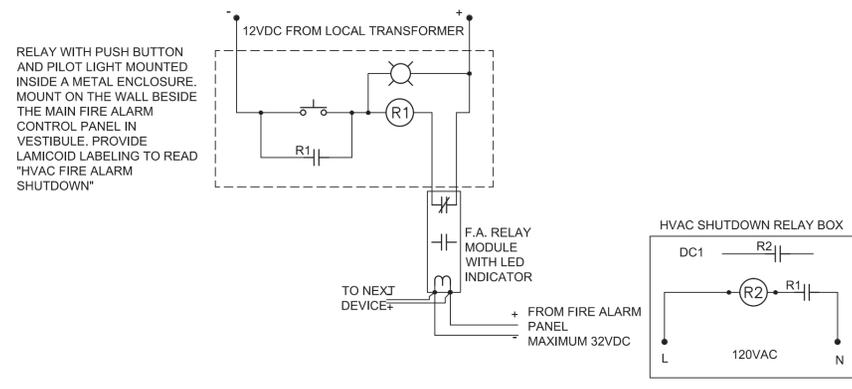


NOTES:  
1. ALIGN ALL EQUIPMENT VERTICALLY AND HORIZONTALLY.  
2. COORDINATE WITH ARCHITECTURAL.

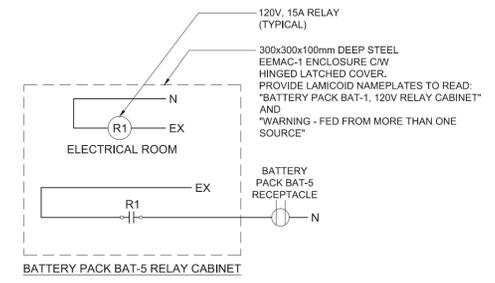
**2 DEVICE MOUNTING HEIGHT DETAIL**  
E501 NTS



**3 KIOSK CONTACTOR CONTROL DIAGRAM**  
E501 NTS



**4 FIRE ALARM / HVAC SHUTDOWN SCHEMATIC**  
E501 NTS



**5 D.C. EMERGENCY LIGHTING BATTERY PACK RELAY CABINET WIRING DIAGRAMS**  
E501 NTS



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Drawing title/Titre du dessin

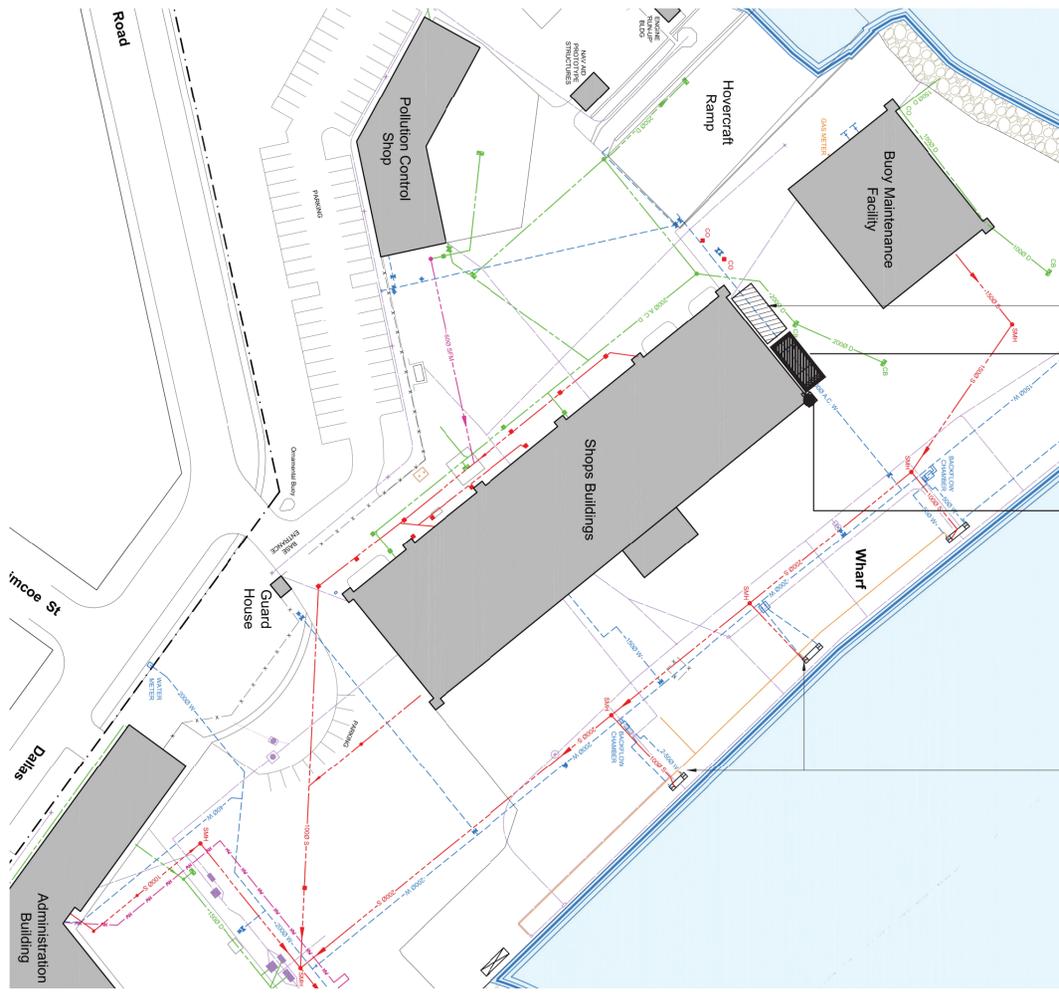
**DETAILS**

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F1700-150949	<b>E501</b>	<b>0</b>





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1 SITE PLAN  
E502 NTS

EXISTING 40' SEACAN TO REMAIN.

NEW LOCATION FOR OWNER SUPPLIED GENERATOR. GENERATOR AND TRANSFER SWITCH ARE SUPPLIED BY THE OWNER ONLY. CONTRACTOR TO SUPPLY AND INSTALL THE REST OF THE SYSTEMS c/w TESTING AS SHOWN ON THE DRAWINGS AND ASKED FOR IN THE SPECS FOR A COMPLETE OPERATIONAL SYSTEM. GENERATOR MANUFACTURER TECHNICIAN IS PROVIDED BY THE OWNER FOR COMMISSIONING. CONTRACTOR TO PROVIDE HIS OWN FORCES FOR THE TEST. ALLOW FOR GENERATOR AND ATS OFFLOADING AND THE REMOVAL OF ONE EXISTING 40' SEACAN IN THE BID PRICE.

EXISTING:  
400A CDP  
2 DISCONNECTS  
30kVA TRANSFORMER  
112.5 kVA TRANSFORMER  
2 x SPLITTERS  
42 CTS DISTRIBUTION PANEL  
CONDUITS AND MISCELLANEOUS EQUIPMENT

DISCONNECT ALL THE ABOVE, PULL ALL THE CABLES BACK TO THE MAIN BREAKER IN THE MAIN ELECTRICAL ROOM AND DISPOSE ALL THE EQUIPMENT IN THIS ROOM. LEAVE EMPTY CONDUITS IN THE CEILING AND PROVIDE PULL STRING FOR FUTURE USE.

SUPPLY TWO (2) 300kVA SKID MOUNTED TRANSFORMER FOR 480 TO 480V POWER. TRANSFORMERS MUST BE SKID MOUNTED c/w CASTOR WHEELS AND FORKLIFT SLEEVES FOR MANEUVERABILITY ON SITE.

STANDARD OF ACCEPTANCE:  
300 kVA SKID TYPE PORTABLE POWER TRANSFORMER. 600 VOLT PRIMARY TO 480/480 VOLT MULTITAP SECONDARY. NEMA 3R WITH CARBON STEEL PROTECTIVE CAGE WITH FOUR CASTERS.

300kVA SKID TYPE CONFIGURATION SHALL INCLUDE:  
400 AMP 1B SERIES CAMLOCK INPUT/OUTPUT WITH COLOR CODED SNAP COVERS TO MATCH THE VOLTAGE USED.  
RE-CONNECTABLE PRIMARY VOLTAGE (600 VAC OR 480 VAC)  
200A 3P 600 VAC 80% MAIN BREAKER ON THE PRIMARY SIDE  
400 AMP 3P 600 VAC 80% MAIN BREAKER ON THE 480/480 VOLT SECONDARY SIDE.  
400 A INTERIOR I-LINE PANEL TO DISTRIBUTE PRIMARY OR SECONDARY c/w 1-400A 3 PHASE BREAKER, 1-200A 3 PHASE BREAKER & 1-100A 3 PHASE BREAKER.  
ALUMINUM NEMA 3R ENCLOSURE WITH BOTTOM ACCESS TRAP DOOR (HARDWIRE OUT ACCESS).  
HEAVY DUTY CARBON STEEL FRAME WITH FORKLIFT POCKETS AND LIFTING EYELETS.  
CONFIGURABLE GLAND PLATES ON BOTH SIDES OF LOAD CENTER ENCLOSURE c/w 1-400A 3 PHASE RECEPTACLE, 1-200A 3 PHASE RECEPTACLE & 1-100A 3 PHASE RECEPTACLE.  
NEVER FLAT URETHANE CASTERS WITH LOCKS.



EXISTING PRIMARY FEED FROM CDP C1. REMOVE AND DISPOSE AS PER DETAIL E401.

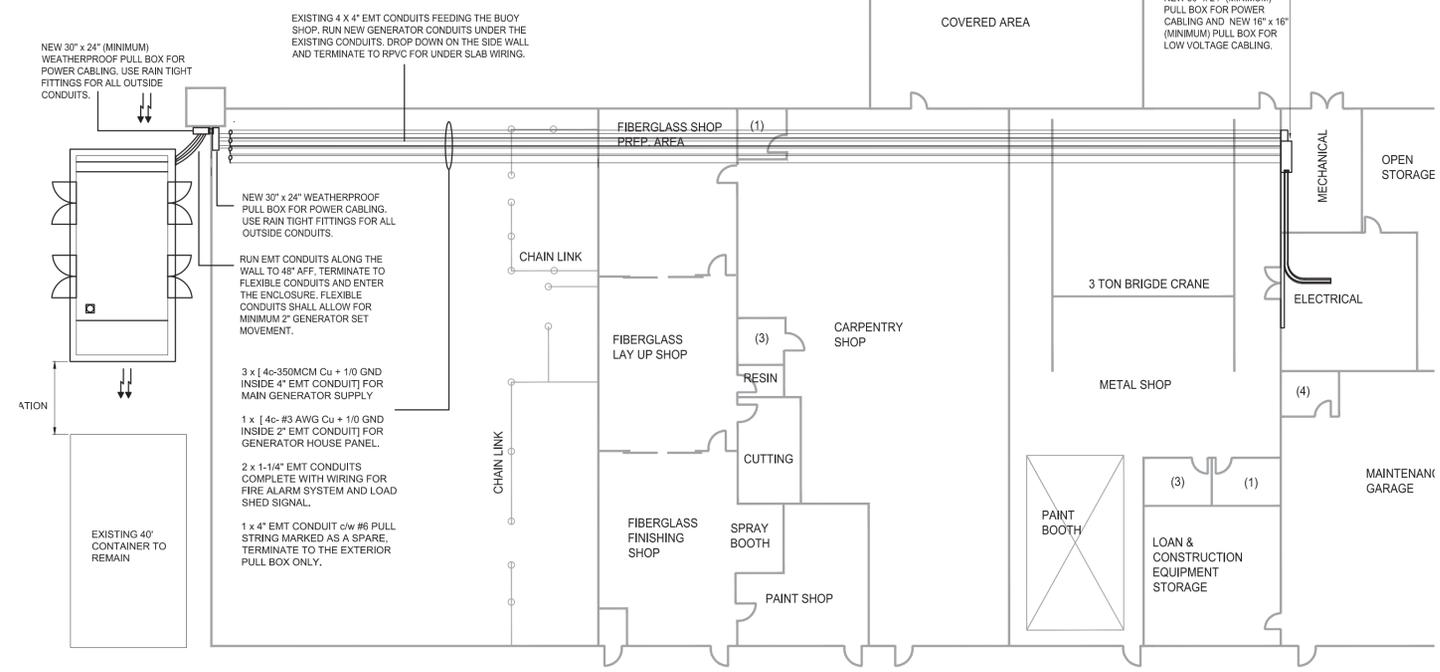
EXISTING SECONDARY FEED TO 480V KIOSK CDP. REMOVE AND RE-ROUTE TO NEW LOCATION AS PER DETAIL E401.

EXISTING 225KVA, 600-120/208V, 3P TRANSFORMER FEEDING SHOPS 800A, 3P MAIN DISCONNECT. REMOVE AND RE-LOCATE TO NEW LOCATION AS SHOWN ON E401. EXISTING PRIMARY AND SECONDARY FEEDS ARE RUN UNDER THE SLAB FROM CDP A. PULL ALL THE CABLES BACK TO THE PANEL AND RE-ROUTE TO THE NEW LOCATION. USE FLEXIBLE CONDUITS TO TERMINATE EMT CONDUITS TO TRANSFORMER TO MITIGATE TRANSFORMER VIBRATION EFFECT ON CONDUITS. TYPICAL FOR ALL DRY TYPE TRANSFORMERS. ALLOW FOR NEW CABLES AND CONDUITS IN THE BID PRICE. TYPICAL FOR ALL THE RE-LOCATED TRANSFORMER.

EXISTING 450KVA, 600-480V, 3P TRANSFORMER FEEDING THE KIOSK 480V CDP. REMOVE AND DISPOSE AS SHOWN ON E401.

EXISTING 75KVA, 600-277/480V, 3P TRANSFORMER FEEDING KIOSK CDP. REMOVE AND RE-LOCATE TO NEW LOCATION AS SHOWN ON E401. EXISTING PRIMARY AND SECONDARY FEEDS ARE RUN UNDER THE SLAB FROM CDP A. PULL ALL THE CABLES BACK TO THE PANEL AND RE-ROUTE TO THE NEW LOCATION. ALLOW FOR NEW CONDUITS AND CABLES FROM THE CDP TO THE NEW LOCATION.

2 EXISTING TRANSFORMERS PHOTO  
E502 NTS



3 EMERGENCY POWER FEEDER RUN LAYOUT  
E502 1:200

5		
4		
3	RE-ISSUED FOR TENDER	2016/02/05
2	ISSUED FOR TENDER	2016/01/27
1	ISSUED FOR 99% REVIEW	2016/01/26
0	ISSUED FOR 33% REVIEW	2016/01/16
Revision/	Description/Description	Date/Date
Client/client		



DEPARTMENT OF FISHERIES AND OCEANS CANADA  
9860 WEST SAANICH ROAD  
SIDNEY, B.C.

Project title/Titre du projet  
VICTORIA COAST GUARD BASE  
VICTORIA, B.C.  
ELECTRICAL SYSTEMS AND LIFE SAFETY  
REFURBISHMENT

Consultant Signature Only

Designed by/Concept par  
A.D.

Drawn by/Dessine par  
A.G.

PWSC Project Manager/Administrateur de Projets TPSCG  
RANDY BURGIN

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSCG

Drawing title/Titre du dessin  
DISTRIBUTION DETAILS

Project No./No. du projet F1700-150949	Sheet/Feuille E502 8 OF 10	Revision no./La Révision no. 0
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Revision/	Description/Description	Date/Date
5		
4		
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 REFURBISHMENT**

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 PWSC Project Manager/Administrateur de Projets TPSGC  
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 Regional Manager, Architectural and Engineering Services  
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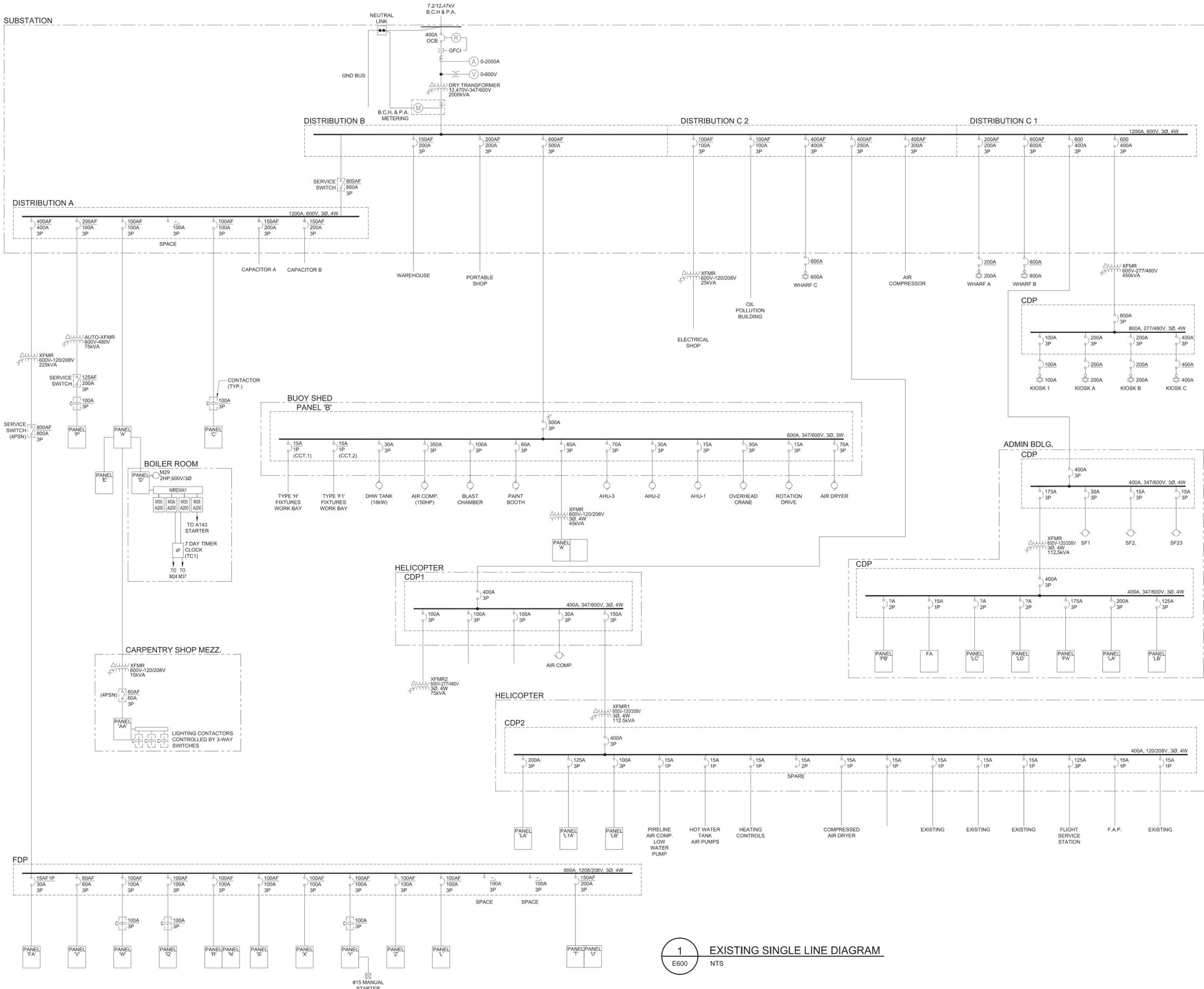
Drawing title/Titre du dessin  
**SINGLE LINE DIAGRAM - EXISTING**

Project No./No. du projet  
**F1700-150949**

Sheet/Feuille  
**E600**

Revision no./La Révision no.  
**0**

9 OF 10



**1** EXISTING SINGLE LINE DIAGRAM  
 E600 NTS



