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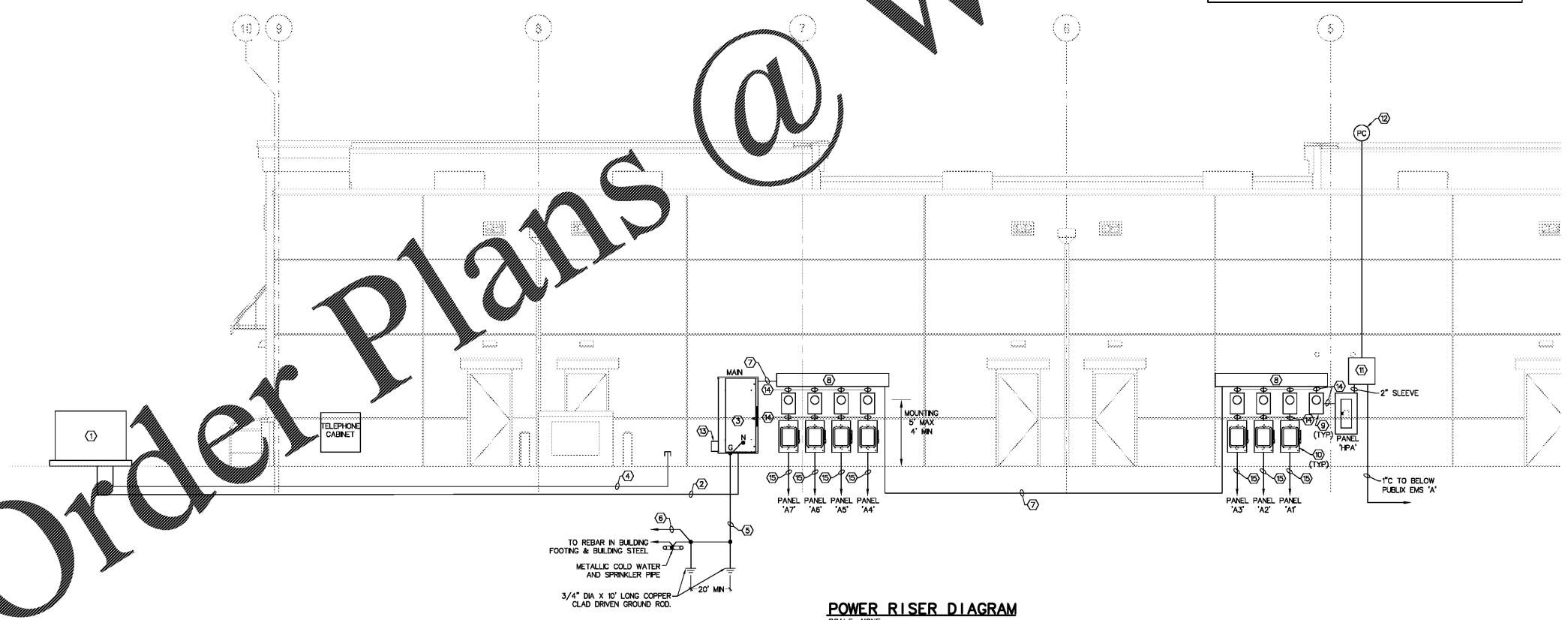
REVISION: 07-18
 FAULT CURRENT STUDY
 SOURCE IMPEDANCE VALUES BASED ON IEEE STD. 241-1986, TABLE B.1
 PROJECT: RETAIL @ TATTERSALL PARK
 HOOPER, AL

SYSTEM VOLTAGE: 250 VOLT WIRE TYPE CU-1
 ASSUMED BASE KVA: 2000 WIRE TYPE AL-2
 UTILITY COMPANY AFC: 85000 PFC CIRCUIT
 UTILITY COMPANY X/R RATIO: 12

BUS	SOURCE AFC	SOURCE X/R	WIRE SIZE	WIRE TYPE	# OF RUNS	BUS X/R	BUS AFC
MAIN	85000	12.00	600	1	3	6.17	58000
WIREWAY	58000	6.17	600	1	3	5.78	56073
PANEL 'A7'	56073	5.78	3/0	1	1	1.33	31961
PANEL 'A8'	56073	5.78	3/0	1	1	1.83	41707
PANEL 'A5'	56073	5.78	3/0	1	1	2.38	48222
PANEL 'A4'	56073	5.78	3/0	1	1	1.48	34459
WIREWAY	56073	5.78	600	1	3	4.38	48149
PANEL 'A3'	49149	4.38	3/0	1	1	1.85	33091
PANEL 'A2'	49149	4.38	3/0	1	1	1.25	26853
PANEL 'A1'	49149	4.38	3/0	1	1	1.01	22653
PANEL '1P'	49149	4.38	3/0	1	1	2.94	44720

NOTE:
 THE FAULT CURRENT STUDY ABOVE IS BASED UPON A 300 KVA UTILITY TRANSFORMER. ELECTRICAL CONTRACTOR SHALL CONFIRM UTILITY TRANSFORMER SIZE AND AVAILABLE FAULT CURRENT PRIOR TO ORDERING GEAR. IF UTILITY TRANSFORMER IS DIFFERENT THAN AS INDICATED ABOVE, THE ELECTRICAL CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING FOR SUITABLE AFC RATING. INTEGRATED SERIES RATINGS OF CIRCUIT BREAKERS IS PERMITTED. EC OBTAIN SITE SPECIFIC AFC RATING FOR INSTALLED TRANSFORMER FROM THE UTILITY PROVIDER AND MAKE AVAILABLE FOR INSPECTOR PRIOR TO INITIAL ELECTRICAL INSPECTION.

- NOTES
- UTILITY COMPANY PAD MOUNTED TRANSFORMER WITH 120/208 VOLT SECONDARY. EC SHALL COORDINATE INSTALLATION AND REQUIREMENTS OF CONCRETE PAD WITH UTILITY COMPANY. EC SHALL COORDINATE INSTALLATION SECONDARY CONDUITS AND CONDUCTORS WITH UTILITY COMPANY PRIOR TO ROUGH-IN.
 - SERVICE LATERAL CONSISTING OF (3) PARALLEL RUNS OF 4" C WITH (4) #600 KCMIL COPPER EACH.
 - 1200 AMP HEAVY-DUTY, 3 POLE, NEMA 3R, 250 VOLT, SERVICE ENTRANCE RATED, DISCONNECT WITH SOLID NEUTRAL, FUSED AT 1200 AMPS WITH CLASS L CURRENT LIMITING FUSES. PROVIDE PLAQUE INDICATING "SERVICE MAIN" IN ACCORDANCE WITH NEC 230.70.
 - (2) 4" SPARE CONDUITS WITH PULL-STRING FOR FUTURE SERVICE. STUB UP AND CAP.
 - GROUNDING ELECTRODE CONDUCTOR TO CONSIST OF #3/0 FROM N-G BOND IN MAIN AND EXTENDED UNBROKEN TO TWO (2) 3/4" X 10' L COPPER CLAD STEEL VERTICALLY DRIVEN GROUND RODS, NEAREST BUILDING STEEL BEAM, FOUNDATION STEEL (BELOW MSS), COLD WATER PIPE AND SPRINKLER RISER (BOTH WITHIN 5 FT. OF BUILDING ENTRY) IN ACCORDANCE WITH NEC 250.104. PROVIDE INTERSYSTEM BONDING TERMINATION BAR (ARLINGTON INDUSTRIES MODEL # GBB5250 OR EQUIVALENT) BELOW EACH MAIN. ROUTE EXTERIOR EXPOSED PORTIONS OF GEC IN PVC. ALL CONCEALED CONNECTIONS SHALL BE BY EXOTHERMIC WELD CONNECTIONS.
 - EXTEND #6 COPPER CONDUCTOR TO TELEPHONE BOARD AND PROVIDE 6" OF SLACK CONDUCTOR IN TELEPHONE CABINET FOR FUTURE CONNECTION.
 - 3 PARALLEL 3-1/2" C WITH 4 #600 KCMIL, 1 #3/0 EG EACH.
 - 18"x16"x8" NEMA 3R WIREWAY WITH LOCKABLE COVER. BOND WIREWAY TO EG. EXTEND CONDUCTORS FULL LENGTH OF THE WIREWAY AND TAP IN A STAGGERED FASHION.
 - INSTALL 200AMP SELF-CONTAINED METER SOCKET PROVIDED BY UTILITY COMPANY. COORDINATE INSTALLATION WITH UTILITY COMPANY.
 - 200 AMP HEAVY-DUTY, NEMA 3R, 3 POLE, 250 VOLT, DISCONNECT, FUSED AT 200 AMPS WITH CLASS RK1 CURRENT LIMITING FUSES.
 - 24"x24"x8" DEEP, NEMA 3R, HINGED COVER BOX WITH CONTACTORS IN ACCORDANCE WITH SCHEDULE AND 24-HR, 7-DAY, TIME CLOCK. REFER TO CONTROL DIAGRAM.
 - 120 VOLT PHOTO CELL (INTERMATIC # K1100 OR EQUIVALENT) MOUNTED ON WEATHERPROOF BOX ON ROOF FACING NORTH.
 - TYPE 1 SURGE PROTECTIVE DEVICE (SPD) PER NEC 285.
 - 2-1/2" C WITH 4 #3/0, 1 #3/0 EG.
 - (1) 2-1/2" C WITH 4 #3/0, 1 #6 EG. EXTENDED TO APPROPRIATE PANEL. PROVIDE (1) ADDITIONAL PARALLEL 2-1/2" EMPTY SPARE CONDUIT WITH PULLSTRING. STUB-UP AND CAP AT BOTH ENDS FOR FUTURE USE.
- GENERAL NOTES
- REFER TO FAULT CURRENT STUDY THIS SHEET FOR AVAILABLE FAULT CURRENT AT EACH PANEL (BUS AFC). EC TO ENSURE PANELBOARDS ARE SUITABLE FOR FAULT CURRENT ENVIRONMENT (BUS AFC). SERIES RATINGS WITH UPSTREAM DEVICES WILL BE ACCEPTED.
 - PROVIDE ENGRAVED PLASTIC LAMINATED SIGNS TO IDENTIFY MAINS AND SUITE NUMBERS.



POWER RISER DIAGRAM
 SCALE: NONE

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Colucci & Retzlaff
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CLIENT NAME
 White Development Company
 1801 South Keene Rd.
 Clearwater, FL 33756

PROJECT NAME
 Retail @ Tattersall Park
 US Highway 280 & Highway 19
 Hoover, AL

SHEET TITLE
 Power Riser Diagram

No.	Description	Date
A	100% Public Submission	06/07/18
B	ISSUED TO BID & PERMIT	7/26/18

PROJECT NO.	210000
DATE	07/27/18
DRAWN BY	SW
CHECKED BY	PC