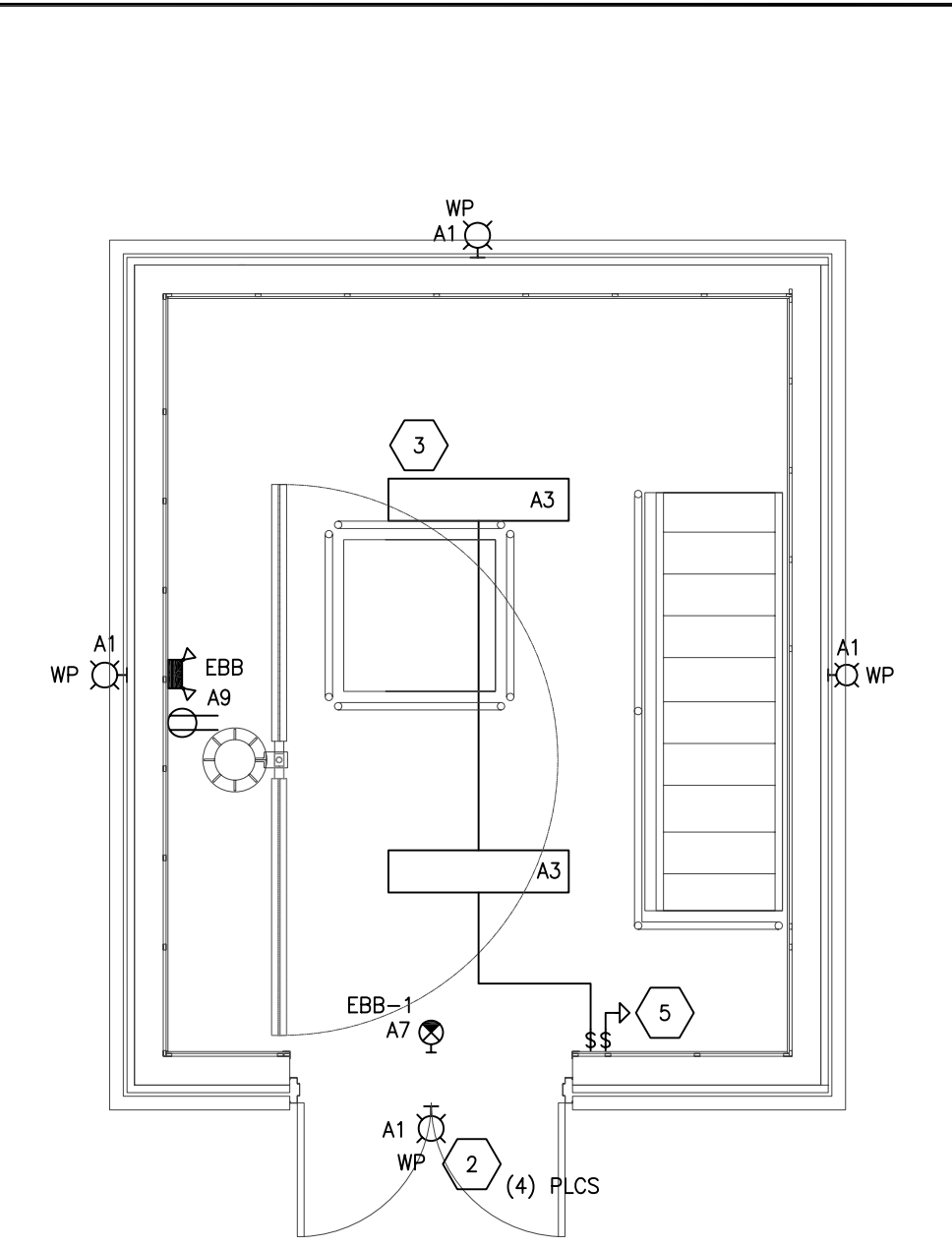
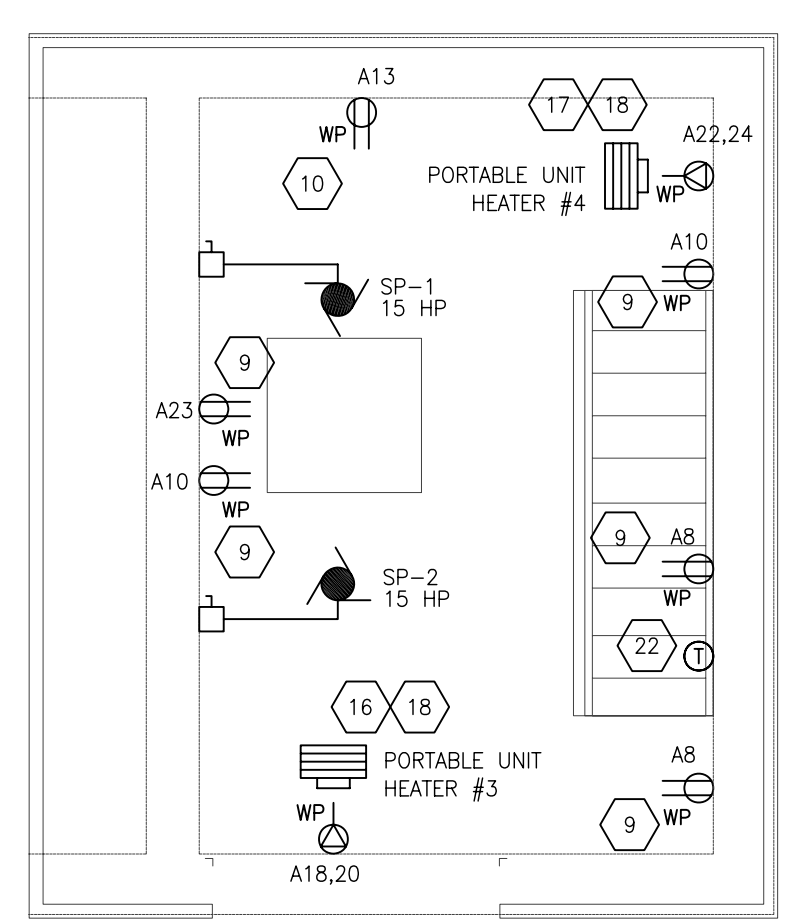


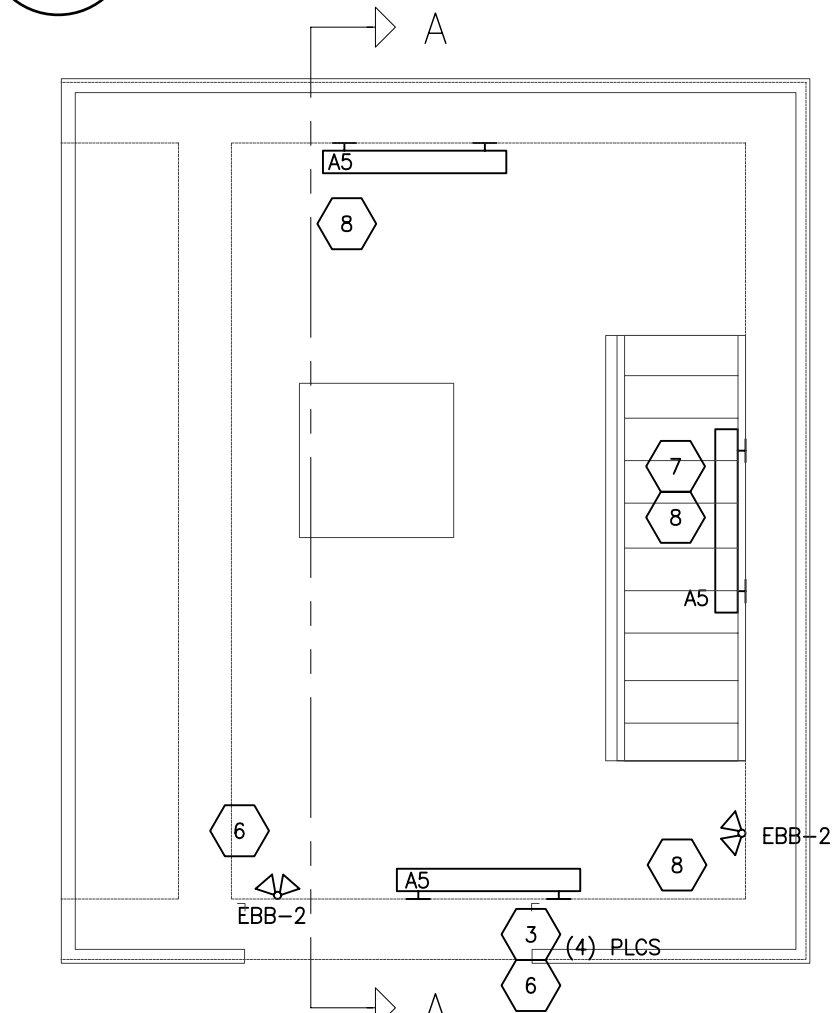
A MAIN FLOOR - POWER DISTRIBUTION
E01 1:50



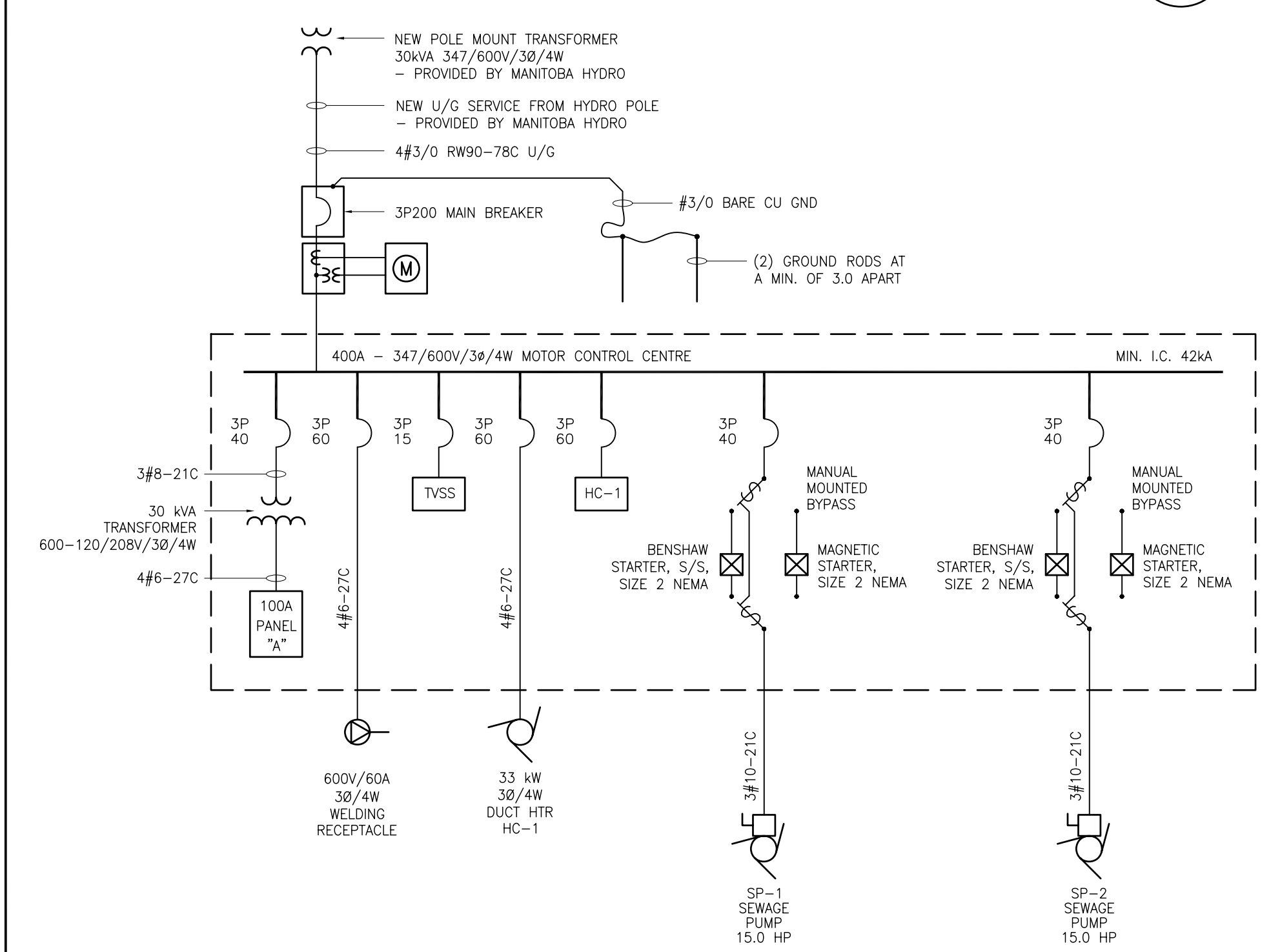
B MAIN FLOOR - LIGHTING LAYOUT
E01 1:50



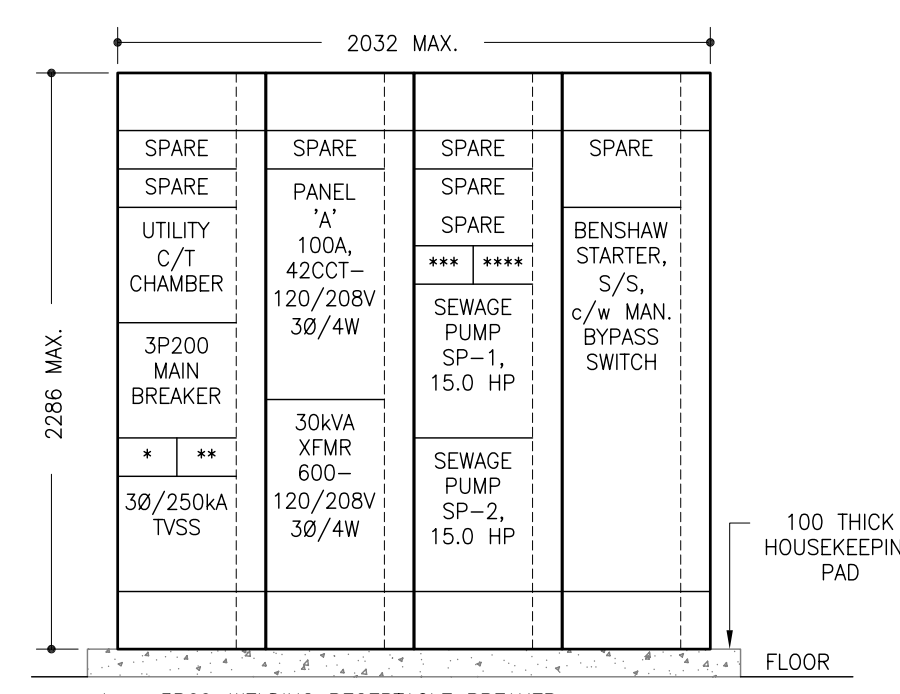
C LOWER LEVEL - POWER DISTRIBUTION
E01 1:50



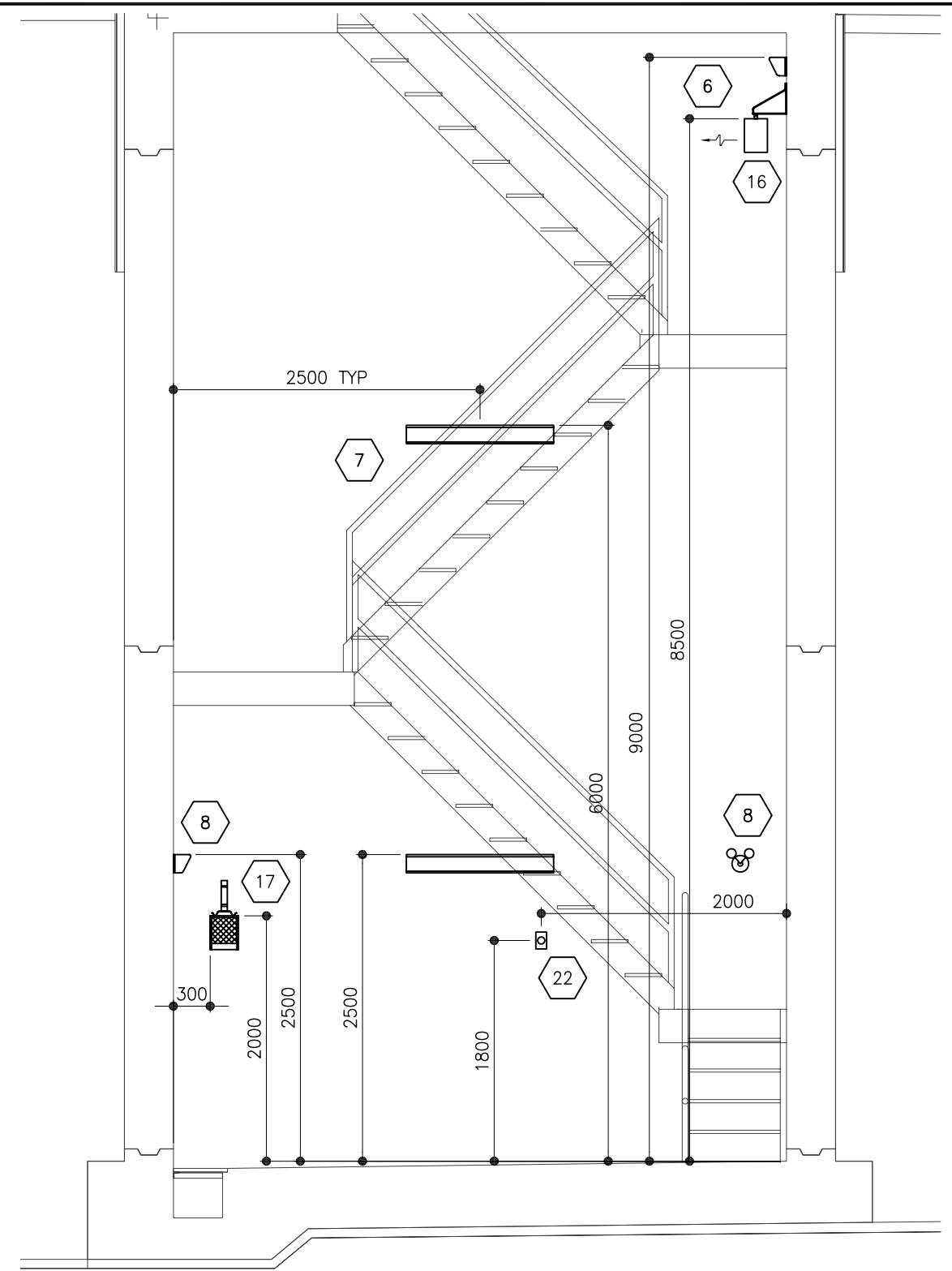
D LOWER LEVEL - LIGHTING LAYOUT
E01 1:50



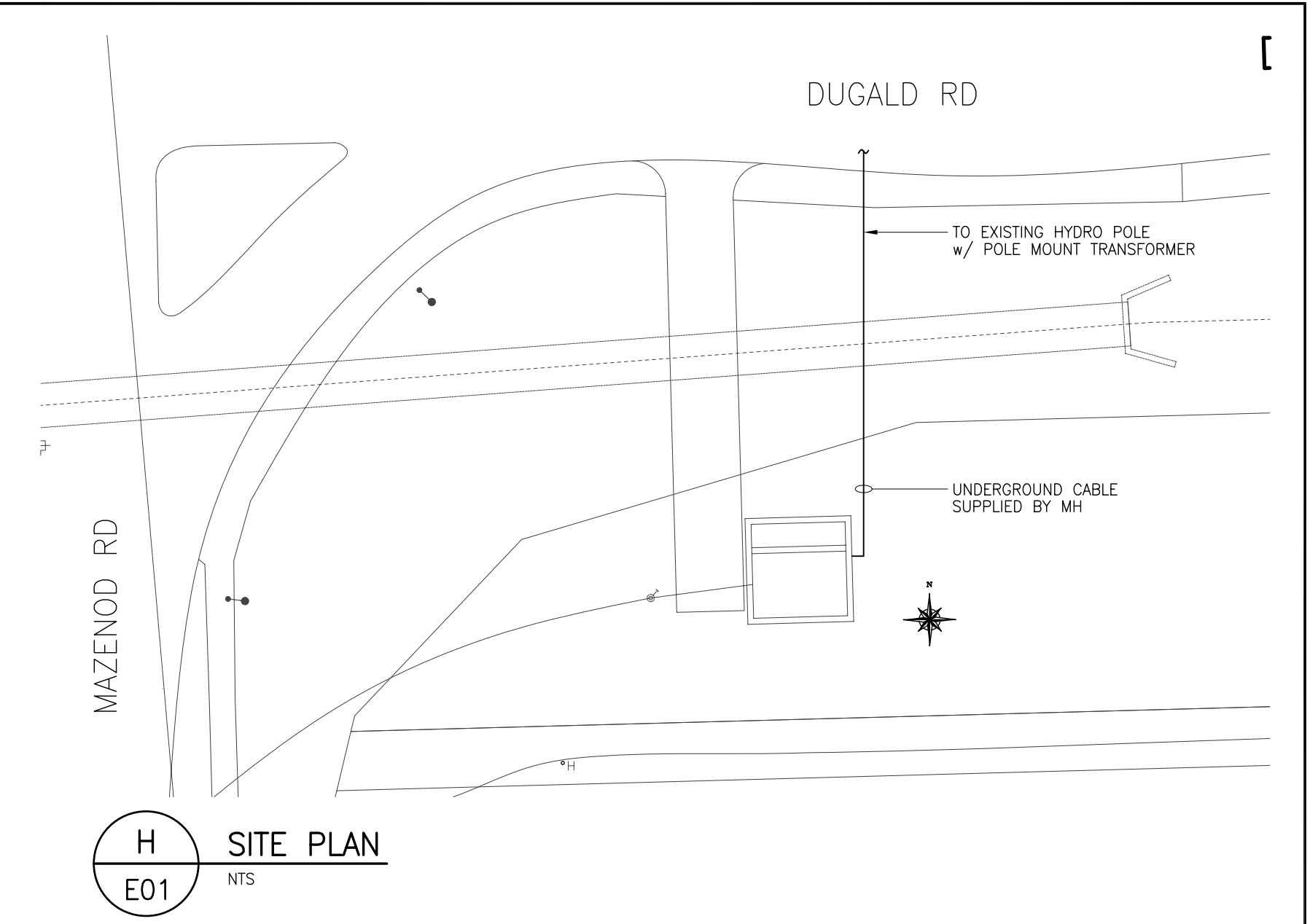
E SINGLE LINE DIAGRAM
E01 NTS



F MCC CONTROL UNIT
E01 NTS



G SECTION A-A
E01 1:50



H SITE PLAN
E01 NTS

PANEL #:		PANEL TYPE:				
A		42CCT c/w BOLT-IN C.B.				
MOUNTING:		AMPERE: 100A				
TOTAL LOAD: EST. 28.5 KW		VOLTAGE: 120/208V				
FED FROM: MCC		PHASE: 3ø/4W				
FEEDER:		MAIN BREAKER:				
NOTES:						
WATTS	DESCRIPTION	No.	C/B	C/B No.	DESCRIPTION	WATTS
500W	4 EXTERIOR LIGHTS	1	15	15 * 2	RECEPTACLE, EXTERIOR - WP	300W
150W	2 MAIN FLOOR LIGHTS	3	15	15 4	RECEPTACLE, MAIN FLOOR	1 500W
300W	4 LOWER LEVEL LIGHTS	5	15	15 6	RECEPTACLE, TELE/DATA - TVSS	1 300W
25W	EXIT SIGN	7	15	15 * 8	RECEPTACLE, LOWER LEVEL - WP	2 1.0KW
300W	EBB RECEPTACLE	9	15	15 * 10	RECEPTACLE, LOWER LEVEL - WP	2 1.0KW
1.2kW	LIFTING HOIST MAIN FLOOR RECEPTACLE	11	15	15 12	EXHAUST FAN (F-1)	500W
1.2kW	LIFTING HOIST DRYWELL RECEPTACLE	13	15	15 14	SUPPLY FAN (F-2)	500W
2.4kW	PORTABLE UNIT HEATER #1	15	2P	15 16	SPARE	
2.4kW	RECEPTACLE	17	30	2P 18	PORTABLE UNIT HEATER #3	2.4kW
2.4kW	PORTABLE UNIT HEATER #2	19	2P	30 20	RECEPTACLE	2.4kW
2.4kW	RECEPTACLE	21	30	2P 22	PORTABLE UNIT HEATER #4	2.4kW
500W	SUMP PUMP RECEPTACLE	23	15	30 24	RECEPTACLE	2.4kW
	SPARE	25	15	15 26	SPARE	
	SPARE	27	15	15 28	SPARE	
	SPARE	29	15	15 30	SPARE	
	SPARE	31	15	15 32	SPARE	
	SPARE	33	15	15 34	SPARE	
	SPACE	35		36	SPACE	
	SPACE	37		38	SPACE	
	SPACE	39		40	SPACE	
	SPACE	41		42	SPACE	

- NEW CONSTRUCTION NOTES:**
- NEW 42 CCT, 100A-120/208V/3ø/4W PANEL "A" FED FROM MCC THROUGH A 30KVA 600-120/208V TRANSFORMER.
 - FOR (4) EXTERIOR LIGHTING FIXTURES, USE LITHONIA FIXTURE CAT. NO. TWP70M-120-CR-LPI-WG-CSA c/w 70W METAL HALIDE AND WIREGUARD.
 - FOR (6) INTERIOR LIGHTING FIXTURES, USE LITHONIA FIXTURE CAT. NO. VDS232-120-GE8-CSA c/w 2-32W T8 LAMPS. FIXTURE WILL BE CEILING OR WALL MOUNTED.
 - HOUSEKEEPING PAD FOR THE MCC SHALL BE 100 LARGER THAN THE PERIMETER OF THE UNIT AND TO BE 100 THICK.
 - TO LOWER LEVEL LIGHTING FIXTURES.
 - LOWER LEVEL (1) LIGHTING FIXTURES AND EMERGENCY LIGHTING TO BE MOUNTED AT APPROX. 9000 AFF.
 - LOWER LEVEL (1) LIGHTING FIXTURES TO BE MOUNTED AT APPROX. 6000 AFF.
 - LOWER LEVEL (2) LIGHTING FIXTURES AND EMERGENCY LIGHTING TO BE MOUNTED AT APPROX. 2500 AFF.
 - LOWER LEVEL RECEPTACLES TO BE MOUNTED AT APPROX. 1200 AFF. (5 PLACES)
 - RECEPTACLE OUTLET FOR THE LIFTING HOIST TO BE MOUNTED AT 150 ABOVE THE SUPPORTING BEAM FOR THE HOIST.
 - 400 x 150 HOLE THRU FLOOR FOR ELECTRICAL CONDUIT. HOLE TO BE LOCATED AT 100 FROM HOUSEKEEPING PAD AND ALIGNED WITH THE CENTER OF HOUSEKEEPING PAD. USE UNI-STRUT BRACING FOR ELECTRICAL CONDUIT. SUPPLY A CHECKERPLATE COVER PLATE TO COVER HOLE AFTER ALL CONDUIT HAVE BEEN INSTALLED.
 - INSTALL WELDER BREAKER IN MCC BELOW THE MAIN BREAKER SPACE. BREAKER TO BE A 600V-3P60.
 - WELDER RECEPTACLE SHALL BE A HEAVY DUTY, NON-HAZARDOUS, NEMA 4, WATER TIGHT, 600V-60A, 3-WIRE/4-POLE c/w BACKBOX, MANUFACTURED BY CROUSE-HINDS CAT. NO. ARE6425 OR SHALL BE EQUAL TO.
 - INSTALL (4) 4.8kW PORTABLE UNIT HEATERS AT LOCATIONS INDICATED ON DRAWING. UNIT HEATER TO BE PLUG IN STYLE. UNIT HEATER MANUFACTURED BY QUELLET CAT. NO. OCH4800W* OR SHALL BE EQUAL TO.
 - UPPER LEVEL UNIT HEATER 1 & 2 TO BE MOUNTED FROM TOP OF UNIT HEATER AT 2460 AFF AND 1200 FROM WALL.
 - LOWER LEVEL UNIT HEATER 3 TO BE MOUNTED FROM TOP OF UNIT HEATER AT 8500 AFF AND 900 FROM WALL.
 - LOWER LEVEL UNIT HEATER 4 TO BE MOUNTED FROM TOP OF UNIT HEATER AT 2000 AFF AND 300 FROM WALL.
 - UNIT HEATER RECEPTACLE SHALL BE A 6-30R, 30A/10/208V. INSTALL RECEPTACLE AT SAME HEIGHT AS THE UNIT HEATER.
 - INSTALL A UNISTRUT METAL SUPPORT FRAME ON THE OUTER EDGE OF THE SEWAGE PUMPS FOR THE CABLEING.
 - INSTALL A NEMA (2) U/F DISCONNECT FOR PUMP MOTOR. SUPPLY A TECK 3/C#10 FROM THE U/F DISCONNECT SWITCH TO THE MOTOR.
 - REFER TO DRAWING 7507 FOR THE SPECIFICATION OF THE 33kW DUCTWORK HEATER. FAN (F-2) IS INSTALLED BELOW HEATER COIL (HC-1).
 - INSTALL THE THERMOSTAT FOR THE 33kW DUCTWORK HEATER AS INDICATED IN THE DRY WELL.

- EQUIPMENT CONTROL NOTES:**
- SUPPLY AND INSTALLATION OF ALARM & CONTROL PANEL TO BE DONE BY THE CITY OF WINNIPEG.
 - ELECTRICAL CONTRACTOR TO INSTALL (2) 25-12#14 CONDUIT FROM ALARM & CONTROL PANEL TO MCC. ENSURE TO LEAVE 1500 OF EXTRA CABLE ROLLED-UP IN THE ALARM & CONTROL PANEL FOR THE CITY OF WINNIPEG TO MAKE FINAL CONNECTIONS. VERIFY LOCATION OF ALARM & CONTROL PANEL PRIOR TO INSTALLATION OF CONDUIT.
 - PROVIDE AND INSTALL TRANSMITTER CONTROL PANEL ADJACENT TO ALARM & CONTROL PANEL. INSTALL 25 CONDUIT c/w 24V CABLE + 1PR TWSA FROM TRANSMITTER TO HIGH LEVEL FLOAT SWITCH. VERIFY INSTALLATION OF HIGH LEVEL FLOAT SWITCH PRIOR TO INSTALLATION OF CONDUIT.
 - SUPPLY AND INSTALLATION OF HIGH LEVEL FLOAT SWITCH TO BE DONE BY THE CITY OF WINNIPEG.

GENERAL NOTES:

A. VERIFY ALL DIMENSIONS, ELEVATIONS AND LOCATIONS FOR ALL ELECTRICAL EQUIPMENT & WIRING ON SITE.

- EMERGENCY EQUIPMENT NOTES:**
- CONNECT 120V LIGHTING CIRCUITS TO VOLTAGE SENSING RELAYS IN EMERGENCY BATTERY BANK. USE LUMACELL EBB 250W CAT. NO. RC245200-2M118W-1MBB C/W 2-18W MT LAMPS. VERIFY CIRCUITS ON SITE & MARK ON AS-BUILT DRAWINGS. PROVIDE A DUPLEX RECEPTACLE ADJACENT TO NEW EBB#2100 AFF. CONNECT TO PANEL "A" ON OCT "A9". CONNECT NEW EXIT LIGHTS TO SEPARATE CIRCUIT "A7". NEW IP15 CB WITH 2#12-18C. CONNECT 3RD SOCKET TO EMERGENCY LIGHTING CCT AS INDICATED.
 - USE LUMACELL REMOTE LAMP CAT. NO. MT2-24V18W C/W 2-18W MT LAMPS. TWIN REMOTE HEADS SHALL BE WIRED WITH A MIN. 2#10-18C.
 - USE LUMACELL EXIT SIGN CAT. NO. LCME-UN.
 - ENSURE PROPER WIRE SIZE TO THE FURTHEST UNIT TO HAVE A V.O.D. NOT MORE THAN 5%.

- SYMBOL LEGEND**
- 3 PHASE MOTOR
 - 1 PHASE MOTOR
 - ALARM & CONTROL PANEL
 - TRANSFORMER
 - STANDARD RECEPTACLE
 - MECHANICAL RECEPTACLE
 - U/F DISCONNECT
 - UNIT HEATER
 - SINGLE SWITCH
 - FLUORESCENT - CEILING MOUNTED
 - FLUORESCENT - WALL MOUNTED
 - INCANDESCENT LIGHT FIXTURE
 - TELEPHONE OUTLET
 - TELE/DATA BACKBOARD
 - EMERGENCY BATTERY BANK
 - REMOTE LAMPS, 2 HEADS
 - EXIT SIGN
 - WP* DENOTES WEATHER PROOF

<p>Accutech Engineering Inc. Tomorrow's Technology Today 605-287 Broadway, Winnipeg, Manitoba Canada R3C-0R9 Phone (204) 944-1353 Fax (204) 944-1444 www.accutecheng.ca</p>			<p>ENGINEER'S SEAL</p> <p>ORIGINAL SIGNED BY J.D.P. HRABLIUK 08/02/07</p>		<p>THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT</p> <p>DUGALD ROAD WASTEWATER PUMPING STATION ELECTRICAL LAYOUT AND NOTES</p>		<p>CONSULTANT DRAWING NUMBER -</p> <p>SHEET 6 OF 14</p> <p>CITY DRAWING NUMBER 7505</p>	
DESIGNED BY TJ	CHECKED BY TJ	APPROVED BY JH	<p>BID OPPORTUNITY 892-2007</p> <p>PLOT DATE: 08 02 13</p>		<p>HOR. SCALE VERTICAL AS SHOWN</p> <p>RELEASED FOR CONSTRUCTION SIGNED BY K. ZUREK</p>			
5 ISSUED FOR TENDER FEB 11 08 JH	4 ISSUE FOR 100% REVIEW JAN 25 08 JH	3 ISSUE FOR 99% REVIEW DEC 14 07 JH	2 ISSUE FOR 75% REVIEW SEP 11 07 TJ	1 ISSUE FOR 50% REVIEW SEP 11 07 TJ	<p>NO. REVISIONS</p> <p>DATE BY</p> <p>DATE FEB 11 2008</p> <p>DATE 08/02/13</p>			

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES