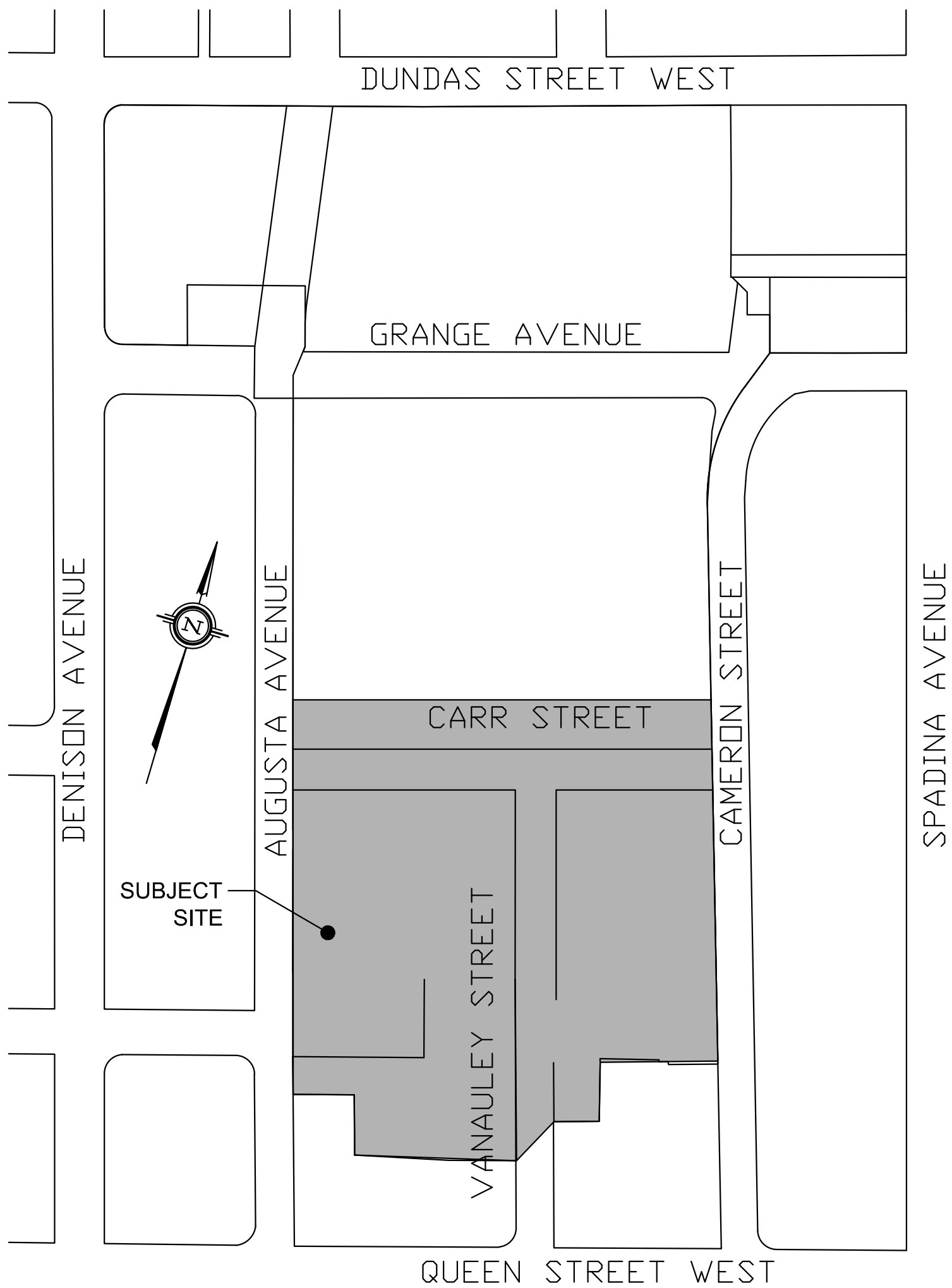


TORONTO HYDRO

UNDERGROUND REMOVALS

ALEXANDER PARK

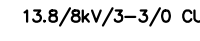
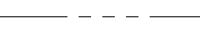


ELECTRICAL CONSTRUCTION STANDARDS	
TITLE	NUMBER (LATEST VERSION)
3-PHASE LOOP-THROUGH GROUND "Y" SYSTEM	13-7200
COLD SHRINK METHOD, 27.6kV, 1 CONDUCTOR	16-3860
INDOOR COLD SHRINK METHOD, 27.6kV, 1 CONDUCTOR	16-4140
CABLE CHAMBER	18-5100
MATERIALS & INSTALLATION PROCEDURES	31-2110
STRUCTURAL DETAILS	31-2130
TYPE 'C'- FOR PRIMARY CABLES ONLY (900x1200x1050mm)	31-3135
CABLE RACK C TYPE	31-8260
CABLE ARM	31-8270

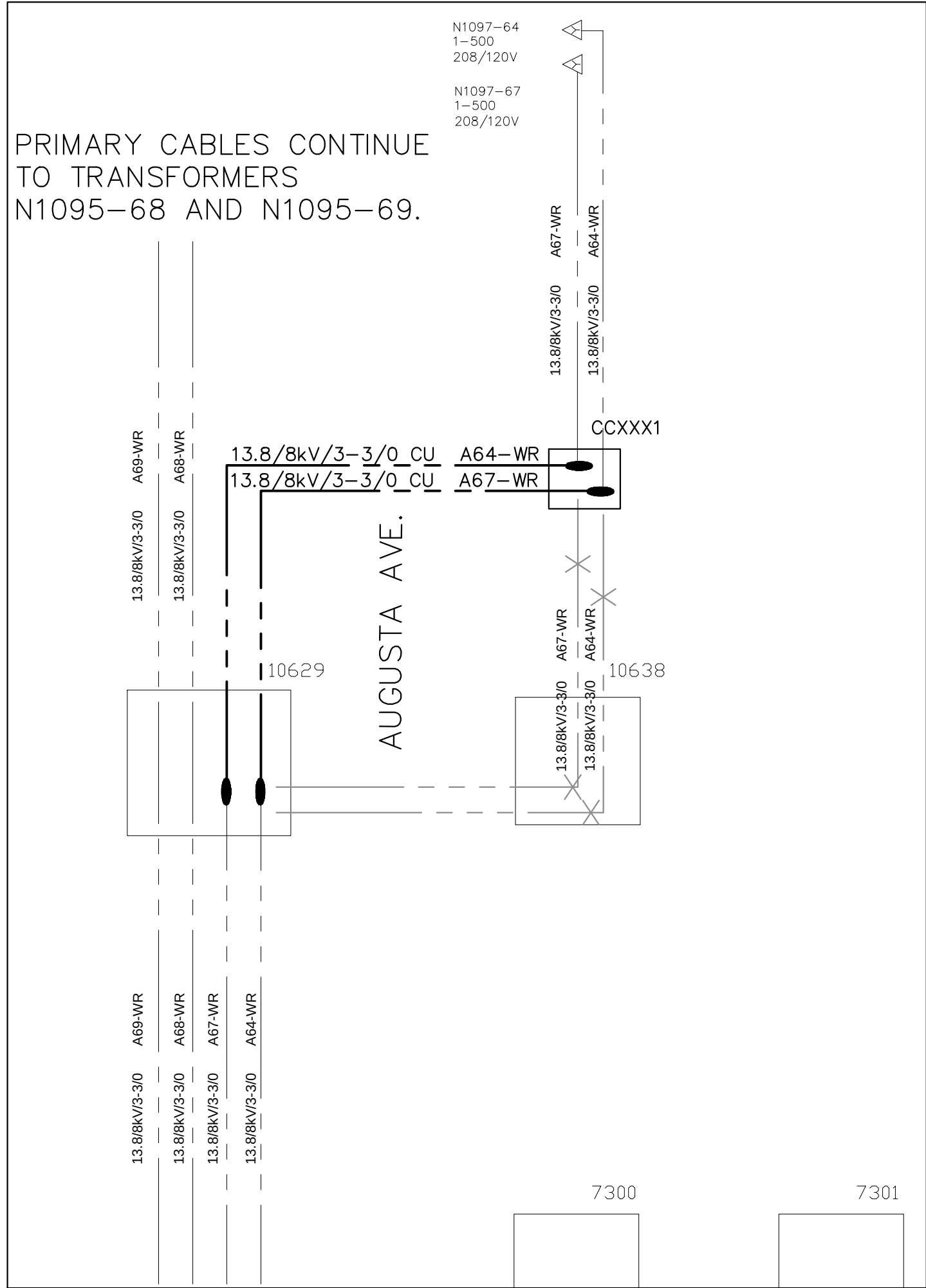
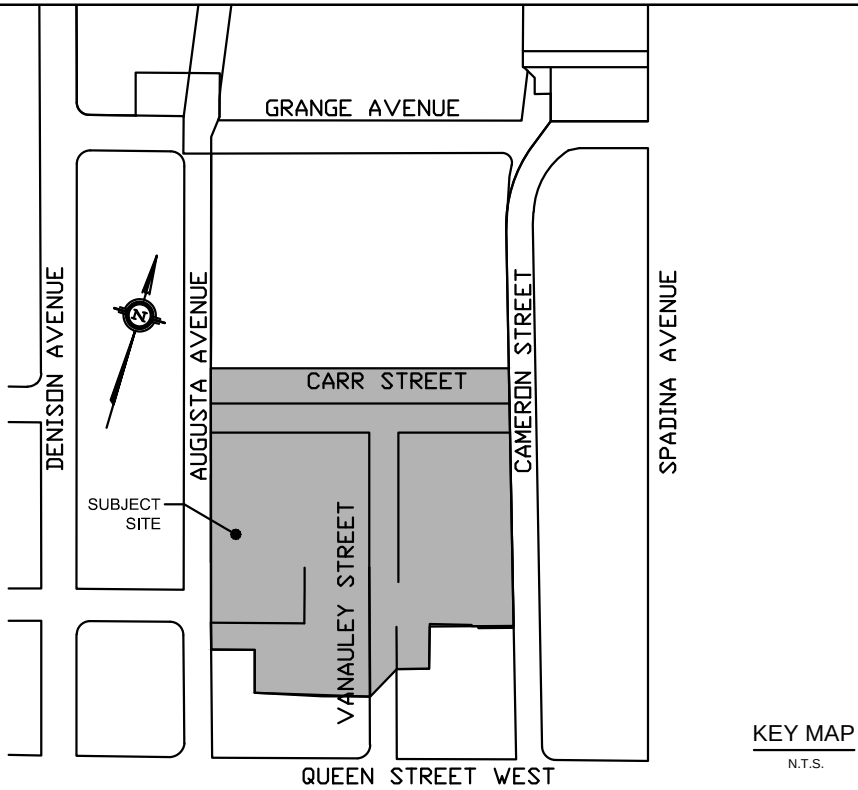
DRAWING LEGEND		
SHEET	DRAWING NUMBER	DESCRIPTION
1	2013-XXXXX1	TITLE SHEET
2	2013-XXXXX2	SCHEMATIC
3	2013-XXXXX3	CIVIL PLAN
4	2013-XXXXX4	ELECTRICAL PLAN
5	2013-XXXXX5	ELECTRICAL PLAN

 DPM Energy Inc. 8000 Jane St. Suite A200 Vaughan, ON L4K 5B8 Tel: (905)–597–7200 Fax: (905)–597–7271 E-mail: info@dpmenergy.com www.dpmenergy.com		176A 13 004	
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3			
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1	JAN 07/14	FIRST SUBMISSION	KX RH
rev.	date	Description	by appd.
 COS TORONTO			
drawn by K.XU	civil design	date yy/ mm/ dd	
ip reference # W13193	civil approval	date yy/ mm/ dd	
ellipse project # XXXXXX	electrical design R.HOLDER	date yy/ mm/ dd __/__/__	
construction project # XXXXXX	electrical approval N.IOZZO	date yy/ mm/ dd __/__/__	
scale 1:500	construction approval M.ALTOMARE	date yy/ mm/ dd __/__/__	
dwg. title: ALEXANDER PARK CABLE & DUCT REMOVAL PHASE 1B TITLE SHEET			
dwg. no. 2013-XXXXX		sheet no. 1 of 5	rev. no. 0

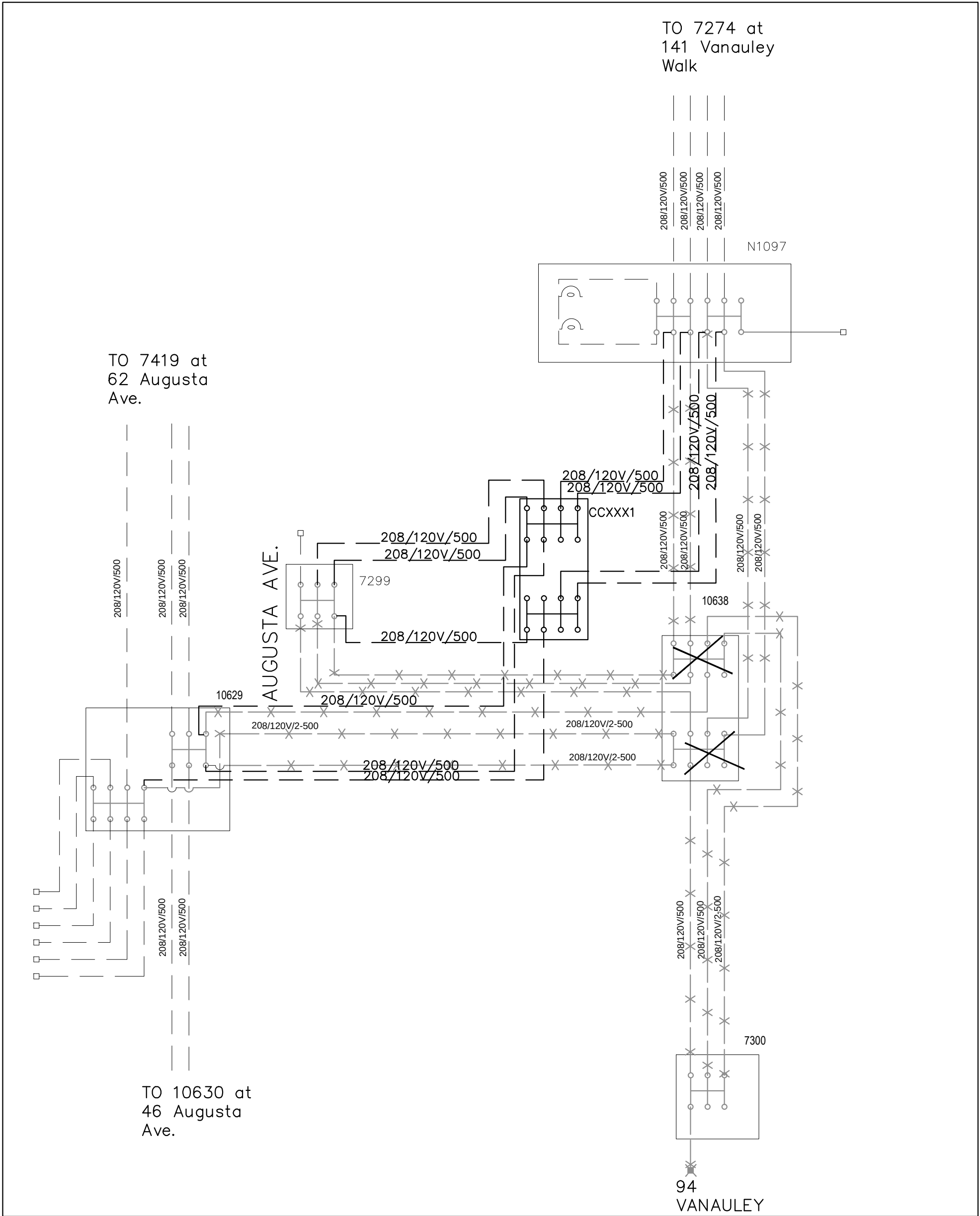


LEGEND			
INSTALL			
	PROPOSED 3C 3/0 CU 15KV TRXLPE PRIMARY CABLE		PROPOSED CABLE CHAMBER
	CONDUCTOR SPLICE OR WIRE CHANGE PROPOSED		
REMOVAL			
	TX1 3PH YY DY PAD/SUBM PROPOSED REMOVE		PRIMARY CONDUCTOR SPLICE OR WIRE CHANGE PROPOSED REMOVE
	U/G 3-PHASE PRIMARY FEEDER/LATERAL CABLE PROPOSED REMOVE		
EXISTING			
	U/G 3-PHASE LATERAL/DISTRIBUTION CABLE EXISTING		
	TX1 3PH YY DY PAD/SUBM EXISTING		
	EXISTING CABLE CHAMBER		

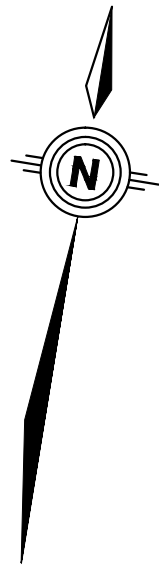
LEGEND			
INSTALL			
	U/G SECONDARY CABLE PROPOSED		PROPOSED CABLE CHAMBER
	HOMAC PROPOSED		SECONDARY U/G CABLE SPLICE OR WIRE CHANGE PROPOSED
REMOVAL			
	U/G SECONDARY CABLE PROPOSED REMOVE		SECONDARY NETWORK PROTECTIVE PROPOSED REMOVE
	HOMAC PROPOSED REMOVE		SECONDARY U/G SERVICE PROPOSED REMOVE
EXISTING			
	EXISTING CABLE CHAMBER		U/G SECONDARY CABLE EXISTING
	EXISTING SECONDARY U/G SERVICE		EXISTING SECONDARY NETWORK PROTECTIVE
	EXISTING HOMAC		EXISTING SECONDARY U/G CABLE SPLICE OR WIRE CHANGE



SCHEMATIC - PHASE 1B PRIMARY



SCHEMATIC - PHASE 1B SECONDARY



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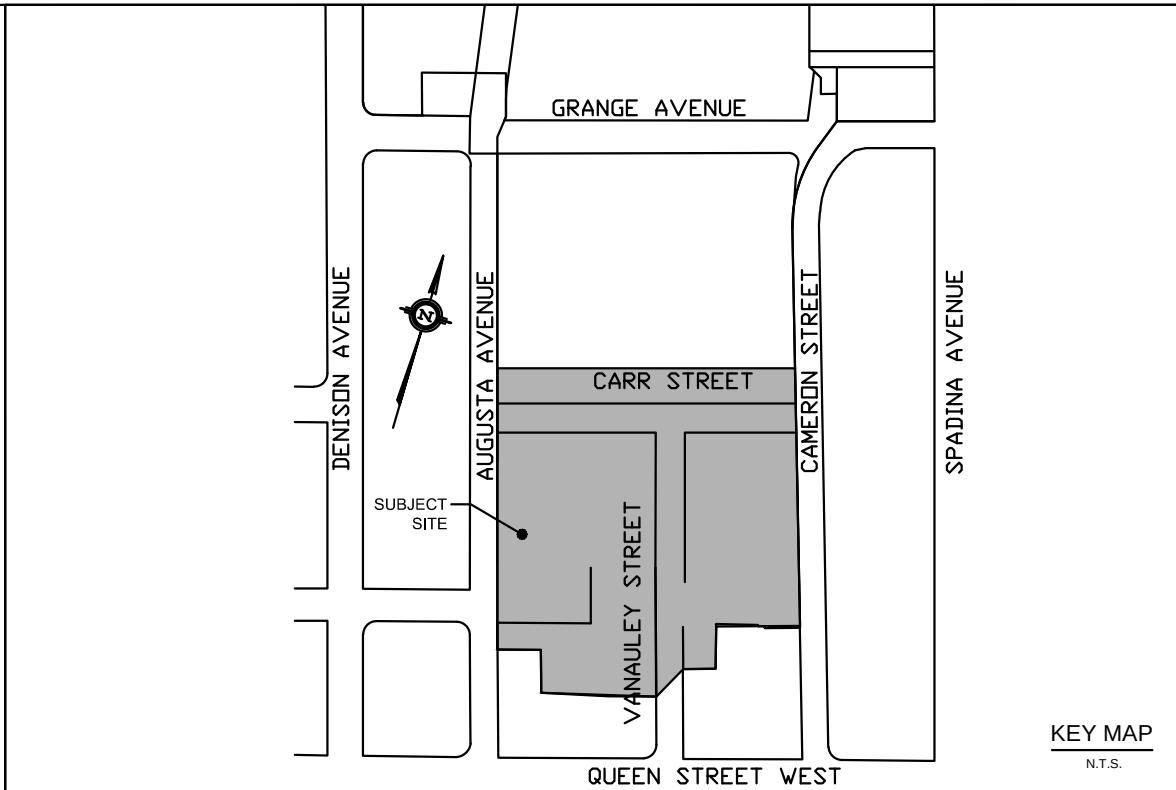
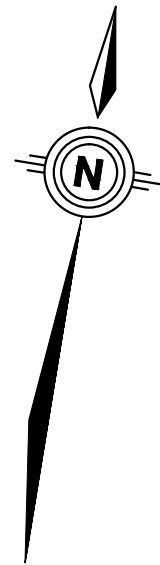
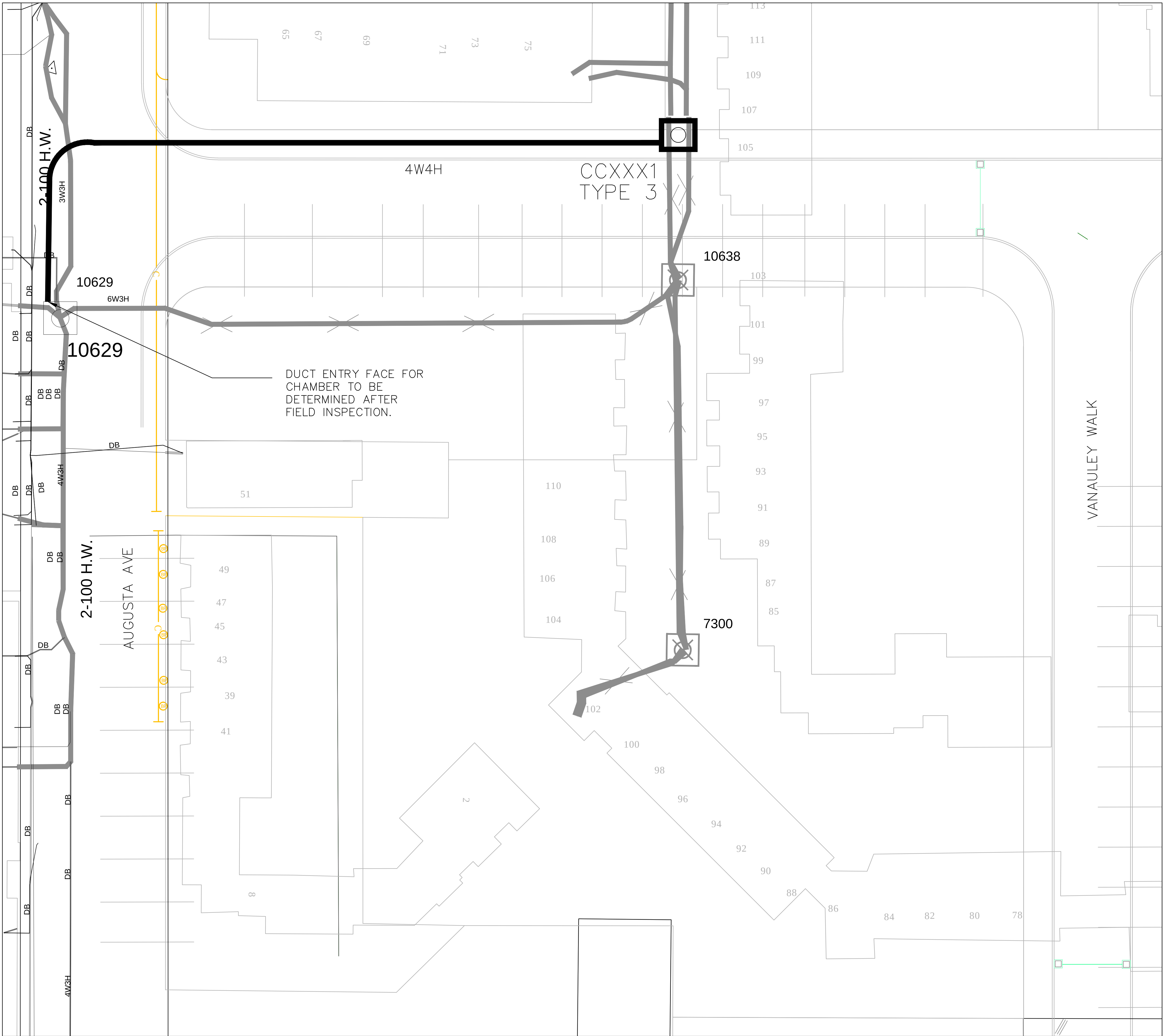


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drawn by K.XU	civil design	date yy/ mm/ dd
ip reference # W13193	civil approval	date yy/ mm/ dd
ellipse project # XXXXXX	electrical design R.HOLDER	date yy/ mm/ dd _/_/ _
construction project # XXXXXX	electrical approval N.IOZZO	date yy/ mm/ dd _/_/ _
scale 1:500	construction approval M.ALTOMARE	date yy/ mm/ dd _/_/ _

dwg. title: ALEXANDER PARK CABLE & DUCT REMOVAL PHASE 1B PRIMARY & SECONDARY SCHEMATIC		
dwg. no. 2013-XXXXX	sheet no. 2 of 5	rev. no. 0





LEGEND			
INSTALL			
	CABLE CHAMBER TYPE III (2500X3000) PROPOSED		DUCT BANK 4 WIDE PROPOSED
REMOVAL			
	CABLE CHAMBER PROPOSED REMOVED		CONCRETE ENCASED DUCT BANK PROPOSED REMOVED
	TWO UNIT NETWORK TRANSFORMER VULT 250/433V SCALED 8530mm X 3050mm PROPOSED REMOVE		
EXISTING			
	EXISTING VULT		EXISTING CABLE CHAMBER
	EXISTING DUCTS		



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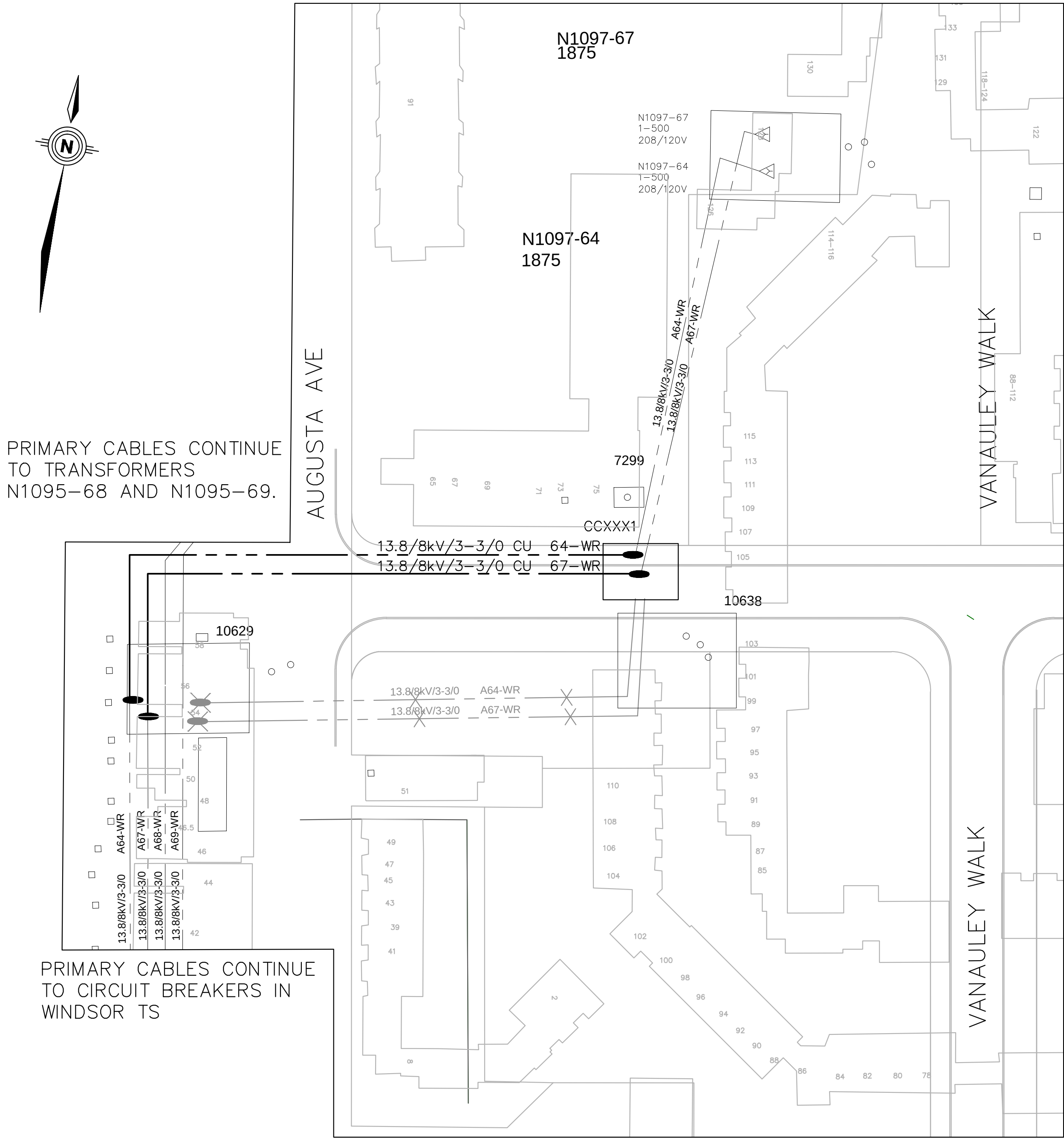
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1	JAN 07/14	FIRST SUBMISSION	KX	RH	
rev.	date	Description	by	appd.	

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drawn by	civil design	date yy/ mm/ dd
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ip reference #	civil approval	date yy/ mm/ dd
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ellipse project #	electrical design	date yy/ mm/ dd
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construction project #	electrical approval	date yy/ mm/ dd
XXXXX	N.IOZZO	_/_/_
scale	construction approval	date yy/ mm/ dd
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dwg. title:		
ALEXANDER PARK CABLE & DUCT REMOVAL PHASE 1B CIVIL LAYOUT		
dwg. no.	sheet no.	rev. no.
2013-XXXXX	3 of 5	0



WORK INSTRUCTIONS
U/G – CABLE/RACKING/TERMINATION – W.O.#_____ INSTALL 78m OF 1–3C–3/0 TRXLPE 15kV AL CABLE BETWEEN 10629 AND CCXXX1.
INSTALL ALL NECESSARY CABLE JOINTS. RECOVER 78m OF 3C–3/0 kmil PILC 15kV CABLE BETWEEN 10629 AND CCXXX1.
U/G – SWITCHING AND ELECTRICAL SUPPORT – W.O.#_____ COMPLETE ALL REQUIRED SWITCHING NECESSARY TO CONSTRUCT PROJECT.



PRIMARY CABLES CONTINUE
TO TRANSFORMERS
N1095–68 AND N1095–69.

PRIMARY CABLES CONTINUE
TO CIRCUIT BREAKERS IN
WINDSOR TS

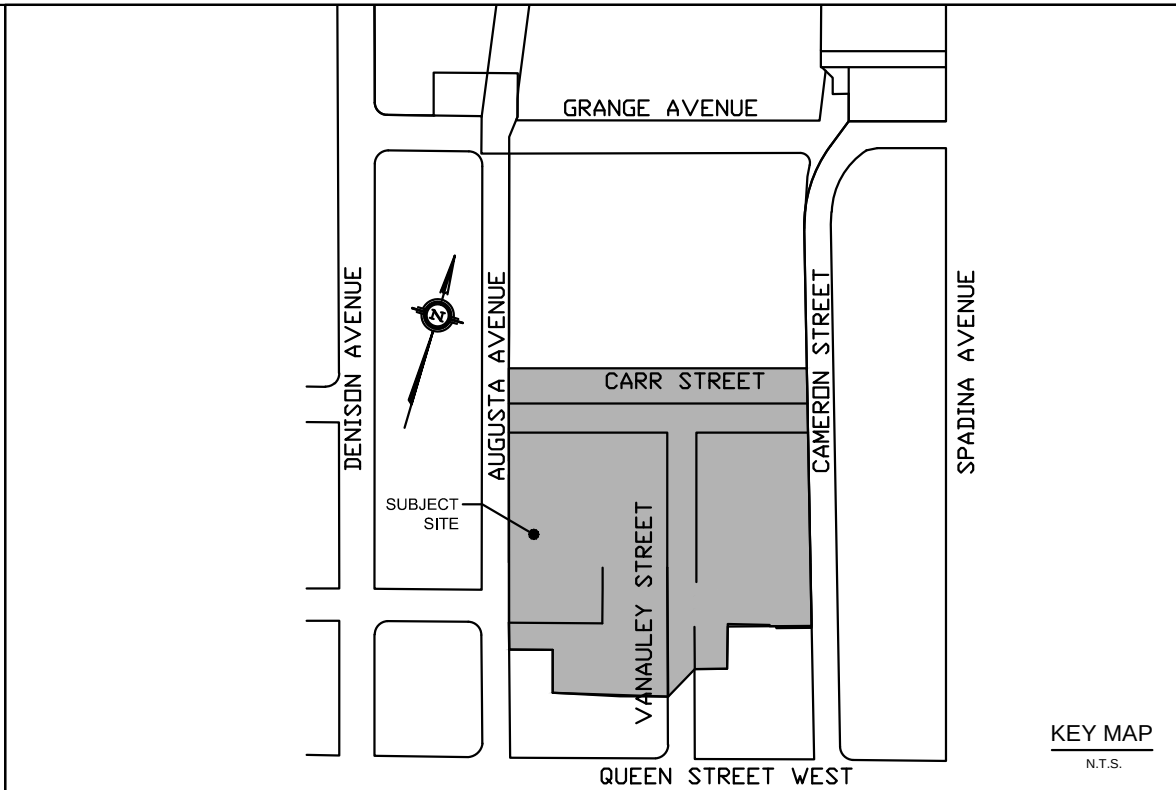
CABLE PULLING SCHEDULE FOR A64–WR						
LOCATION	CABLE DESIGNATION	CABLE DESCRIPTION	*APPROX LENGTHS (m)	X NO. OF RUNS	TOTAL LENGTHS (m)	METHOD OF PULL
10629 TO CCXXX1	A64–WR	1–3C –3/0 TRXLPE CU 15kV	78	1	78	GRIP

CABLE PULLING SCHEDULE FOR A67–WR						
LOCATION	CABLE DESIGNATION	CABLE DESCRIPTION	*APPROX LENGTHS (m)	X NO. OF RUNS	TOTAL LENGTHS (m)	METHOD OF PULL
10629 TO CCXXX1	A67–WR	1–3C –3/0 TRXLPE CU 15kV	78	1	78	GRIP

CABLE RECOVER SCHEDULE FOR A64–WR						
LOCATION	CABLE DESIGNATION	CABLE DESCRIPTION	*APPROX LENGTHS (m)	X NO. OF RUNS	TOTAL LENGTHS (m)	METHOD OF PULL
10629 TO 10638	A64–WR	1–3C –3/0 PILC 15kV	61	1	61	GRIP
10638 TO CCXXX1	A64–WR	1–3C –3/0 PILC 15kV	17	1	17	GRIP

CABLE RECOVER SCHEDULE FOR A67–WR						
LOCATION	CABLE DESIGNATION	CABLE DESCRIPTION	*APPROX LENGTHS (m)	X NO. OF RUNS	TOTAL LENGTHS (m)	METHOD OF PULL
10629 TO 10638	A67–WR	1–3C –3/0 PILC 15kV	61	1	61	GRIP
10638 TO CCXXX1	A67–WR	1–3C –3/0 PILC 15kV	17	1	17	GRIP

* APPROX LENGTHS DID NOT INCLUDE ADDITIONAL CABLE QUANTITIES FOR SPLICING, RACKING AND/OR TERMINATIONS.



LEGEND			
INSTALL			
	PROPOSED 3C 3/0 CU 15kV TRXLPE PRIMARY CABLE		PROPOSED CABLE CHAMBER
	CONDUCTOR SPLICE OR WIRE CHANGE PROPOSED		
REMOVAL			
	TX1 3PH YY DY PAD/SUBM PROPOSED REMOVE		U/G 3-PHASE PRIMARY FEEDER/LATERAL CABLE PROPOSED REMOVE
	U/G 3-PHASE LATERAL/DISTRIBUTION CABLE EXISTING		
	TX1 3PH YY DY PAD/SUBM EXISTING		
	EXISTING CABLE CHAMBER		
EXISTING			
	U/G 3-PHASE LATERAL/DISTRIBUTION CABLE EXISTING		
	TX1 3PH YY DY PAD/SUBM EXISTING		
	EXISTING CABLE CHAMBER		



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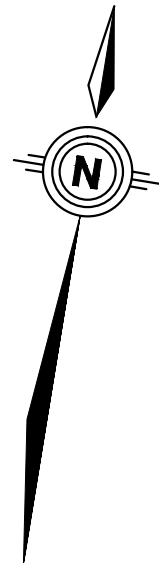
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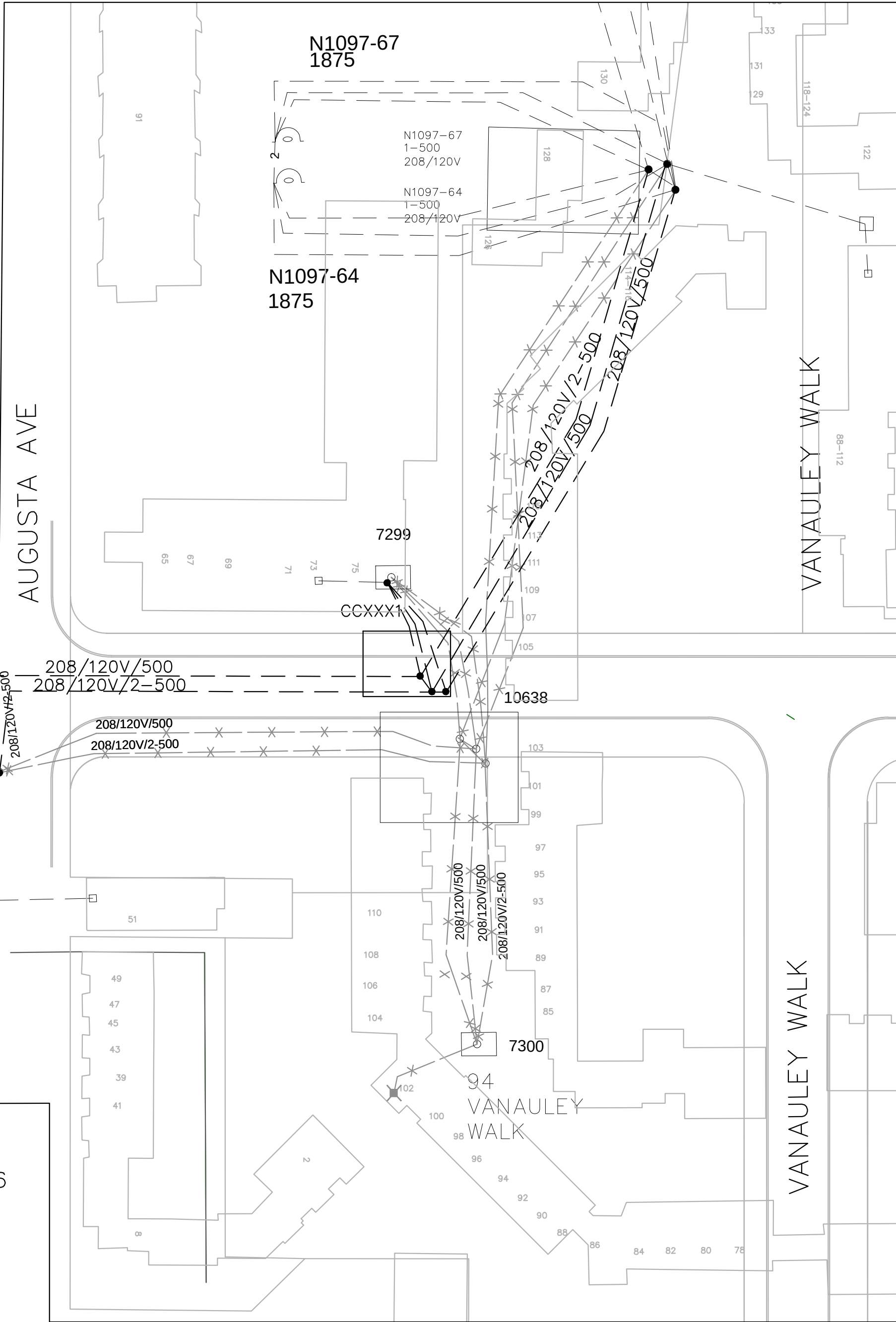
drawn by	civil design	date yy/ mm/ dd
K.XU		
ip reference #	civil approval	date yy/ mm/ dd
W13193		
ellipse project #	electrical design	date yy/ mm/ dd
XXXXX	R.HOLDER	__/__/__
construction project #	electrical approval	date yy/ mm/ dd
XXXXX	N.IOZZO	__/__/__
scale	construction approval	date yy/ mm/ dd
1:500	M.ALTOMARE	__/__/__
dwg. title:		
ALEXANDER PARK CABLE & DUCT REMOVAL PHASE 1B PRIMARY ELECTRICAL LAYOUT		
dwg. no.	sheet no.	rev. no.
2013-XXXXX	4 of 5	0





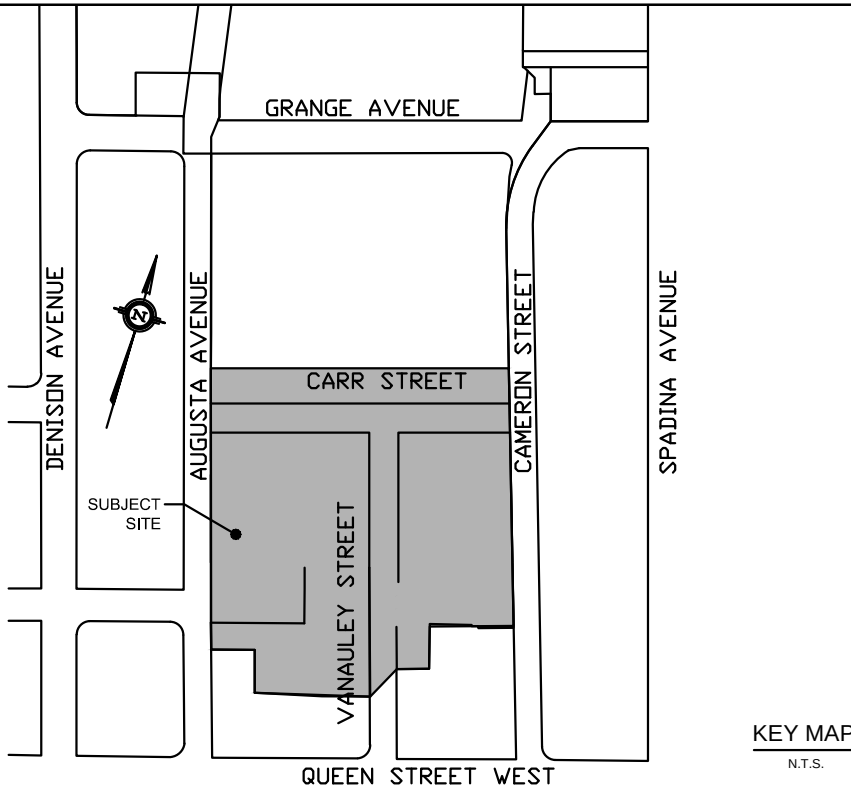
SECONDARY CABLES
CONTINUE TO 7419 AT 62
AUGUSTA AVE.

SECONDARY CABLES
CONTINUE TO 10630 AT 46
AUGUSTA AVE.



WORK INSTRUCTIONS
U/G - CABLE/RACKING/TERMINATION - W.O.#_____ INSTALL 78m OF 1-3C-3/0 TRXLPE 15kV AL CABLE BETWEEN 10629 AND CCXXX1.
INSTALL ALL NECESSARY CABLE JOINTS. RECOVER 78m OF 3C-3/0 kcmil PILC 15kV CABLE BETWEEN 10629 AND CCXXX1.

U/G - SWITCHING AND ELECTRICAL SUPPORT - W.O.#_____ COMPLETE ALL REQUIRED SWITCHING NECESSARY TO CONSTRUCT PROJECT.



LEGEND

INSTALL			
	U/G SECONDARY CABLE PROPOSED		PROPOSED CABLE CHAMBER
	HOMAC PROPOSED		SECONDARY U/G CABLE SPlice OR WIRE CHANGE PROPOSED

REMOVAL			
	U/G SECONDARY CABLE PROPOSED REMOVE		SECONDARY NETWORK PROTECTIVE PROPOSED REMOVE
	HOMAC PROPOSED REMOVE		SECONDARY U/G SERVICE PROPOSED REMOVE

EXISTING			
	EXISTING CABLE CHAMBER		U/G SECONDARY CABLE EXISTING
	EXISTING SECONDARY U/G SERVICE		EXISTING SECONDARY NETWORK PROTECTIVE
	EXISTING HOMAC		EXISTING SECONDARY U/G CABLE SPlice OR WIRE CHANGE



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rev.	date	Description	by	appd.



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K.XU		
ip reference #	civil approval	date yy/ mm/ dd
W13193		
ellipse project #	electrical design	date yy/ mm/ dd
XXXXX	R.HOLDER	__/__/__
construction project #	electrical approval	date yy/ mm/ dd
XXXXX	N.IOZZO	__/__/__
scale	construction approval	date yy/ mm/ dd
1:500	M.ALTOMARE	__/__/__

dwg. title:		
ALEXANDER PARK CABLE & DUCT REMOVAL PHASE 1B SECONDARY ELECTRICAL LAYOUT		
dwg. no.	sheet no.	rev. no.
2013-XXXXX	5 of 5	0

