

NOTES :

CONSTRUCTION STANDARDS
 TO BE CONSTRUCTED IN ACCORDANCE WITH MANITOBA HYDRO DISTRIBUTION AND SUBTRANSMISSION STANDARDS, LATEST REVISION.
 NO MAJOR CHANGES SHALL BE MADE WITHOUT APPROVAL OF THE DESIGN ENGINEER OR DELEGATE.

SINGLE PHASE PAD-MOUNTED TRANSFORMER LOCATION
 SEE CD205-3 FOR RULES PERTAINING TO THE PLACEMENT OF ALL PADMOUNTED EQUIPMENT

CUSTOMER ACCEPTANCE
 THE CUSTOMER SERVICE DEPARTMENT REPRESENTATIVE IS RESPONSIBLE FOR OBTAINING WRITTEN CUSTOMER AGREEMENT TO THE PROPOSED INSTALLATION PRIOR TO CONSTRUCTION COMMENCEMENT.

SITE GRADING
 THE DEVELOPER IS RESPONSIBLE FOR GRADING OF THE SITE TO WITHIN +0.15M OF FINISHED GRADE PRIOR TO CONSTRUCTION COMMENCEMENT. BENCHMARKS ARE TO BE OBTAINED FROM THE DEVELOPER OR CONSULTANT.

EQUIPMENT ELEVATIONS
 THE DEVELOPER TO INDICATE ON ONE COPY OF THE MANITOBA HYDRO DRAWINGS) THE FINISHED GRADE AT ALL EQUIPMENT LOCATIONS, REFERENCED TO A BENCHMARK.

SERVICE CONDUCTOR
 SERVICE CONDUCTOR TO BE 10 AL PE/PVCJ TRIPLEX UNLESS NOTED OTHERWISE.

AUTHORITY	NOTIFIED	NOT REQ'D	OBTAINED
DISTRICT	2019 XX XX		2019 XX XX
C.O.W./MUNICIPAL	2019 XX XX		2019 XX XX
M.T.S.		X	
GAS		X	
SHAW		X	
EASEMENTS		X	
COMMUNICATIONS		X	
S.C.C.		X	
DEPT. OF HIGHWAYS		X	

CONTACT	NAME	PHONE NUMBER	E-MAIL ADDRESS
DESIGN	SLAVA REVZIN	249-8401-8478	SREVZIN@PRIMARYENG.COM
DESIGN ENGINEER	BEN MCLEOD	249-8401-8478	BMCLEOD@PRIMARYENG.COM
PORTFOLIO PM	DARRIN WACHI	451-2817	DWACHI@HYDRO.MB.CA
EMERGENCY SERVICES	DARRYL STOOK	918-0341	DSTOOK@HYDRO.MB.CA
UG CONSTRUCTION	BILL AMMETER	981-8356	BAMMETER@HYDRO.MB.CA
OH CONSTRUCTION	WAYNE IRLAND	771-5212	WIRLAND@HYDRO.MB.CA
HYDRO GAS			
SHAW			
MTS			
CUSTOMER REP			
DISTRICT ENG TECH	ROB DENIKA	756-1928	RDENIKA@HYDRO.MB.CA

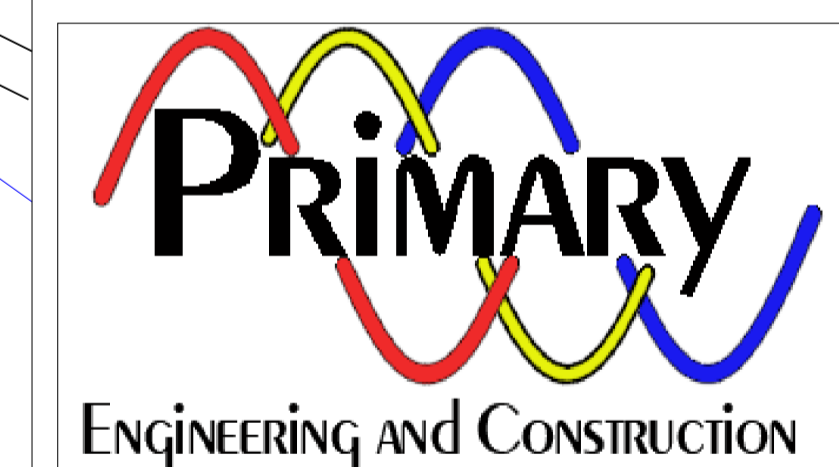
INSTALLED			
Quantity	Fixture Type	Wattage	Pole Type
7	LED	40	EXCLUSIVE
##	LED	##	SHARED
##	LED	##	EXCLUSIVE
##	LED	##	SHARED

REMOVED			
Quantity	Fixture Type	Wattage	Pole Type
5	LED	40	EXCLUSIVE
##	LED	##	EXCLUSIVE
##	LED	##	EXCLUSIVE
##	LED	##	SHARED

LED CONVERSION CHART		
HPS WATTAGE	EQUIVALENT LED WATTAGE	CATALOG NUMBER
100	73	ERS10C3E1540
150	95	ERS10C3E1740
250	138	ERS120E1540
400	209	ERS30N5E1540

*STREETLIGHT PLACEMENT FOLLOWS IES STANDARDS AND THEY ARE PLACED ACCORDING TO USING DRIVEWAY LOCATIONS PROVIDED BY THE DEVELOPER. DRIVEWAY LOCATIONS THAT HAVE BEEN CHANGED AFTER THE DESIGN HAS BEEN SEALED RESULTING IN A CONFLICT BETWEEN STREETLIGHTS AND THE DRIVEWAY ARE THE RESPONSIBILITY OF THE DEVELOPER TO RECOVER THE COSTS ASSOCIATED WITH RELOCATING THE STREETLIGHTS.

BANNERS AND ASSOCIATED HARDWARE TO BE REMOVED AND RETURNED TO THE CITY OF WINNIPEG, 1277 PACIFIC AVENUE WITH AN ITEMIZED LIST AND QUANTITIES.



INFORMATION PERTAINING TO THE SIZE, TYPE AND LOCATION OF MANITOBA HYDRO FACILITIES AND INSTALLATIONS IS ILLUSTRATED AND INDICATED BY THE NUMBERS OF ANY ACTIVITY BEING CONDUCTED AT OR NEAR THE IDENTIFIED FACILITIES. ALL LOCATIONS AND EQUIPMENT MUST BE VERIFIED BY APPROPRIATE HYDRO ELECTRIC OFFICES PRIOR TO ANY PHYSICAL ACTIVITY BEING UNDERTAKEN AT NEAR HYDRO INSTALLATIONS.

MANITOBA HYDRO SHALL CUT, CAP & ABANDON ORIGINAL FEED TO THE STREET LIGHTS PRIOR TO REMOVAL. ALL FINAL CONNECTIONS WILL BE COMPLETED BY MANITOBA HYDRO.

UPON DISCONNECTION BY MANITOBA HYDRO THE CONTRACTOR SHALL INSTALL TEMPORARY # 6PX OVERHEAD FEED IN ORDER TO MAINTAIN LIGHTING DURING CONSTRUCTION. AT THE END OF CONSTRUCTION TEMPORARY OVERHEAD SHALL BE DISCONNECTED BY THE CONTRACTOR.

UPON DISCONNECTION BY MANITOBA HYDRO THE CONTRACTOR SHALL INSTALL TEMPORARY #4PX DURING CONSTRUCTION. AT THE END OF CONSTRUCTION TEMPORARY OVERHEAD SHALL BE DISCONNECTED BY THE CONTRACTOR.

MANITOBA HYDRO SHALL CUT, CAP & ABANDON ORIGINAL FEED TO THE STREET LIGHTS PRIOR TO REMOVAL. ALL FINAL CONNECTIONS WILL BE COMPLETED BY MANITOBA HYDRO.

INSTALL ALL 4AL CN CABLE IN 2" CONDUIT

INSTALL PROPOSED STREET LIGHTS ON NEW TRENCH ALIGNMENT AS SHOWN

INSTALL NEW GROUND RODS AS PER CD50-5

INSTALL STREET LIGHT BASES USING SOFT DIG

TRANSFER LUMINAIRE FROM EXISTING STANDARDS TO NEW STANDARDS

MANITOBA HYDRO TO SALVAGE EXISTING STREETLIGHT DIP AND ALL ASSOCIATED EQUIPMENT AND INSTALL NEW DIP AS PER CD 315-5 C/W ONE NEW 60A POLE MOUNTED STREETLIGHT RELAY AND PHOTO-ELECTRIC CONTROLLER. INSTALL BY PASS SWITCH AS PER CD 315-11.

CONTRACTOR SHALL INSTALL LOWER 3m OF CABLE GUARD AS PER CD 315-5 & CD 200-63. COIL NEW CABLE FOR FINAL CONNECTION BY MANITOBA HYDRO.

INSTALL PROPOSED STREETLIGHTS ON NEW TRENCH ALIGNMENT AS SHOWN.

INSTALL NEW GROUND RODS AS PER CD 50-5.

TRANSFER LUMINAIRES FROM EXISTING STANDARDS TO NEW STANDARDS.

RE-USE STREETLIGHT STANDARD.

INSTALL ALL 4AL CN CABLE IN 2" CONDUIT.

OBTAIN TEMPORARY OH FEED FROM THE STREET LIGHT ARM.

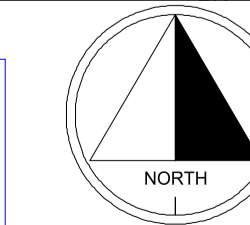
PROPOSED SEQUENCE OF CONSTRUCTION:
 -MH STAFF SHALL DISCONNECT AND ISOLATE THE EXISTING STREET LIGHT POLES TO BE REPLACED.
 -CONTRACTOR TO INSTALL TEMPORARY OH FEEDS BETWEEN EXISTING POLES.
 -MH STAFF TO INSTALL FINAL DROP FROM EXISTING POLE TO SOURCE AND ENERGIZE.
 -CONTRACTOR TO INSTALL NEW POLES, UNDERGROUND STREET LIGHT CABLE BETWEEN POLES, GROUND RODS, RELAYS, AND BOTTOM SECTION OF CABLE GUARD AT DIP (IF APPLICABLE) AND TERMINATE IN HAND HOLE.
 -MH STAFF TO DISCONNECT AND ISOLATE TEMPORARY OH FEED TO EXISTING POLES, AS WELL AS COMMON AND ENERGIZE NEW POLES FROM NEW UNDERGROUND SOURCE.
 -CONTRACTOR TO REMOVE OH FEEDS AND REMOVE EXISTING POLES.

COW TENDER 20-R-XX

PRELIMINARY NOT TO BE USED FOR CONSTRUCTION

REEL NUMBER	MANUFACTURER	MANUFACTURE DATE

CONTACT "CLICK BEFORE YOU DIG MANITOBA" AT ClickBeforeYouDigMB.com
 THREE FULL WORKING DAYS PRIOR TO CONSTRUCTION FOR LOCATION OF EXISTING WATER, WASTEWATER, LAND DRAINAGE UTILITIES AND MANITOBA HYDRO UTILITIES



DATE	REVISIONS	BY	CHKD.	APP.

DRAWING NUMBER	REFERENCE DRAWINGS	DRAWN	CHECK	SCALE	DATE
	WINNIPEG UGS APPROVAL	SR		1:500	2020-03-13

AREA NUMBER	STATION NUMBER	FEDDER NUMBER	SYSTEM VOLTAGE
5306	N/A		120/240V

MANITOBA HYDRO DISTRIBUTION ENGINEERING	
WOF#	NETWORK #
P:33419	

CUSTOMER SERVICE PROJECT	
COW 20-R-XX - GOVERNMENT ST - STREET RENEWAL	
INSTALL 7 DAVITS AND LUMINAIRES. INSTALL 377m OF 2" PIPE & #4AL.	