

POWER PEDESTAL 'A'		VOLTAGE		120/240V-1PH-3W	
MOUNTING LOCATION	PEDESTAL OUTSIDE	MAIN BUS	REMARKS	C/W	GROUNDING AS PER C.E.C.
* SOUTH CANOPY LIGHTING	15 1	31	15	POWER DOOR ASSIST	
* SOUTH CANOPY LIGHTING	15 2	32	15	POWER DOOR ASSIST	
* NORTH CANOPY LIGHTING (#10 WIRE)	15 3	33	15	BUS DETECTION AND WARNING SYSTEM	
* NORTH CANOPY LIGHTING (#10 WIRE)	15 4	34	15	BUS DETECTION AND WARNING SYSTEM	
BB HEAT	20 5	35	15	POST LIGHTS	*
BB HEAT	20 6	36	15	POST LIGHTS	*
BB HEAT	20 7	37	15	POST LIGHTS	*
BB HEAT	20 8	38	15	POST LIGHTS	*
BB HEAT	20 9	39	15	POST LIGHTS	*
BB HEAT	20 10	40	15	POST LIGHTS	*
BB HEAT	20 11	41	15	SIGN BAND	
BB HEAT	20 12	42	15	SIGN BAND	
* SHELTER LIGHTING	15 13	43	15	T.V.'s	
* SHELTER LIGHTING	15 14	44	15	T.V.'s	
* SHELTER LIGHTING	15 15	45	-	SPACE	
* SHELTER LIGHTING	15 16	46	-	SPACE	
* SHELTER LIGHTING	15 17	47	-	SPACE	
* SHELTER LIGHTING	15 18	48	-	SPACE	
* PILLAR SIGNAGE (FUTURE)	15 19	49	-	SPACE	
* PILLAR SIGNAGE	15 20	50	-	SPACE	
* STATION IDENTIFICATION SIGNAGE	15 21	51	-	SPACE	
* STATION IDENTIFICATION SIGNAGE	15 22	52	-	SPACE	
* STATION IDENTIFICATION SIGNAGE	15 23	53	-	SPACE	
* STATION IDENTIFICATION SIGNAGE	15 24	54	-	SPACE	
EBDD	15 25	55	-	SPACE	
EBDD	15 26	56	15	SPARE	
* INFO KIOSK	15 27	57	15	SPARE	
* INFO KIOSK	15 28	58	15	SPARE	
POWER DOOR ASSIST	15 29	59	15	SPARE	
POWER DOOR ASSIST	15 30	60	15	PANEL RECEPTACLE	

### ELECTRICAL LAYOUT

SCALE: 1:50

### BUS DETECTION AND WARNING SYSTEM

Provide a complete and operational bus detection and warning system to the complete satisfaction of the Contract Administrator. Electrical provisions include, but are not necessarily limited to the following:

- Provision of the supply and install of directional probe system to detect inbound vehicles only. Probes to be located in the roadbed 200m from the entrance to the station. All wiring to be in minimum 1.5" conduit. Provide 18"x24" splice pit at curb to CoW standards, for connection to probe. Wiring to be 14/4 shielded buried cable. One probe will be required west of the station (in east-bound lane) and one will be required east of the station (in west-bound lane). Coordinate conduit routing with Contract Administrator prior to road work or rough-in.
- Each probe is to be connected to a processor c/w power supply in heated electrical enclosure. Upon detection of vehicle, processor is to signal a timed relay which will activate the following after a programmable delay:
  - signal devices at east end of station are to operate upon activation of west-bound (inbound) vehicles only. Devices at west end of station to operate similarly;
  - audible chime at north and south pedestrian crossings;
  - illuminate flashing LED lights mounted on poles (both sides of pedestrian crossing). Lights are to continue flashing for a programmable duration. Initial setting to be 30 seconds from activation. LED signals to be Edwards 103 series, NEMA 4X rated weather-proof and vandal-resistant;
  - chime is to sound every time a vehicle passes the detector and lights to flash for full duration after each vehicle.
- Manufacturers: Probes to be Sure Action Incorporated P8000 c/w 212 Processor or approved equal.
- Equipment is to be supplied by local manufacturer's rep, such as National Industrial Communications Inc. Final connections to be performed by manufacturer's representative.
- Provide complete commissioning and training of system to Contract Administrator's satisfaction.

### SPECIFIC ELECTRICAL NOTES

- WIRE AND CONNECT 2 CIRCUITS OF 120V CANOPY LED LIGHTING AS REQUIRED. COORDINATE WITH CANOPY SUPPLIER. LIGHTING IS SUPPLIED AND INSTALLED BY OTHERS.
- WIRE AND CONNECT NEW HEATED SHELTER AS REQUIRED. COORDINATE POWER ACCESS WITH SUPPLIER. ELECTRICAL INCLUDES 2x 2kW ELECTRIC BASEBOARD HEATERS AND SHELTER LIGHTING.
- APPROXIMATE LOCATION OF POWER PEDESTAL 'A' C/W RECEPTACLE. COORDINATE LOCATION WITH UTILITY AND LANDSCAPE ARCHITECT.
- NOT USED.
- WIRE AND CONNECT NEW UNHEATED SHELTER AS REQUIRED. COORDINATE POWER ACCESS WITH SUPPLIER. ELECTRICAL INCLUDES SHELTER LIGHTING.
- APPROXIMATE LOCATION OF UTILITY TRANSFORMER.
- WIRE AND CONNECT 2 CIRCUITS OF 120V CANOPY LED LIGHTING AS REQUIRED. COORDINATE WITH CANOPY SUPPLIER. LIGHTING IS SUPPLIED AND INSTALLED BY OTHERS.
- WIRE AND CONNECT ILLUMINATED SIGN ARM AS REQUIRED.
- WIRE AND CONNECT EBDD AS REQUIRED.
- WIRE AND CONNECT STATION IDENTIFICATION SIGNAGE AS REQUIRED.
- WIRE AND CONNECT INFO KIOSK AS REQUIRED.
- PROVIDE BUS WARNING FLASHING LIGHTS AND AUDIBLE CHIME MOUNTED ON LUMINAIRE POLE @ 2150mm A.F.G. WIRE AND CONNECT TO BUS DETECTION AND WARNING SYSTEM.
- WIRE AND CONNECT POWER DOOR ASSIST AS REQUIRED.
- WIRE AND CONNECT PILLAR ILLUMINATED SIGN AS REQUIRED. PROVIDE 2 CIRCUITS OF 120V POWER.

### GENERAL ELECTRICAL NOTES

- COORDINATE ROUTING OF ALL UNDERGROUND CONDUITS WITH LANDSCAPE ARCHITECT.

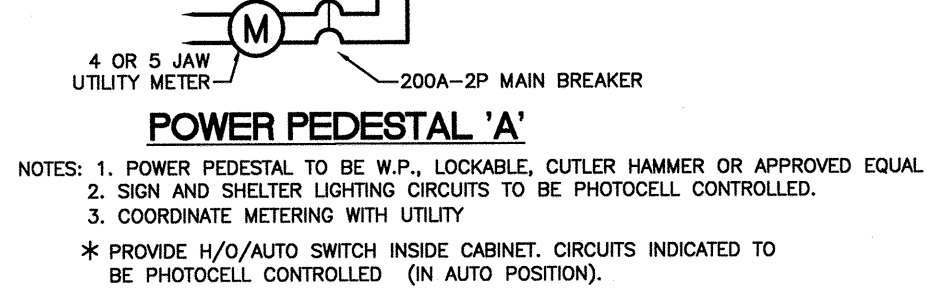
### SYMBOL SCHEDULE

	Post light
	Ground fault duplex receptacle. 'WP' indicates weatherproof.
	Junction box.

### LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	LAMPS
1	ASYMMETRIC INDIRECT LUMINAIRE MOUNTED ON 15' POLE	REBELLE	1-150W MH
2	SYMMETRIC INDIRECT LUMINAIRE MOUNTED ON 18' POLE	REBELLE	1-150W MH

NOTE: REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.



**APGM**  
Certificate of Authorization  
Nova 3 Engineering Ltd.  
No. 962 Date: 2011-04-15

LOCATION	APPROVED	B.M. ELEV.	BM ELEV.
UNDERGROUND STRUCTURES	STRUCTURES		
ORIGINAL SIGNED BY	DATE		
SUPV. U/G STRUCTURES COMMITTEE			

NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRM GIVEN LOCATIONS AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

DESIGNED BY	DATE	BY	DATE
DZ			
DRAWN BY	DF		
CHECKED BY	VJT		
APPROVED BY			
HOR. SCALE	1:150		
VERTICAL			
NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	2011.04.20	DZ

NOVA 3 ENGINEERING LTD.  
CONSULTING ENGINEERS

**DILLON CONSULTING**

RELEASED FOR CONSTRUCTION  
ORIGINAL SIGNED BY RANDY FINGAS  
DATE: April 20, 2011

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
V. J. THIELMANN  
REGISTERED ENGINEER  
2011.04.15

CONSULTANT PROJECT NO.  
08-028

**THE CITY OF WINNIPEG**  
TRANSIT DEPARTMENT

Winnipeg

SOUTHWEST RAPID TRANSIT CORRIDOR - STAGE 1  
STATION CONSTRUCTION, WARSAW RECONSTRUCTION & ASSOCIATED WORKS

CITY DRAWING NUMBER  
P-3325-28

SHEET 28 OF 28

CONSULTANT DRAWING NUMBER  
C7-B2201-T

FORT ROUGE STATION  
ELECTRICAL LAYOUT

J:\31\0326\New\Draw\FR SITE LAV01072011-01-24.dwg