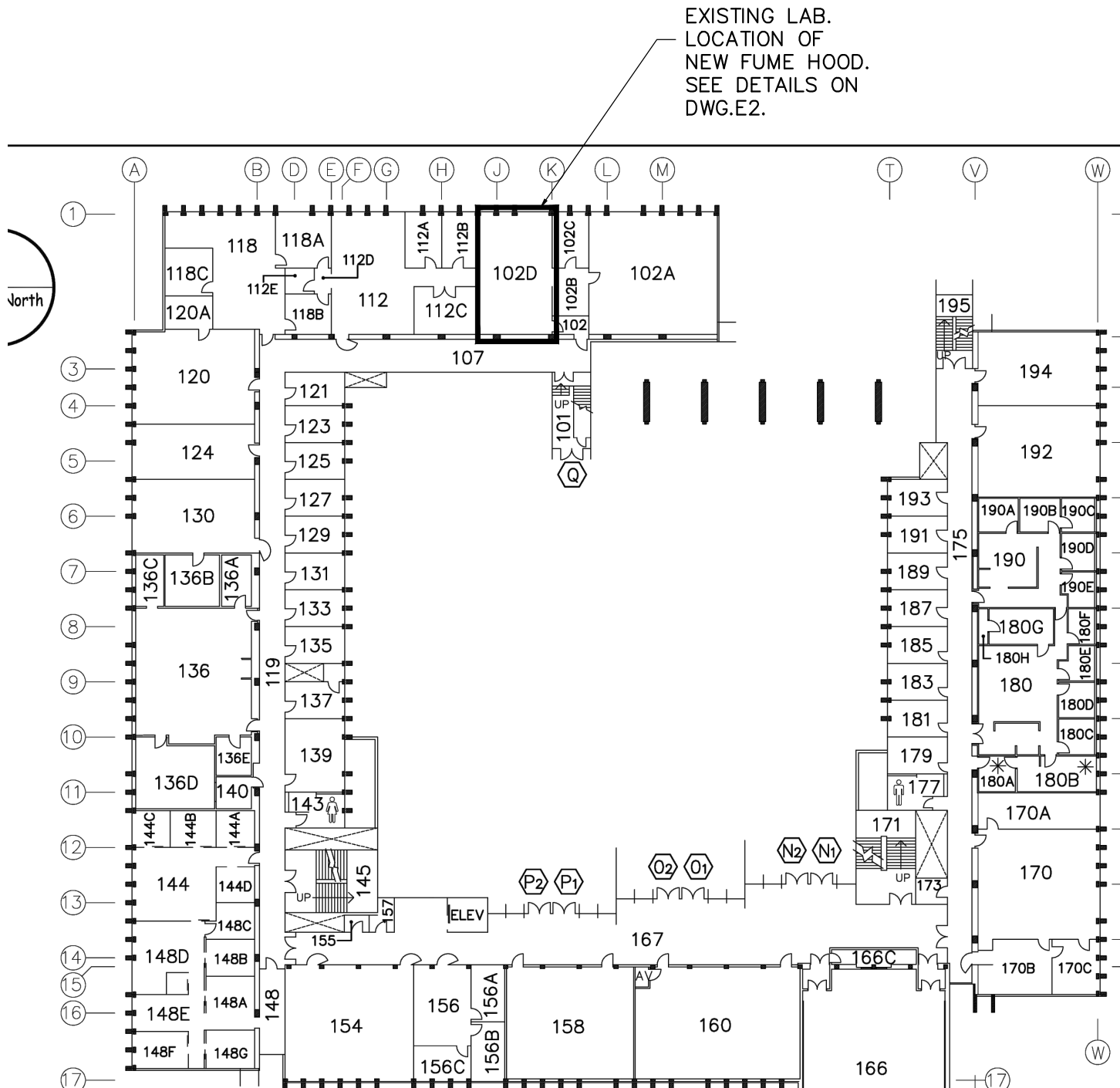
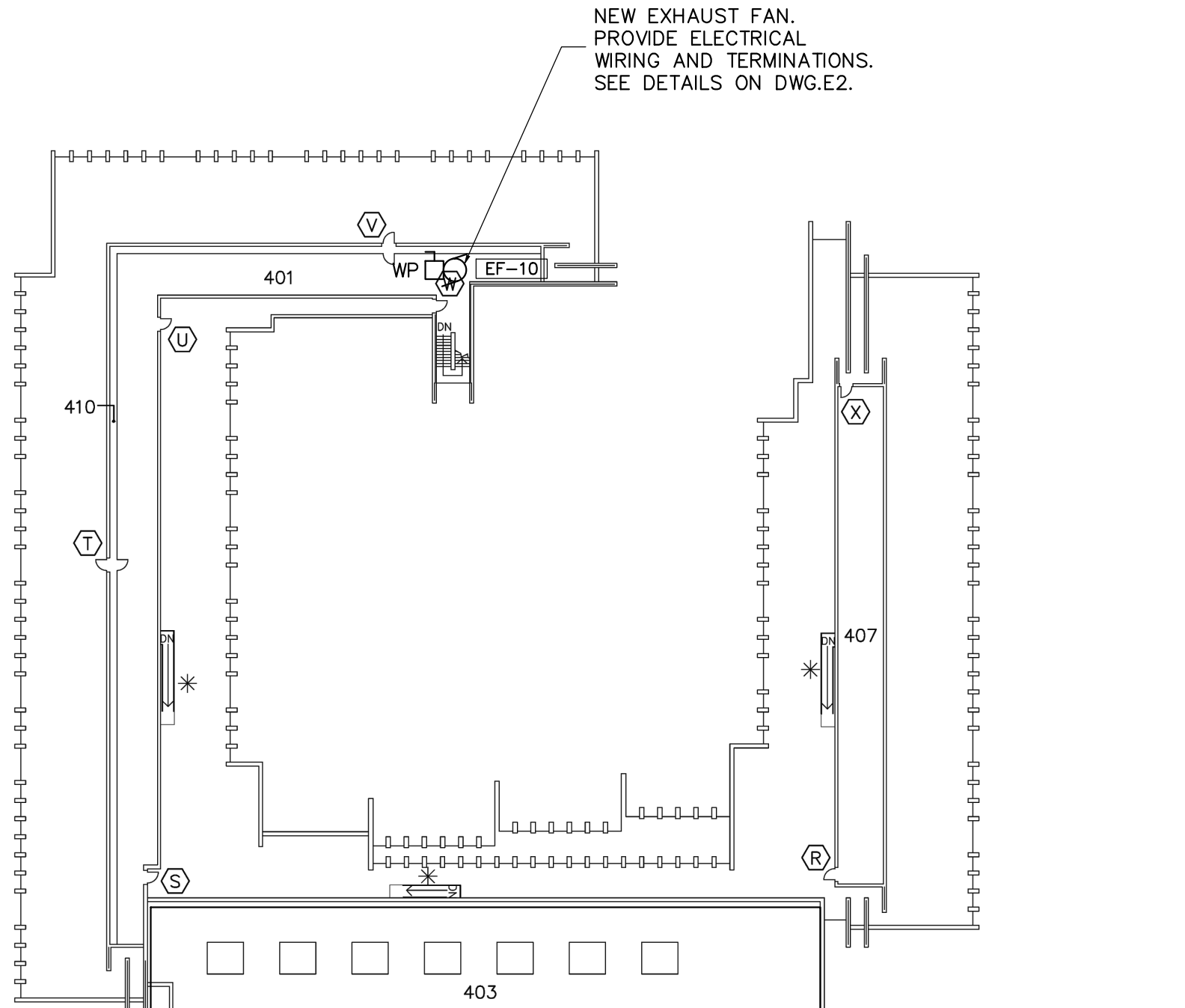


SPECIFICATIONS

1. GENERAL CONDITIONS
- 1.1 REFER TO DIVISION 1 SPECIFICATIONS.
2. POWER AND LIGHTING WIRING
- 2.1 USE ONLY THE SPECIFIC EQUIPMENT NAMED IN THE TENDER DOCUMENTS FOR THIS CONTRACT, OR AN APPROVED SUBSTITUTE. THE DESIGN IS BASED ON THE FIRST NAMED EQUIPMENT AND ANY ADDITIONAL COSTS REQUIRED FOR THE USE OF ALTERNATIVES SHALL BE INCLUDED IN THE TENDER. SUBSTITUTIONS MADE TO THE CONTRARY WILL BE REJECTED OUTRIGHT UNLESS WRITTEN AUTHORITY IS OBTAINED FROM THE CONSULTANT PRIOR TO THE PURCHASE OF SUCH EQUIPMENT. SUBSTITUTIONS FOR NAMED MATERIAL MAY BE USED ONLY IF APPROVED BY THE CONSULTANT IN WRITING.
- 2.2 ALL EQUIPMENT TO BE ADEQUATELY SUPPORTED FROM BUILDING STRUCTURAL MEMBERS. WHERE POSSIBLE USE CAST IN CONCRETE INSERTS; OTHERWISE DRILLED METAL INSERTS. WHERE WOOD SCREWS ARE USED, THEY MUST PENETRATE AT LEAST 25MM (1"), EXCEPT IN COUNTERS. PERFORATED PIPE HANGER IRONS SHALL NOT BE USED. OBTAIN THE SERVICES OF A SEISMIC CONSULTANT TO ENSURE ALL SUPPORT METHODS COMPLY WITH LOCAL CODE REQUIREMENTS.
- 2.3 IDENTIFY ALL ELECTRICAL DEVICES, PANELBOARDS, STARTERS, CONTROLLERS, FEEDERS, SWITCHES,ETC. PROVIDE TYPEWRITTEN, REMOVABLE PANELBOARD CIRCUIT DIRECTORIES. USE "LAMICOID" LABELS TO IDENTIFY EQUIPMENT. USE BLACK-ON-CLEAR "BROTHER" STYLE LABEL SHOWING CIRCUIT NUMBER ON COVERPLATE OF ALL RECEPTACLES.
- 2.4 PROVIDE OR ARRANGE FOR ALL CUTTING, PATCHING, FLASHING, SLEEVING, ETC. ALL DRILLING AND CORING IN EXISTING WALLS/SLABS SHALL BE RESTORED TO ORIGINAL FIRE PROOF RATING WITH APPROVED FIRE PROOF COMPOUND. ALL DAMAGED SURFACES SHALL BE RE-FINISHED TO ORIGINAL CONDITIONS.
- 2.5 COORDINATE THE DISCONNECTION AND REMOVAL OF THE EXISTING DISTRIBUTION EQUIPMENT INCLUDING EXTENSION OF FEEDERS AND BRANCH CIRCUITING TO SUIT THE NEW EQUIPMENT ARRANGEMENT.
- 2.6 COORDINATE FOR ALL SHUTDOWNS TO BE UNDERTAKEN WITH FULL COOPERATION OF THE TENANTS OVER THE WEEKEND AND/OR AFTER NORMAL WORKING HOURS.
- 2.7 THE CONTRACTOR SHALL IDENTIFY EXISTING BRANCH CIRCUITING AND EXTEND TO THE PROPER PANEL FOR TERMINATION.
- 2.8 ALL WIRING TO BE CONCEALED. FEEDERS SHALL BE WIRED IN CONDUIT. BRANCH WIRING SHALL BE WIRED IN CONDUIT.
- 2.9 CONDUIT BETWEEN MOTOR DISCONNECT SWITCH AND MOTOR TERMINALS SHALL BE FLEXIBLE, WATER TIGHT TYPE.
- 2.10 ALL CONDUCTORS SHALL BE RW90 STRANDED COPPER, NO SMALLER THAN NO. 12 AWG.
- 2.11 COLOUR CODING TO C.S.A STANDARDS.
3. GROUNDING
- 3.1 PROVIDE EQUIPMENT GROUNDING AND BONDING AS REQUIRED BY LOCAL INSPECTION AUTHORITIES.

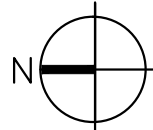


GROUND FLOOR PLAN
SCALE: 1"=20'-0"



4th FLOOR PLAN
SCALE: 1"=20'-0"

PENTHOUSE MECHANICAL ROOM AND EXISTING MCC. TERMINATE FEEDER FOR NEW MOTOR. COORDINATE SHUT-DOWN WITH UBC AS REQUIRED.



	OCT. 05,14	FOR COORDINATION	MK
NO.	DATE	REVISION	BY



BLC ENGINEERING INC.
Electrical Consultants

Tel: 604-986-4128
Fax: 604-986-4129
mirek@blcengineering.com
41-850 West17th Street
North Vancouver, B.C. V7P 3K4

COPYRIGHT RESERVED. THIS PLAN AND DESIGN IS AND AT ALL TIMES REMAINS THE EXCLUSIVE PROPERTY OF BLC ENGINEERING INC. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF BLC ENGINEERING INC.

WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALE DIMENSIONS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND SHALL REQUEST CLARIFICATION OF DIMENSIONS, CONDITIONS, OR CONFLICTING INFORMATION CONTAINED IN CONTRACT DRAWINGS AND DOCUMENTS. FAILURE TO OBTAIN SUCH CLARIFICATION BEFORE THE CONTRACTOR BECOMES RESPONSIBLE FOR ANY RESULTING IMPROPER WORK AND THE COST OF RECTIFICATION.

CONSULTANT

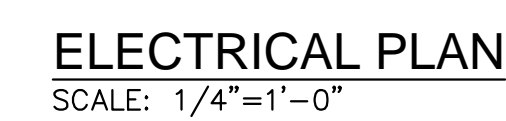


BUILDING/FACILITY
MACMILLAN BUILDING
2357 MAIN MALL

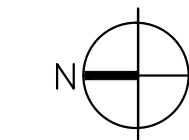
PROJECT TITLE
FUME HOOD INSTALLATION

DRAWING TITLE
KEY PLANS AND
SPECIFICATIONS

SCALE	AS NOTED	DATE	SEP. 2014
DRAWN	MK	SHEET NO.	E1 OF 2
REVIEWED	MK		
CAD FILENAME	14124E		
UBC PROJECT NO.	XXX		
UBC DRAWING NO.	XX	REV.	



- NOTES:**
1. REMOVE EXISTING 120/208V, SURFACE MOUNTED JUNCTION BOXES AND WIRING. TRIM CONDUITS AT FLOOR LEVEL.
 2. REUSE 120V CIRCUIT REMOVED FROM ABANDONED JB'S TO SUPPLY ELECTRICAL DEVICES WITHIN NEW FUME HOOD.
 3. TERMINATE NEW CIRCUIT TO JUNCTION BOX MOUNTED TO TOP OF FUME HOOD.
 4. INSTALL FAN MOTOR CONTROL SWITCH AS DESCRIBED IN MECHANICAL MOTOR LIST. SWITCH CONDUIT AND WIRING SHOULD FOLLOW MECHANICAL DUCT RISER TO TOP OF BUILDING.



	OCT. 05,14	FOR COORDINATION		MR.
NO.	DATE	REVISION		BY

ELECTRICAL CONSULTANT



BLC ENGINEERING INC.
Electrical Consultants

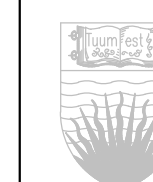
Tel: 604-986-4128
Fax: 604-986-4129
mirek@blcengineering.com
41-850 West 17th Street
North Vancouver, B.C. V7P 3K4

COPYRIGHT RESERVED. THIS PLAN AND DESIGN IS AND AT ALL TIMES REMAINS THE EXCLUSIVE PROPERTY OF THE UBC PLANT OPERATIONS, LBS PROJECT SERVICES - DESIGN OFFICE DEPARTMENT OF THE UNIVERSITY OF BRITISH COLUMBIA AND CANNOT BE USED OR REPRODUCED WITHOUT THE EXPRESS CONSENT OF UBC PLANT OPERATIONS, LBS PROJECT SERVICES - DESIGN OFFICE

WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND SHALL REQUEST CLARIFICATION OF ERRORS, DISCREPANCIES, OR DOUBTFUL INFORMATION CONTAINED IN CONTRACT DRAWINGS AND DOCUMENTS. FAILURE TO OBTAIN SUCH CLARIFICATION RENDERS THE CONTRACTOR RESPONSIBLE FOR ANY RESULTING IMPROPER WORK AND THE COST OF RECTIFICATION.

CONSULTANT

	OWNER
--	-------



THE UNIVERSITY OF BRITISH COLUMBIA

BUILDING/FACILITY

MACMILLAN BUILDING
2357 MAIN MALL

	PROJECT TITLE

FUME HOOD INSTALLATION

	DRAWING TITLE
--	---------------

CONSTRUCTION DETAILS

SCALE	AS NOTED	DATE	SEP. 2014
DRAWN	MK	SHEET NO.	E2 OF 2
REVIEWED	MK		
CAD FILENAME	14124E		
UBC PROJECT NO.	XXX		
UBC DRAWING NO.	XX	REV.	