

### IRRIGATION CONTROLLER

RAIN BIRD ESP-LXME WITH RSD RAIN SENSOR  
STATIONS: 16 STATIONS USED: 15  
LOCATE IN TBU 11. COORDINATE WITH  
DEPARTMENTEL REPRESENTATIVE FOR EXACT  
LOCATION. CONTROL WIRE TO BE PLACED IN  
SCHED 40 PVC CONDUIT.

CONTROL WIRE TO BE PLACED IN  
SCHEDULE 40 PVC CONDUIT AND  
ROUTED TO REMOTE CONTROL  
VALVES.


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





INSTALL EACH LATERAL LINE IN  
SEPARATE PVC SLEEVE TWICE THE  
NOMINAL LATERAL PIPE SIZE  
UNDER ALL PAVEMENT.






### NOTES:






1. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
2. THE IRRIGATION PLAN IS DIAGRAMMATIC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE PROPER SPACING AND COVERAGE.
3. THE CONTRACTOR SHALL MONITOR AND SEASONALLY ADJUST THE IRRIGATION SCHEDULE TO PREVENT OVER WATERING IN NON-PEAK PERIODS.
4. CONTRACTOR TO PROVIDE OPERATIONS MANUAL FOR IRRIGATION SYSTEM PRIOR TO FINAL ACCEPTANCE.
5. MANUALLY INSTALL AND HAND TRENCH AROUND TREES, SHRUBS AND OBSTACLES.
6. PERFORM ELECTRICAL WORKS WITH ACCORDANCE TO THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE AND LOCAL AMENDMENTS. THIS INCLUDES TRENCHING, PULLING AND SIZING UNDERGROUND RATED CABLE THROUGH SCHEDULE 40 RIGID PVC CONDUIT, AND BACKFILL.
7. COORDINATE WITH DEPARTMENTAL REPRESENTATIVE ON LOCATING 16 STATION COMMERCIAL CONTROLLER INSIDE TBU11.
8. CONTRACTOR TO PROVIDE ELECTRICAL AS-BUILTS OF CABLE RUNS AND CONTROLLER MOUNTING LOCATION.
9. CONTRACTOR SHALL PROVIDE IRRIGATION SHOP DRAWINGS FOR APPROVAL BY THE DEPARTMENTAL REPRESENTATIVE PRIOR TO INSTALLATION.

### IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION	QTY	bars
	TURF SPRAY 15 cm POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 13 mm NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, AND PRESSURE REGULATING.	64	2.1

SYMBOL	DESCRIPTION	QTY	bars	L/MIN	RADIUS
	TURF ROTOR, 15 cm POP-UP, PLASTIC RISER, ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	6	3.1	5.8	10.7 m
	TURF ROTOR, 15 cm POP-UP, PLASTIC RISER, ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	5	3.1	7.8	11.3 m
	TURF ROTOR, 15 cm POP-UP, PLASTIC RISER, ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	15	3.1	9.5	11.3 m
	TURF ROTOR, 15 cm POP-UP, PLASTIC RISER, ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	1	3.1	11.7	12.2 m
	TURF ROTOR, 15 cm POP-UP, PLASTIC RISER, ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	67	3.1	15.2	12.8 m
	TURF ROTOR, 15 cm POP-UP, PLASTIC RISER, ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	2	3.1	19.3	13.7 m

SYMBOL	DESCRIPTION	QTY
	WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 25 mm BALL VALVE WITH 25 mm PESB VALVE AND 25 mm PRESSURE REGULATING 2.76 BAR QUICK-CHECK BASKET FILTER. 0.3 GPM TO 20 GPM.	1
	HIGH FLOW CONTROL ZONE KIT, FOR LARGE COMMERCIAL DRIP ZONES. 40 mm PESB-R SCRUBBER GLOBE VALVE WITH SINGLE 40 mm PRESSURE REGULATING (2.76 BAR) QUICK-CHECK BASKET FILTERS. FLOW RANGE: 15-62 GPM.	1
	FLUSH VALVE	8
	AREA TO RECEIVE DRIPLINE	1,246 m
	XFCV ON-SURFACE LANDSCAPE DRIPLINE WITH A HEAVY-DUTY 0.24 BAR CHECK VALVE. 0.6 GPH EMITTERS AT 30 cm O.C. DRIPLINE LATERALS SPACED AT 45 cm APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. GREAT FOR ELEVATION CHANGE. SPECIFY XF INSERT FITTINGS.	

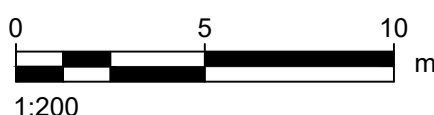
SYMBOL	DESCRIPTION	QTY
	25 mm, 40 mm, 50 mm PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION, WITH PRESSURE REGULATOR MODULE.	15
	25 mm BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	1
	50 mm TO 203 mm CAST IRON GATE ISOLATION VALVE. RING-TITE GASKET ENDS. RESILIENT WEDGE WITH EPOXY COATING AND OPTIONAL NUT. FOR IPS PIPE. SAME SIZE AS MAINLINE PIPE.	1
	REDUCED PRESSURE BACKFLOW PREVENTER	1
	20 STATION COMMERCIAL CONTROLLER. MOUNTED ON A PLASTIC WALL MOUNT. FLOW SENSING AND WATER MANAGEMENT CAPABILITIES.	1

IRRIGATION LATERAL LINE: HDPE PE4710 DR 13.5 - 25 mm DIAMETER	1,364.3 m
IRRIGATION LATERAL LINE: HDPE PE4710 DR 13.5 - 32 mm DIAMETER	278.2 m
IRRIGATION LATERAL LINE: HDPE PE4710 DR 13.5 - 40 mm DIAMETER	367.4 m
IRRIGATION LATERAL LINE: HDPE PE4710 DR 13.5 - 50 mm DIAMETER	170.6 m
IRRIGATION MAINLINE: HDPE PE4710 DR 11 - 80 mm DIAMETER	132 m
PIPE SLEEVE: PVC CLASS 200 SDR 21	80 m
CONTROL WIRE SLEEVE, PVC SCHED 40, 50 mm	180 m

VALVE CALLOUT
# VALVE NUMBER
# VALVE FLOW
# VALVE SIZE

### IRRIGATION POINT OF CONNECTION

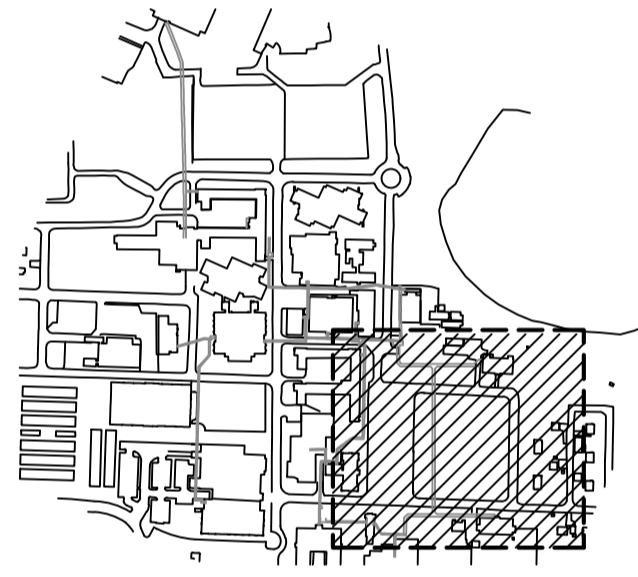
SIZE: 100 mm  
MINIMUM STATIC PRESSURE: 4.9 BAR  
ATTACH TO POTABLE WATER LINE AT APPROXIMATE LOCATION SHOWN.



## TENDER NOT FOR CONSTRUCTION



Key Plan



Revision	Description	Date
E	Issued For Tender	19/09/30
D	Issued For 99% Review	19/06/21
C	Issued For 85% Review	19/03/15
B	Issued For 50% Review	18/11/13
A	Issued For Review	18/09/07

Project title

### Tunnel Revitalization

Designed by  
D. Morehouse  
Drawn by  
D. Morehouse / J. Green  
Approved by  
B. Wolfater  
PWSC Project Manager  
J. Dayman  
Drawing title

Package 1 - TBU43 - Above Ground  
Landscape - Proposed  
Irrigation Plan

Project no.	Drawing no.	Revision no.
1004259	L1.03	E