

GENERAL NOTES

- CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTORS MUST VISIT THE SITE & FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK.
- PREVENT THE SPREAD OF DUST & DEBRIS BEYOND THE WORK AREA AND CLEAN ALL SURFACES AT COMPLETION.
- MAKE GOOD ALL SURFACES AFFECTED BY THIS WORK.
- COORDINATE ALL SHUTDOWNS WITH THE DEPARTMENTAL REPRESENTATIVE.
- PROVIDE ALL LABOUR AND MATERIAL REQUIRED TO FORM A COMPLETE, FUNCTIONAL SYSTEM AS DESCRIBED ON DRAWINGS.

DEMOLITION NOTES:

- * UNLESS NOTED OTHERWISE, CONTRACTOR IS RESPONSIBLE TO DISPOSE OF ALL ITEMS OFF SITE.
- A. REMOVE ALL CARPET TILE FLOORING, AND ASSOCIATED RUBBER COVERED BASE THROUGHOUT ROOM.
- B. REMOVE ALL VINYL TILE FLOORING, AND ASSOCIATED RUBBER COVERED BASE THROUGHOUT ROOM.
- C. REMOVE ALL VINYL SHEET FLOORING, AND ASSOCIATED RUBBER COVERED BASE THROUGHOUT ROOM.
- D. REMOVE WINDOWS BLINDS AND HARDWARE, AND RETURN TO NRC.
- E. REMOVE PC350 FABRIC AND BATTEN FINISH, PREP WALL TO RECEIVE NEW DRYWALL.
- F. DEMOLISH PC350 WALLS. WALL HEIGHT: 2743mm.
- G. DEMOLISH PC350 WALLS. WALL HEIGHT APPROX. 3600 mm.
- H. DEMOLISH STEEL STUD & PLASTER WALLS. WALL HEIGHT APPROX. 3600 mm. ANY AND ALL ITEMS SUPPORTED ON EXISTING WALLS ARE TO BE REMOVED AND/OR REINSTALLED ON OTHER SURFACES AS REQUIRED.
- I. EXISTING WALLS TO REMAIN.
- J. REMOVE EXISTING DOORS, HARDWARE AND DOOR FRAMES.
- K. REMOVE SUSPENDED CEILING SYSTEM THROUGHOUT ROOM.
- L. EXISTING WINDOWS TO REMAIN.
- M. EXISTING DOORS AND ASSOCIATED TRIM TO REMAIN.
- N. ALL DOORS TO CONSTRUCTION AREA ARE TO REMAIN CLOSED THROUGHOUT DEMOLITION AND CONSTRUCTION, AS TO PREVENT THE SPREAD OF DUST TO OTHER PARTS OF THE BUILDING.
- O. CONTRACTOR IS RESPONSIBLE TO KEEP PATH OF TRAVEL (HALLWAY, ENTRANCE DOORS, AND ADJACENT PARKING LOT) CLEAN, FREE OF ANY DEBRIS AND CONSTRUCTION MATERIAL.

NEW CONSTRUCTION NOTES:

- SUPPLY AND INSTALL LASERVISION PORTABLE CURTAIN BCO.F5P01.5002 ON EXISTING HALLWAY DOORS. INSTALL ON EXISTING HERITAGE DOORS USING 3M "DUAL LOCK" 1" PEEL AND STICK IT VELCRO AROUND PERIMETER OF GLAZING. CUSTOM SIZE CURTAIN TO FIT EXISTING DOORS.
- PATCH, REPAIR, PREP, PRIME AND PAINT (2 COATS) ALL WALLS, BULK HEADS, CONDUITS AND CEILINGS, THROUGHOUT ALL ROOMS. PRIMER TO BE ICI DULUX LIFEMASTER PRIMER (IN CONTRASTING COLOUR TO PAINT), ZERO VOC, 100% ACRYLIC, PAINT COLOUR: ICI PAINTS "CRISP WHITE SHIRT" 60YR 83/009, A0008. EGGHELL FINISH.
- REFINISH WALL WITH NEW 12.7mm SQUARED EDGE GYPSUM BOARD AND BATTENS TO MATCH NEW PARTITION WALLS.

D1 - NEW DOORS:

- SOLID CORE WOOD DOOR: 915 X 2130 X 45mm (3'-0" x 7'-0" x 1 3/4").
- BIRCH PAINT GRADE WOOD VENEER.
- FRAME: PC350 EXTRUDED ALUMINUM FRAME, CLEAR ANODIZED FINISH.
- HAGER ECBB1100 STEEL HINGES
- HAGER 3600 SERIES PASSAGE LEVER.
- DOOR STOP: H1118X x C15.
- PRIME AND PAINT (2 COATS). PRIMER TO BE ICI DULUX LIFEMASTER PRIMER, ZERO VOC, 100% ACRYLIC, PAINT COLOUR: ICI PAINTS "SNOWFIELD" 00NN 72/000, A2010. SEMI-GLOSS FINISH.

W1 - NEW PARTITION WALLS:

- NEW DE-MOUNTABLE PC350 BATTEN PARTITION.
- NEW PARTITION WALL IS TO EXTEND TO U/S OF EXISTING CEILING (HEIGHT APPROX. 3600 mm).
- 64mm, 22 Ga STEEL STUDS @ 406mm O.C.
- 12.7mm SQUARE EDGE GYPSUM BOARD BOTH SIDES, PRIMED AND PAINTED TO MATCH WALLS. BATTEN AT JOINTS.
- FILL VOIDS WITH ROXUL, SOUND ATTENUATION INSULATION.
- INCLUDE ALL BATTENS, TRIM AND BASEBOARD FOR A COMPLETE INSTALLATION. BATTEN COLOR TO BE LIGHT GREY.

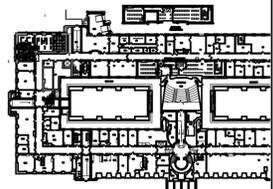
W2 - NEW WINDOW BLACKOUT PANELS:

- FRAME NEW WALLS WITHIN EXISTING WINDOW OPENINGS. TYPICAL OPENING SIZE APPROX. 2330 mm WIDE X 2300 mm HIGH.
- 12.7mm GOOD ONE SIDE PLYWOOD WITH 50mm WOOD TRIM AT PERIMETER, AND ALL JOINTS. PRIMED AND PAINTED (2 COATS) WHITE.
- 64mm, 22 Ga STEEL STUDS @ 406mm O.C. BOTTOM PLATE OF WALL TO BE ANGLED, TO FOLLOW SHAPE OF EXISTING WINDOW SILL. ANCHOR TO EXISTING STRUCTURE AT PERIMETER, AS REQUIRED.
- FILL VOIDS WITH ROXUL, SOUND ATTENUATION INSULATION.
- 6 MIL POLY VAPOUR BARRIER.
- 12.7mm GOOD ONE SIDE PLYWOOD WITH 50mm WOOD TRIM AT PERIMETER, AND ALL JOINTS. PRIMED AND PAINTED (2 COATS) FLAT BLACK.
- BLACK CAULKING AT PERIMETER JOINT WITH EXISTING.

F1 - NEW FLOORING

- INSTALL NEW FLOORING THROUGHOUT ROOMS 105, 111 AND ENTRY VESTIBULE.
- NEW FLOORING TO BE VINYL TILE BY ARMSTRONG. STYLE 51876 MINT CREAM.
- INSTALL NEW BLACK RUBBER COVERED BASE AT ALL WALLS BORDERING NEW TILE FLOORING. RUBBER COVERED BASE NOT REQUIRED AT PC350 WALLS.
- INSTALL RUBBER TRANSITION STRIPS AT AREAS BORDERING EXISTING FLOORING, WHERE REQUIRED.
- PROVIDE NRC WITH ONE EXTRA PACKAGE OF TILES, TO BE USED AS SPARES.

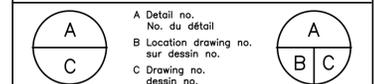
KEY PLAN



No.	Date	Revision	By:
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Date Printed: _____ Date imprimée: _____

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project: **S-77** projet

NEW FIBRE PHOTONICS LASER LAB

SUSSEX DRIVE CAMPUS

drawing: **DEMOLITION AND NEW CONSTRUCTION PLANS** dessin

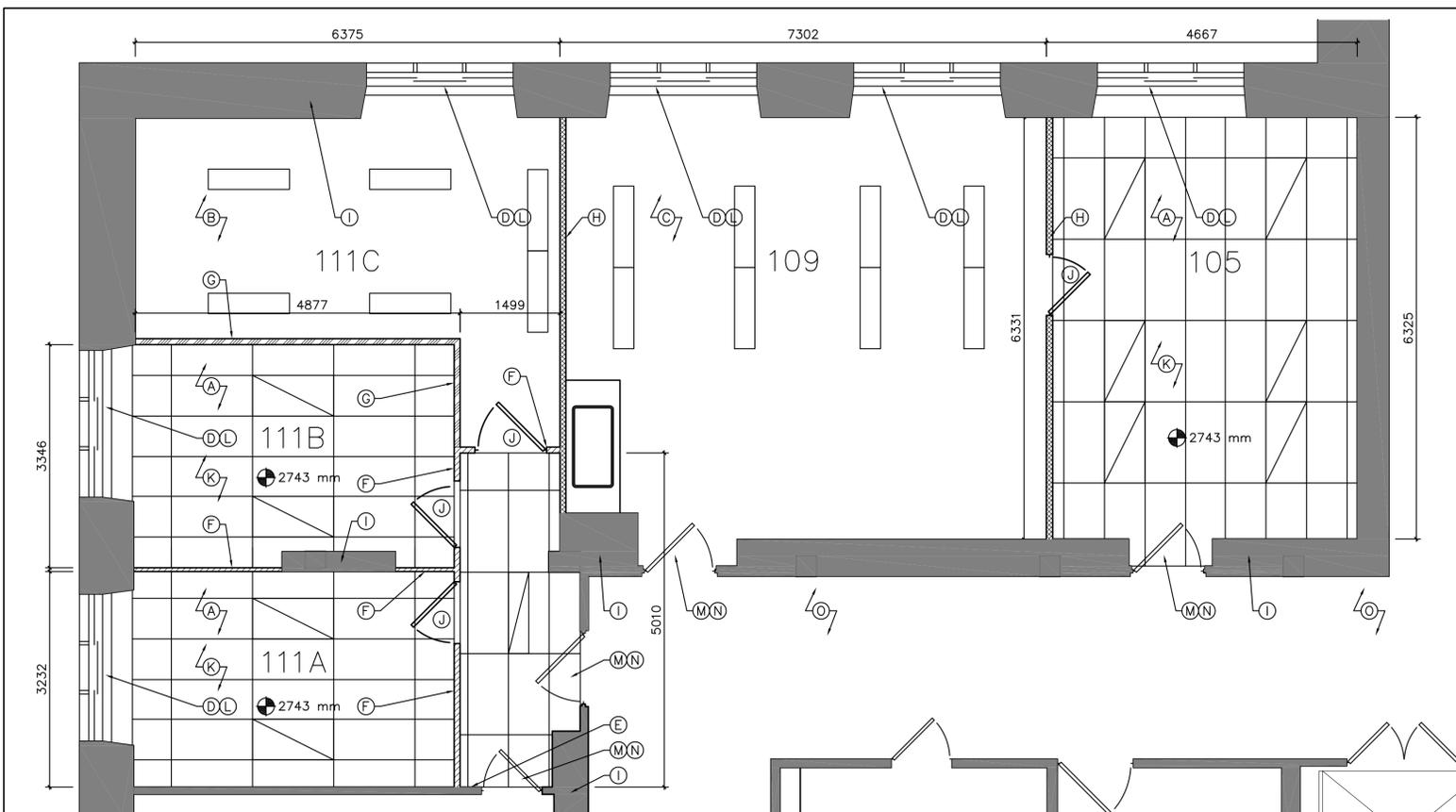
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drawn: **BL** dessiné: **AS NOTED** scale: **AS NOTED** échelle

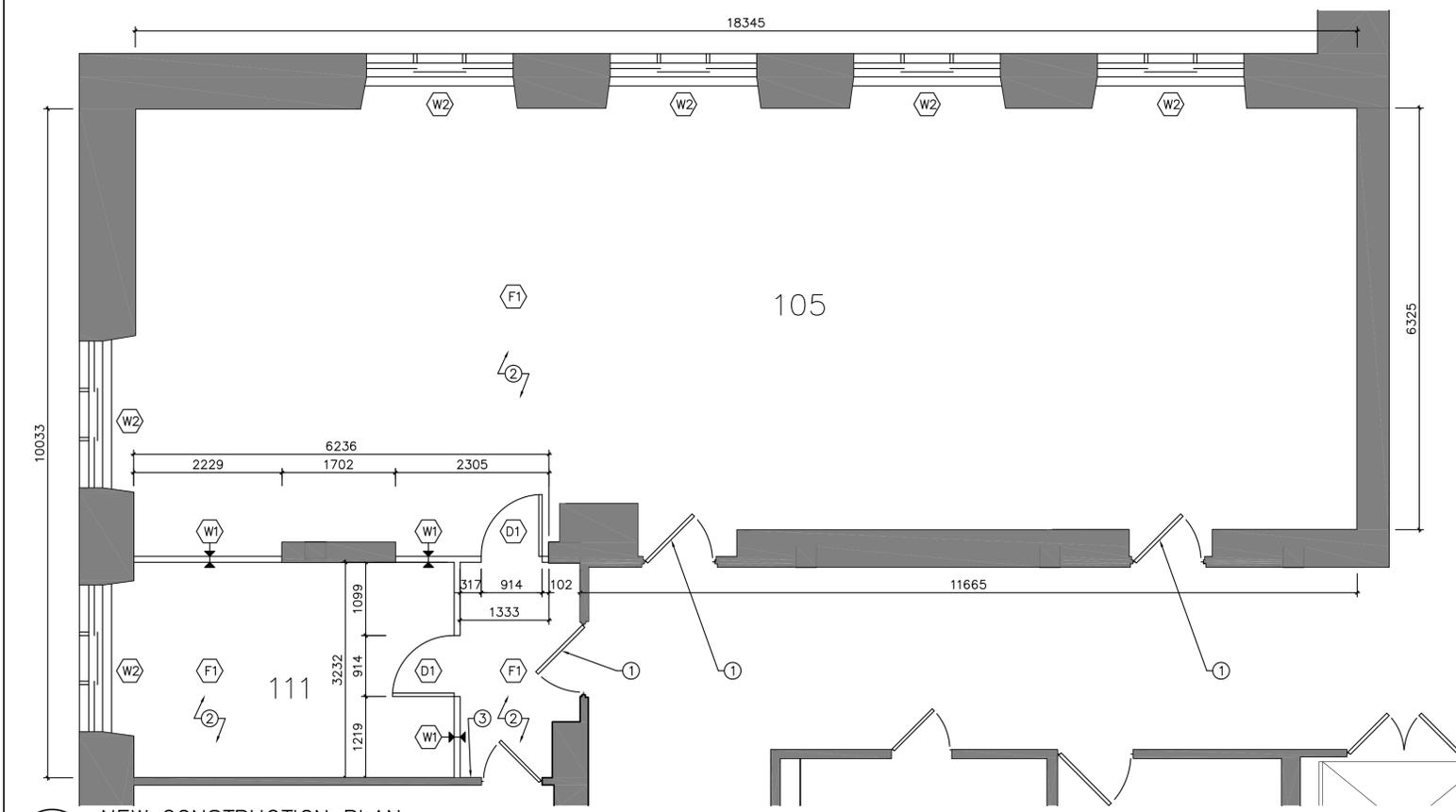
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approved: **BV** approuvé: **9100024775** W.O.no. D.T.no.

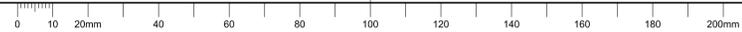
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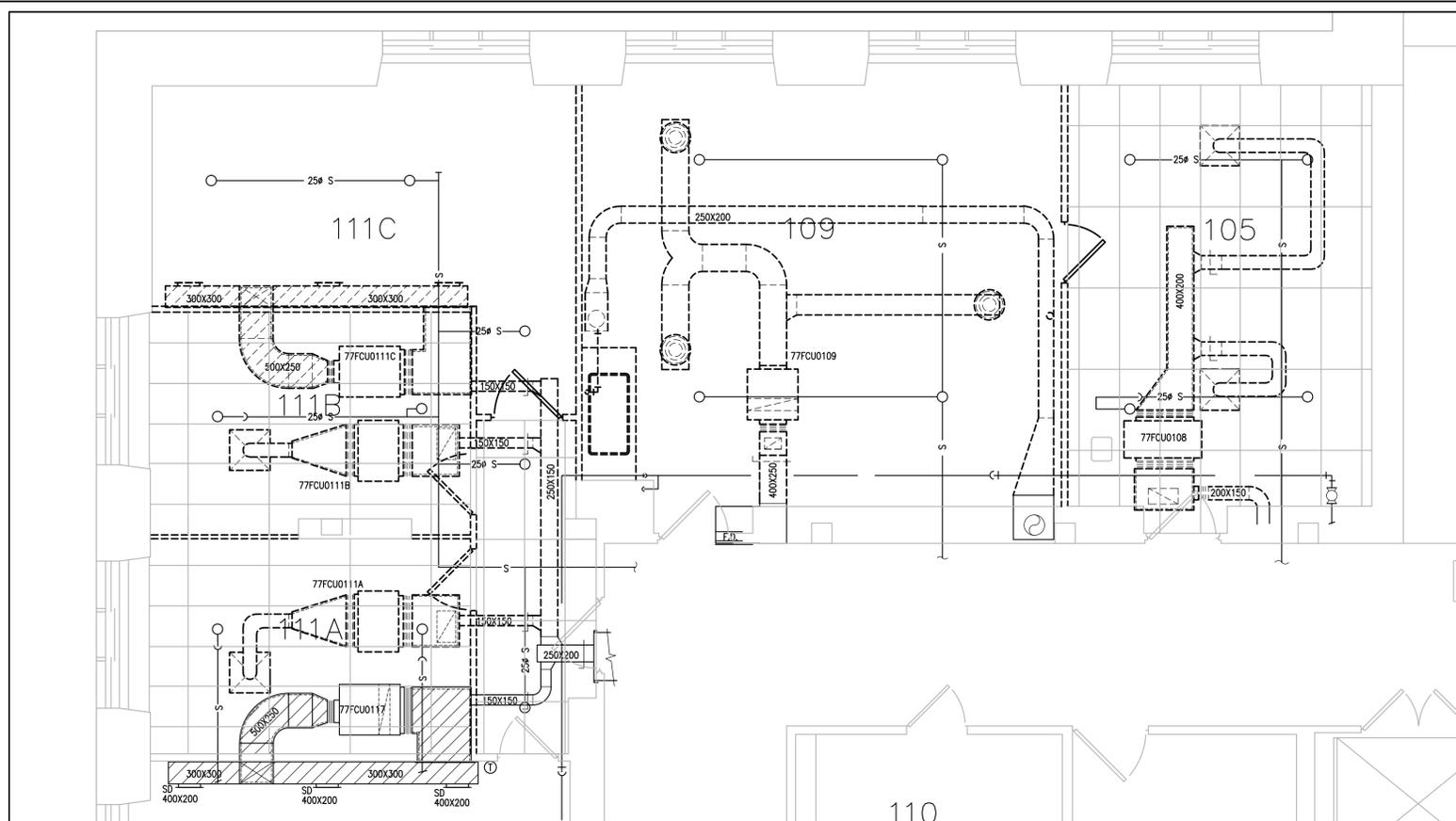


1
A01
DEMOLITION PLAN
SCALE = 1:50

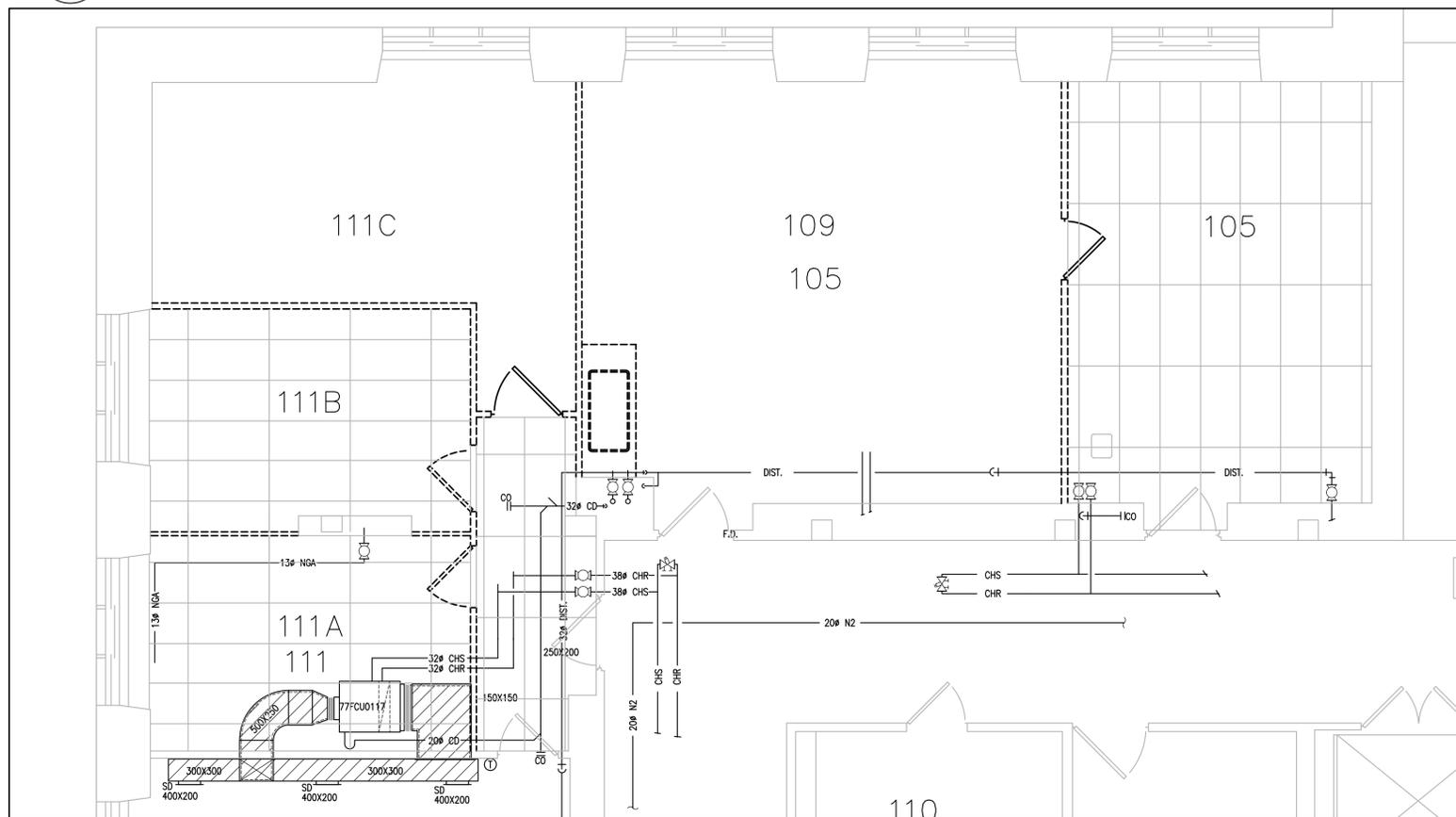


2
A01
NEW CONSTRUCTION PLAN
SCALE = 1:50





1
M01
**S-77- PARTIAL BASEMENT PLAN
HVAC- DEMOLITION**
SCALE- 1:50



2
M01
**S-77- PARTIAL BASEMENT PLAN
PLUMBING + UTILITIES- DEMOLITION**
SCALE- 1:50

MECHANICAL DEMOLITION: (X)

- DISCONNECT AND REMOVE EXISTING FAN COIL UNITS, SUPPLY AND RETURN DUCTWORK, CHILLED WATER SUPPLY AND RETURN PIPING AND CONDENSATE PIPING AS INDICATED. DISPOSE OF ALL MATERIAL OFF SITE AS PER SPECIFICATIONS.
- REMOVE ALL DIFFUSERS AND RETURN AIR GRILLES AS INDICATED.
- ISOLATE, DISCONNECT AND REMOVE EXISTING SINK S1, ASSOCIATED DOMESTIC HOT WATER (DHW), DOMESTIC COLD WATER (DCW), VENT AND SANITARY PIPING AS INDICATED. CAP AND SEAL ALL UNUSED BRANCH PIPING AS SOURCE.
- ISOLATE, DISCONNECT AND REMOVE EXISTING SINK S2, ASSOCIATED DOMESTIC HOT WATER, DOMESTIC COLD WATER, VENT AND SANITARY PIPING AS INDICATED.
- ISOLATE, DISCONNECT AND REMOVE EXISTING LAB SINKS (S3'S), ASSOCIATED DOMESTIC COLD WATER, VENT AND SANITARY PIPING AS INDICATED.
- REMOVE AND DISPOSE EXHAUST DUCTWORK AS INDICATED. CAP AND SEAL DUCTWORK AT WALL AS INDICATED ON NEW WORK PLAN.
- REMOVE AND DISPOSE OUTDOOR AIR (OUI) SUPPLY AIR DUCTWORK AS INDICATED.
- ISOLATE, DISCONNECT AND REMOVE NATURAL GAS PIPING AND GAS OUTLETS AS INDICATED. CAP AND SEAL ALL UNUSED BRANCH CONNECTIONS AT SOURCE.
- ISOLATE, DISCONNECT AND REMOVE COMPRESSED AIR PIPING AND COMPRESSED AIR OUTLETS AS INDICATED. CAP AND SEAL ALL UNUSED BRANCH CONNECTIONS AT SOURCE.
- ISOLATE, DISCONNECT AND REMOVE HOUSE OXYGEN PIPING AND GAS OUTLETS AS INDICATED. CAP AND SEAL PIPING AT SOURCE.
- ISOLATE AND REMOVE DISTILLED WATER PIPING TO REMOVED LAB SINKS AS INDICATED. CAP AND SEAL AT SOURCE.
- FAN COIL UNIT 77FCU0117 SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION PERIOD, CONTRACTOR TO ASSURE THAT OUT DOOR AIR SUPPLY TO THIS UNIT IS NOT CONTAMINATED WITH CONSTRUCTION DUST.

NRC - CNRC

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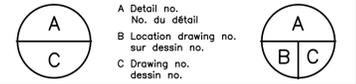
MECHANICAL GENERAL NOTES:

- INSTALLATION OF ALL DCW, DHW, NEW SANITARY AND VENT PIPING TO BE INSTALLED AS PER NBC STANDARDS.
- ALL TRADES TO COORDINATE WORK ON SITE TO AVOID ANY CONFLICTS AND/OR INTERFERENCES.
- ANY WORK REQUIRING THE SHUTDOWN OF ANY BUILDING SYSTEM IS TO BE COORDINATED WITH NRC REPRESENTATIVE AND BUILDING COORDINATOR.
- SHOP DRAWINGS MUST BE SUBMITTED TO NRC REPRESENTATIVE FOR REVIEW AND APPROVAL. SHOP DRAWINGS TO INCLUDE ALL DESCRIPTIVE DATA FOR MECHANICAL EQUIPMENT AND COMPONENTS AS WELL AS NAME OF PROJECT, CONTRACTOR, NAME OF COMPONENT, MANUFACTURER AND MODEL NUMBER, OVERALL DIMENSIONS AND CLEARANCE DIMENSIONS, WEIGHTS, NOISE LEVELS AND EXTENDED WARRANTY COVERAGE. NOTE: ALL EQUIPMENT TO BE ORDERED QUICK SHIP.
- OBTAIN AND DISPLAY ALL REQUIRED PERMITS ON WORKSITE AND INCLUDE COPIES OF INSPECTION CERTIFICATES IN OPERATING AND MAINTENANCE MANUALS.
- KEEP SITE CLEAR OF RUBBISH AND WASTE MATERIAL RESULTING FROM WORK ON DAILY BASIS.
- BALANCE ALL SYSTEMS TO OPERATE AS DESIGNED.

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0	DEC 2013	ISSUED FOR TENDER	JWG

Date Printed DD MM YYYY Date imprimée

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project **BUILDING S-77- FIBRE PHOTONICS LAB RENOVATION** projet

SUSSEX DRIVE
drawing **MECHANICAL DEMOLITION** dessin

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approved	approuvé	W.O.no.	D.T.no.
BV			

dwg.no. **3894-M01** dessin no.



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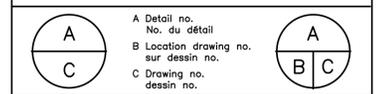
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project **BUILDING S-77- FIBRE PHOTONICS LAB RENOVATION** projet

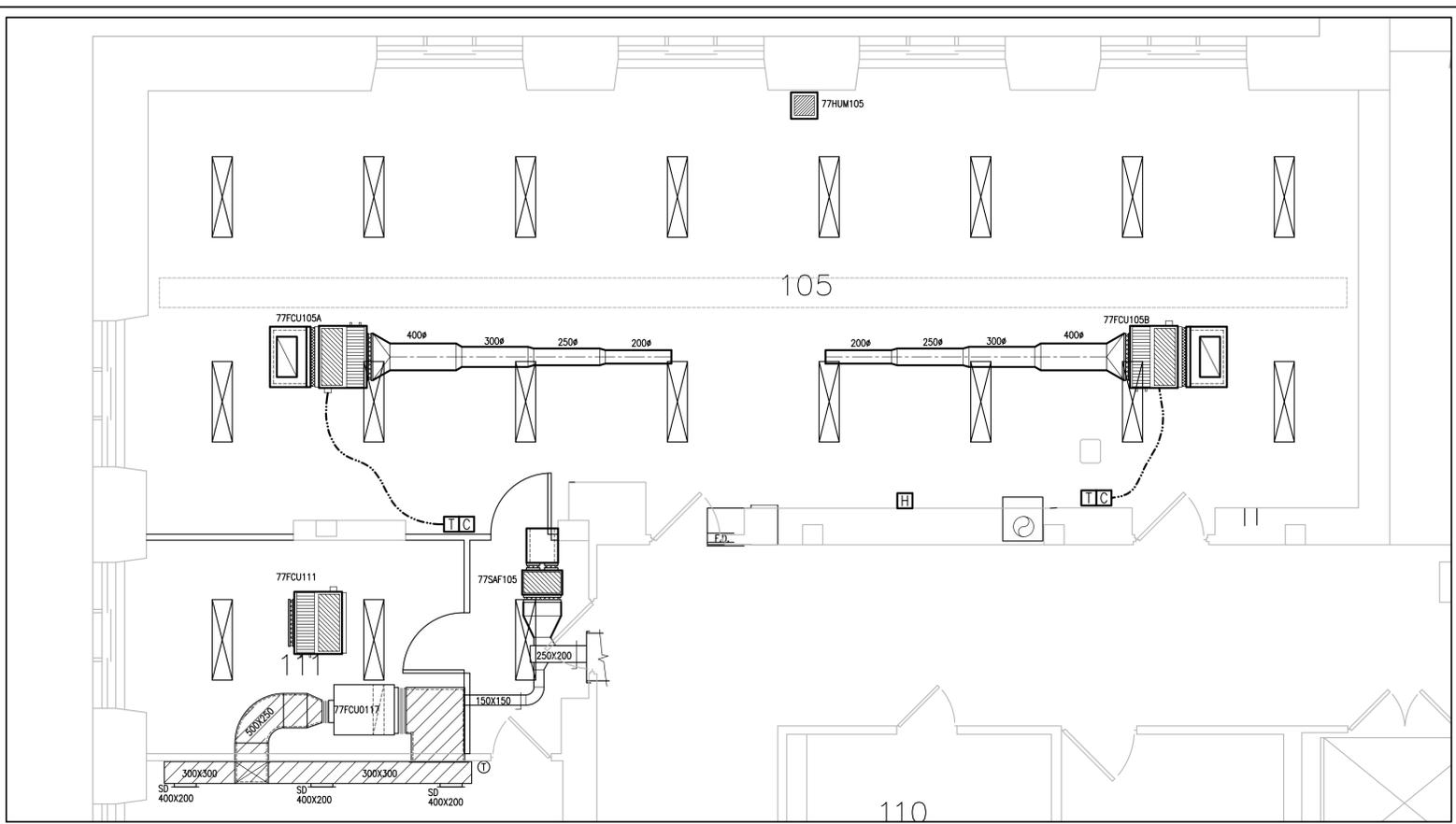
SUSSEX DRIVE

drawing **MECHANICAL- NEW WORK** dessin

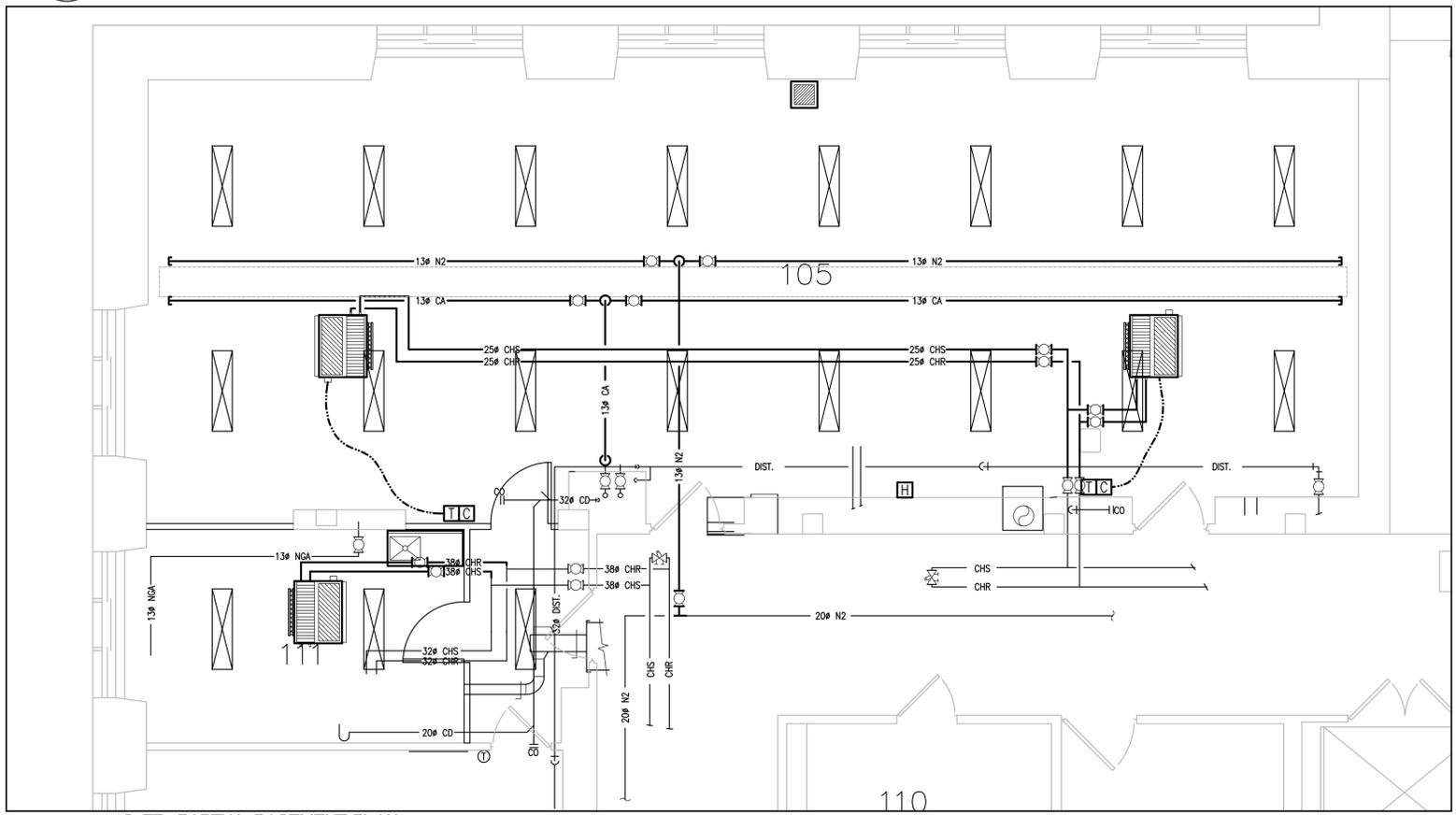
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approved	approuvé	W.O.no.	D.T.no.
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3894-M02			

MECHANICAL NEW WORK: (X)

- PROVIDE NEW FAN COIL UNITS (77FCU105A, 77FCU105B AND 77FCU111) ASSOCIATED SUPPLY AND RETURN DUCTWORK (SIZED AS INDICATED), CHILLED WATER SUPPLY AND RETURN PIPING (CHS AND CHR) SIZED AS INDICATED, ISOLATION VALVES AND CONTROLS AS INDICATED. REFER TO SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- PROVIDE NEW PERFORATED DUCTWORK TO ACT AS DIFFUSERS FROM NEW FAN COIL UNITS LOCATED IN "FRED" LASER LAB, SIZED AS INDICATED. SIZE DUCTWORK AND PERFORATIONS TO PROVIDE AIR FLOW AT 94 L/S PER METER.
- PROVIDE AIR FILTERS ON INLET AND OUTLET OF FAN COIL UNIT 77FCU111.
- PROVIDE NEW PRESSURIZATION FAN C/W WITH FILTER ON INLET AND ASSOCIATED DUCTWORK AS INDICATED. FAN IS TO BE CONNECTED TO EXISTING TRANSFER GRILLE AND PROVIDE POSITIVE PRESSURE TO THE LASER ROOM. REFER TO SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL DETAILS.
- TEST ADJUST AND BALANCE NEW FAN COIL UNITS, PRESSURIZATION FAN AND SUPPLY AIR DUCT DUCT TO THE AIR FLOWS INDICATED.
- PROVIDE NEW CHILLED WATER SUPPLY (CHS), CHILLED WATER RETURN (CHR) FROM EXISTING TAKE-OFFS TO NEW FAN COIL UNITS AS INDICATED. INSULATE AND LABEL PIPING AS PER SPECIFICATIONS. PROVIDE REQUIRED ISOLATION, CONTROL AND CIRCUIT BALANCING VALVES AS INDICATED.
- PROVIDE NEW COMPRESSED AIR PIPING AND EQUALLY SPACED ISOLATION VALVES SIZED AND LOCATED AS INDICATED. PIPING TO BE RUN ON THE UNDERSIDE OF THE ELECTRICAL TRAY AND HAVE SIX (6) 1.3# STUBS OUTS COMPLETE WITH BALL VALVES (THREADED ENDS TO 1/2" FNPT) EVERY 3 METERS (6 PER 10FT), APPROXIMATE TOTAL OF 34. VALVES ARE TO BE ALTERNATELY DIRECTED LEFT OR RIGHT TO ALLOW FOR CONNECTIONS FROM EITHER SIDE OF ELECTRICAL TRAY.
- PROVIDE NEW COMPRESSED NITROGEN PIPING AND EQUALLY SPACED ISOLATION VALVES SIZED AND LOCATED AS INDICATED. PIPING TO BE RUN ON THE UNDERSIDE OF THE ELECTRICAL TRAY AND HAVE SIX (6) 1.3# STUBS OUTS COMPLETE WITH BALL VALVES (THREADED ENDS TO 1/2" FNPT) EVERY 3 METERS (6 PER 10FT), APPROXIMATE TOTAL OF 34. VALVES ARE TO ALTERNATELY DIRECTED LEFT OR RIGHT TO ALLOW FOR CONNECTIONS FOR EITHER SIDE OF ELECTRICAL TRAY.
- PROVIDE NEW CONDENSATE PIPING FROM NEW FAN COIL UNITS SIZED AND LOCATED AS INDICATED. CONNECT TO EXISTING CONDENSATE DRAINS AS INDICATED.
- PROVIDE NEW SINK (S4), DOMESTIC COLD WATER (DCW), DOMESTIC HOT WATER (DHW), DE-IONIZED WATER CONNECTION, SANITARY DRAIN AND VENT PIPING AS INDICATED. ALL NEW PIPING TO BE CONNECTED TO EXISTING BUILDING SERVICES AS INDICATED. FIRE STOP ALL OPENINGS AS PER N.B.C. AND TO THE SATISFACTION OF N.R.C. REPRESENTATIVE.
- PROVIDE NEW CHILLER (77CCU-1), INTEGRATED CIRCULATING PUMP, CONTROLS AND PIPING AS PER SPECIFICATIONS FOR CLIENT PRECISION HEAT EXCHANGER. REFER TO SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- PROVIDE NEW WALL MOUNTED HUMIDIFIER (77HUM105) C/W BUILT ON BLOWER PACK AND WALL MOUNTED HUMIDISTAT AS INDICATED. REFER TO SCHEDULES FOR ADDITIONAL INFORMATION.



1
M02
S-77- PARTIAL BASEMENT PLAN
HVAC- NEW WORK
 SCALE- 1:50



2
M02
S-77- PARTIAL BASEMENT PLAN
PLUMBING + UTILITIES- NEW WORK
 SCALE- 1:50



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CHILLED WATER HORIZONTAL FAN COIL SCHEDULE																					
TAG	LOCATION	COOLING COIL CAPACITIES						HEATING COIL CAPACITIES						S.P. (Pa)	MOTOR (HP)	FLA/MCA/MOC	V/P/HZ	REMARKS			
		T.C. (kW)	S.C. (kW)	EDBT	EWBT	LDBT	E.W.T.	L.W.T.	FLOW RATE (L/M)	S.H.C. (WATTS)	EDBT	P.D. Pa	LDBT						E.W.T.	L.W.T.	FLOW RATE (L/M)
77FCU01	ROOM 105	8.35	6.59	26.7°C	19.4°C	12.8°C	7.2°C	12.8°C	24.2	N/A	N/A	N/A	N/A	N/A	N/A	376	63	1/6	2.5/--/15	120/1/60	NEW- SEE BELOW FOR DETAILS
77FCU111	ROOM 111	12.13	9.17	26.7°C	19.4°C	12.8°C	7.2°C	12.8°C	34.8	N/A	N/A	N/A	N/A	N/A	N/A	705	63	2X 1/6	5.0/--/--	120/1/60	NEW- SEE BELOW FOR DETAILS
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NOTE:
 1. NEW UNITS IN ROOM 105 ARE BASED ON ENVIROTECH MODEL HLF 50
 2. NEW UNIT IN ROOM 111 IS BASED ON ENVIROTECH MODEL HLF 60

AIR COOLED CHILLER SCHEDULE																	
TAG	LOCATION	T.C. (kW)	S.C. (kW)	S.W.T.	R.W.T.	PUMP TYPE	S.P. (Pa)	FLOW RATE (L/M)	AMB. HIGH TEMP	AMB. LOW TEMP	PUMP MOTOR (H.P.)	RES. VOLUME (L)	DIMENSIONS L X D X H (MM)	WEIGHT (KG)	FLA/MCA/MOC	V/P/HZ	REMARKS
77CCU---	ROOM 105	10	---	5°C	---	---	4.1	75.7	32°C	---	---	17.9	1327X639X856	184	--/--/--	208/3/60	NEW

NOTE:
 1. UNIT 77CCU--- IS BASED ON A NESLAB THERMOFLEX 10000 AND IS USED TO SUPPLY CHILLED WATER TO CLIENT SUPPLIED CHILLERS FOR "FRED" LASER.

SUPPLY FAN SCHEDULE											
No.	LOCATION	DRIVE TYPE	FAN TYPE	L/S	S.P. (Pa)	FAN RPM	SONES	VOLTAGE	AMPS	WATTS	REMARKS
77SAF105	VESTIBULE	DIRECT	CABINET	347	63	1100	2.0	120/1/60	1.32	350	NEW

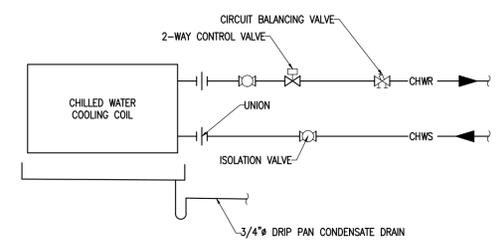
NOTE:
 1. FAN 77SAF105 BASED ON A GREENHECK CSP-A700 AND IS USED TO PRESSURIZE ROOM 105

FIXTURE SCHEDULE							
TAG	FIXTURE TYPE	DCW	DHW	DW	SAN	VENT	REMARKS
S1	SINK	13#	13#	13#	38#	32#	REMOVED
S2	SINK	13#	13#	---	38#	32#	REMOVED
S3	LAB SINK	13#	---	13#	38#	23#	REMOVED
S4	SERVICE SINK	13#	13#	13#	38#	38#	NEW

NOTES:
 1. NEW FIXTURES ARE TO BE CONNECTED TO EXISTING DOMESTIC COLD WATER, DOMESTIC HOT WATER, DE-IONIZED WATER, SANITARY DRAIN AND VENT SERVICES. ALL NEW DOMESTIC COLD, DOMESTIC HOT TO BE INSULATED AS PER SPECIFICATIONS.
 2. ALL SANITARY PIPING TO BE SLOPED AS PER NATIONAL BUILDING CODE STANDARDS (NBC).

ELECTRIC STEAM HUMIDIFIER SCHEDULE									
No.	LOCATION	MOUNTING	DISTRIBUTOR	KG/HR	INPUT (KW)	VOLTAGE	AMPS	NUMBER OF CYLINDER	REMARKS
77HUM105	ROOM 105	WALL	BLOWER PACK	0.9-4.55	3.8	208/1/60	---	1	NEW

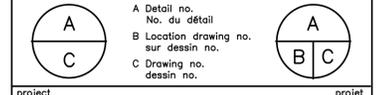
NOTE:
 1. HUMIDIFIER IS BASED ON A NORTEC MODEL NH-EL 10 C/W BUILT ON BLOWER PACK



1 FAN COIL PIPING SCHEMATIC- CHILLED WATER
 SCALE: N.T.S.

No.	Date	Revision	By:
0	DEC 2013	ISSUED FOR TENDER	JWG

Date Printed DD MM YYYY Date Imprimée
 • Verify all dimensions and site conditions and be responsible for same
 • Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité



project / projet		BUILDING 8-77- FIBRE PHOTONICS LAB RENOVATION	
drawing / dessin		MECHANICAL- DETAILS AND SCHEDULES	
designed / conçu	JWG	date / date	DEC. 2013
drawn / dessiné	JWG	scale / échelle	AS INDICATED
checked / vérifié	---	sheet / feuille	3 of/de 3
approved / approuvé		W.O.no.	D.T.no.
dwg.no.		dessin no.	

3894-M03

C

GENERAL NOTES

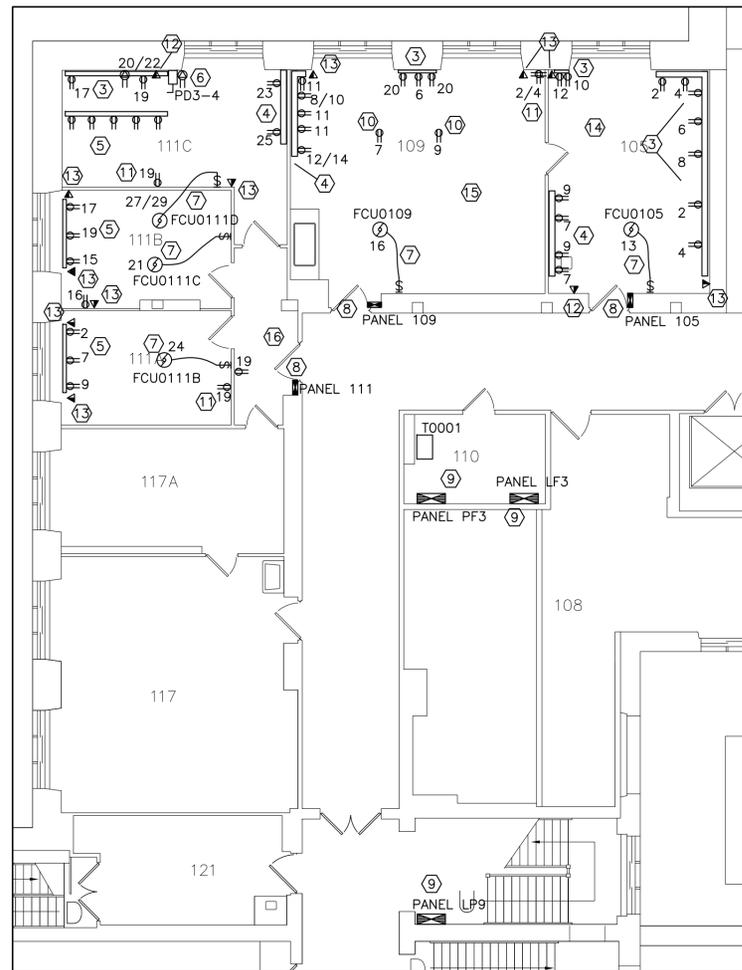
- A READ THIS DRAWING IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
- B CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO NRC DEPARTMENTAL REPRESENTATIVE.
- C CONTRACTORS MUST VISIT THE SITE & FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK.
- D PREVENT THE SPREAD OF DUST & DEBRIS BEYOND THE WORK AREA AND CLEAN ALL SURFACES AT COMPLETION.
- E MAKE GOOD ALL SURFACES AFFECTED BY THIS WORK.
- F COORDINATE ALL SHUTDOWNS WITH THE NRC DEPARTMENTAL REPRESENTATIVE.
- G FILL ALL HOLES, PATCH & PAINT ALL SURFACES IN CONTRACT AREA. COLOUR SCHEME TO MATCH EXISTING.
- H REMOVE MEANS REMOVE AND DISPOSE OF OFF SITE UNLESS OTHERWISE NOTED.
- I PROVIDE LABELS TO NEW DEVICES TO INDICATE POWER SOURCE. UPDATE PANEL SCHEDULES AFTER JOB COMPLETION.
- J REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL PLACEMENT OF LIGHT FIXTURES.
- K ALL WIRE TO BE IN EMT UNLESS OTHERWISE NOTED.

DRAWING NOTES

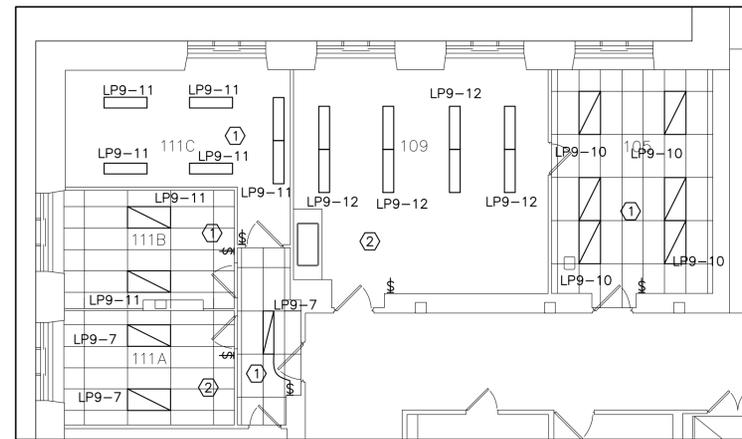
1. REMOVE EXISTING LIGHTING AND SWITCH IN THIS ROOM. REMOVE WIRE AND CONDUIT BACK TO SOURCE.
2. REMOVE EXISTING LIGHTING AND SWITCH IN THIS ROOM. RETAIN CIRCUIT FOR USE IN NEW CONSTRUCTION.
3. EXISTING METAL RACEWAY AND RECEPTACLES TO REMAIN. SHOWN FOR REFERENCE ONLY.
4. REMOVE EXISTING RACEWAY, RECEPTACLES, WIRE AND CONDUIT BACK TO SOURCE.
5. REMOVE EXISTING METAL RACEWAY ATTACHED TO FURNITURE. REMOVE RECEPTACLES, WIRE AND CONDUIT BACK TO SOURCE.
6. REMOVE EXISTING TWISTLOCK RECEPTACLE AND DISCONNECT ALONG WITH WIRE AND CONDUIT BACK TO SOURCE.
7. REMOVE EXISTING FCU SWITCH AND DISCONNECT WIRE. REMOVE WIRE AND CONDUIT BACK TO SOURCE.
8. EXISTING PANEL TO REMAIN. REMOVE ALL WIRE AND CONDUIT NOTED ON DRAWINGS AND UPDATE PANEL SCHEDULE.
9. EXISTING ELECTRICAL PANEL TO REMAIN. SHOWN FOR REFERENCE.
10. REMOVE EXISTING RECEPTACLE ATTACHED TO FURNITURE. REMOVE WIRE AND CONDUIT BACK TO SOURCE.
11. REMOVE EXISTING RECEPTACLE, CONDUIT AND WIRE BACK TO SOURCE.
12. EXISTING VOICE/DATA DROP TO REMAIN.
13. REMOVE EXISTING BOX AND CONDUIT FOR DATA DROP.
14. EXISTING LOADS IN ROOM 105 ARE FED FROM PANEL 105.
15. EXISTING LOADS IN ROOM 109 ARE FED FROM PANEL 109.
16. EXISTING LOADS IN ROOMS 111A, 111B, 111C ARE FED FROM PANEL 111.

LEGEND

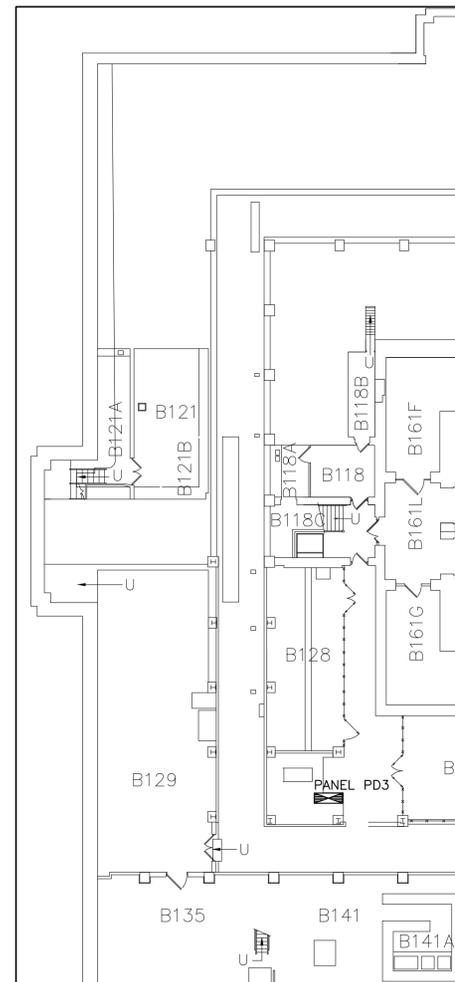
	EXISTING SUSPENDED FLUORSCENT LIGHT FIXTURE
	EXISTING RECESSED FLUORSCENT LIGHT FIXTURE
	NEW STEM MOUNTED LED LIGHT FIXTURE
	SINGLE-GANG LIGHT SWITCH
	OCCUPANCY SENSING LIGHT SWITCH
	5-15R DUPLEX RECEPTACLE
	5-20R RECEPTACLE
	OUTLET FOR DATA WIRING
	SURFACE MOUNTED ELECTRICAL PANEL
	MANUAL MOTOR PROTECTION SWITCH
	LOAD RATED DISCONNECT



1 DEMOLITION - POWER AND TELECOM.
 E01 SCALE: 1:100



2 DEMOLITION - LIGHTING
 E01 SCALE: 1:100



3 PANEL PD3 LOCATION - SUB-BASEMENT
 E01 SCALE: 1:200

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Date Printed Date imprimée

- o Verify all dimensions and site conditions and be responsible for same
- o Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

A	A Detail no. No. du détail	A
C	B Location drawing no. sur dessin no.	B C
	C Drawing no. dessin no.	

project projet

S-77
NEW FIBRE PHOTONICS LASER LAB

MONTREAL ROAD CAMPUS

drawing dessin
ELECTRICAL DEMOLITION

designed DIF conçu date DEC 2013 date

drawn DIF dessiné scale AS NOTED échelle

checked K.X.L. vérifié sheet E01 of/de 2 feuille

approved B.V. approuvé W.O.no. 9100024775 D.T.no.

dwg.no. dessin no.

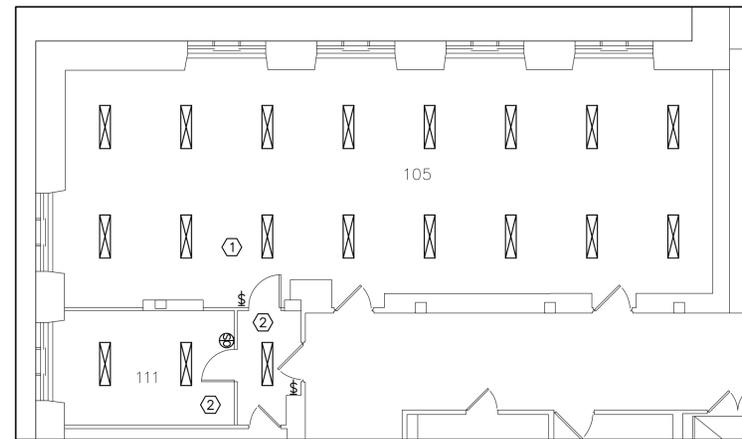
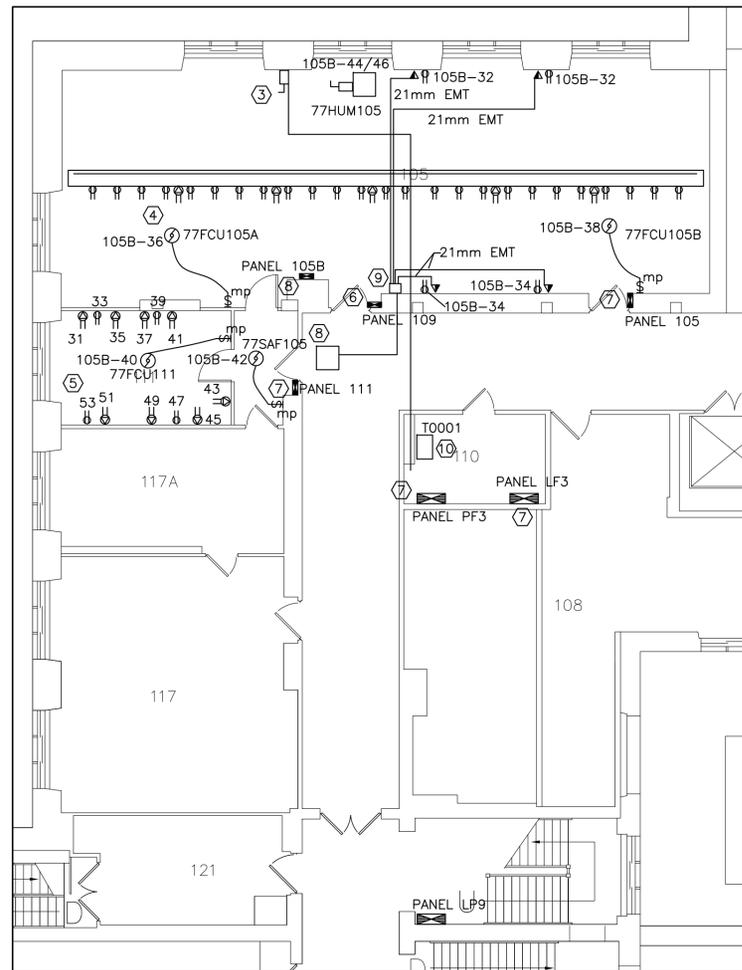
3894-E01

GENERAL NOTES

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- B CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO NRC DEPARTMENTAL REPRESENTATIVE.
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- K ALL WIRE TO BE IN EMT UNLESS OTHERWISE NOTED.

DRAWING NOTES

1. LIGHTING IN ROOM 105 TO BE CIRCUITED FROM LP9-12. USE #12 WIRE IN EMT AND MOUNT AT 2600mm A.F.F. PROVIDE NEW SWITCH.
2. LIGHTING IN ROOM 105B TO BE CIRCUITED FROM LP9-7. USE #12 WIRE IN EMT AND MOUNT AT 2600mm A.F.F. PROVIDE NEW SWITCH AS SHOWN.
3. PROVIDE 100A FUSED DISCONNECT WITH 3x #3 + GRD IN 35mm EMT. CONDUIT TO END NEAR EXISTING TRANSFORMER T0001. LEAVE ENOUGH ADDITIONAL WIRE TO ALLOW FUTURE CONNECTION TO TRANSFORMER.
4. CABLE TRAY WITH RECEPTACLES ATTACHED TO OUTSIDE OF TRAY. TRAY TO BE MOUNTED 2600mm A.F.F. CIRCUIT EACH RECEPTACLE INDIVIDUALLY FROM NEW PANEL 105B. USE CIRCUITS 1-25 FOR THE 25x 5-15R RECEPTACLES AND 26-30 FOR THE 5x 5-20R RECEPTACLES.
5. RECEPTACLES IN THIS ROOM ARE FED FROM PANEL 105B.
6. NEW PANEL 105B. PROVIDE 3P100A BREAKER AND FEED FROM SPACE IN PANEL LF3 USING 4x #3 +GRD IN 41mm EMT.
7. EXISTING ELECTRICAL PANEL.
8. EXISTING VOICE/DATA BOX.
9. PROVIDE 305X305X150mm PULL BOX FOR DATA WIRING.
10. EXISTING TRANSFORMER.



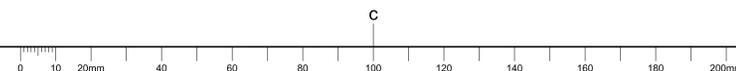
2 NEW WORK - LIGHTING
 E02 SCALE: 1:100

NEW PANEL 105B

120/208 VOLTS	LOCATION	ROOM 111	225A A.BUSSING
3 PHASE	FEEDER	4x #3 + GRD IN 41mm EMT	SURFACE MTG.

CIRC.	BKR.	DESCRIPTION	DESCRIPTION	BKR.	CIRC.
1	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	2
3	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	4
5	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	6
7	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	8
9	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	10
11	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	12
13	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	14
15	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	16
17	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	18
19	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	20
21	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	22
23	1P15	SERVICE TRAY RECEPTACLE	SERVICE TRAY RECEPTACLE	1P15	24
25	1P15	SERVICE TRAY RECEPTACLE	20A SERVICE TRAY RECEPTACLE	1P20	26
27	1P20	20A SERVICE TRAY RECEPTACLE	20A SERVICE TRAY RECEPTACLE	1P20	28
29	1P20	20A SERVICE TRAY RECEPTACLE	20A SERVICE TRAY RECEPTACLE	1P20	30
31	1P20	20A RECEPTACLE ROOM 111	RECEPTACLES ROOM 105	1P15	32
33	1P15	RECEPTACLE ROOM 111	RECEPTACLES ROOM 105	1P15	34
35	1P20	20A RECEPTACLE ROOM 111	77FCU105A	1P15	36
37	1P20	20A RECEPTACLE ROOM 111	77FCU105B	1P15	38
39	1P15	RECEPTACLE ROOM 111	77FCU1111	1P15	40
41	1P20	20A RECEPTACLE ROOM 111	EXHUAST FAN 77SAF105	1P15	42
43	1P20	20A RECEPTACLE ROOM 111			44
45	1P20	20A RECEPTACLE ROOM 111	HUMIDIFIER 77HUM105	2P25	46
47	1P15	RECEPTACLE ROOM 111	SPACE		48
49	1P20	20A RECEPTACLE ROOM 111	SPACE		50
51	1P20	20A RECEPTACLE ROOM 111	SPACE		52
53	1P15	RECEPTACLE ROOM 111	SPACE		54
55		SPACE	SPACE		56
57		SPACE	SPACE		58
59		SPACE	SPACE		60

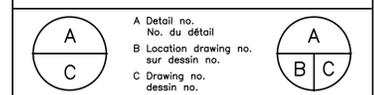
1 NEW WORK - POWER AND TELECOM.
 E02 SCALE: 1:100



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project: **S-77** projet
NEW FIBRE PHOTONICS LASER LAB

MONTREAL ROAD CAMPUS

drawing: **ELECTRICAL NEW WORK** dessin

designed: **DIF** conçu date: **DEC 2013** date

drawn: **DIF** dessiné scale: **AS NOTED** échelle

checked: **K.X.L.** vérifié sheet: **E02 of/de 2** feuille

approved: **B.V.** approuvé W.O.no.: **9100024775** D.T.no.

dwg.no.: **3894-E02** dessin no.