

**GENERAL SITE LIGHT NOTES**

**CONCRETE BASES**

FOR DETAILS SEE VTRANS STANDARD SHEET E-180B.

WHEN CONCRETE BASES ARE INSTALLED IN SLOPING GROUND, THERE MUST BE A MINIMUM OF 5'-0" OF THE BASE IN THE GROUND.

CARE SHOULD BE TAKEN WHERE CONCRETE BASES, DRAINAGE STRUCTURES OR UTILITIES ARE CLOSE TOGETHER.

**POLES, ANCHOR BASES AND ARMS**

ALL NEW SITE LIGHT POLES AND LUMINAIRE ARMS SHALL BE ALUMINUM IN ACCORDANCE WITH SUBSECTION 753.01 (B) AND SHALL BE DARK BRONZE IN COLOR.

**LUMINAIRES AND POLES**

FOR LIGHT POLE DETAILS SEE VTRANS STANDARD SHEET E-180A.

LUMINAIRES SHALL HAVE A MOUNTING HEIGHT OF 22.5'. THE ARM LENGTH SHALL BE 4'.

TYPE A: ALUMINUM, DARK BRONZE, 'COBRA HEAD' TYPE LED, TYPE III, DISTRIBUTION EQUIVALENT TO BETA LED CATALOG NO. STR-LWY-3MB-04-C-UL-BZ-525-R-SC WITH PHOTO CELL.

TYPE B: ALUMINUM, DARK BRONZE, 'COBRA HEAD' TYPE LED, TYPE V, DISTRIBUTION EQUIVALENT TO BETA LED CATALOG NO. STR-LWY-3MB-04-C-UL-BZ-525-R-SC WITH PHOTO CELL.

POLES: TAPERED ALUMINUM, 20 FT. DARK BRONZE, WITH BASE COVER EQUIVALENT TO GE LIGHTING SYSTEMS: RRTA-20-SA-6S-6.0-1-F

LUMINAIRE SHALL MEET THE ISO FOOTCANDLE DATA AND THE ILLUMINATION LEVELS AS DESCRIBED BELOW.

**ILLUMINATION LEVELS**

PARK AND RIDE SHALL HAVE AN AVERAGE OF 1.0fc., MINIMUM OF 0.2fc., WITH MIN/MAX RATIO OF 20:1, AND AN AVE/MIN UNIFORMITY OF BETWEEN 3:1 AND 4:1 OR BETTER.

**CONDUIT**

A 2 INCH (I.D.) MINIMUM CONDUIT SHALL BE USED AT ALL LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS, ALL CONDUIT SHALL BE SCHEDULE 80 PVC.

**POWER DROP STANCHION**

FOR DETAILS SEE VTRANS STANDARD SHEET E-175.

MINIMUM 2" NEMA APPROVED PVC SCHEDULE 80 SHALL BE USED.

ATTACH CONDUIT ON SIDE OF POLE AWAY FROM TRAFFIC WHEN POSSIBLE.

INSTALL LOWEST STANDOFF BRACKET AT 7 FEET ABOVE GRADE. SPACE REMAINING STANDOFF BRACKETS APPROX. 5 FEET APART.

INSTALL SLIP JOINT APPROXIMATELY 2/3 OPEN.

TERMINATE CONDUIT WITH CONDULATOR FOR PRIMARY CABLE, OR WEATHERHEAD FOR SECONDARY CABLE.

SERVICE CONDUIT SHALL BE MINIMUM 2 INCH. SMALLER CONDUIT MAY BE ALLOWED WITH PRIOR APPROVAL FROM THE UTILITY AND THE ENGINEER AND AFTER CONSULTATION WITH THE ROADWAY, TRAFFIC & SAFETY, AND PAVEMENT MANAGEMENT SECTIONS.

**WIRE**

ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR JUNCTION BOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND SIZED AS SPECIFIED ON THE PLANS. ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.

**GROUNDING**

ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR. RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUND CONDUCTOR.

ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

**PULLBOXES / JUNCTION BOXES**

FOR DETAILS SEE VTRANS STANDARD SHEET E-173.

**GENERAL**

THE LOAD ON EACH BRANCH OF A THREE WIRE CIRCUIT SHALL BE AS BALANCED AS POSSIBLE, LOAD TO NEUTRAL.

THE LAST CONCRETE POLE BASE AT THE END OF EACH CIRCUIT SHALL HAVE A CONDUIT SWEEP WITH CAP INSTALLED FOR FUTURE USE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY ELECTRICAL PERMITS.



LEGEND: BLACK OR WHITE (NON-REFL.) - STAMPED PRIOR TO PRINTING/PAINTING. BACKGROUND: NATURAL ALUMINUM OR FLAT BLACK SURFACE, SAME AS POLE FINISH.

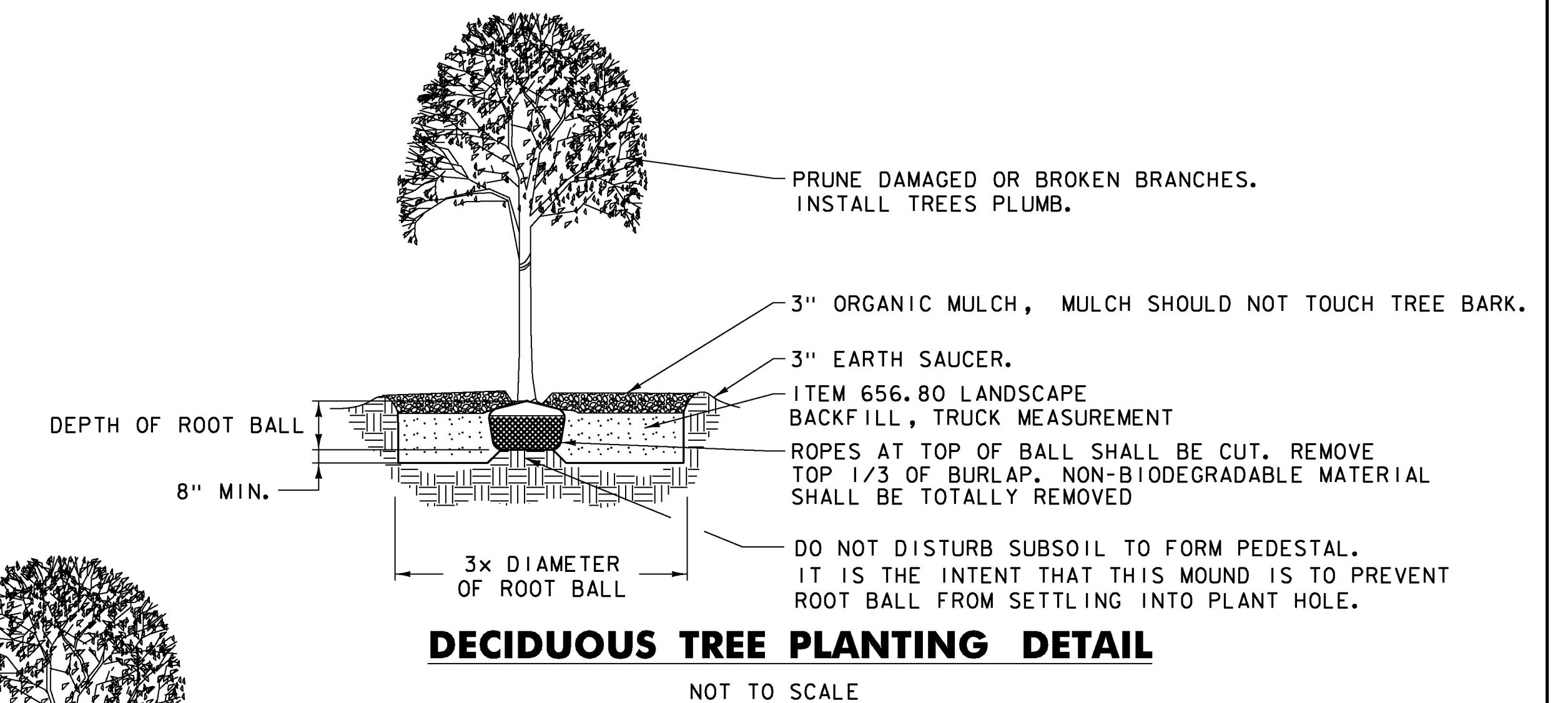
**DETAILS FOR TAGS ATTACHED TO SITE LIGHT POLES**

NOT TO SCALE

1. THE TAG SHALL BE MOUNTED ON ALL STREET LIGHT POLES IN SUCH A MANNER AS NOT TO BE EASILY REMOVED, SUCH AS WELDED, RIVETED, OR BOLTED WITH VANDAL PROOF BOLTS.
2. THE LETTERS SHALL BE PUNCHED, STAMPED, ENGRAVED, OR PHOTO-ETCHED. PUNCHING, STAMPING OR ENGRAVING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
3. THE BASE MATERIAL FOR THE TAG SHALL BE ALUMINUM WITH A MINIMUM THICKNESS OF 0.100 INCH.
4. THE TAG SHALL BE ATTACHED TO THE POLE ABOVE THE HANDHOLE, 6 INCHES MAXIMUM. IF THE POLE HAS A TRANSFORMER BASE ATTACH TAG TO COVER.
5. TYPE 'A' FIXTURE TAG SHALL READ: SL-#-51W-LED-SL3  
TYPE 'B' FIXTURE TAG SHALL READ: SL-#-102W-LED-5WQ

**GENERAL NOTES**

1. APPLICABLE STANDARDS: AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS, ANSI A300. AMERICAN STANDARD FOR NURSERY STOCK, AND SO 260.1. HORTUS THIRD, THE STAFF OF THE L.H. BAILEY HORTORIUM. ALL STANDARDS SHALL INCLUDE THE LATEST ADDITIONS AND AMENDMENTS AS OF THE DATE OF ADVERTISEMENT FOR BIDS.
2. FERTILIZER: SLOW RELEASE TYPE, OR SUBSTITUTE APPROVED BY THE ENGINEER, APPLIED AS FOLLOWS:  
TREES AND SHRUBS  
MARCH-MAY 10-10-10  
MAY-OCTOBER 6-10-10  
OCTOBER-MARCH 4-12-12  
RATE OF APPLICATION: 1lb./INCH IN CALIPER
3. EXCAVATE SOIL TO 3X WIDER THAN ROOT BALL DIAMETER FOR TREES AND 2X WIDER FOR SHRUBS. SET BALLED AND BURLAPPED (B&B) STOCK ON LAYER OF COMPACTED SOIL MIXTURE, STAND PLUMB AND IN CENTER OF PIT OR TRENCH WITH TOP OF BALL AT THE SAME ELEVATION AS ADJACENT FINISHED LANDSCAPE GRADES. REMOVE WIRE BASKET AND ALL TWINE, REMOVE BURLAP FROM UPPER THIRD OF BALLS; RETAIN ON BOTTOMS. SET CONTAINER GROWN SOCK AS SPECIFIED FOR B&B MATERIAL, EXCEPT CUT CANS ON TWO SIDES WITH AN APPROVED CAN CUTTER.
4. DISH TOP OF BACKFILL TO ALLOW FOR MULCHING. MULCH PITS WITH NOT LESS THAN 3" OF ORGANIC MULCH. MULCH SHOULD NOT TOUCH TREE BARK. SEE SUBSECTION 755.10.
5. ALL PLANTS SHALL BE CAREFULLY AND THOROUGHLY WATERED DURING PLANTING AND AS OFTEN AS NECESSARY THEREAFTER TO PROVIDE THE BEST GROWING CONDITIONS UNTIL ACCEPTANCE OF THE WORK.
6. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE, AT THE EXPENSE OF THE CONTRACTOR.
7. MAINTAIN LAWNS BY WATERING, FERTILIZING, WEEDING, MOWING (2" HEIGHT), TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING, AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS AT THE EXPENSE OF THE CONTRACTOR.
8. SEE TYPICAL SECTIONS SHEET 2 FOR TURF ESTABLISHMENT INFORMATION.



**DECIDUOUS TREE PLANTING DETAIL**

NOT TO SCALE

**PLANTING ALONG SLOPE**

NOT TO SCALE

PROJECT NAME:	BRADFORD
PROJECT NUMBER:	CMG PARK (33)
FILE NAME:	z09K252frm.dgn
PROJECT LEADER:	M. FOISY
DESIGNED BY:	I. MAYNARD
CHECKED BY:	G. SANTY
LIGHTING AND LANDSCAPING DETAILS	
PLOT DATE:	5/22/2014
DRAWN BY:	P. ARMATA
CHECKED BY:	G. SANTY
SHEET	18 OF 33

