

ACOUSTIC NOTES:

1. THE POWER TRANSFORMER LOCATED IN THE CUSTOMER OWNED SUBSTATION SHOULD BE SELECTED FOR LOW NOISE. TRANSFORMERS WITH COOLING FANS SHOULD BE AVOIDED. TRANSFORMER CORES SHOULD BE INTERNALLY ISOLATED WITH SPRINGS OR NEOPRENE-IN-SHEAR MOUNT.
 2. NOTWITHSTANDING THE TYPE OF TRANSFORMER SELECTED, THE UNIT MUST BE WELL ISOLATED. A 150mm THICK HOUSEKEEPING PAD POURED ON 50mm THICK UNDERLAY (2 LAYERS OF 150-SEF HP OR EQUIVALENT) SHOULD BE INCLUDED BELOW THE UNIT. THE INCOMING DUCT BANK MUST BE WELL ISOLATED AT ANY POINTS OF SUSPENSION FROM UNDERSIDE OF THE GROUND FLOOR SLAB OR ANY SHEAR WALLS, USING RUBBER COMPRESSION MOUNTS IN SERIES WITH THE RODS SUPPORTING THE UNISTRUT ASSEMBLIES TO WHICH THE CABLES OR CONDUITS ARE ATTACHED, OR RUBBER PADS OR SLEEVES IN CLAMPS.
 3. 300kVA - 450kVA TRANSFORMERS WHICH ARE LOCATED BELOW SUITES SHOULD BE ISOLATED ON DOUBLE LAYER RUBBER PADS (25mm THICK, 50 DIAMETER MAXIMUM). ALL CONDUITS OR CABLES THAT ARE SUSPENDED FROM THE GROUND FLOOR SLAB ABOVE SHOULD BE VIBRATION ISOLATED AT ANY POINT OF SUSPENSION FROM THE STRUCTURE USING RUBBER COMPRESSION MOUNTS IN SERIES WITH THE RODS SUPPORTING THE UNISTRUT ASSEMBLIES TO WHICH THE CABLES OR CONDUITS ARE ATTACHED, IN A MANNER SIMILAR TO THAT DESCRIBED ABOVE. CONDUITS OR CABLES FOR THESE TRANSFORMERS SHOULD NOT BE BURIED IN THE GROUND FLOOR SLAB, BUT SURFACE MOUNTED TO FACILITATE ISOLATION.
 4. AN ISOLATED HOUSEKEEPING PAD SHALL BE INSTALLED BELOW THE TRANSFORMERS (SIZED AT 300kVA OR ABOVE) AND ASSOCIATED SWITCHGEAR.
 5. SMALLER TRANSFORMERS (45kVA to 15kVA) LOCATED IN PI AND ON THE ROOF, SHALL BE ISOLATED ON NBN PADS.
 6. ALL TRANSFORMERS ARE TO BE ISOLATED ON DOUBLE-LAYER RUBBER PADS (25mm THICK 50 DIAMETER MAXIMUM).
1. TRANSFORMER HOUSE KEEPING PADS SHALL BE POURED ON 2 LAYERS OF DURACOUSTIC. TRANSFORMER CASING SHALL BE ISOLATED FROM THE HOUSE KEEPING PADS WITH DOUBLE-LAYER RUBBER PADS.
 8. THE GENERATOR SHALL BE LOCATED ON A 100mm THICK HOUSEKEEPING CONCRETE PAD ABOVE THE FLOATING FLOOR. THE GENERATOR SUPPORTED FROM THIS HOUSEKEEPING PAD WITH SPRING ISOLATORS HAVING A NORMAL 25mm STATIC DEFLECTION, WITH RIBED RUBBER PADS UNDER THE SPRING BASE.
 9. BACK TO BACK ELECTRICAL OUTLETS ARE TO BE AVOIDED IN SUITE DEMISING WALL. THEY SHOULD BE STAGGERED BY A MINIMUM OF 12" IN CONCRETE WALLS OR 1 STD SPACE (IN DRYWALL) TO PREVENT REDUCING THE SOUND INSULATION PERFORMANCE OF THOSE WALLS. THIS ALSO APPLIES TO COMMUNICATIONS OUTLETS AND SWITCHES.

KEY NOTES:

1. ELECTRICAL CONTRACTOR TO PROVIDE CONCRETE ENCASED DUCT BANKS AND TO VERIFY ON SITE EXACT LOCATION AND DEPTH OF HV CABLES FOR MATCH-UP WITH HV DUCTS AT PROPERTY LINE. INSTALLATION OF HV CABLES AND TERMINATION ARE DONE BY TORONTO HYDRO.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE 6-4" DUCTS FOR TELECOMMUNICATION SERVICES FROM THE BUILDING UP TO PROPERTY LINE. INSTALLATION OF CABLES AND TERMINATION UP TO THE PROPERTY LINE ARE DONE BY THE ELECTRICAL CONTRACTOR. TELECOMMUNICATION SERVICE PROVIDERS ARE RESPONSIBLE FOR DUCTS AND CABLING BEYOND PROPERTY LINE.
3. PROVIDE RAMP SNOW MELTING C/W THE FOLLOWING:

QTY.	TYPE	CAT.*	DESCRIPTION
3	EA	SUB13006	MI HEATING CABLE - 462 FEET, 15000W, 600V, WITH 15 FEET COLD LEADS - MADE TO ORDER
6	EA	HARD-SPACER-GALV-25M-25M	GALVANIZED STEEL FREE-PUNCH STRAPPING 25M
2	EA	SMCS	SNOW MELTING CAUTION SIGN
CONTROLS - DISTRIBUTION & GROUND FAULT PROTECTION INCLUDED			
1	EA	SMFG3-600-3-1/3P1501-3R-100	AUTOMATIC SNOW/ICE MELTING SYSTEM CONTROLLER - 208/240v
1	EA	CIT-1	AUTOMATIC SNOW SENSOR
AS REQ.	EA	91T-6E	ESTIMATED FREIGHT AT 35% FLAT RATE
AS REQ.	EA	FREIGHT	ESTIMATED FREIGHT FOR ALL MADE TO ORDER ITEMS TBD AT TIME OF ORDER

4. ALL UNDERGROUND INSTALLATION OF ELECTRICAL DUCTS/CONDUITS SHALL COMPLY WITH THE LATEST ESA CODE RULE 12-012 (BULLETIN 12-2-15), WHICH SPECIFIES "CONTINUOUS RED PLASTIC MARKER TAPES WITH BLACK LETTERS IDENTIFYING THE POWER LINE UNDERGROUND INSTALLATION.
 - 1) PLACED APPROXIMATELY HALF WAY BETWEEN THE INSTALLATION AND GRADE LEVEL.
 - 2) INSTALLED COVERING THE WIDTH OF THE INSTALLATION, AND
 - 3) WHERE MULTIPLE MARKER TAPES ARE REQUIRED TO COVER THE WIDTH OF THE INSTALLATION MARKER TAPES SHALL BE PERMITTED TO BE PLACED A MAXIMUM OF 600mm APART.
5. RUN 1" CONDUIT TO GENERATOR CONTROL PANEL AND CACR ROOM FROM INCOMING GAS STATION CONTROL VALVE.
6. ELECTRICAL CONTRACTOR SHALL KEEP CLEARANCE 600mm HORIZONTAL AND 300mm VERTICAL BETWEEN SERVICES GAS LINE AND HYDRO DUCT BANK.
7. COMMUNICATION CONDUIT REQUIREMENTS:
 - a) PLACE 24" FULL BOX ON BUILDING WALL WHERE ENTRANCE SUB DUCT ENTERS BUILDING SO DUCT CAN BE SEALED AFTER ENTRANCE CABLE IS PLACED TO PREVENT WATER AND GASES SEEPING INTO BUILDING.
 - b) CONDUIT TERMINATION AT THE PROPERTY LINE TO BE MARKED WITH A 2"x4" STAKED INTO THE GROUND APPROXIMATELY 3' HIGH MARKED "WITH THE NAME OF COMMUNICATION PROVIDER".
 - c) INSIDE THE BUILDING, CONDUIT MUST BE ENT (FIRE RATED ELECTRICAL METALLIC TUBING) 89mm (3.5") OR 100mm (4") INSIDE DIAMETER TO ENSURE THE SUCCESSFUL PLACEMENT AND TO AVOID DAMAGING THE CABLE DURING THE PULGING OPERATION. "METER" FULL BOXES ARE REQUIRED AT 90 DEGREE BENDS WITHIN THE BUILDING.
 - d) CONDUIT LENGTHS OVER 30m HAVE A FULL ROPE.
 - e) ALL CONDUITS TO BE FREE AND CLEAR OF OBSTRUCTIONS AS A BLOCKAGE AT THE TIME OF CABLE PLACEMENT WILL RESULT IN A DELAY OF SERVICE UNTIL THE PATH HAS BEEN CLEARED AT THE OWNER'S EXPENSE.
 - f) 4"x8"x3/4" FIRE RETARDANT PLYWOOD BACKBOARD FASTENED TO WALL IN AN AREA ACCESSIBLE WITHOUT THE USE OF A LADDER WHERE IT IS POSSIBLE FOR A TECHNICIAN TO WORK WITHOUT BLOCKING A PASSAGEWAY AND WHERE THE EQUIPMENT MOUNTED WILL NOT BE DAMAGED BY DOORS OR ANY MOVING OBJECTS.
8. REFER TO LANDSCAPE DRAWINGS FOR DETAILED LAYOUT. LANDSCAPE LIGHTS SHALL BE CONTROLLED BY A TIMER/CONTROLLER TO BE LOCATED NEAR 'ELP-E2' AND CONNECT TO 'ELP-E2'. LIGHTS 'L1' SHALL BE CONTROLLED BY PHOTOCELL.
9. THE CONTRACTOR SHALL VERIFY WITH TORONTO HYDRO FOR COORDINATION TO MATCH TORONTO HYDRO DUCT BANK.
10. THE CONTRACTOR SHALL VERIFY THE LOCATION OF TELECOMMUNICATION DUCT BANK WITH BELL/ROGERS
11. THE EXACT LOCATION TO BE CONFIRMED WITH THE OWNER.

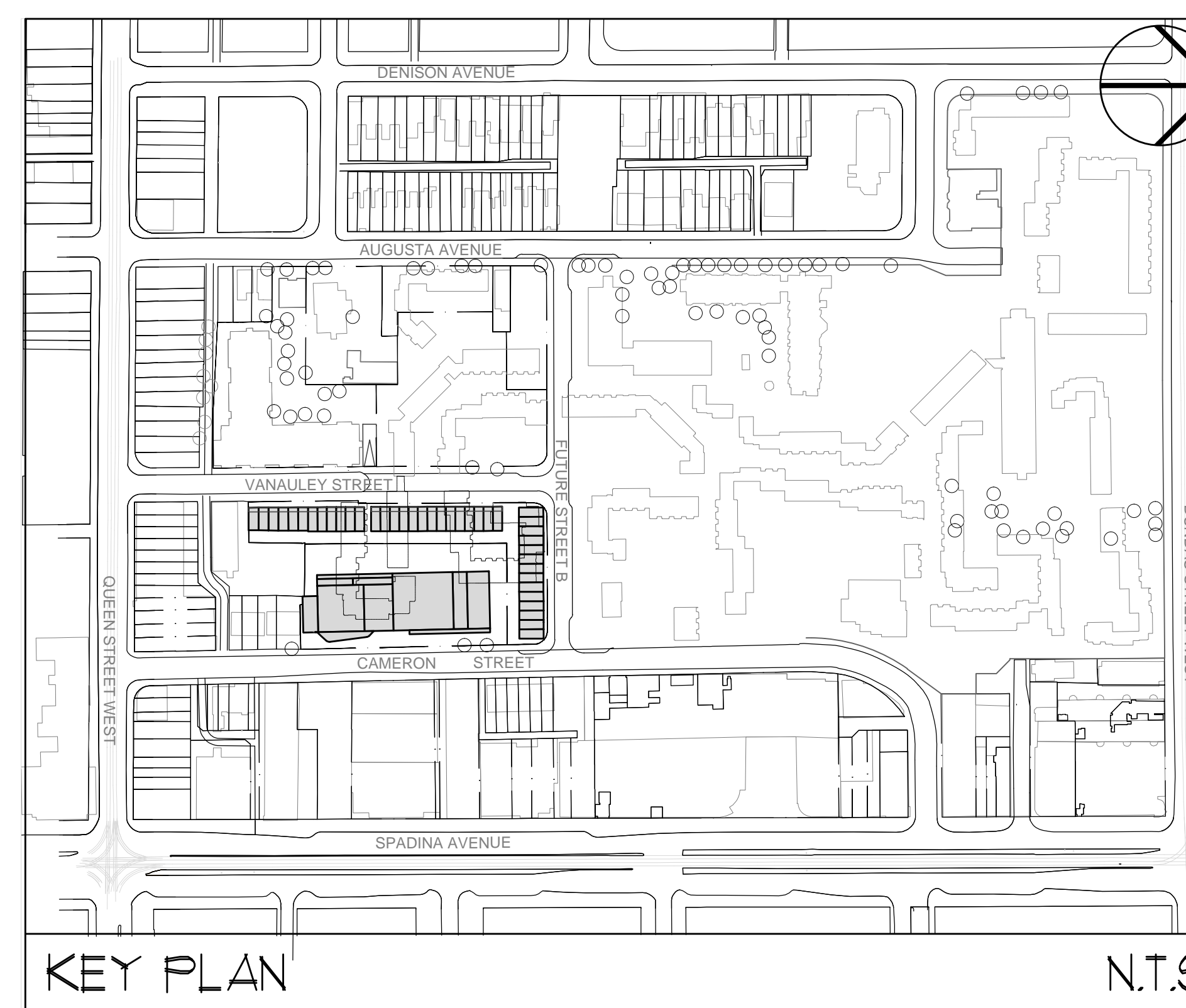
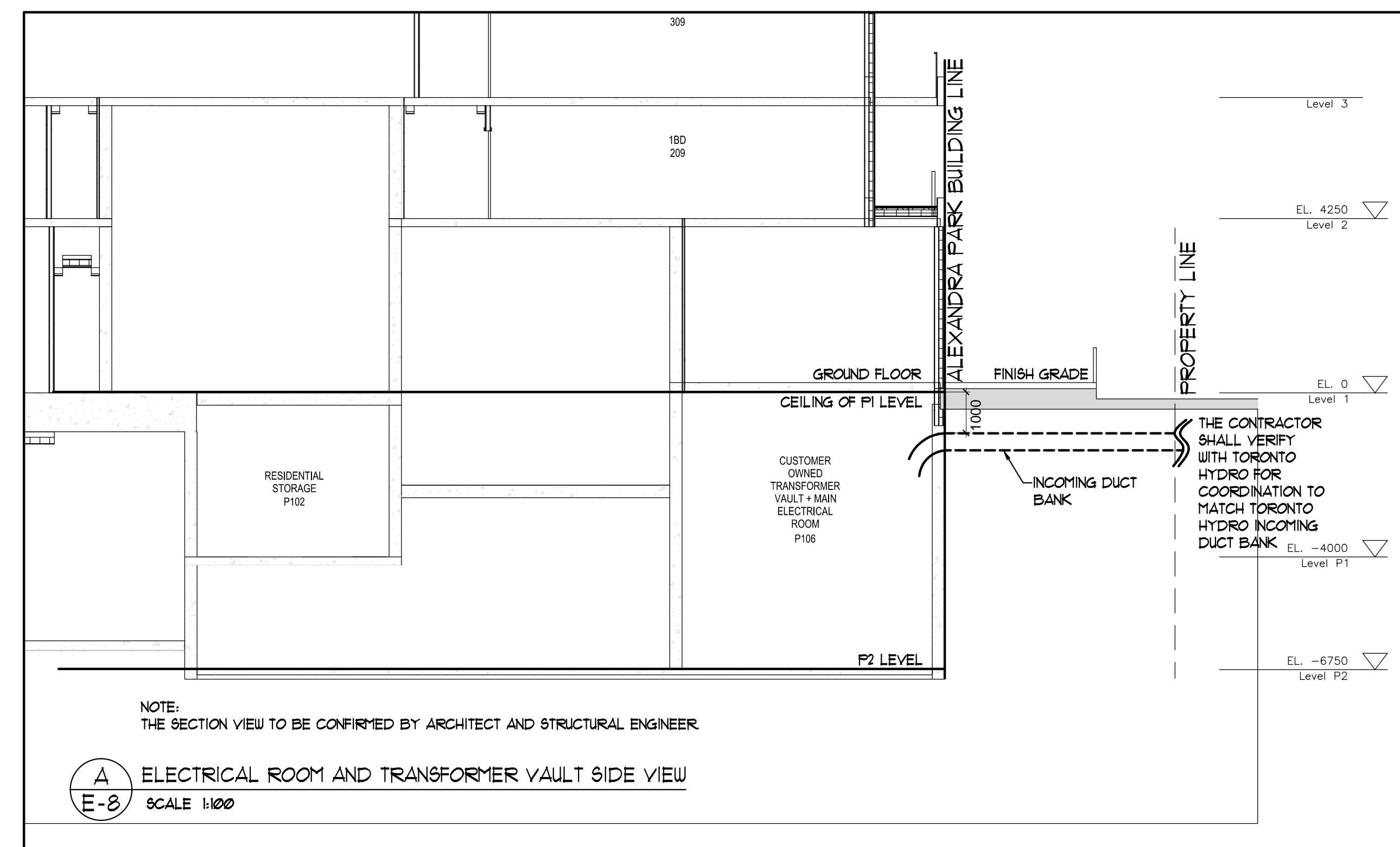
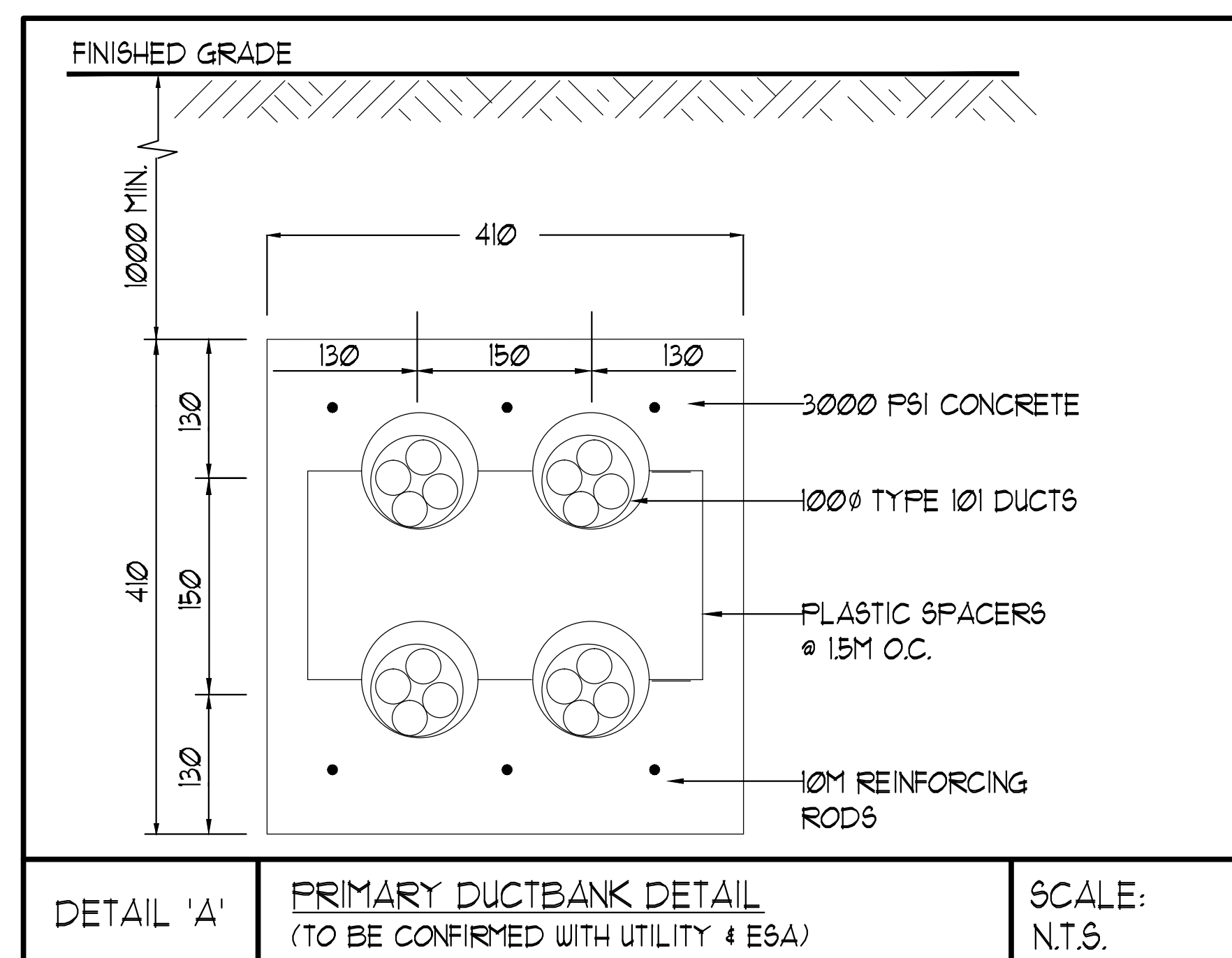
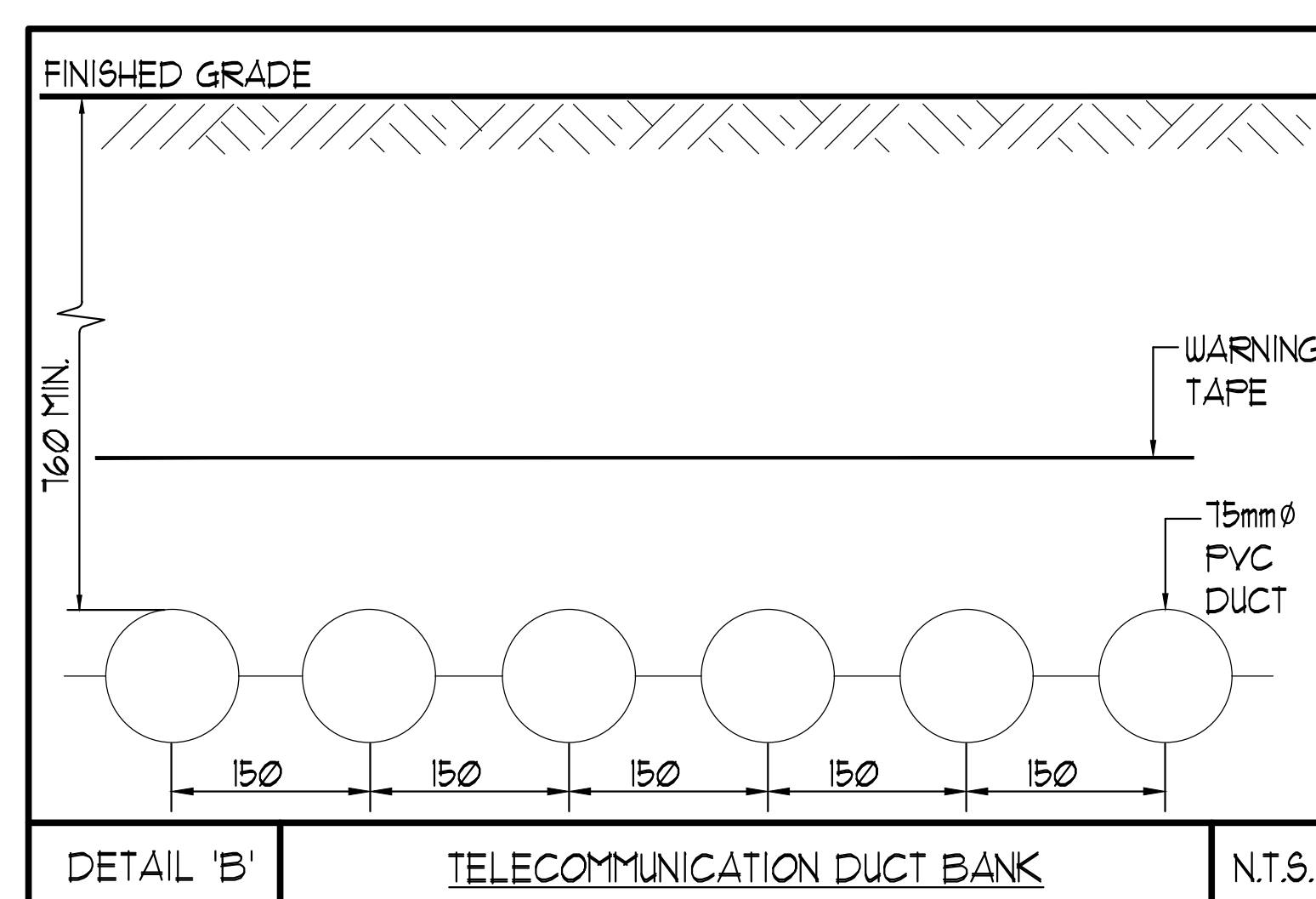
**ALEXANDRA PARK (#1313)
ELECTRICAL DRAWING LIST**

NO.	DESCRIPTION	SCALE	ISSUED FOR PERMIT MAY 30/2014
E-1	SITE PLAN	1:200	✓
E-1A	SITE LANDSCAPE PLAN	1:200	✓
E-2	P-1 FLOOR PLAN - ELECTRICAL LAYOUT	1:100	✓
E-3	P-1 FLOOR PLAN - ELECTRICAL LAYOUT	1:100	✓
E-4	G/F SOUTH FLOOR PLAN - LIGHTING LAYOUT	1:50	✓
E-5	G/F NORTH FLOOR PLAN - LIGHTING LAYOUT	1:50	✓
E-6	G/F SOUTH FLOOR PLAN - POWER LAYOUT	1:50	✓
E-7	G/F NORTH FLOOR PLAN - POWER LAYOUT	1:50	✓
E-8	2/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-9	2/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-10	3/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-11	3/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-12	4/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-13	4/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-14	5/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-15	5/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-16	6/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-17	6/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-18	7/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-19	7/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-20	8/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-21	8/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-22	9/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-23	9/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-24	10/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-25	11/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-26	12/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-27	13/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-28	14/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	✓
E-29	ROOF FLOOR PLAN - ELECTRICAL LAYOUT	N.T.S.	✓
E-30	SINGLE LINE DIAGRAM	N.T.S.	✓
E-31	SUITE DISTRIBUTION PANEL, TELECOM & SECURITY RISER DIAGRAMS	N.T.S.	✓
E-32	FIRE ALARM RISER DIAGRAM	N.T.S.	✓
E-33	FIRE ALARM SCHEDULES AND DETAILS	N.T.S.	✓
E-34	ELECTRICAL PANEL SCHEDULES	N.T.S.	✓
E-35	ELECTRICAL DETAILS	N.T.S.	✓
E-36			
E-37			
E-38			

ELECTRICAL LEGEND

LIGHTING	
⊕	FLUORESCENT LIGHT FIXTURE, TYPE AS INDICATED
⊕	NIGHT LIGHT OR LIGHT CONNECTED TO EMERGENCY POWER
⊕	CEILING MOUNTED WALL MOUNTED LIGHT FIXTURE, INSCRIBED LETTER DENOTES TYPE
⊕	POLE MOUNTED LIGHT FIXTURE, INSCRIBED LETTER DENOTES TYPE
⊕	CHANGED CEILING LIGHT OUTLET
⊕	TRACK LIGHT
⊕	STRIP LIGHT
⊕	UNDER CABINET FLUORESCENT LIGHT FIXTURE
⊕	CEILING MOUNTED WALL MOUNTED EXIT SIGN
⊕	EMERGENCY BATTERY PACK
⊕	EMERGENCY BATTERY PACK
⊕	OCCUPANCY SENSOR POWER PACKS
⊕	SINGLE/DOUBLE POLE, SINGLE/DOUBLE (3/4" x 1/2" DENOTES 3-WAY 4-WAY/PLUG LIGHT, OTHER SWITCHED LIGHT RESPECTIVELY)
⊕	MASTER LIGHTING SWITCH OFF SWITCH
⊕	SENSOR WALL SWITCH FIRE SELF POWERED
⊕	OCCUPANCY SENSOR CEILING MOUNTED
POWER	
⊕	REGULAR DUPLEX RECEPTACLE
⊕	DUPLEX RECEPTACLE GROUND FAULT INTERRUPT
⊕	3-20R 1-60T DUPLEX RECEPTACLE
⊕	SINGLE RECEPTACLE TYPE AND CONFIGURATION AS SPECIFIED FOR DRYER
⊕	CONNECTION FOR OVERCLOCKTOP
⊕	ABOVE COVER DEVICE
⊕	CEILING MOUNTED DEVICES
⊕	FLOOR MOUNTED DEVICES
⊕	DISCONNECT SWITCH, NON-FUSED
⊕	DISCONNECT SWITCH, FUSED
⊕	COMBINATION STARTER
⊕	FRACTIONAL MOTOR/FAN DIRECT CONNECTION
⊕	DIRECT CONNECTION, SINGLE PHASE
⊕	DIRECT CONNECTION, THREE PHASE
⊕	THEMIST/AT
⊕	DRYER SENSOR
⊕	HEAT TRACE
⊕	ELECTRICAL HEATER
⊕	ELECTRICAL PANEL / SECURITY PANEL
TELECOMMUNICATION	
⊕	TV/CABLE OUTLET
⊕	TELEPHONE OUTLET
⊕	TELEPHONE CABLE (MULTI-PORT OUTLET) DATA OUTLET
⊕	DATA/TELEPHONE OUTLET
⊕	IN-SITE TELEPHONE BOX/CU RECEPTACLE
⊕	LIFT LOCATION
⊕	MUSIC SPEAKER / VOLUME CONTROL
⊕	RADIO RECEIVER
SECURITY	
⊕	INTERCOM / INTERPHONE
⊕	INTERCOM WITH CAMERA
⊕	PANIC BUTTON / PANIC INTERCOM STATION
⊕	CARD READER
⊕	AUTOMATIC RELEASE CARD ACCESS/RADIO RECEIVER
⊕	ELECTRIC STRIKE
⊕	MAGLOCK
⊕	DOOR CONTACT / WINDOW CONTACT
⊕	AUTOMATIC DOOR OPERATOR
⊕	MOTION DETECTOR
⊕	PUSH BUTTON
⊕	SECURITY CAMERA
LIFE SAFETY	
⊕	FIRE ALARM SPOKE DETECTOR
⊕	SPOKE ALARM
⊕	FIRE ALARM DUCT TYPE SPOKE DETECTOR
⊕	FIRE ALARM HEAT DETECTOR
⊕	FIXED TEMP. 57° SMOKE HEAT DETECTOR
⊕	MOISTURE PROOF HEAT DETECTOR
⊕	CO ALARM
⊕	COMBINATION SPOKE & CO ALARM
⊕	CO SENSOR / NO SENSOR
⊕	FIRE ALARM MANUAL PULL STATION
⊕	PROPAGATORS HANDSET
⊕	FIRE ALARM STROBE/ORN WALL MTD.
⊕	FIRE ALARM 110V-HORN WALL MTD.
⊕	FIRE ALARM SPEAKER/STROBE CEILING MTD.
⊕	FIRE ALARM SPEAKER/STROBE MTD.
⊕	FIRE ALARM ANNUNCIATOR PANEL
⊕	FIRE ALARM CONTROL PANEL

SITE PLAN



REVISIONS

NO.	DATE	DESCRIPTION
1	05/30/14	ISSUED FOR PERMIT

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PROJECT TITLE: ALEXANDRA PARK
DRAWN BY: S.C. CHECKED BY: S.T. SCALE: 1:200
DATE: FEB 13 PROJECT NUMBER: 1313 DRAWING NUMBER: E-1