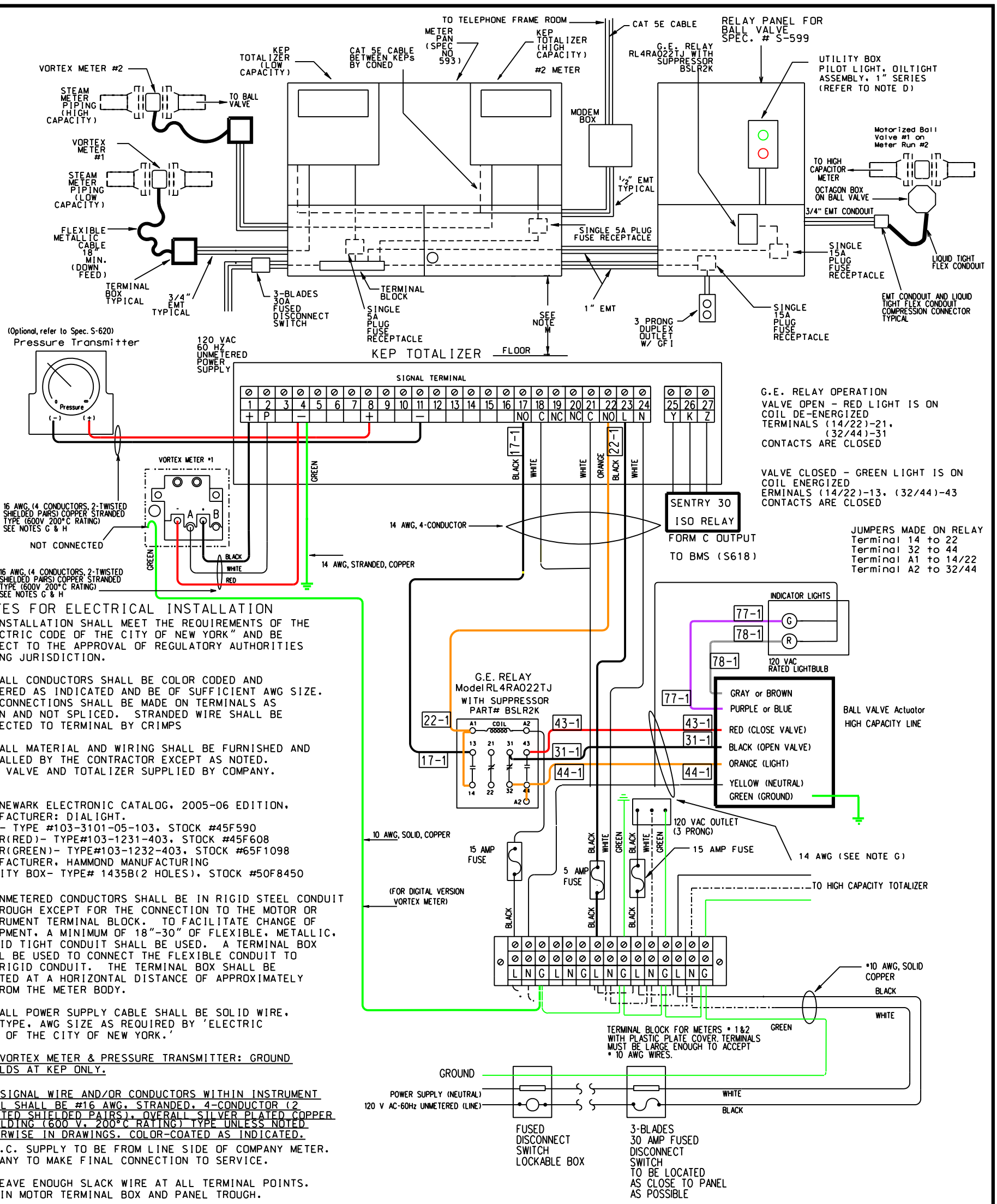
DRAWN BY	
2/7/02	WONG. J
REVISED	
8/18/03	KOO J. LIN A
REVISED	
8/10/04	ARMAND. C.
REVISED	
5 11/14/05	ABDALLA. A. Revised for digital meter installation
6 8/15/06	Revised to add # 10 AWG ground wire for use with digital Vortex meter in future



NOTES FOR ELECTRICAL INSTALLATION

A) INSTALLATION SHALL MEET THE REQUIREMENTS OF THE "ELECTRIC CODE OF THE CITY OF NEW YORK" AND BE SUBJECT TO THE APPROVAL OF REGULATORY AUTHORITIES HAVING JURISDICTION.

B) ALL CONDUCTORS SHALL BE COLOR CODED AND NUMBERED AS INDICATED AND BE OF SUFFICIENT AWG SIZE. ALL CONNECTIONS SHALL BE MADE ON TERMINALS AS SHOWN AND NOT SPLICED. STRANDED WIRE SHALL BE CONNECTED TO TERMINAL BY CRIMPS

C) ALL MATERIAL AND WIRING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR EXCEPT AS NOTED. BALL VALVE AND TOTALIZER SUPPLIED BY COMPANY.

D) NEWARK ELECTRONIC CATALOG, 2005-06 EDITION, MANUFACTURER: DIALIGHT.
BASE- TYPE #103-3101-05-103, STOCK #45F590
COVER(RED)- TYPE#103-1231-403, STOCK #45F608
COVER(GREEN)- TYPE#103-1232-403, STOCK #65F1098
MANUFACTURER, HAMMOND MANUFACTURING
UTILITY BOX- TYPE# 1435B(2 HOLES), STOCK #50F8450

E) UNMETERED CONDUCTORS SHALL BE IN RIGID STEEL CONDUIT OR TROUGH EXCEPT FOR THE CONNECTION TO THE MOTOR OR INSTRUMENT TERMINAL BLOCK. TO FACILITATE CHANGE OF EQUIPMENT, A MINIMUM OF 18"-30" OF FLEXIBLE, METALLIC, 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 LOCATED AT A HORIZONTAL DISTANCE OF APPROXIMATELY 9" FROM THE METER BODY.

F) ALL POWER SUPPLY CABLE SHALL BE SOLID WIRE, THW TYPE, AWG SIZE AS REQUIRED BY 'ELECTRIC CODE OF THE CITY OF NEW YORK.'

G) VORTEX METER & PRESSURE TRANSMITTER: GROUND SHIELDS AT KEP ONLY.

H) SIGNAL WIRE AND/OR CONDUCTORS WITHIN INSTRUMENT PANEL SHALL BE #16 AWG, STRANDED, 4-CONDUCTOR (2 TWISTED SHIELDED PAIRS), OVERALL SILVER PLATED COPPER SHIELDING (600 V, 200°C RATING) TYPE UNLESS NOTED OTHERWISE IN DRAWINGS. COLOR-COATED AS INDICATED.

I) A.C. SUPPLY TO BE FROM LINE SIDE OF COMPANY METER. COMPANY TO MAKE FINAL CONNECTION TO SERVICE.

J) LEAVE ENOUGH SLACK WIRE AT ALL TERMINAL POINTS. 12" IN MOTOR TERMINAL BOX AND PANEL TROUGH.

K) ALL EQUIPMENT, ENCLOSURE AND CONDUIT FITTINGS PROVIDING ACCESS TO UNMETERED ELECTRIC WIRING SHALL BE SEALABLE.

L) THE METER PAN SHALL BE INSTALLED AT A MINIMUM HEIGHT OF 3'-6" AND A MAXIMUM HEIGHT OF 4'-9" FROM FLOOR TO BOTTOM OF PAN. A HEIGHT OF 4'-0" IS PREFERRED WHERE PRACITCAL. NOTE: THE METER PAN IS LONG LEAD DELIVERY ITEM.

M) AN A.C. POWER OUTLET (3-PRONG DEPLEX OUTLET WITH GFI) SHALL BE INSTALLED AT THE BOTTOM OF THE METER PAN TO PROVIDE ELECTRICITY FOR OPERATION OF PORTABLE EQUIPMENT.

N) 120 V AC RATED INDICATOR LIGHTS

O) THE NEGATIVE LEAD OF THE VORTEX METER SIGNAL CIRCUIT SHALL BE GROUNDED AT THE EARTH GROUND

P) THE GROUND TERMINAL OF THE VORTEX METER SHALL BE GROUNDED 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 < 1 OHM RESISTANCE TO GROUND

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED

WIRING DIAGRAM FOR TWO VORTEX METERS (ANALOG VERSION) WITH ONE BALL VALVE/PRESSURE TRANSMITTER AND NEW VERSION OF G.E. RELAY

CONSOLIDATED EDISON COMPANY OF N.Y. INC.
STEAM DISTRIBUTION ENGINEERING

DATE: 8/15/06 | DWG. NO. S-631 | Rev 6