



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Georgia Division**

August 20, 2014

61 Forsyth Street S.W.  
Suite 17T100  
Atlanta, Georgia 30303  
Phone 404-562-3630  
Fax 404-562-3703  
Georgia.fhwa@fhwa.dot.gov

Keith Golden, P.E. Commissioner  
Georgia Department of Transportation  
One Georgia Center  
600 West Peachtree Street, NW  
Atlanta, GA 30308

In Reply Refer To:  
HPE-GA

Dear Commissioner Golden:

We have reviewed the request to use proprietary items on the Transportation Enhancement (TE) Project, PI# 0010728, located in the City of Douglasville, Douglas County.

Insufficient information was provided to determine that a proprietary item is needed for concrete pavers, or storm water quality device. Typically these items can be provided by multiple manufacturers in an array of colors, shapes, and sizes that would appear to be able to meet the aesthetic unity desired in this project. Please correct the information and resubmit your request.

FHWA finds that it is in the public interest to use the following items for the purposes of aesthetic and logistic synchronization:

Light Poles and Luminaires:

- Manufacturer: Post (Valmont) – A595 GR, Color (RAL 8019 T), Height 12'
- Arm: Paramount Arm, Single, Model 51021, Type 504
- Base: Washington Base #WA18AC, Color (RAL 8019 T)
- Luminaire: US Architectural Lighting

This public interest finding is only applicable for the light poles and luminaries listed above. Furthermore, this public interest finding is only applicable for use on PI# 0010728, in Douglas County. The City of Douglasville is responsible for ensuring that these items comply with the Buy America Act.

If you have any questions, please contact Julio A. Nuñez at (404) 562-3638.

Sincerely,

 Rodney N. Barry, P.E.  
Division Administrator

Cc: Brent Story, State Design Policy Engineer

Keith Golden, P.E., Commissioner

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GEORGIA DEPARTMENT OF TRANSPORTATION

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One Georgia Center, 600 West Peachtree Street, NW  
Atlanta, Georgia 30308  
Telephone: (404) 631-1000

August 13, 2014

Mr. Rodney Barry – Division Administration  
Federal Highway Administration  
61 Forsyth Street, Suite 17T100  
Atlanta, GA 30277  
**Attention: Melinda Roberson**

Subject: Proprietary Items Usage  
PI # 0010728  
SR5/SR8/US78/Broad Street from SR92 to CS710 McCarley Street  
City of Douglasville, Douglas County

Mr. Barry:

Please review the attached request from the City of Douglasville for the use of proprietary concrete pavers, light posts, luminaires, and a water quality device along SR5/SR8/US78/Broad Street from SR92 to CS710/McCarley Street, P.I. Number 0010728.

The City of Douglasville has previously installed identical items in the project vicinity, and holds a stockpile of the requested proprietary concrete pavers for maintenance purposes. In order to ensure aesthetic continuity within its downtown area, the City of Douglasville respectfully requests approval to utilize the requested items.

The Department considers the use of the proposed proprietary lighting items and concrete pavers to be in compliance with 23 CFR 635.411 for aesthetic synchronization. The Department also considers the proposed water quality device to be in compliance with 23 CFR 635.411 where no equally suitable alternative device is available.

Should you have any questions or concerns, please contact Dave Peters at 404-631-1738 or Jeanne Kerney at 404-631-1982.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brent Story".

for: Brent Story, P.E.  
State Design Policy Engineer

BAS:drp



**Harvey Persons**  
Mayor

**William D. Osborne**  
City Manager

**Joyce Stone**  
City Clerk

**City Council**  
Mark E. Adams  
LaShun B. Danley  
Samuel Davis  
Douglas H. Lequire  
Michael J. Miller  
Carl D. Pope  
Larry G. Yockey

July 30, 2014

Ms. Jeanne Kerney  
TE Project Manager  
Moreland Altobelli Associates, Inc.  
2211 Beaver Run Road, Suite 190  
Norcross, GA 30071

RE: Use of Proprietary Items for  
**SR 5 / SR 8 from SR 92 to CS 710 McCarley Street, Douglas County**  
GDOT PI: 0010728

Dear Ms. Kerney,

As per Federal Highway Administration regulation in 23 CFR 635.411(a) 2, proprietary materials, specifications, and processes can be used if their use is essential for synchronization with existing highway facilities. For the City of Douglasville's Transportation Enhancement Project, *PI# 0010728* the following proprietary items are proposed for use:

**Concrete Pavers**

Manufacturer: *Pavestone*  
Quantity in Project: *700 SF*

Model: *2 3/8" thk. Holland Stone*  
Finish: *Provencial,*  
Pattern: *90 degree herringbone and sailor*  
*course banding*  
Color: *Old Town Blend*

Total Estimated Cost for Concrete Pavers: *\$3150*

**Stormwater Quality Device**

Manufacturer: *Crystal Streams*  
Quantity in Project: *1*  
Total Estimated Cost for Device: *\$15,000*

Model: *Sample 646*  
Finish: *na*  
Color: *na*

**Light Poles and Luminaires**

**Manufacturer:**

Post: *Valmont – A595 GR, Color: RAL 8019 T, Height: 12'*  
Arm: *Paramount Arm, Single, Model 51021, Type SO4 (18" rise) w/ Decorative support strap, Color: RAL 8019 T*  
Base: *Washington Base (#WA18AC) Color: RAL 8019 T*  
Luminaire: *US Architectural Lighting - LCLS-SGR-III-150HPS-LA-RAL8019-T, w/ Shallow Skirt (RSD) & Twist Photocell (TCP+V) Color: RAL 8019 T*  
Finish: *Powder Coat Color: RAL 8019 T*  
Quantity in Project: *8*  
Total Estimated Cost for Light Poles and Luminaires: *\$28,000*

The total estimated costs for materials listed above are based on recent construction bids on similar projects. These costs include materials, labor, tax, and freight.

The total cost for the project is \$750,000. The cost of \$46,150 for proprietary items represents 6.15% of the estimated construction costs.

The project consists of renovating a portion of an existing plaza and streetscape constructed under the TE program. Several building materials features used on the previous project will also be incorporated into the new design, namely site lighting and concrete paving. These items were installed under PI# 0002298. These products will also be used in all future streetscape enhancement projects in the City of Douglasville.

The proposed site lighting fixture is consistent with the current City standards fixture selection for the downtown area and adjacent streets in the City of Douglasville. The concrete pavers being proposed in the plaza are consistent with the unit pavers in the adjacent plazas and streetscapes (were installed under PI# 0002298) and with existing stock of pavers currently being held by the City.

On the construction plans, we have exhibited the product information and contact information for each product's manufacturer. We also attached photographs of existing areas with the products in use.

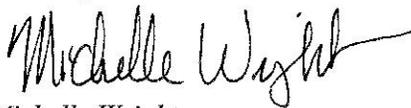
The Crystal Streams Separator water quality device has been indicated as the approved water quality device for use on this project by the authority having jurisdiction (Douglasville-Douglas County Water and Sewer Authority) over state mandated water quality within this municipality.

I Michelle Wright, Planning Director, of the City of Douglasville, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2), that this patented or proprietary item is essential for synchronization with existing highway facilities. The use of these products is essential for aesthetic synchronization to match the visual appearance of existing facilities previously installed in the city and for compatibility with previous TE design projects.

I Michelle Wright, Planning Director, of the City of Douglasville, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2), that that no equally suitable alternative exists for this Crystal Streams Separator (model 646) water quality device.

The City of Douglasville respectfully requests that the use of these proprietary products be approved.

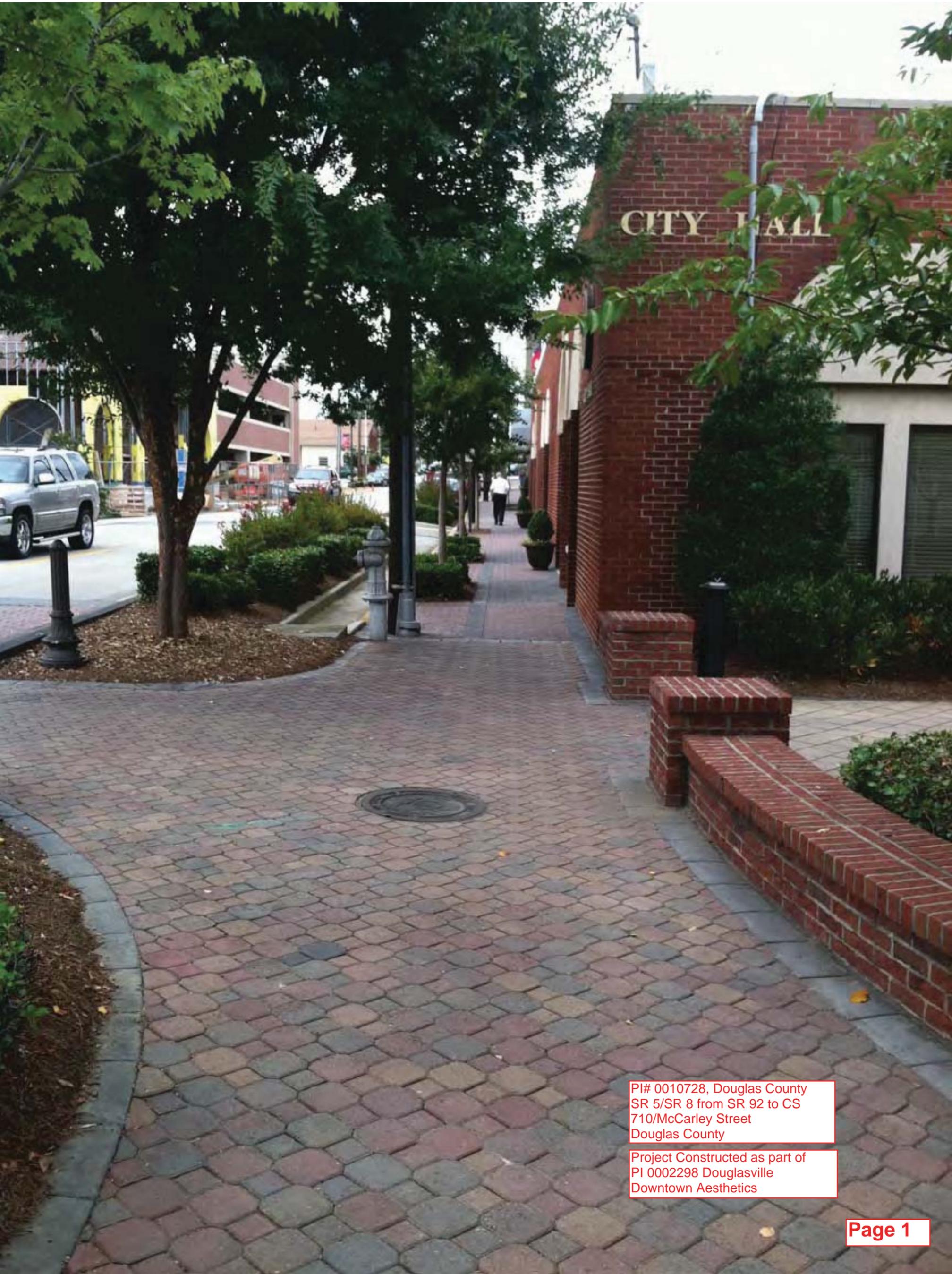
Sincerely,



Michelle Wright  
Planning Director  
City of Douglasville

Attachments to include:

- A. Photos of existing concrete pavers and pedestrian light fixtures.
- B. Manufacturer details for each proprietary item.



PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

Project Constructed as part of  
PI 0002298 Douglasville  
Downtown Aesthetics



PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

Project Constructed as part of  
PI 0002298 Douglasville  
Downtown Aesthetics



PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

Project Constructed as part of  
PI 0008124 Downtown Corridor  
Lighting and Banners Phase 1

# Holland Stone Series

With the renowned durability of interlocking pave stones, Holland Stone offers the old world charm of a simple paver shape. The rectangular shape can be installed in a number of fascinating patterns to produce simple or intricate designs. Mix these patterns with any of the available standard colors or combination of colors and you've got the potential for an architectural effect limited only by the imagination. Holland Stone is available in Standard, Parkway™ (non-chamfered edges), Provencial™ (smooth) and Heritage™ (tumbled) finishes.

## COMPOSITION AND MANUFACTURE

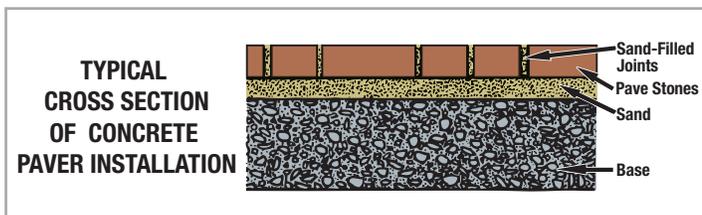
Holland Stone is made from a "no slump" concrete mix. Made under extreme pressure and high frequency vibrations, Holland Stone has a compressive strength greater than 8000 psi, a water absorption maximum of 5% and will meet or exceed ASTM C-936 and freeze-thaw testing per Section 8 of ASTM C-67. Heritage™ Series may not comply with ASTM C-67 freeze-thaw durability. Note: Requires modifying the ASTM C 140 - Paver Annex A4 - "The test specimen shall be 60 ± 3 mm thick and, if necessary, cut to a specimen size having a Height/Thickness (width) [H/T] aspect ratio of 0.6 ± 0.1

## INSTALLATION

1. Excavate unsuitable, unstable or unconsolidated subgrade material and compact the area which has been cleared. Backfill and level with dense graded aggregate suitable for base material (typically 4 in. to 8 in. (101mm to 202mm) of compacted base for light vehicular and pedestrian traffic) or as otherwise directed by Site Engineer/Architect/Landscape Architect.
2. Place bedding course of washed sand conforming to the grading requirements of ASTM C-33 to a uniform depth of 1-1 1/2 in. (25-38mm) screeded to the grade and profile required.
3. Install Holland Stone with joints approximately 1/8 in. (3mm).
4. Where required, cut pave stones with an approved cutting device to fit accurately, neatly and without damaged edges.
5. Tamp pave stones with a plate compactor, uniformly level, true to grade and free of movement.
6. Spread sand to 1/8 in. (3mm) thickness over entire paving area. Heritage™ Series may require joint sand stabilization.
7. Make one more pass with plate compactor to fill joints with sand.

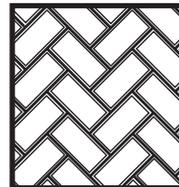
Complete installation & specification details are available by contacting your Pavestone Company Sales Representative.

**Note:** Colors are shown as accurately as possible in brochures & samples, but due to the nature of the product, regional color differences and variables in print reproduction, colors may not match exactly. For best results in maintaining color consistency, pavers must be installed from several cubes at a time. Efflorescence, a whitish, powder-like deposit, may appear on concrete pavers. This is a natural occurrence in any concrete product and will usually wear off over time.

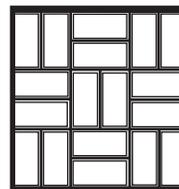


## INSTALLATION PATTERNS

### Holland Stone (with Chamfer)

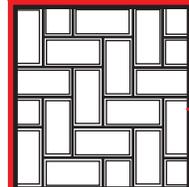


45° Herringbone

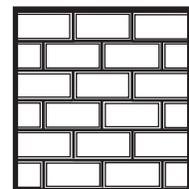


Parquet

Patterns: 90 degree Herringbone & Sailor Course bands

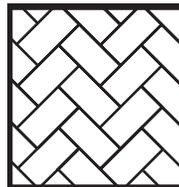


90° Herringbone

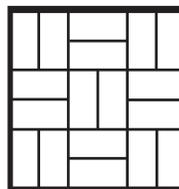


Runner Bond

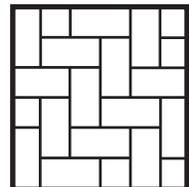
### Holland Stone Parkway™ Series (with out Chamfer)



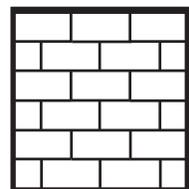
45° Herringbone



Parquet

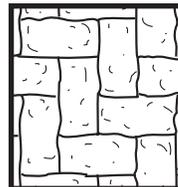


90° Herringbone

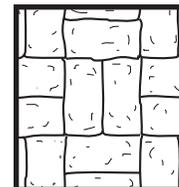


Runner Bond

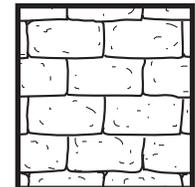
### Holland Stone Heritage™ Series



90° Herringbone

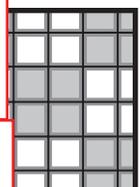


Parquet



Runner Bond

PI# 0010728, Douglas County  
 SR 5/SR 8 from SR 92 to CS  
 710/McCarley Street  
 Douglas County  
 Project Constructed as part of  
 PI 0002298 Douglasville  
 Downtown Aesthetics



Parquet

**APPLICATIONS (contact your local representative for application preferred thickness)**

General Road Construction • Parking Lots • Driveways • Patios • Highway Rest Areas • Bridge Underpasses  
 Entrance Areas • Industrial Plants • Industrial Yards • Storage Depots • Loading Docks • Flooring in Stables • Sidewalks • Terraces • Garden Pathways  
 Pool Decks • Beach Promenades • Pedestrian Malls • Roof Gardens • Street Medians

**PRODUCT INFORMATION:** Holland Stone is available in one (1) size.

Four (4) Height/Thicknesses: 40mm = 1 5/8"<sup>\*\*</sup>, 60mm = 2 3/8"<sup>\*\*</sup>, 80mm = 3 1/8"<sup>\*\*</sup>, 120mm = 4 3/4"<sup>\*\*</sup>

Finishes Available: **Heritage™ Series** - Tumbled finish reminiscent of old world European charm.

**Parkway™ Series** - Straight, defined, non-chamfered edges create an elegant, tight fitting installation with the beautiful natural appearance of clay pave stones, but with the strength, durability and functionality of concrete pave stones.

**Provincial™ Series** - Smooth finish with a fine gradient texture allows for a brighter color presentation and endurance.

**PAVER SELECTION AS INDICATED**



**Holland Stone**

Nominal Dimensions: 3 7/8" W x 7 13/16" L\*  
 98mm x 198mm

Height/Thickness:	40mm = 1 5/8" <sup>**</sup>	60mm = 2 3/8" <sup>**</sup>	80mm = 3 1/8" <sup>**</sup>	120mm = 4 3/4" <sup>**</sup>
Wt./Stone	4.00 lbs.	6.0 lbs.	8.1 lbs.	12.2 lbs.
Stones/Sq. ft.	4.66	4.66	4.66	4.66
Stones/Pallet	720	480	384	288
Approx. Wt./Pallet	2,899 lbs.**	2,884 lbs.**	2,988 lbs.**	3,513 lbs.**
Sq. ft./Pallet	155	103	83	62
Product Number	215	217	219	222

\* For light duty, foot traffic only



**Holland Stone Heritage™ Series**

Nominal Dimensions: 3 7/8" W x 7 13/16" L\*  
 98mm x 198mm

Height/Thickness:	60mm = 2 3/8" <sup>**</sup>	80mm = 3 1/8" <sup>**</sup>
Wt./Stone	6 lbs.	8.1 lbs.
Stones/Sq. Ft.	4.66	4.66
Stones/Pallet	480	384
Approx. Wt./Pallet	2,884 lbs.**	2,988 lbs.**
Sq. ft./Pallet	103	83
Product Number	217T	219T



**Holland Stone Parkway™ Series**

Nominal Dimensions 3 7/8" W x 7 13/16" \*  
 98mm x 198mm

Height/Thickness:	60mm = 2 3/8" <sup>**</sup>	80mm = 3 1/8" <sup>**</sup>
Wt./Stone	6 lbs.	8.1 lbs.
Stones/Sq. Ft.	4.66	4.66
Stones/Pallet	480	384
Approx. Wt./Pallet	2,884 lbs.**	2,988 lbs.**
Sq. ft./Pallet	103	83
Product Number	237	239

\*Fractional dimensions are nominal. Not available in all markets

\*\* Does NOT include 50 lbs. for wooden Pallet.

**Holland Stone II™**

Nominal Dimensions: 3 7/8" W x 7 13/16" L\*  
 98mm x 198mm

Height/Thickness:	60mm = 2 3/8" <sup>**</sup>	80mm = 3 1/8" <sup>**</sup>
Wt./Stone	6 lbs.	8.1 lbs.
Stones/Pallet	480	384
Approx. Wt./Pallet	2,884 lbs.**	2,988 lbs.**
Sq. ft./Pallet	103	83
Product Number	227	229



**Double Holland Stone** (also see City Stone™ V)

Nominal Dimensions: 7 13/16" W x 7 13/16" L\*  
 198mm x 198mm

Height/Thickness:	60mm = 2 3/8" <sup>**</sup>	80mm = 3 1/8" <sup>**</sup>
Wt./Stone	12 lbs.	15.6 lbs.
Stones/Sq. ft.	2.33	2.33
Stones/Pallet	240	192
Approx. Wt./Pallet	2,884 lbs.**	2,988 lbs.**
Sq. ft./Pallet	103	83
Product Number	257	259



**Holland Stone IV** (also see City Stone™ IV)

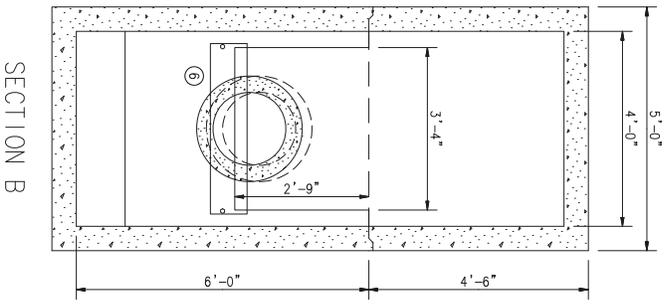
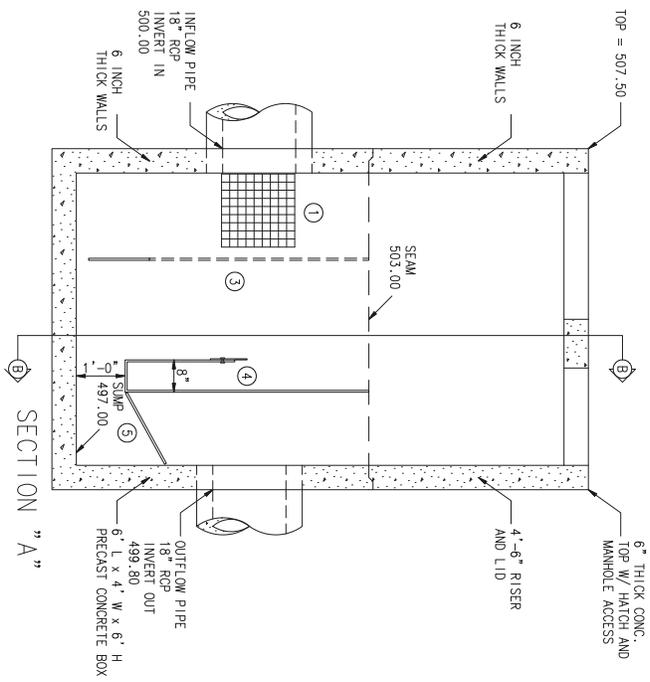
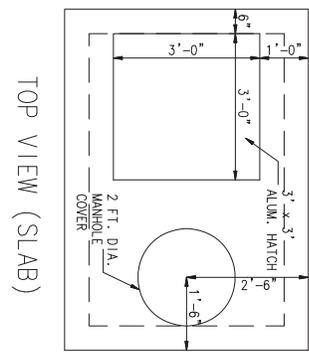
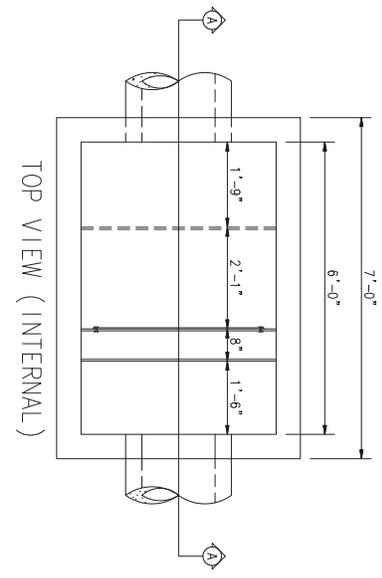
Nominal Dimensions: 3 7/8" W x 3 7/8" L\*  
 98mm x 98mm

Height/Thickness: 60mm = 2 3/8"<sup>\*\*</sup>

**PI# 0010728, Douglas County  
 SR 5/SR 8 from SR 92 to CS  
 710/McCarley Street  
 Douglas County**

**Project Constructed as part of  
 PI 0002298 Douglasville  
 Downtown Aesthetics**

Holland Stone Heritage™ Series is sold on pallets or in bags. There is approximately the same sq. ft./pallet from plant to plant. Contact your Pavestone Company manufacturer for packaging details.



LEGEND

- ① EXPANDED ALUMINUM BASKET W/ 1/4" MESH LINING, 1'-6" H x 1'-6" L x 4'-0" W
- ② 2ND INTERNAL BAFFLE W/ 1" HOLES DRILLED AT 1 1/4" O.C., 6'-0" H.
- ③ SPILL PROTECTIN RESERVOIR 5'-0" H. WITH A 2'-9" FRONT CUT.
- ④ 3/4" COCONUT FIBER FILTER IN ALUMINUM FRAME 1'-8" LONG.
- ⑤ 1/4" ALUMINUM PLATE, 9" H., 3'-6" WIDE.

PI# 0010728, Douglas County  
 SR 5/SR 8 from SR 92 to CS  
 710/McCarley Street  
 Douglas County

CRYSTALSTREAM WATER QUALITY VAULT  
 MODEL "646"

Sample 646 newformat 7/17/2007 p.a.d.s.

Protected by U.S. Patent No's: 6,797,161; 6,936,163; 6,939,461; 6,951,607; 6,994,783; 7,011,743, 7,037,436

JOB NAME:  
**SAMPLE 646**

Device No.: CST-1  
 CST PROJECT NUMBER

DESIGN FIRM: Engineer's Name

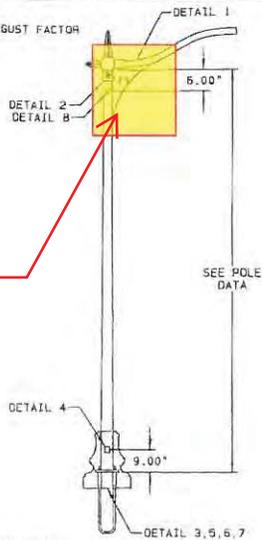
- SPECIFICATIONS
1. TOTAL FLOW CAPACITY SHALL BE 6.00 CFS.
  2. WATER QUALITY FLOW OF 1.4 CFS MUST BE TREATED BEFORE BYPASS.
  3. SPILL PROTECTION CAPACITY SHALL BE 575 GALLONS BEFORE OVERFLOW.
  4. ANY CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER AND THE REVIEWING AUTHORITY.

CrystalStream Technologies

THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF PRACTICAL BEST MANAGEMENT, INC. IT IS PROVIDED FOR THE PROFESSIONAL ENGINEER NAMED HEREON. DESIGN UPON DATA PROVIDED BY THE ENGINEER NAMED HE

**Page 6**

DESIGN CRITERIA:  
 CRITERIA: AASHTO 1994  
 WIND VELOCITY: 80mph X 1.3 GUST FACTOR



POLE ASSEMBLY APPROX 102.00#

MATERIAL DATA

COMPONENT	ASTM DESIGNATION	MIN YIELD (KSI)
POLE SHAFT	A595 GR A	55
POLE BASE	A36	36
ANCHOR BOLT	F1554 GR 55	55
GALVANIZING-HARDWARE	A153	

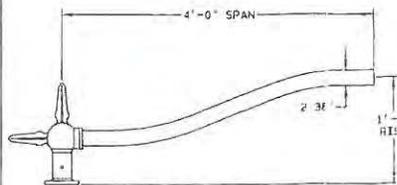
FINISH DATA

FINISH COAT: IGIC OR UREATHANE POLYESTER POWDER  
 COLOR: DARK BRONZE  
 VALMONT SPEC: F-2648

POLE DATA

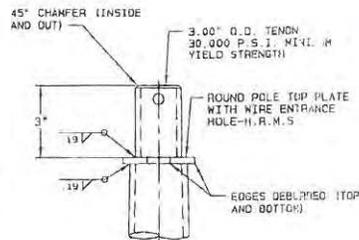
ITEM	QTY	POLE TUBE			POLE BASE				ANCHOR BOLT				
		BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK (IN)	SQUARE S (IN)	BOLT CIRCLE "Y" (IN)	THK "M" (IN)	HOLE/SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)
1	80	4.76	3.10	12.00	11	9.00	8.00	0.75	0.88 X 1.44	0.75	17.00	3.00	6.00

NOTE:  
 ARM SHALL BE ALIGNED AND LEVELLED BY CONTRACTOR. THE THRU BOLT HOLE SHALL BE FIELD DRILLED BY THE CONTRACTOR. THRU BOLT SHALL BE 0.38" DIA. X 3.75" LONG STAINLESS STEEL AND SUPPLIED WITH ARM FOR CONNECTION.

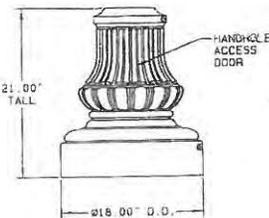


CAST ALUMINUM SINGLE ARM (APPROX 13.00#)

DETAIL 1 | PARAMOUNT LUMINAIRE ARM

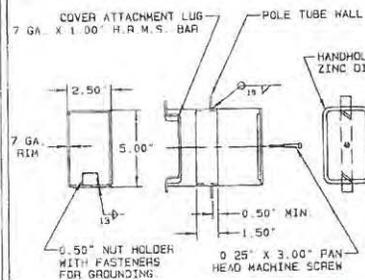


DETAIL 2 | POLE TOP TENON

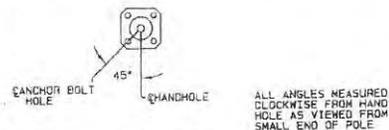


CAST ALUMINUM CLAM SHELL BASE COVER (APPROX 29.00#)

DETAIL 3 | WASHINGTON BASE MODEL# WA18AC



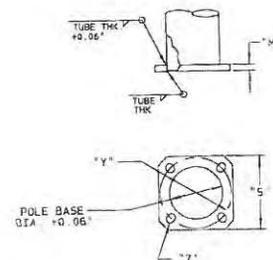
DETAIL 4 | 2.5" X 5" HANDHOLE



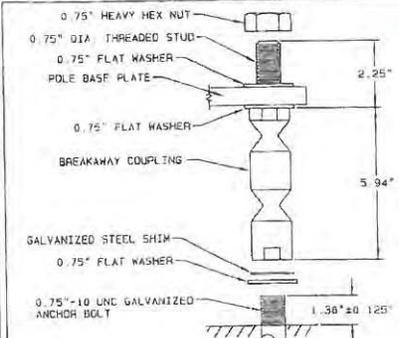
DETAIL 7 | ANCHOR BOLT

ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES. VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING. THE VALMONT WARRANTY SPECIFICALLY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.

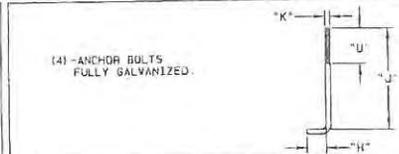
DETAIL 8 | FESTOON BOX



DETAIL 5 | POLE BASE



DETAIL 6 | TRANSPO NO. 4075 BREAKAWAY COUPLING



DETAIL 8 | FESTOON BOX

REV	DRAWN BY-DATE	CHECK BY-DATE	DESCRIPTION
B	PAR 12/21/11	PAR 12/21/11	ADD MATERIAL INFO AND WEIGHTS
A	PAR 09/12/11	PAR 09/12/11	ADD FESTOON BOX / DETAIL 8
	DLE 08/18/11	DLE 08/18/11	

SOLD TO:	DOUGLASVILLE CORRIDOR
SHIP TO:	DOUGLASVILLE, GA
P.O. #:	
AGENT:	TRAFFIC & LTS CORP.

TITLE:	LIGHTING STRUCTURE
--------	--------------------

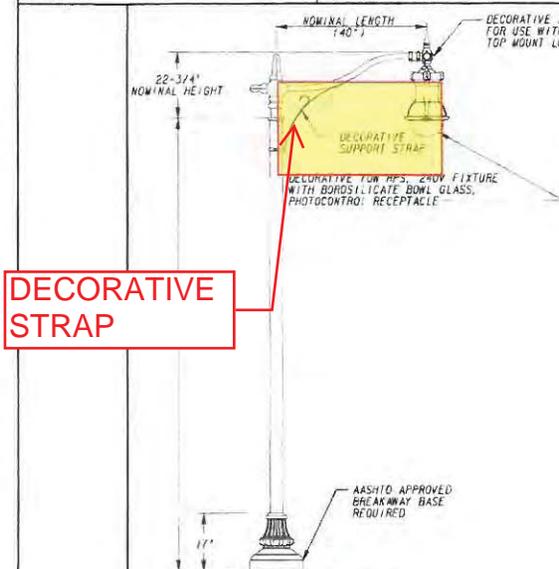
VALMONT INDUSTRIES, INC. RESERVES THE RIGHT TO INSTALL VARIOUS ENGINEER APPROVED, MATERIAL HANGING ACCOMMODATIONS TO FACILITATE THE MANUFACTURING PROCESS.



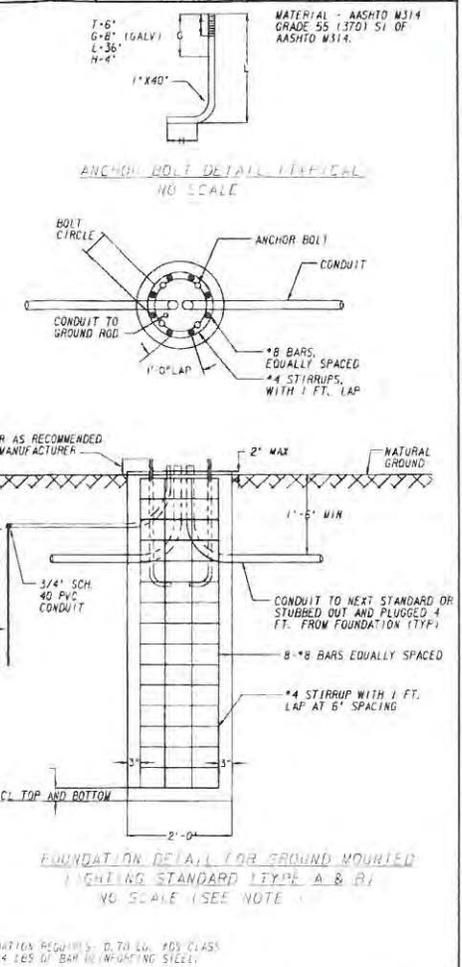
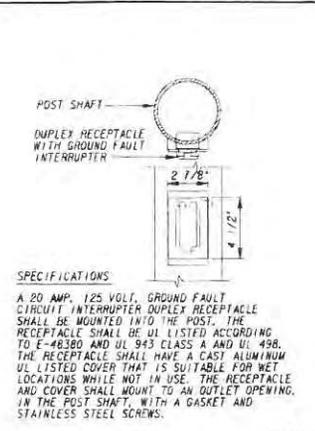
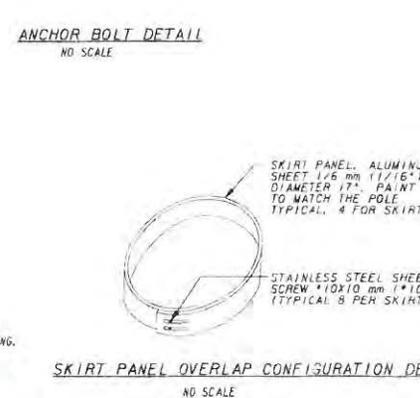
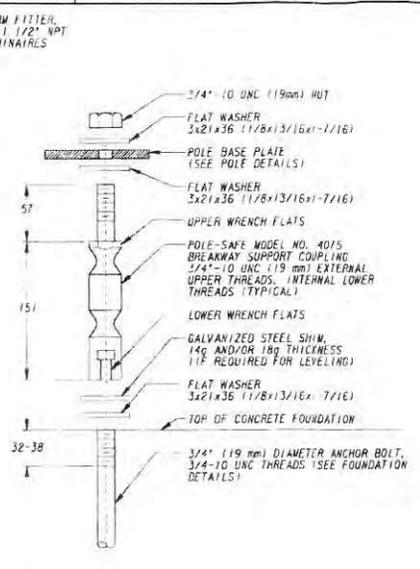
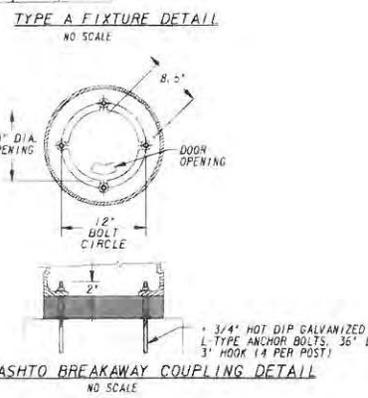
ORDER NUMBER:	161655-P1
PAGE NUMBER:	1 OF 1
DRAWING NUMBER:	GA161655P1
REV:	B

PI# 0010728, Douglas County  
 SR 5/SR 8 from SR 92 to CS 710/McCarley Street  
 Douglas County

Project Constructed as part of  
 PI 0008124 Downtown Corridor  
 Lighting and Banners Phase 1



**DECORATIVE STRAP**



NOT TO SCALE

REVISION DATES

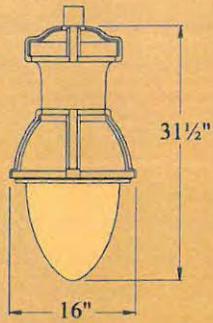
CITY OF DOUGLASVILLE  
 OFFICE OF PLANNING  
 SPECIAL CONSTRUCTION DETAIL

25-11

PI# 0010728, Douglas County  
 SR 5/SR 8 from SR 92 to CS 710/McCarley Street  
 Douglas County

Project Constructed as part of  
 PI 0008124 Downtown Corridor  
 Corridor Lighting and Banners  
 Phase 1

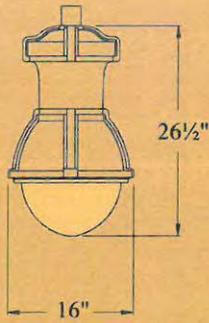
**Page 8**



**LCLS-DGR**

Max 400 W. HID Lamp

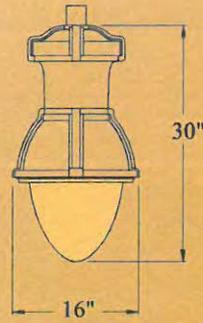
Borosilicate Glass Refractor provides Type-III, Type-IV or Type-V Light Distribution



**LCLS-SGR**

Max 250 W. HID Lamp

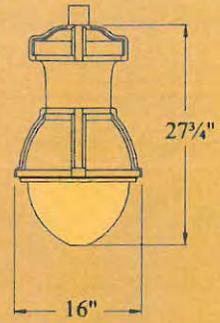
Borosilicate Glass Refractor provides Type-III, Type-IV or Type-V Light Distribution



**LCLS-DPR**

Max 250 W. HID Lamp

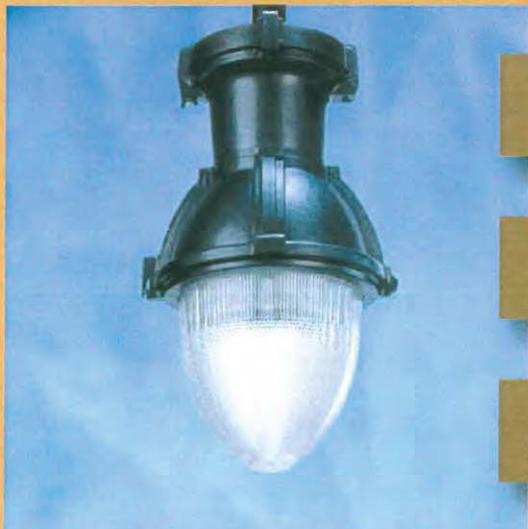
Polycarbonate Refractor provides Type-III, Type-IV or Type-V Light Distribution



**LCLS-SPR**

Max 175 W. HID Lamp

Polycarbonate Refractor provides Type-III, Type-IV or Type-V Light Distribution



Timeless Design

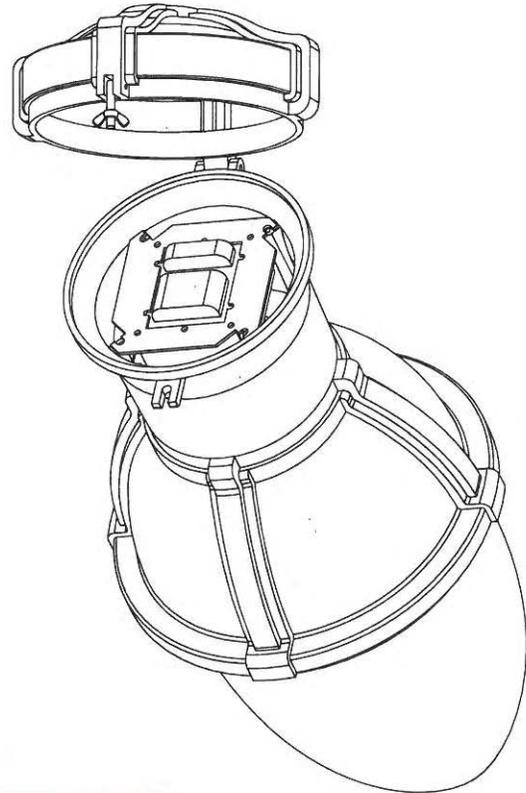
Superior Illumination

Toolless Maintenance

The LCLS series features 4 refractors which combined with 4 reflector shades allow for a selection of 20 unique styles. This elegant design features toolless entry to both the ballast, and the lamp compartment for maintenance ease. Both the borosilicate glass refractor and the polycarbonate refractor feature an internal prism structure to allow the smooth exterior to be easily maintained thereby providing consistent illumination over time.

Designed for optimum performance the LCLS series combines reemerging 19th century appearance with 21st. century lighting technology.

LCLS series exceeds the most rigid maintenance requirement by providing complete servicing without the use of tools.



**LCLS SERIES**



PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

**Page 9**

**Refractor frame assembly:** Durable heavy duty cast aluminum construction. Door frame seats borosilicate glass or polycarbonate refractor. The assembly features toolless access to the optical chamber. A fluted, semi-specular reflector provides optimum reflectance and combines with prismatic refractor to provide maximum light control and precise distribution in type III, IV or V light patterns. A one-piece EPDM gasket mounted to the door frame is compressed between the door frame and the housing to provide a weather, dust, and insect resistant seal.



**Housing:** Durable heavy wall aluminum casting features threaded top connection for arm or pendant mounting. Stainless steel, hinged fastener provides toolless access to the electrical module. Twin integral cast lugs on lower casting cradle fastener to provide unique safety feature. This unique feature guards against accidental opening of the housing.



**Electrical compartment:** Toolless access. Simply release quick-connect assembly, loosen Four (4) stainless steel captive screws, slightly rotate ballast tray counter clockwise, and entirely remove ballast module for servicing ease. An electrical terminal block is provided to facilitate wiring connections.



PI# 0010728, Douglas County  
 SR 5/SR 8 from SR 92 to CS  
 710/McCarley Street  
 Douglas County

**LCLS-DGR**

MAX. 400 W.

PRISMATIC  
GLASS

TYPE  
III, IV or V  
Light  
Distribution

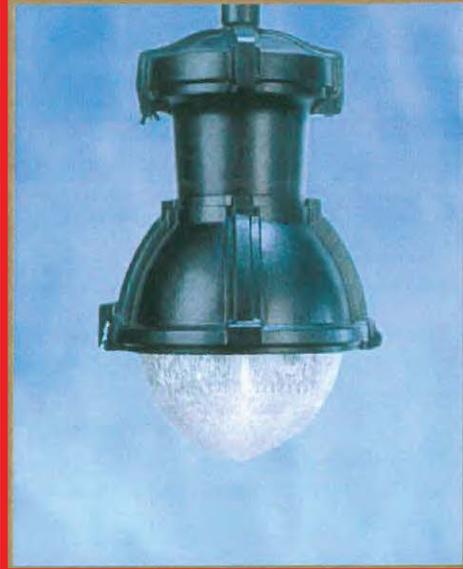


**LCLS-SGR**

MAX. 250 W.

PRISMATIC  
GLASS

TYPE  
III, IV or V  
Light  
Distribution



**LCLS-DPR**

MAX. 250 W.

PRISMATIC  
POLYCARBONATE

TYPE  
III, IV or V  
Light  
Distribution



**LCLS-SPR**

MAX. 175 W.

PRISMATIC  
POLYCARBONATE

TYPE  
III, IV or V  
Light  
Distribution



PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

**SPECIFICATIONS:**

**LUMINAIRE:** HOUSING-HEAVY WALL CAST ALUMINUM CONSTRUCTION WITH TOOLLESS REMOVABLE BALLAST TRAY FOR EASY BALLAST ACCESS.

**DOOR FRAME ASSEMBLY:** DURABLE HEAVY WALL CAST ALUMINUM CONSTRUCTION. DOOR FRAME SEAT EITHER BOROSILICATE GLASS OR POLYCARBONATE REFRACTOR AND HINGES AWAY FROM LUMINAIRE HOUSING WITHOUT THE USE OF TOOLS. A ONE PIECE EPDM GASKET ON DOOR FRAME IS COMPRESSED BETWEEN FRAME AND LUMINAIRE HOUSING TO PROVIDE WEATHER, DUST AND INSECT RESISTANT SEAL.

**OPTICS:** PRISMATIC BOROSILICATE OR PRISMATIC POLYCARBONATE REFRACTOR COUPLES WITH SEMI-SPECULAR ALUMINUM, FLUTED TOP REFLECTOR TO PROVIDE MAXIMUM EFFICIENT, LIGHT CONTROL. TYPE III, IV OR V LIGHT DISTRIBUTION AVAILABLE.

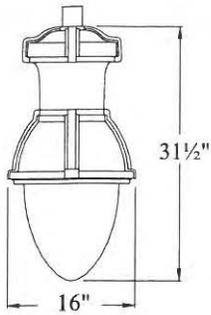
**LAMP HOLDER:** MOGUL BASE PORCELAIN.

**LAMP:** (BY OTHERS)

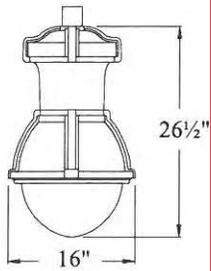
**BALLAST:** H.P.F./C.W.A. AUTOTRANSFORMER, -30° STARTING TEMPERATURE. ELECTRICAL COMPONENTS ARE MOUNTED TO A REMOVABLE TRAY FOR EASY ACCESS. TERMINAL BLOCK PROVIDED IN BALLAST HOUSING.

**FINISH:** ELECTROSTATICALLY APPLIED BAKED ON TEXTURED ACRYLIC ENAMEL IS STANDARD. (OPTION: SMOOTH FINISH - SPECIFY "S" AFTER COLOR SELECTION, EXAMPLE - BKS)

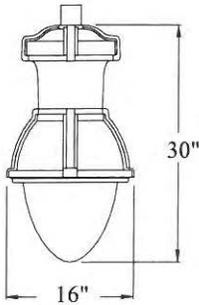
**Page 11**



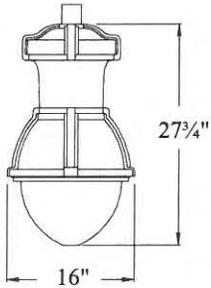
**LCLS-DGR**  
Prismatic Glass  
Max. 400 W.



**LCLS-SGR**  
Prismatic Glass  
Max. 250 W.

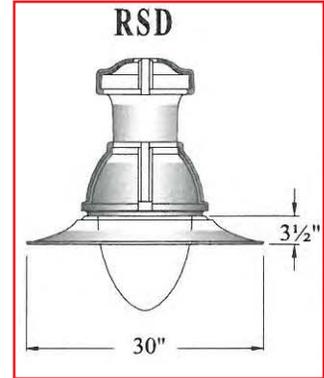
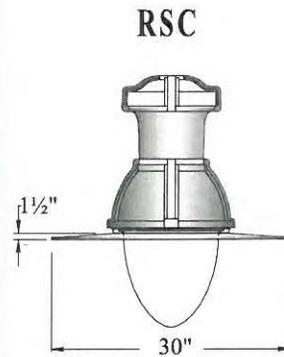
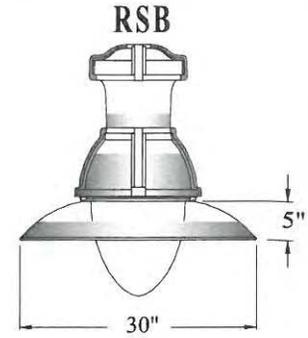
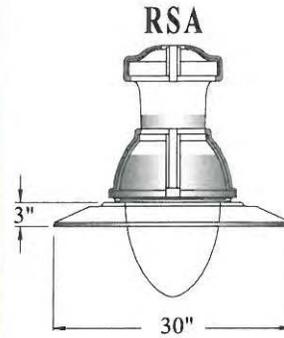


**LCLS-DPR**  
Prismatic Polycarbonate  
Max. 250 W.



**LCLS-SPR**  
Prismatic Polycarbonate  
Max. 175 W.

**REFLECTOR SHADE OPTION**



**ORDERING INFORMATION**

MODEL NO. : <b>LCLS</b>	OPTICS	WATTAGE	TYPE	VOLTAGE	MOUNTING	FINISH	OPTIONS
<b>MODEL NO. :</b> <b>LCLS</b>	<b>OPTICS</b>	<b>LAMP</b>		<b>VOLTAGE</b>	<b>MOUNTING</b>	<b>FINISH</b>	<b>OPTIONS</b>
<b>L C L S</b>	<input type="checkbox"/> TYPE III III.....  <input type="checkbox"/> TYPE IV (FORWARD THROW) IV.....  <input type="checkbox"/> TYPE V V.....	<input type="checkbox"/> 400 MH* <input type="checkbox"/> 250 MH* <input type="checkbox"/> 175 MH* <input type="checkbox"/> 150 MH* <input type="checkbox"/> 100 MH*	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 480 <input type="checkbox"/> MT	<input type="checkbox"/> XPY <input type="checkbox"/> XPD <input type="checkbox"/> XPS <input type="checkbox"/> LEVELING ALIGNER ..... LA 	<input type="checkbox"/> BLACK RAL-9005-T  <input type="checkbox"/> WHITE RAL-9003-T  <input type="checkbox"/> GREY RAL-7004-T  <input type="checkbox"/> DRK BRONZE RAL-8019-T  <input type="checkbox"/> GREEN RAL-6005-T	<input type="checkbox"/> REFLECTOR SHADE.....RSA .....RSB .....RSC .....RSD  <input type="checkbox"/> HOUSE SIDE SHIELD.....HS  <input type="checkbox"/> QUARTZ RESTRIKE.....QTZ  <input type="checkbox"/> TWIST LOCK PHOTO CELL + VOLTAGE (EXAMPLE: TPC120V.....TPC+V)   <input type="checkbox"/> SINGLE FUSE (120V., 277V).....SF  <input type="checkbox"/> DOUBLE FUSE (208V., 240V).....DF	
		<input type="checkbox"/> 400 HPS <input type="checkbox"/> 250 HPS <input type="checkbox"/> 200 HPS <input checked="" type="checkbox"/> 150 HPS <input type="checkbox"/> 100 HPS  <input type="checkbox"/> 250 MV <input type="checkbox"/> 175 MV <input type="checkbox"/> 100 MV	<input type="checkbox"/> XPY <input type="checkbox"/> XPD <input type="checkbox"/> XPS <input type="checkbox"/> LEVELING ALIGNER ..... LA 	<input type="checkbox"/> BLACK RAL-9005-T  <input type="checkbox"/> WHITE RAL-9003-T  <input type="checkbox"/> GREY RAL-7004-T  <input type="checkbox"/> DRK BRONZE RAL-8019-T  <input type="checkbox"/> GREEN RAL-6005-T	<input type="checkbox"/> REFLECTOR SHADE.....RSA .....RSB .....RSC .....RSD  <input type="checkbox"/> HOUSE SIDE SHIELD.....HS  <input type="checkbox"/> QUARTZ RESTRIKE.....QTZ  <input type="checkbox"/> TWIST LOCK PHOTO CELL + VOLTAGE (EXAMPLE: TPC120V.....TPC+V)   <input type="checkbox"/> SINGLE FUSE (120V., 277V).....SF  <input type="checkbox"/> DOUBLE FUSE (208V., 240V).....DF		

PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

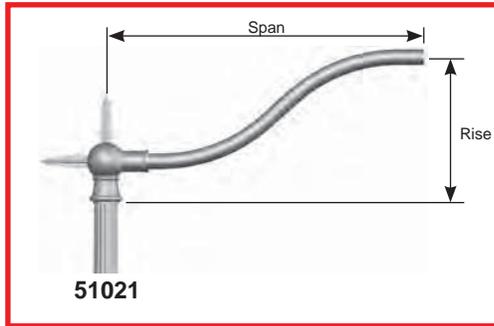
\*AVAILABLE IN PULSE START (SPECIFY: MHPS)  
**METAL HALIDE UNITS ONLY**  
USE ED28 LAMP FOR 400 W.  
USE MEDIUM BASE LAMP FOR 100 W.

SEE SUN VALLEY CATALOG FOR ADDITIONAL ARMS

FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9500)  
SEE WEBSITE FOR ADDITIONAL COLORS

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: <b>PTS E2</b> Quote: _____	Customer Approval: _____ Date: _____

**SPECIFICATIONS**



**LOAD AND DIMENSIONAL DATA**

DESIGN INFORMATION							LOADING INFORMATION			
ARM DESIGN	MODEL NUMBER	ARM TYPE	SPAN (FT)	RISE (IN)	ARM EPA (SQ FT)	ARM WEIGHT (LBS)	MAX DESIGN WIND SPEED (MPH) w/ 1.3 GUST	MAX LUMINAIRE EPA (SQ FT)	MAX LUMINAIRE WEIGHT (LBS)	
Single	51021	S04	4	18	2.12	23	100	3.00	75	
		S06	6	21	2.55	30	100	3.00	75	
		S08	8	24	2.97	37	100	2.60	66	
		S10	10	27	3.44	58	90	3.00	75	
								100	2.60	75
								80	2.70	75
Double -180°	51022	S04	4	18	2.83	38	100	3.00	75	
		S06	6	21	3.70	53	100	3.00	75	
		S08	8	24	4.54	67	100	2.60	66	
		S10	10	27	5.47	110	90	3.00	75	
								100	2.60	75
								80	2.70	75
						90	2.60	60		
						100	1.90	60		

**NOTE:**

- Two-piece construction consisting of a cast aluminum hub and steel pipe arm
- Choice of five arm-spans for optimal illumination to match a variety of roadway settings
- Cast aluminum hub accepts 3.00" OD X 3.00" tall pole top tenon

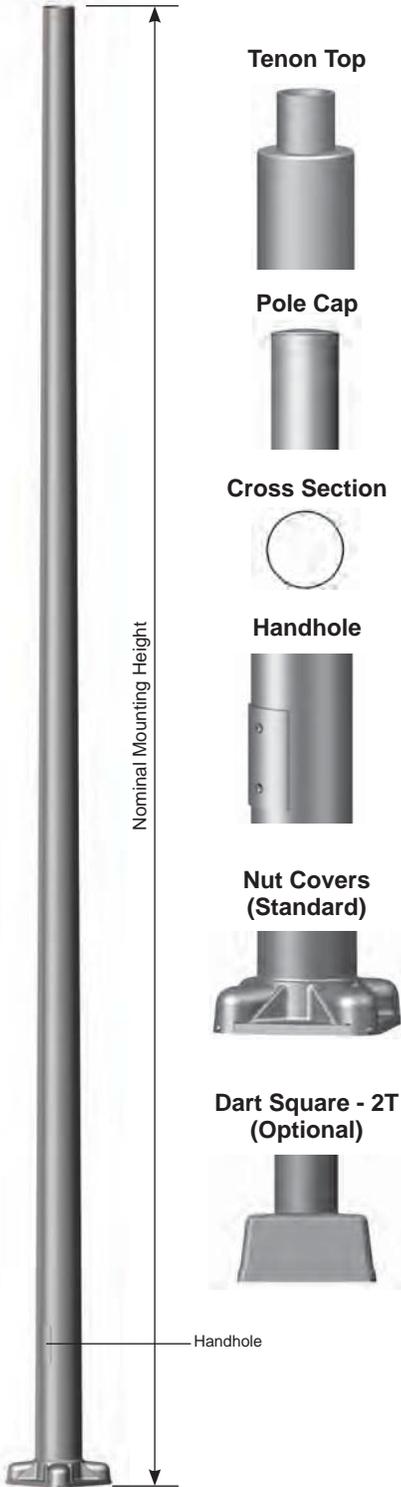
**PRODUCT ORDERING CODES**

DESIGN SERIES	MODEL NUMBER	ARM TYPE	LUMINAIRE MOUNTING	LUMINAIRE ARM COLOR*		OPTIONS
PTS	51021	S04	E2	DDB		
	51021 51022	S04 S06 S08 S10 S12	E2 = 2.38" OD Slip Fit	<b>STEEL</b> WH = White ST = Sandstone BK = Black SM = Silver Metallic SL = Silver LG = Light Gray SG = Slate Gray DT = Dark Tan MB = Medium Bronze CB = Bronze DB = Dark Bronze BN = Brown HG = Hunter Green DG = Dark Green RD = Red SC = Special Color (Contact Factory)	<b>ALUMINUM</b> DWH = White DSS = Sandstone BR = Burgundy HG = Hunter Green DNA = Natural Aluminum DCG = Charcoal Gray DMB = Medium Bronze SBN = Sanded Bronze DNB = New Dark Bronze <b>DDB = Dark Bronze</b> SBK = Sanded Black DBL = Black DSB = Steel Blue DTG = Dark Green DBR = Red SC = Special Color (Contact Factory)	See Accessories at <a href="http://valmontstructures.com">valmontstructures.com</a> (Please Specify)

**PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County**

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: PTS E2 _____ Quote: _____	Customer Approval: _____ Date: _____

**SPECIFICATIONS**



**Pole** - The pole shaft is spun from seamless alloy aluminum.

**Pole Top** - A pole top tenon is provided for top mount luminaire and/or bracket. A removable pole cap is available for poles receiving drilling patterns for side-mount luminaire arm assemblies.

**Handhole** - A covered handhole with hardware and grounding provision are provided.

**Base Cover** - Optional Dart Square-2T cast and decorative base covers available as special order.

**Anchor Base** - The anchor base is cast from 356 alloy aluminum. The completed assembly is heat-treated to a T6 temper. Aluminum nut covers are included with anchor base unless otherwise specified.

**Anchor Bolts** - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.

**Finish** - The standard finish for the pole assembly and components is satin brushed, natural anodize, duranodic or polyester powder applied coating in accordance with Valmont's Specifications. Additional finish options available upon request.

**Design Criteria** - Please reference Design Criteria Specification for appropriate design conditions.

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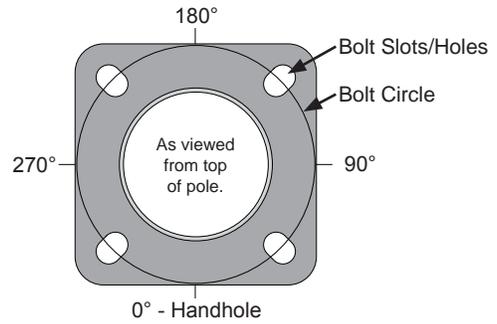
# 8' to 16' ROUND TAPERED ALUMINUM 4-Bolt Anchor Base

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: PTS E2 Quote: _____	Customer Approval: _____ Date: _____

## ANCHORAGE DATA

POLE		BASE PLATE				ANCHOR BOLTS			
BASE OD (IN)	WALL THK (IN)	BOLT CIRCLE		SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)	
		DIA (IN)	± (IN)						
4.00	0.125	7.50	0.75	8.91	0.630	0.75 x 17.00 x 3.00	3.25	N/A	
5.00	0.125	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A	
5.00	0.156	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A	
5.00	0.188	8.63	0.88	9.61	0.630	0.75 x 17.00 x 3.00	3.25	N/A	
6.00	0.156	9.50	0.75	10.32	0.630	0.75 x 17.00 x 3.00	3.50	N/A	
6.00	0.188	9.50	0.75	10.32	0.630	0.75 x 17.00 x 3.00	3.50	N/A	

Anchor Base Detail



## LOAD AND DIMENSIONAL DATA

NOMINAL MOUNTING HEIGHT	DESIGN INFORMATION										POLE DIMENSIONS					
	70 MPH w/1.3 GUST		80 MPH w/1.3 GUST		90 MPH w/1.3 GUST		100 MPH w/1.3 GUST		110 MPH w/1.3 GUST		POLE HEIGHT	BASE OD (IN)	TOP OD (IN)	WALL THK (IN)	STRUCTURE WEIGHT2 (LBS)	MODEL NUMBER
	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)	MAX EPA1 (SQ FT)	MAX WEIGHT (LBS)						
8'-0"	11.3	75	8.5	75	6.5	75	5.1	75	4.1	75	7'-8"	4.00	3.00	0.125	17	070830404T4
10'-0"	8.7	75	6.4	75	4.8	75	3.7	75	2.9	75	9'-8"	4.00	3.00	0.125	20	090830404T4
	16.4	75	12.3	75	9.5	75	7.5	75	6.1	75	9'-8"	5.00	3.00	0.125	24	090830504T4
12'-0"	6.7	75	4.8	75	3.5	75	2.6	75	1.9	75	11'-8"	4.00	3.00	0.125	23	110830404T4
	13.3	75	9.8	75	7.4	75	5.8	75	4.6	75	11'-8"	5.00	3.00	0.125	26	110830504T4
	16.6	75	12.4	75	9.5	75	7.4	75	6.0	75	11'-8"	5.00	3.00	0.156	34	110830506T4
	19.9	100	14.8	100	11.4	100	9.0	100	7.3	100	11'-8"	5.00	3.00	0.188	36	110830506T4
14'-0"	5.2	75	3.5	75	2.4	75	1.6	75	1.1	75	13'-8"	4.00	3.00	0.125	27	130830404T4
	10.8	75	7.8	75	5.8	75	4.4	75	3.4	75	13'-8"	5.00	3.00	0.125	31	130830504T4
	13.7	75	10.0	75	7.5	75	5.8	75	4.6	75	13'-8"	5.00	3.00	0.156	37	130830505T4
	16.4	100	12.1	100	9.2	100	7.2	100	5.7	100	13'-8"	5.00	3.00	0.188	43	130830506T4
16'-0"	3.8	75	2.4	75	1.5	75	0.8	75	0.4	75	15'-8"	4.00	3.00	0.125	30	150830404T4
	8.5	75	6.0	75	4.3	75	3.2	75	2.4	75	15'-8"	5.00	3.00	0.125	35	150830504T4
	10.9	75	7.8	75	5.8	75	4.4	75	3.4	75	15'-8"	5.00	3.00	0.156	42	150830505T4
	13.2	100	9.6	100	7.2	100	5.5	100	4.3	100	15'-8"	5.00	3.00	0.188	50	150830506T4
	18.8	100	14.0	100	10.7	100	8.5	100	6.9	100	15'-8"	6.00	4.00	0.156	53	150840605T4
	22.9	100	17.1	100	13.2	100	10.5	100	8.6	100	15'-8"	6.00	4.00	0.188	62	150840606T4

- EPA represents the Effective Projected Area of each luminaire. Designs are limited to top mount or side-mount luminaires. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
- Structure weight is a nominal value which includes the pole shaft and base plate.

## PRODUCT ORDERING CODES

CROSS SECTION	MODEL NUMBER	FIXTURE MOUNTING	COLOR		OPTIONS
R	51021	--	DDB	DDB	
R = Round	070830404T4 090830404T4 090830504T4 110830404T4 110830504T4 110830505T4 110830506T4 130830404T4 130830504T4 130830505T4 130830506T4 150830404T4 150830504T4 150830505T4 150830506T4 150840605T4 150840606T4	<b>Drill Mounting</b> D1 = 1 Luminaire D2 = 2 @ 180° D3 = 3 @ 120° D4 = 4 @ 90° D5 = 2 @ 90° D6 = 3 @ 90° <b>Tenon Mounting</b> P2 = 2.38" OD x 4.00" P3 = 3.50" OD x 6.00" P4 = 4.00" OD x 6.00" P5 = 2.88" OD x 4.00" P7 = 2.38" OD x 5.00" PQ = 2.38" OD x 12.00" PD = 3.00" OD x 3.00" -- = Plain Top P9 = Other Tenon (Contact Factory)	<b>Polyester Powder</b> DWH = White DSS = Sandstone BR = Burgundy HG = Hunter Green DNA = Natural Aluminum DCG = Charcoal Gray DMB = Medium Bronze SBN = Sanded Brown DNB = New Dark Bronze DDB = Dark Bronze SBK = Sanded Black DBL = Black DSB = Steel Blue DTG = Dark Green DBR = Red SC = Special Color (Contact Factory)	<b>Anodized</b> 204 = Clear Natural 311 = Light Bronze* 312 = Medium Bronze* 313 = Dark Bronze* 335 = Black* *Durandic Anodize <b>Brushed</b> SBF = Satin Brushed	See Accessories at valmontstructures.com (Please Specify with Code)

PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: <b>PTS E2</b> Quote: _____	Customer Approval: _____ Date: _____

## FEATURES

- Aesthetically pleasing family for lighting and traffic applications
- Clamshell design for quick, easy assembly
- Durable, high quality aluminum casting provides clean, crisp details
- Provided with stainless steel hardware
- Tamper proof hardware available as special order
- Long-lasting finish available in a variety of colors
- Install on existing poles to enhance streetscape
- Model numbers WA18AC and WA24AC are FHWA approved for use with select steel and aluminum poles in a breakaway system. Please contact Valmont for assistance with product selection.

POLE BASE DIAMETER RANGE		DIMENSIONS OF BASE COVER				MODEL NUMBER
TAPERED 0.14"/FT (IN)	NON-TAPERED (IN)	DIA (IN)	HEIGHT (IN)	QTY OF ACCESS DOORS		
3.38 - 6.25	3.13 - 6.00	18.00	21.00	1	WA18AC	
5.50 - 10.13	5.13 - 9.75	24.00	28.00	1	WA24AC	
8.63 - 14.25	8.13 - 13.88	30.00	37.00	1	WA30AC	
12.13 - 18.75	11.63 - 18.25	36.00	43.00	1	WA36AC	
18.00 - 26.00	17.38 - 25.50	48.27	50.00	1	WA50AC	

All dimensions shown are nominal and do not include handhole projection.



## PRODUCT ORDERING CODES

MODEL NUMBER	COLOR*	POLE BASE OD (IN)	BASE PLATE			ANCHOR BOLTS		HANDHOLE	
			BOLT CIRCLE DIA (IN)	SQUARE (IN)	THICKNESS (IN)	DIAMETER (IN)	PROJECTION (IN)	SIZE W x H (IN)	CENTER LINE HEIGHT (IN)
51021	DDB								

	STEEL	ALUMINUM
WA18AC	WH = White	DWH = White
WA24AC	ST = Sandstone	DSS = Sandstone
WA30AC	BK = Black	BR = Burgundy
WA36AC	SM = Silver Metallic	HG = Hunter Green
WA50AC	SL = Silver	DNA = Natural Aluminum
	LG = Light Gray	DCG = Charcoal Gray
	SG = Slate Gray	DMB = Medium Bronze
	DT = Dark Tan	SBN = Sanded Brown
	MB = Medium Bronze	DNB = New Dark Bronze
	CB = Bronze	DDB = Dark Bronze
	DB = Dark Bronze	SBK = Sanded Black
	BN = Brown	DBL = Black
	HG = Hunter Green	DSB = Steel Blue
	DG = Dark Green	DTG = Dark Green
	RD = Red	DBR = Red
	SC = Special Color (Contact Factory)	SC = Special Color (Contact Factory)

1. Model Number, Color and Pole Base OD required on all orders.
2. Additional information required when ordering separate from poles.

PI# 0010728, Douglas County  
SR 5/SR 8 from SR 92 to CS  
710/McCarley Street  
Douglas County

# WASHINGTON AC1

Cast Aluminum - Clamshell



STRUCTURES

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: PTS E2 Quote: _____	Customer Approval: _____ Date: _____

## BASE COVER CLOSE-UP



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 710/McCarley Street  
 Douglas County