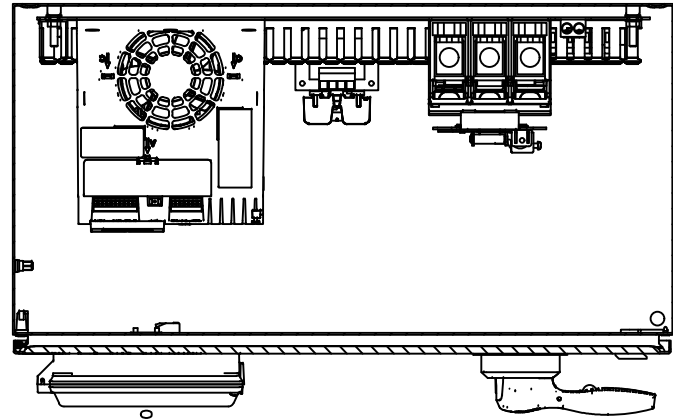


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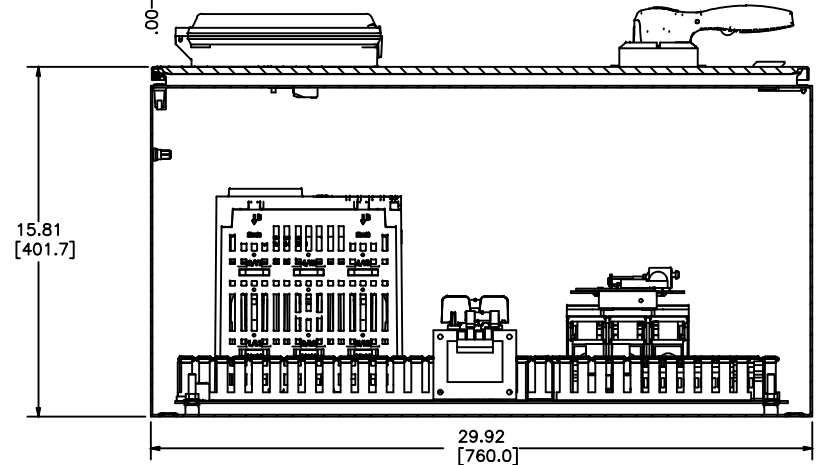
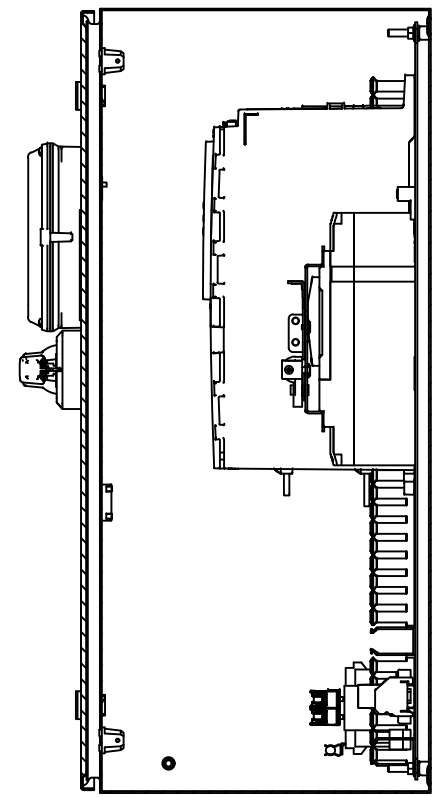
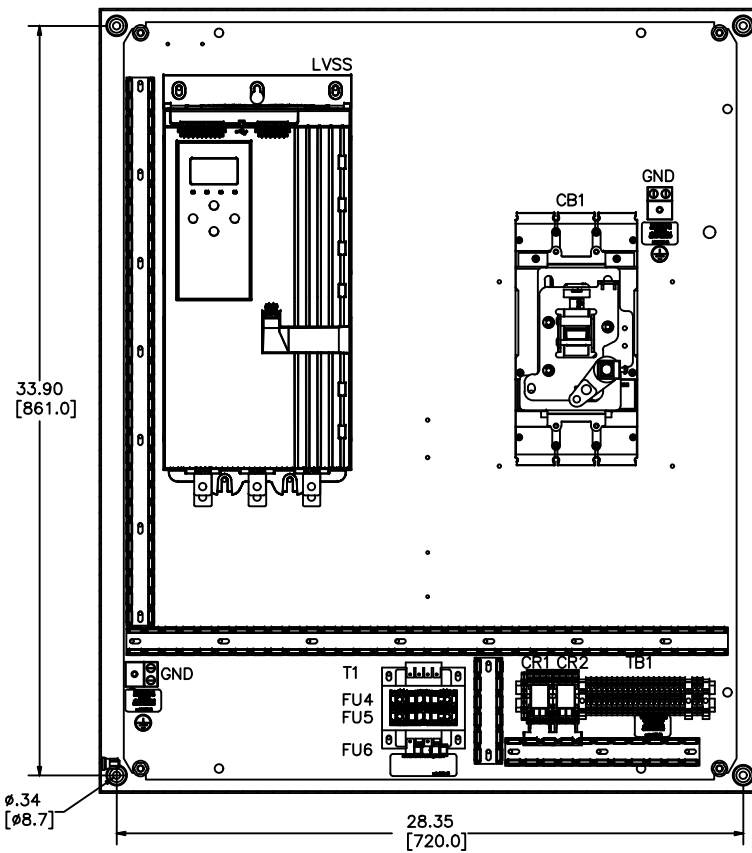
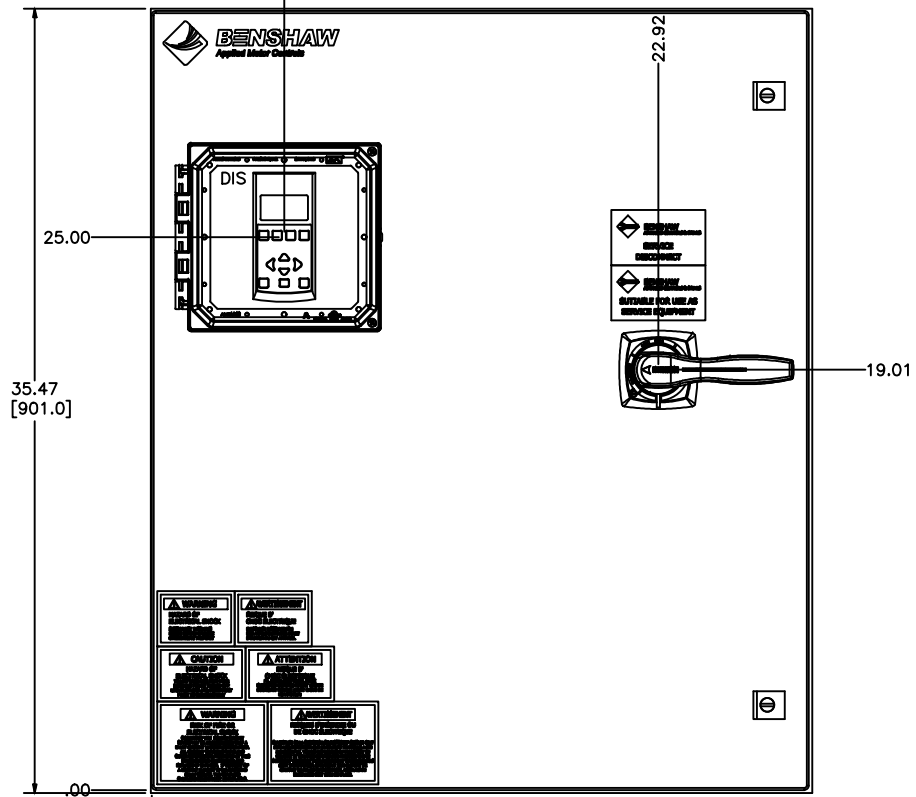
MX4PB-SD-150-4-4-HB  
TYP. DIMS

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N



**LABEL LEGEND**

- CB1: CIRCUIT BREAKER
- GND: GROUND LUG
- LVSS: EMX4I SOFT START (W/INTEGRAL BYPASS)
- TB1: TERMINAL BLOCKS
- CR1-2: CONTROL RELAYS
- T1: CONTROL POWER TRANSFORMER
- FU4-FU5: PRIMARY FUSES (T1)
- FU6: SECONDARY FUSE (T1)
- DIS: EMX4I LCD DISPLAY/KEYPAD



**NOTES:**

- 1 MINIMUM WIRE BENDING SPACE SHALL BE 8.00" FROM TOP OF CIRCUIT BREAKER POWER CONNECTION TO TOP OF ENCLOSURE.
- 2 ENSURE THAT ALL RIBBON CABLES ARE ROUTED AWAY FROM POWER CONDUCTORS.
- 3 MINIMUM WIRE BENDING SPACE SHALL BE 8.00" FROM BOTTOM OF POWERSTACK POWER CONNECTION TO BOTTOM OF ENCLOSURE.

**PRODUCTION**

OPTIONS AND CODE NUMBERS			
OPTION	DISPLAY	HEATER	CONTROL
CODE NO.	YES		

APPRO: BDA 2/8/24	THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED
CHK BY: RWS 2/8/24	THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF BENSCHAW INC. AND MAY NOT BE REPRODUCED OR DIVULGED TO UNAUTHORIZED PERSONS WITHOUT THE EXPRESS WRITTEN CONSENT OF BENSCHAW INC. IT IS PROVIDED SOLELY FOR THE CONVENIENCE OF THE USER AND SHALL BE RETURNED UPON REQUEST.	ALL DIMENSIONS IN INCHES INTERPRET DRAWING PER ASME Y14.5M-1994
CHANGE CHANGED BRAND OF TERMINAL BLOCKS	DO NOT SCALE DWG	TOLERANCES: .XX ± .03 .XXX ± .015 ANGLES ± 1°

**TITLE:**  
ENCLOSURE LAYOUT  
MODULAR REDUCED VOLTAGE  
SOLID STATE STARTER  
NEMA 4/12 WITH  
INTEGRAL BYPASS

SIGNATURES	DATE
DRWN: BDA	3/18/20
CHKD: NMK	3/18/20
ENG: BDA	3/18/20
MFG:	
SIZE	DWG NO.
D	

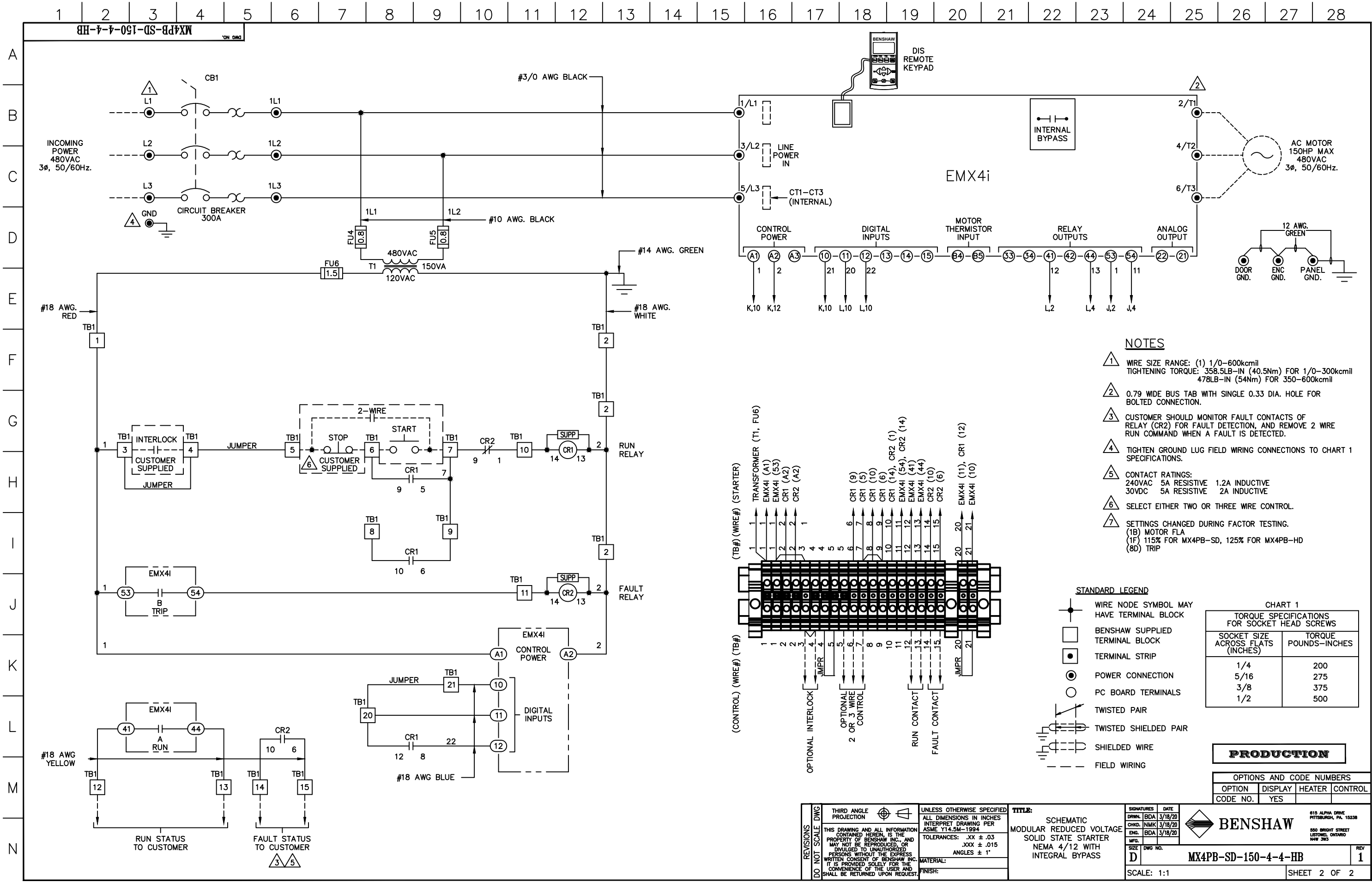
**BENSCHAW**

615 ALPHA DRIVE  
PITTSBURGH, PA. 15238

550 BRIGHT STREET  
LISTONEL, ONTARIO  
M4W 3W5

MX4PB-SD-150-4-4-HB

SCALE: 1:4 SHEET 1 OF 2



- NOTES**
- ① WIRE SIZE RANGE: (1) 1/0-600kcmil  
TIGHTENING TORQUE: 358.5LB-IN (40.5Nm) FOR 1/0-300kcmil  
478LB-IN (54Nm) FOR 350-600kcmil
  - ② 0.79 WIDE BUS TAB WITH SINGLE 0.33 DIA. HOLE FOR BOLTED CONNECTION.
  - ③ CUSTOMER SHOULD MONITOR FAULT CONTACTS OF RELAY (CR2) FOR FAULT DETECTION, AND REMOVE 2 WIRE RUN COMMAND WHEN A FAULT IS DETECTED.
  - ④ TIGHTEN GROUND LUG FIELD WIRING CONNECTIONS TO CHART 1 SPECIFICATIONS.
  - ⑤ CONTACT RATINGS:  
240VAC 5A RESISTIVE 1.2A INDUCTIVE  
30VDC 5A RESISTIVE 2A INDUCTIVE
  - ⑥ SELECT EITHER TWO OR THREE WIRE CONTROL.
  - ⑦ SETTINGS CHANGED DURING FACTOR TESTING.  
(1B) MOTOR FLA  
(1F) 115% FOR MX4PB-SD, 125% FOR MX4PB-HD  
(8D) TRIP

- STANDARD LEGEND**
- WIRE NODE SYMBOL MAY HAVE TERMINAL BLOCK
  - BENSHAW SUPPLIED TERMINAL BLOCK
  - TERMINAL STRIP
  - POWER CONNECTION
  - PC BOARD TERMINALS
  - TWISTED PAIR
  - TWISTED SHIELDED PAIR
  - SHIELDED WIRE
  - - - FIELD WIRING

**CHART 1**

TORQUE SPECIFICATIONS FOR SOCKET HEAD SCREWS

SOCKET SIZE ACROSS FLATS (INCHES)	TORQUE POUNDS-INCHES
1/4	200
5/16	275
3/8	375
1/2	500

**PRODUCTION**

OPTIONS AND CODE NUMBERS			
OPTION	DISPLAY	HEATER	CONTROL
CODE NO.	YES		

<b>REVISIONS</b> DO NOT SCALE DWG	THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES INTERPRET DRAWING PER ASME Y14.5M-1994 TOLERANCES: .XX ± .03 .XXX ± .015 ANGLES ± 1°	<b>TITLE:</b> SCHEMATIC MODULAR REDUCED VOLTAGE SOLID STATE STARTER NEMA 4/12 WITH INTEGRAL BYPASS	SIGNATURES DRW: BDA 3/18/20 CHD: NMK 3/18/20 ENG: BDA 3/18/20	DATE 3/18/20	
	THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF BENSHAW INC. AND MAY NOT BE REPRODUCED OR DIVULGED TO UNAUTHORIZED PERSONS WITHOUT THE EXPRESS WRITTEN CONSENT OF BENSHAW INC. IT IS PROVIDED SOLELY FOR THE CONVENIENCE OF THE USER AND SHALL BE RETURNED UPON REQUEST.			MATERIAL:	FINISH:	BENSHAW 615 ALPHA DRIVE PITTSBURGH, PA. 15238 550 BRIGHT STREET LISTON, ONTARIO N4W 3W5
SCALE: 1:1				SHEET 2 OF 2		