

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/PVC/J 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	TAMMY BAUMANN	306-471-7541	TBAUMANN@HYDRO.MB.CA
DESIGN ENGINEER	VICTOR EDHOH	306-261-2204	VEDHOH@HYDRO.MB.CA
PORTFOLIO PM	DARRIN WACH	451-2617	DWACH@HYDRO.MB.CA
ENERGY SERVICES	DARRYL STOKI	918-0341	DSTOKI@HYDRO.MB.CA
UGS CONSTRUCTION	BILL AMMETER	981-4356	BAMMETER@HYDRO.MB.CA
OH CONSTRUCTION	WAYNE RELAND	771-5212	WRELAND@HYDRO.MB.CA
HYDRO GAS			
SHAW			
MTS			
CUSTOMER REP			
DISTRICT ENG TECH	ROB DENKA	796-1926	RDENKA@HYDRO.MB.CA

INSTALLED				
Quantity	Fixture Type	Wattage	Pole Type	
4	LED	60	EXCLUSIVE	
##	LED	##	SHARED	
##	LED	##	EXCLUSIVE	
##	LED	##	SHARED	
##	LED	##	SHARED	

REMOVED				
Quantity	Fixture Type	Wattage	Pole Type	
4	LED	60	EXCLUSIVE	
##	LED	##	SHARED	
##	LED	##	EXCLUSIVE	
##	LED	##	SHARED	
##	LED	##	SHARED	

LED CONVERSION CHART		
HPS WATTAGE	EQUIVALENT LED WATTAGE	CATALOG NUMBER
100	75	ERS100E1540
150	95	ERS103E1740
250	138	ERS120K3E1540
400	209	ERS300DE1540

"STREETLIGHT PLACEMENT FOLLOWS IES STANDARDS AND THEY ARE PLACED ACCORDINGLY USING 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 LABELED ONLY FOR THE PURPOSES OF ANY ACTIVITY BEING CONDUCTED AT OR NEAR THE IDENTIFIED HYDRO INSTALLATIONS. ALL LOCATIONS AND EQUIPMENT SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF MANITOBA HYDRO. CONTACT PRIOR TO ANY PHYSICAL ACTIVITY BEING UNDERTAKEN AT NEAR HYDRO INSTALLATIONS.

COLOR	DESCRIPTION
MAGENTA	PROPOSED TRENCH
RED	PROPOSED OBJECT
PINK	OBJECT TO BE ABANDONED
GREEN	OBJECT TO BE SALVAGED
BLACK	EXISTING OBJECT
LL ANNOTATION	1 - #4 AL CN STREET LIGHTING CABLE
LL ANNOTATION	1 - 1/0 TRIPLEX STREET LIGHTING CABLE

UPON DISCONNECTION BY MANITOBA HYDRO THE CONTRACTOR SHALL INSTALL TEMPORARY #4PX OVERHEAD FEED IN ORDER TO MAINTAIN LIGHTING DURING CONSTRUCTION.  
 AT THE END OF CONSTRUCTION TEMPORARY OVERHEAD SHALL BE DISCONNECTED BY THE CONTRACTOR AND RETURNED TO MANITOBA HYDRO.

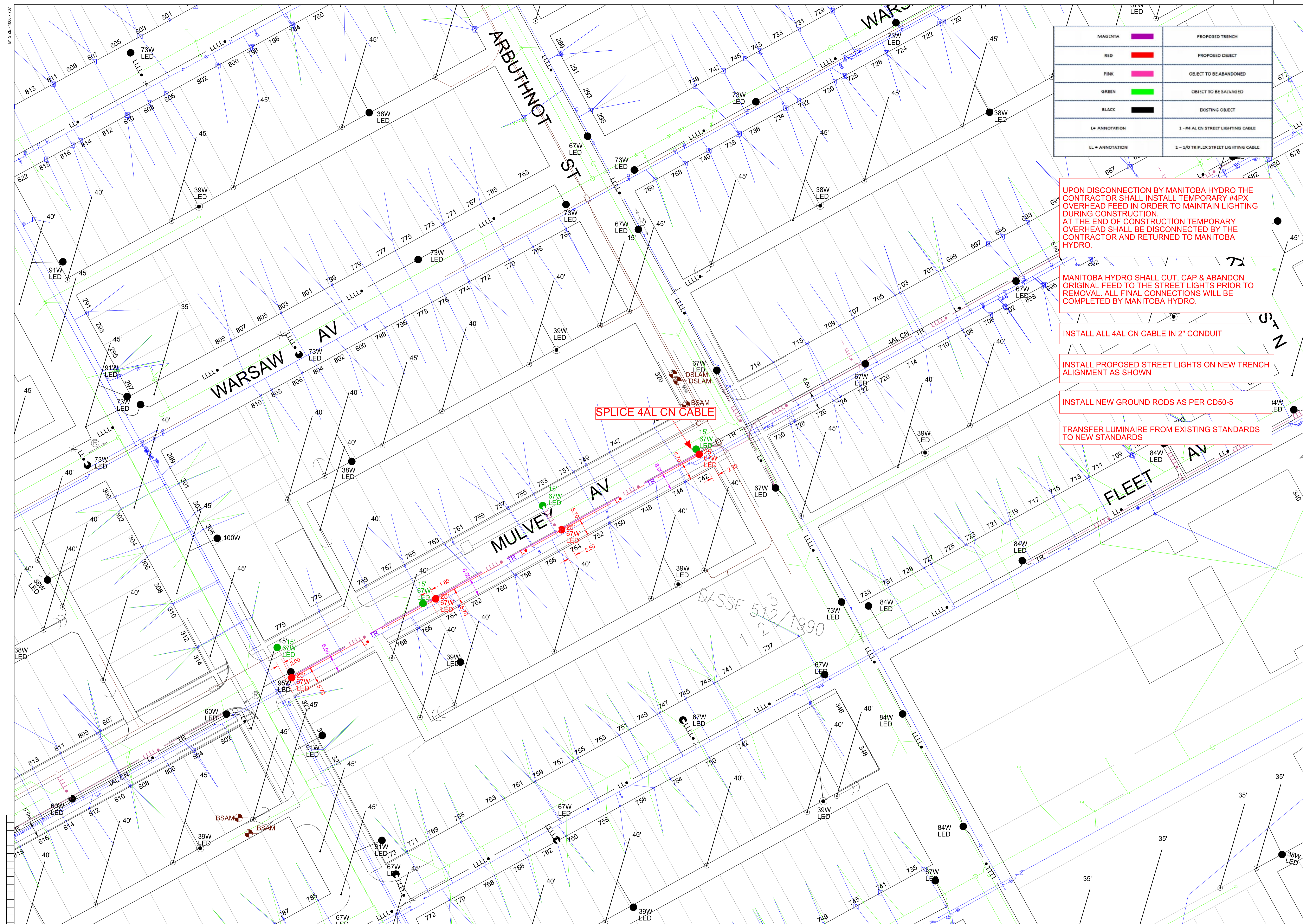
MANITOBA HYDRO SHALL CUT, CAP & ABANDON ORIGINAL FEED TO THE STREET LIGHTS PRIOR TO REMOVAL. ALL FINAL CONNECTIONS WILL BE COMPLETED BY MANITOBA HYDRO.

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

TRANSFER LUMINAIRE FROM EXISTING STANDARDS TO NEW STANDARDS



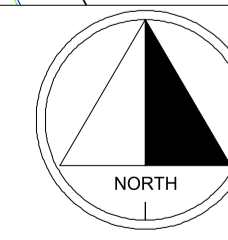
PROPOSED SEQUENCE OF CONSTRUCTION:  
 -MH STAFF SHALL DISCONNECT AND ISOLATE THE EXISTING STREET LIGHT POLES TO BE REPLACED.  
 -CONTRACTOR TO INSTALL TEMPORARY OH FEEDS BETWEEN EXISTING POLES.  
 -MH STAFF TO INSTALL FINAL DROP FROM EXISTING POLE TO SOURCE AND ENERGIZE.  
 -CONTRACTOR TO INSTALL NEW 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  
 19-R-03**

PRELIMINARY  
 NOT TO BE USED FOR CONSTRUCTION

REEL NUMBER	MANUFACTURER	MANUFACTURE DATE

CONTACT "CLICK BEFORE YOU DIG MANITOBA" AT  
[ClickBeforeYouDigMB.com](http://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	T.B.
	WINNIPEG UGS APPROVAL		

DATE	SCALE	SYSTEM VOLTAGE
2019-03-14	1:500	120/240V

AREA NUMBER	MANITOBA HYDRO NETWORK #
5202	4305705

STATION NUMBER	CSC: CITY CENTRE
N/A	

FEEDER NUMBER	CUSTOMER SERVICE PROJECT
	COW 19-R-03 - MULVEY AV - STREET RENEWAL

SYSTEM VOLTAGE	REPLACE 4 DAVITS AND LUMINAIRES.
120/240V	INSTALL 152m OF 2" PIPE & 1/0TPX.