

### OUTDOOR LIGHTING

Post Top Installation Fiberglass Pole  
14 Foot Mounting Height

15 75 05 01  
Sheet 1 of 1

**NOTES:**

- Limestone screenings to be wetted and thoroughly tamped to provide solid compaction around the pole.
- Generally only one tag per street light shall be installed. If more than one street light installed on the same pole, one tag per street light is required, and each tag should be installed on the same quadrant of the light. The tag should be installed visibly from the ground level but not reachable from public. See Dist. 15 90 01 01 for more details.
- In Missouri residential developments, the contractor will install 1-1/2 inch conduit to the pole site. Amener will install the pole and the cable.
- For late underground straight cable at pad mount transformer or pedestal. See Dist. 15 90 01 01.

Std / Sht. No.	Description	15 75 05 01	Qty.
A	15 90 01 01 Pole - F.S. Black, w/hard hose	1	
B	Rock, Crushed Limestone Screening	200	
C	12 51 148 Conduit Poly 1"	2	
D	16 07 292 Cable - Duplex #6 AL	17	
E	16 07 104 Cable - 1" #10-2 conductor-FI	1	
F	17 01 116 Connector, Bolt/Stud Screw - #4-20, 3/16"	2	

DISTRIBUTION CONSTRUCTION STANDARDS **Ameren** ENG-WYV REV. NO. 8 REV. DATE: 01/21/10 Page 15 - 31

### OUTDOOR LIGHTING

Luminaire Components - Post Top Installation

15 70 14 \*\*  
Sheet 1 of 1

**NOTES:**

- Position luminaire to facilitate service from the street.
- On Type III, align reflector with street side.
- Face eye of photo-electric cell north.

Std / Sht. No.	Description	15 70 14 **	01	02	03	04	05	06	07	08	09	10
38 01 524	Colonial, 100w, HPS, Type III	MO										
38 01 525	Colonial, 100w, HPS, Type V	MO	1									
38 01 517	Early American, 100w, HPS, Type III	ALL										
38 01 516	Early American, 100w, HPS, Type V	MO										
38 01 542	Early American, 175w, MH, Type III	IL										
38 01 515	Contemporary, 100w, HPS, Type III	MO										
38 01 514	Contemporary, 100w, HPS, Type V	MO										
38 01 584	Aspen, 100w, HPS, Type III	MO										
38 01 585	Aspen, 100w, HPS, Type V	MO										
38 01 586	Switch, Photo electric Cell	MO	1	1	1	1	1	1	1	1	1	1
38 01 586	Lamp, 100w, HPS	MO	1	1	1	1	1	1	1	1	1	1
28 58 280	Lamp, 175w, MH	MO										

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### USPS APPROVED SPECIFICATIONS - CONCRETE PAD (MULTIPLE UNIT)

**NOTES:**

- CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN AIR MAX - 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3-50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
- ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE B8M, TYPE 316 STAINLESS STEEL.
- A 1" CBU CONTOUR IS DERIVED, A 2" X 4" CBU CONTOUR MAY BE USED AS LONG AS THEY ARE ARRANGED IN GROUPS SUCH THAT THE OVERALL DIMENSION OF THE CONCRETE BASE DOES NOT EXCEED 192 INCHES.

### CLUSTER BOX UNIT (CBU) - ANCHORING METHODS

CBU's must be level and mounted firmly in concrete, using one of the following methods.

- The J-bolt method is the preferred method of installation of CBU's on concrete pads; however, the J-bolt pattern must be accurate with the CBU pedestal plate. When using J-bolts, in order to prevent any damage or accidents that could result from the exposed bolts, consideration should be given as to the time lapse between pouring the concrete and the actual installation. Expansion anchors must be installed in accordance with the manufacturer's instructions.
- The use of anchor bolts for the installation of CBU's on concrete pads is also acceptable as long as the methods described below are followed.
  - Hilti Kwik Bolt II, 1/2" diameter X 5-1/2" overall length Catalog Number: 000-453-696, KG II 12-612, Stainless Steel Catalog Number: 000-456-744 Minimum embedment in concrete must be no less than 3-1/2"
  - ITW Ramset Redhead Trubolt, galvanized, 1/2" diameter X 7" overall length Catalog Number: 7324 Minimum embedment in concrete must be no less than 4"

### CLUSTER BOX UNIT (CBU) - CONCRETE PAD REQUIREMENTS - ALL FREE STANDING PADS MUST BE 8" THICK -

1 UNIT	SINGLE PAD	4' X 4'
2 UNITS	DOUBLE PAD	4' X 7'
3 UNITS	TRIPLE PAD	4' X 10'
4 UNITS	QUAD PAD	4' X 13'

**\*\*\* WHEN PLACING A PARCEL LOCKER AT ANY CBU LOCATION, INCREASE THE PAD SIZE BY AN ADDITIONAL 4' X 4' \*\*\***

### FENCE DETAIL FOR RETAINING WALL

NOT TO SCALE

**NOTES:**

- Use one depth on Block height and total length using the "MOUNTAGE PILE" specifications for your 2.5' high panels.
- 1.7' A If Flagging will require a 1/4" Pipe Picker and 1/4" Pipe.

AMERISTAR® 1555 N. Meigs, Tulsa, OK 74116 1-800-333-3822 www.ameristar.com

### ISSUE REMARKS/DATE

1	INITIAL SUBMITTAL
2	9-23-20 Rev Duckett Creek Cmmnt
3	20201001 Rev per City/Duckett/PWSD#2
4	20201014 Rev per Duckett
5	20201020 Rev per City Comments
6	20201102 Rev per DCSD Comments
7	20201106 Rev per City Comments

### TYPICAL YARD SWALE

Maximum Discharge (Q) = 3.00 cfs  
Maximum Velocity (V) = 3.00 ft/sec  
N = 0.030 (grass)  
Maximum side slopes = 3 (horizontal) : 1 (vertical)

Longitudinal Slope (%)	Discharge (cfs)	Velocity (ft/sec)	Depth (ft)
0.5	3.00	1.73	0.76
1.0	3.00	2.23	0.87
2.0	3.00	2.87	0.99
3.0	1.99	3.00	0.47
4.0	1.30	3.00	0.38
5.0	0.92	3.00	0.32
6.0	0.70	3.00	0.28
7.0	0.52	3.00	0.24
8.0	0.43	3.00	0.22
9.0	0.36	3.00	0.20
10.0	0.32	3.00	0.19

### ASPHALT TRAIL PAVEMENT DETAIL

N.T.S.

### TYPICAL STREET LIGHTING

NOT TO SCALE

### TYPICAL LOT DRAINAGE

NOT TO SCALE

### LANE NARROWING TRAFFIC CALMING DETAIL

N.T.S.

### POSTAL SERVICE DETAILS FOR MULTI-UNIT CBU PLACEMENT

NOT TO SCALE

**NOTES:**

- ALL PARKING STRIPING SHALL BE 4" PAINTED YELLOW LINES (TYP)
- ALL ACCESSIBLE PARKING STRIPING SHALL BE 4" PAINTED BLUE LINES (TYP)

### TYPICAL PARKING STRIPING

N.T.S.

### ACCESSIBLE PARKING SIGN

N.T.S.

**NOTES:**

- 12"x18" ACCESSIBLE PARKING SIGN, R7-8
- HANDICAPPED SIGNS TO CONFORM WITH U.S. DEPARTMENT OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- COORDINATE WITH THE CITY FOR THE LATEST "FINE" SIGN WORDING AND REQUIREMENTS PRIOR TO CONSTRUCTION.
- 6"x12" SUPPLEMENTAL SIGN, PER MISSOURI STANDARDS
- 2" DIA. PIPE, PAINT TO MATCH SIGN

### Slope Installation

The following slope guide outlines general recommendations for installing RollMax™ System temporary and/or permanent RECPS on sloping applications. Consult the staple pattern guide (Figure 9) for fastener spacing recommendations based on the slope severity.

### Channel Installation

The following channel guide outlines general recommendations for installing RollMax™ System temporary and/or permanent RECPS in concentrated flow applications. Consult the staple pattern guide (Figure 9) for fastener spacing recommendations based on the channel severity.

### Shoreline Installation

Below are recommendations for installing RollMax™ System temporary and/or permanent RECPS along shoreline and stream bank applications. Consult the staple pattern guide (Figure 9) for fastener spacing recommendations based on the bank severity.

### Shoreline/Streambank Installation Steps

- For easier installation, lower water level from Level A to Level B before installation to allow bottom trenching.
- Prepare soil before installing RECPS, including any necessary application of lime, fertilizer and sand.
- Begin at the top of the shoreline by anchoring the RECPS in a 6 in. (150 mm) deep 6 in. (150 mm) wide trench with approximately 12 in. (300 mm) of RECPS extended beyond the upper portion of the trench. Anchor the RECPS with a 1/2 in. (12.5 mm) wide anchor trench. Backfill and compact the trench after staking. Apply sand to the compacted soil and fold the remaining 12 in. (300 mm) portion of RECPS back over the sand and compacted soil. Secure RECPS over compacted soil with a row of staples/stakes spaced approximately 12 in. (300 mm) apart across the width of the RECPS.
- Roll RECPS either (a) down the shoreline for long banks. Drop to bottom or (b) horizontally across the shoreline slope. RECPS will install with appropriate side against the soil surface. All RECPS must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
- The edges of all horizontal and vertical staples must be applied at approximately 2 in. (50 mm) (12-15 mm) overlap. In streambank applications, stream banks should be shaped in the predominant flow direction.
- The edges of the RECPS at or below normal water level must be anchored by placing the RECPS in a 12 in. (300 mm) deep 6 in. (150 mm) wide anchor trench. Anchor the RECPS with a row of staples/stakes spaced approximately 12 in. (300 mm) apart in the trench. Backfill and compact the trench after staking (stone or soil may be used as backfill). For installation at or below normal water level, use of a Streambank Mat on top of the RECPS or geotextile may be recommended. Backfill anchor trench with a minimum water using a Shorebank Mat over RECPS along the bottom edge.
- NOTE: In adverse soil conditions longer staples/stakes or earth anchors may be necessary to properly secure the RECPS.

### ROLLMAX™ ROLLED EROSION CONTROL

INSTALLATION GUIDE

**RollMax™ Installation Guidelines:**

North American Green is the world's leading provider of performance guaranteed erosion control solutions. For more than 25 years, our line of erosion and sediment control products has kept our customers on schedule, protected short-term and long-term Erosion Control Blankets (ECBs) and Turf Reinforcement Mats (TRMs) keep you one step ahead of just about any erosion challenge.

North American Green provides everything you need to know for quick, accurate erosion control installation tailored to your site. From start to finish, the North American Green RollMax System™ product installation instructions are based on extensive research and field proven techniques to ensure project success. The following pages offer instructions and guidelines for several scenarios you may encounter during the installation of the RollMax System.

**EXPERIENCE YOU CAN RELY ON**

We are the industry leader when it comes to providing comprehensive erosion and sediment control and turf reinforcement solutions. We have developed integrated systems and products with the sole objective to ensure absolute customer satisfaction. Our products are backed by the most thorough quality assurance practices in the industry. In addition, we provide comprehensive design assistance for every North American Green system.

For additional installation assistance with the RollMax System, please visit [www.amerengreen.com](http://www.amerengreen.com) or call 877-274-2848 and we will be happy to put you in touch with an erosion control specialist who can assist you.

**Our biodegradable BioStakes™ are available in 4 in. and 6 in. lengths and provide an environmentally friendly alternative to metal staples. For even more durable, longer reaching yet all-natural anchoring option, our wood EcoStakes™ are available in 6 in., 18 in., and 36 in. lengths.**

### Installation Made Easy

When under the pressure of severe conditions, even the best erosion control products can't function to their full potential without proper installation and anchoring. North American Green supplies a wide variety of fastener options for nearly every application and soil type.

For use in cohesive soils, wire staples are a cost-effective means to fasten RollMax™ System Rolled Erosion Control Products (RECPS). Available in 6 in., 8 in., 10 in. and 12 in. lengths, our U-shaped staples reach various depths to ensure adequate pull-out resistance. For installation using our handy Pin-Pointer installation tool, 6 in. U-shaped staples or U-clip tie pins are available.

Our biodegradable BioStakes™ are available in 4 in. and 6 in. lengths and provide an environmentally friendly alternative to metal staples. For even more durable, longer reaching yet all-natural anchoring option, our wood EcoStakes™ are available in 6 in., 18 in., and 36 in. lengths.

### STAPLE PATTERN GUIDE

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**PROJECT TITLE**

**STERLING CO. ENGINEERS & SURVEYORS**  
5055 New Baumgartner Road  
St. Louis, Missouri 63129  
Ph 314-487-0440 Fax 314-487-8944  
www.sterling-engr.com  
Corporate Certificate of Authority #001548

**AMBERLEIGH**  
OF FALLON, MISSOURI

Date: 5-18-2021  
Jason D Howell  
License No. PE 2007002801  
Professional Engineer

**LOMBARDO HOMES OF ST. LOUIS, LLC**  
2299 TECHNOLOGY DRIVE, SUITE 150  
OF FALLON, MISSOURI 63368  
Ph 636-265-2710  
Fax 636-695-3195

**MISCELLANEOUS DETAILS**

P+Z No. 20-000028  
City No. 20-003192  
Date: May 18, 2021  
Job No. 14-04-136  
Page No.

**12.1**

IMP

\*FINAL PLAN\* Approval Date: March 27, 2020