

ELECTRICAL SPECIFICATION

Electrical installation shall be in accordance with the current edition of The Canadian Electrical Code, Provincial, Municipal and other codes, rules and regulations.

The contract shall include the furnishing of labor, new material, equipment and services necessary and reasonably implied and/or incidental to the complete installation of the electrical work as shown on the plans and or specified. Supply and install all devices required for the complete approved system, operating to the complete satisfaction of the Contract Administrator.

Prepare and submit to the proper authorities all necessary permits and pay all fees.

Upon completion and before final payment is made, present to Contract Administrator a Certificate of Approval for all electrical work from the inspection department having jurisdiction.

Electrical installation including electrical equipment supplied, installed or connected shall be tested in the presence of the City on completion of the work.

The Electrical Sub-Contractor shall visit the site and ascertain that all work indicated can be carried out without additional cost to the City.

The Electrical Sub-Contractor shall guarantee the satisfactory operation of all work and apparatus included and installed under this section of the specification for a period of twelve (12) calendar months after the final acceptance of the complete building.

The Electrical Sub-Contractor shall be responsible for any damage caused the City's or their Contractors by improperly carrying out this contract.

The Electrical Sub-Contractor shall carefully examine all drawings and specifications relating to the work to be certain that the work under this contract can be satisfactorily carried out and prior to the submission of his tender, report at once to the Contract Administrator any defect, discrepancy, omission or interference affecting the work of this section or the guarantee of same.

Submit one set of corrected "as-built" sepals and one electronic copy 100% AutoCAD 2007 compatible to the City.

Grounding shall be in accordance with the latest edition of The Canadian Electrical Code.

Panelboards, motor starters, disconnect switches, etc., shall be properly identified by means of engraved lamacoid nameplates.

Supply and install all motor controls unless noted otherwise on the drawings. Refer to Mechanical drawings for exact location of motors and mechanical equipment. Unless otherwise specified and/or shown on the drawings, supply and install the following motor control equipment:

- Manual motor starters.
- Magnetic motor starters which are not part of package equipment. Refer to Mechanical drawings and specifications.
- Pushbutton stations.
- Hand-off-auto selector switches.
- Motor disconnect switches.
- Interlock contacts as required for starters.
- Enclosures.
- Starter heater elements as required for starters.
- Contractors.
- Time clocks, time switches and photoelectric relays.
- Pilot lights for all starters, switches and pushbutton stations.

Mechanical and electrical Sub-Contractors are responsible for the mutual coordination of all electrical requirements of mechanical equipment. Coordination is to include the communication of all final electrical nameplate information from the mechanical Sub-Contractor to the electrical Sub-Contractor, the communication of the detailed control information as well as any ancillary information required for the final systems to operate as intended by the responsible professional engineer. The coordination is to occur prior to the ordering of equipment by either trade. No extra compensation will be allowed due to failure to carry out this coordination. Report at once to the Contract Administrator any defect, discrepancy, omission or interference affecting the satisfactory completion of work.

Conduits shall be electric metallic tubing unless otherwise noted on drawings or unless prohibited by regulations. Conduits in direct contact with earth, in concrete shall be rigid PVC or in wet, corrosive location. Conduits shall be concealed unless otherwise noted on the drawings. Conduits shall not be exposed in any area where concealed work is required without prior written approval.

Outlet, junction and switch boxes shall be galvanized pressed steel of size and type to suit the requirements of each outlet. Outlet boxes shall be accessible. Outlets and wiring in wet, corrosive area shall be PVC.

All wiring shall be in conduit, except that armoured cable may be used in stud partitions and for drops to recessed luminaires (max. 4 luminaires per drop).

Wire and cable shall be copper of standard AWG sizes with 600V (90 Degree C) insulation. Insulation shall be X-Link Polyethylene unless otherwise noted on drawings or prohibited by regulations. Aluminum conductors will not be accepted. Minimum wire size shall be # 12 AWG.

Panelboards shall be factory-assembled custom made of size, type and arrangement as shown on drawing. Circuit breakers shall be bolt-in, moulded-case, thermal and magnetic trip. Trip values as shown on drawing. Two or three pole breakers shall have common trip units. Mount a typewritten directory behind a plastic shield on the inside of panelboard doors. All distribution equipment to be sprinkler-proof and c/w lockable door. Minimum fault rating of circuit breakers shall be 22KA S.C.I.C.

Wall-mounted flush switches shall be specification grade 15A,125VAC. White handle, side or back wiring. Mount switches 1200mm above finished floor unless otherwise noted on the drawings.

Duplex receptacles shall be specification grade 15A, 125VAC, parallel slot, U-ground, white, side and back wiring. Mount receptacles 400mm above finished floor or 150mm above counter tops unless otherwise noted on the drawings.

Cover plates for flush-mounted receptacles and switches on concealed conduit system shall be stainless steel.

Mount surface mounted equipment such as panelboards, telephone cabinets and other electrical equipment on plywood mounting boards, c/w grey enamel finish.

Any cutting and patching in existing walls or floors required for the addition or relocation of electrical equipment shall be the responsibility of the Electrical Sub-Contractor.

Existing Work:

The Electrical Sub-Contractor shall take into account items which he is responsible for due to the changes and alterations to the existing building and allow for such items that may occur in his tendered price.

The Electrical Sub-Contractor is to notify the supply utility of all load increases to existing service.

Existing conduits, wire and outlets which are in good repair and sized to meet all code requirements, may be reused. All equipment to be reused must be approved by the local inspection department and the Contract Administrator.

The Electrical Sub-Contractor shall relocate outlets at no additional charge if requested prior to roughing in. The electrical Sub-Contractor shall relocate outlets at no additional charge if requested by the local authority having jurisdiction.

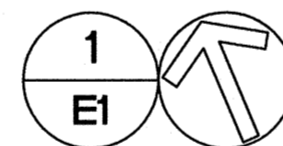
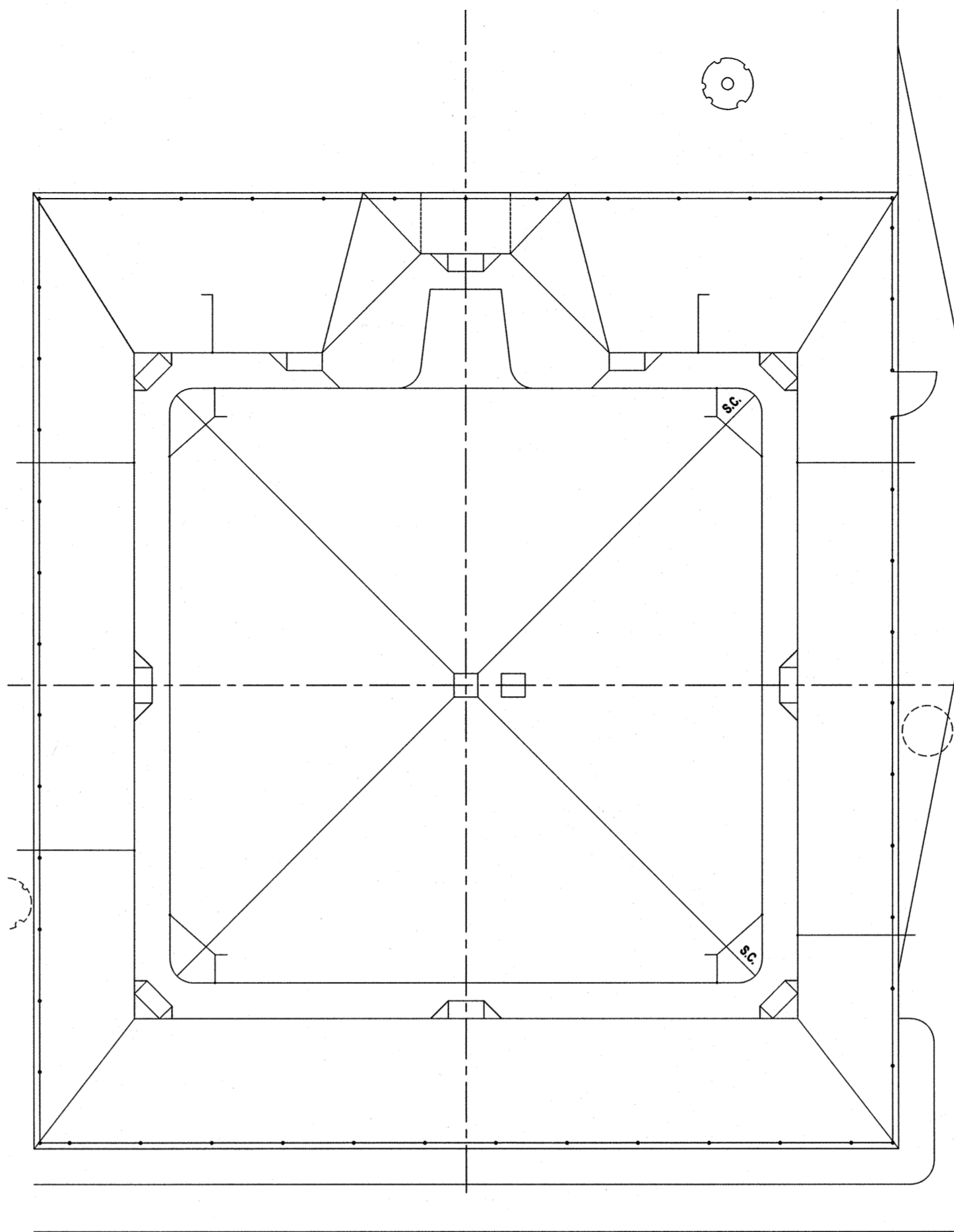
Equipment and material shall be installed as specified. Requests for equal status shall be submitted to Contract Administrator 7 days prior to tender submission. No requests will be accepted past the 7 day deadline. Only one request will be considered from each supplier. If rejected for any reason, no substitutes from the same supplier will be reviewed.

Electrical Sub-Contractor shall submit shop drawings to Contract Administrator for review prior to ordering equipment. At the request of the Contract Administrator, the successful Electrical Sub-Contractor shall submit a completed C-1 form (form available from Contract Administrator).

Supply and install, wire and connect all luminaires (to be complete with lamps) as indicated. All luminaires exceeding 150V shall be complete with an integral disconnecting means that will simultaneously open all circuit conductors and conductors supplying the ballast(s). All luminaires exceeding 150V shall be marked in a conspicuous, legible, and permanent manner adjacent to the disconnecting means, identifying the specific purpose. Refer to Canadian Electrical Code rule 30-308(4).

Final connection to all mechanical equipment to be flexible. Obtain and refer to mechanical shop drawings of mechanical equipment for circuit breaker and wire size. Adjust circuit breaker and wire size without additional cost to the City.

All existing and new City's equipment is to be wired and connected. Supply and install, wire and connect matching receptacle for portable equipment complete with cord and cap. Refer to equipment name plate rating for electrical characteristics prior to rough-in. All City's equipment which is non-portable, shall be directly connected via cab tyre cord matching electrical characteristics as determined by nameplate ratings of equipment. Confirm nameplate characteristics prior to rough-in.

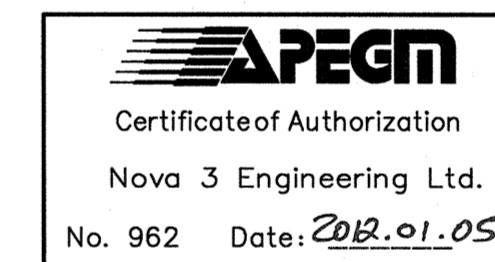
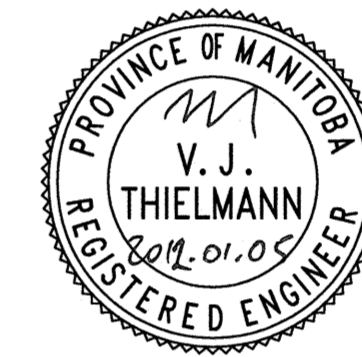
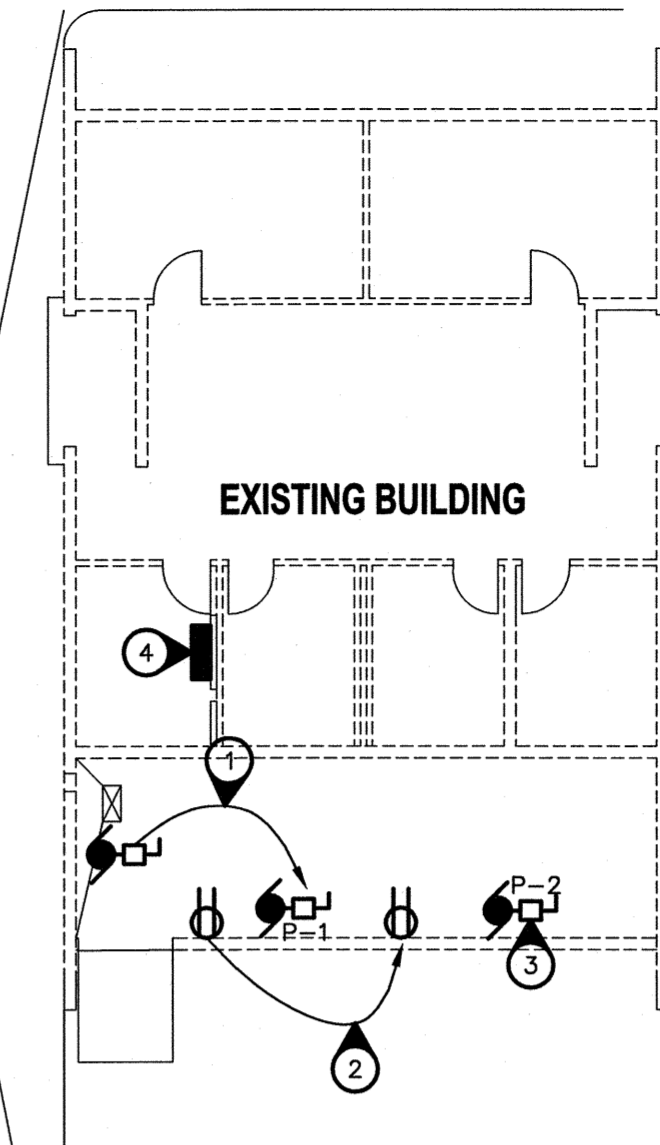


ELECTRICAL - LAYOUT

SCALE: 3/32"=1'-0"

SPECIFIC ELECTRICAL NOTES

- 1 REMOVE EXISTING PUMP AND REPLACE/RELOCATE WITH NEW WADING POOL CIRCULATING PUMP (P-1) AS INDICATED. EXTEND WIRING AS REQUIRED.
- 2 RELOCATE CHLORINE TANK RECEPTACLE AS INDICATED.
- 3 FUTURE LOCATION OF PUMP (P-2).
- 4 APPROXIMATE LOCATION OF EXISTING 200A-120/240V-1PH-3W PANEL.



No.	Description	Date (m/d/y)	Drawn	Checked
1	ISSUED FOR TENDER	01/05/12	KC	TTM
Revisions/Issuance (Read Up)				
Designed By	Drawn By	Checked By	Approved By	
TTM	KC	TTM	--	

THE CONTRACTOR IS TO VERIFY DIMENSIONS AND DATA NOTED ON THE STRUCTURAL DRAWINGS WITH CONDITIONS ON THE SITE. CO-ORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS, AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. THIS DRAWING IS NOT TO BE SCALED.



Project Title

KING EDWARD PARK WADING POOL REPLACEMENT
709 MANHATTAN AVE. WINNIPEG, MB.
Bid Opportunity Number: 1010-2011

Sheet Title

ELECTRICAL

Scale

AS NOTED

Date

JAN. 05, 2012

File Number

31-219

Sheet Number

E1 - RO

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