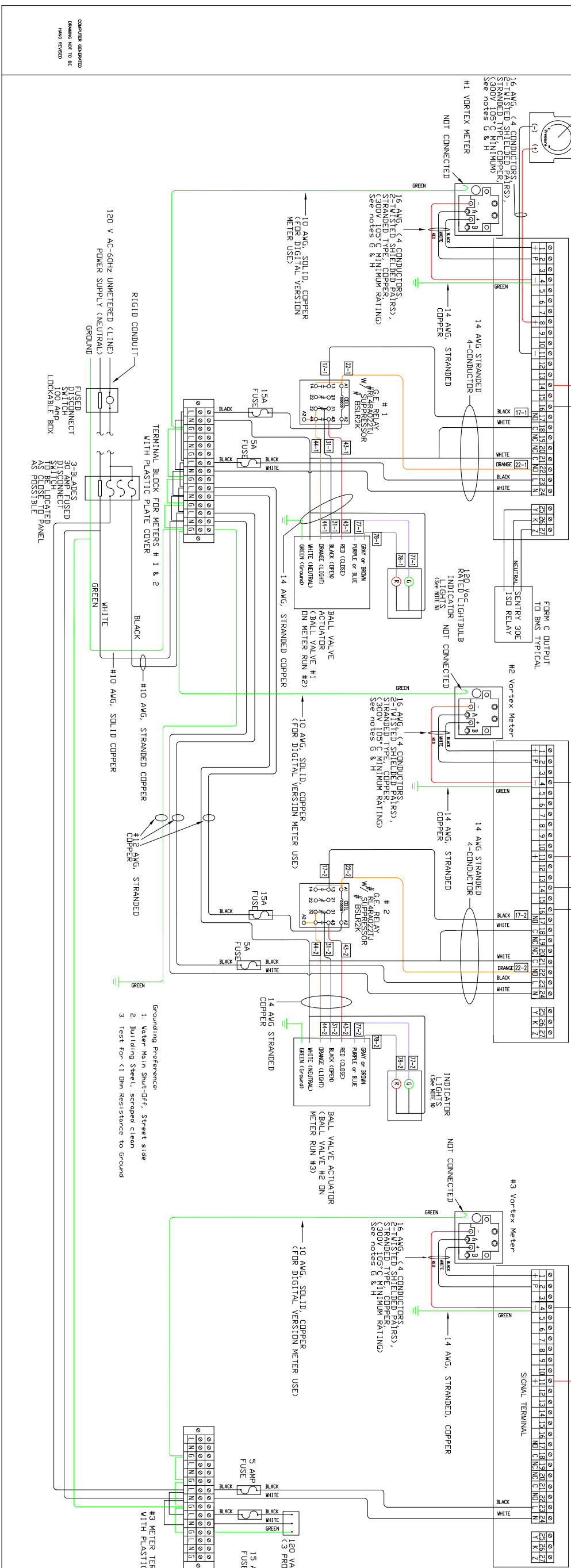


1	12/07/01	Wong, J
2	05/25/00	BIRKE, J
REVISIONS		
1	12/07/01	Wong, J
2	03/06/03	Wong, J
3	08/21/03	Koo, J & Sun, A
4	09/10/04	Paul, John Q
5	11/14/05	Arnold, C
Revised for digital meter installation		
6	08/09/06	Arnold, A
Revised to add ground wire for use with meter in panel		
7	02/28/13	Wong, J
Revised to modify wiring and to change meter to standard wire shield		



NOTES FOR ELECTRICAL INSTALLATION

- INSTALLATION SHALL MEET THE REQUIREMENTS OF THE ELECTRIC CODE OF THE CITY OF NEW YORK AND BE HAVING JURISDICTION.
- ALL CONDUCTORS SHALL BE COLOR CODED AND NUMBERED AS INDICATED AND BE OF SUFFICIENT AMPS SIZE. ALL CONNECTIONS SHALL BE MADE ON TERMINALS AS SHOWN AND NO STRANDED WIRE SHALL BE CONNECTED TO TERMINAL BY GAMES.
- ALL MATERIAL AND WIRING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
- ALL VALVE AND TRANSMITTER SUPPLIED BY COMPANY.
- NEWARK ELECTRONIC CATALOG, 2005-06 EDITION, BASE - TYPE #103-3101-05-103, STOCK #45F590 (COVER) TYPE #110-123132-03, STOCK #59F1098 MANUFACTURER, HANMONG MANUFACTURING UTILITY BOX - TYPE# 14358(2 HOLES), STOCK #50F8450
- UNWETTERED CONDUCTORS SHALL BE IN RIGID STEEL CONDUIT OR THROUGH EXCEPT FOR THE CONNECTION TO THE MOTOR OR INSTRUMENT TERMINAL BLOCK - TO FACILITATE CHANGE OF LIQUID TIGHT CONDUIT SHALL BE USED. A TERMINAL BOX SHALL BE USED TO CONNECT THE FLEXIBLE CONDUIT TO THE RIGID CONDUIT. THE TERMINAL BOX SHALL BE 9" FROM THE METER BODY.
- ALL POWER SUPPLY CABLE SHALL BE STRANDED WIRE. TANK TYPE SIZE AS REFERRED BY ELECTRIC CODE OF THE CITY OF NEW YORK.
- VORTEX METER & PRESSURE TRANSMITTER: GROUND SHIELDS AT KEEP ONLY
- STRANDED WIRE AND/OR CONDUCTORS WITHIN INSTRUMENT PANEL SHALL BE STRANDED CONDUCTORS WITHIN SHIELDED PAIRS. OVERALL SILVER PLATED COPPER SHIELDING (300V 105°C MINIMUM RATING) SHIELDED TYPE UNLESS NOTED OTHERWISE IN DRAWINGS. COLOR-CODED AS INDICATED.
- A.C. SUPPLY TO BE FROM LINE SIDE OF COMPANY METER COMPANY TO MAKE FINAL CONNECTION TO SERVICE.
- LEAVE ENOUGH SLACK WIRE AT ALL TERMINAL POINTS.
- IN MOTOR TERMINAL BOX AND PANEL TROUGH.
- ALL EQUIPMENT, ENCLOSURE AND CONDUIT FITTINGS PROVIDING ACCESS TO UNWETTERED AND ELECTRIC WIRING SHALL BE SEPARABLE.
- THE METER PAN SHALL BE INSTALLED AT A MINIMUM HEIGHT OF 3'-6" AND A MAXIMUM HEIGHT OF 4'-9" FROM BOTTOM OF THE METER PAN TO PROVIDE ELECTRICITY FOR OPERATION OF FORNABLE EQUIPMENT.
- 120 V AC RATED INDICATOR LIGHTS
- THE NEGATIVE LEAD OF THE VORTEX METER SIGNAL CIRCUIT SHALL BE GROUND AT THE POWER SUPPLY GROUND.
- THE GROUND TERMINAL OF THE VORTEX METER SHALL BE GROUND AT THE EARTH GROUND WITH A WIRE AWG # 10.

GROUNDING PREFERENCE:
 1. Water Main Shut-Off, Street side
 2. Building Steel, scraped clean
 3. Test for 41 Ohm Resistance to Ground

JUMPERS MADE ON RELAY
 Terminal 14 to 22
 Terminal 32 to 44
 Terminal A1 to 32/44
 Terminal 22 to 32/44

VALVE CLOSED - GREEN LIGHT IS ON
 COIL DE-ENERGIZED
 TERMINALS (14/22)-21,
 (32/44)-21
 CONTACTS ARE CLOSED

VALVE OPEN - RED LIGHT IS ON
 COIL ENERGIZED
 TERMINALS (14/22)-13,
 (32/44)-43
 CONTACTS ARE CLOSED

TERMINAL BLOCK #1 & 2 WITH PLASTIC FLARE COVER
 BLACK
 WHITE
 GREEN
 #10 AWG, STRANDED COPPER
 #10 AWG, SOLID COPPER
 RIGID CONDUIT
 120 V AC-60HZ UNWETTERED (LINE) POWER SUPPLY (NEUTRAL) GROUND
 FUSED DISCONNECT TO CONNECT TO 30 AMP FUSED SWITCH TO BE LOCATED IN LOCKABLE BOX AS POSSIBLE

TERMINAL BLOCK #3 WITH PLASTIC COVER
 BLACK
 WHITE
 GREEN
 5 AMP FUSE
 15 AMP FUSE
 120 VAC DUPLEX OUTLET (3 PRONG)

GROUNDING PREFERENCE:
 1. Water Main Shut-Off, Street side
 2. Building Steel, scraped clean
 3. Test for 41 Ohm Resistance to Ground

WIRING DIAGRAM FOR THREE VORTEX METERS (ANALOG VERSION) WITH TWO BALL VALVE PRESSURE TRANSMITTER AND MODEM BOX (SEQ.).

CONSULTED EDISON COMPANY OF N. Y.
 STEAM DISTRIBUTION ENGINEERING

DATE: 03/06/03
 LAST REV.: 2/28/13
 DWG S-624 R7