



Memorandum
Department of Planning, Public Works
& Parks

To: Planning and Public Works Committee

From: Mara M. Perry, Senior Planner

Date: 05/10/2012

RE: **Chesterfield Blue Valley, Proposed Lot 10 (Premium Outlets):** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for a 50.72 acre tract of land zoned "PC" Planned Commercial District in the northeast corner of the development located on the north side of Olive Street Road, west of its intersection with Chesterfield Airport Road.

Summary

The Clayton Engineering Company and The Collaborative, Inc., on behalf of Simon Property Group and the Woodmont Company, has submitted a Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design.

The plans were reviewed at the Planning and Public Works Committee meeting on April 19, 2012. At that meeting, a recommendation to hold was approved by a vote of 4-0 for the applicant to address concerns with the Architectural Elevations.

The applicant worked with Staff to address the concerns expressed by the Planning and Public Works Committee and submitted amended plans on Friday, May 4, 2012.

In your packet are a set of new architectural elevations and architectural renderings in a 11" x 17" color format. The drawings show both the prior submission to the Planning Commission next to the revised submission. In addition, a new aerial perspective was generated to show the relationship of all the buildings as a whole with the updated materials and landscaping around the edges of the buildings. On each page is a bullet point reference to what changes have been made to the architectural elevations.

Attached please find a revised Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, Architect's Statement of Design, Architectural renderings and perspectives.

Respectfully submitted,

Mara M. Perry, AICP
Senior Planner

Cc: Michael G. Herring, City Administrator
Rob Heggie, City Attorney
Michael O. Geisel, Director of Planning, Public Works & Parks
Aimee Nassif, Planning and Development Services Director

ST. LOUIS PREMIUM OUTLETS

CITY OF CHESTERFIELD, MISSOURI

ZONED: PC PLANNED COMMERCIAL DISTRICT

ORDINANCE NO. 2612

GENERAL NOTES:

- All utilities shown have been located from available records. Their location should be considered approximate. The contractor shall notify all utility companies, prior to construction, to have existing utilities field verified.
- All proposed improvements shall be constructed to City of Chesterfield, Monarch Chesterfield Levee District, the U.S. Army Corps of Engineers, and MSD Standards.
- No grade shall exceed 3:1 slope.
- All dimensions shown are to face of curb unless otherwise specified.
- All grading and storm water collection shall be per MSD, MDOOT, the City of Chesterfield, the Monarch Chesterfield Levee District, and the U.S. Army Corps of Engineers.
- Storm water shall be discharged at adequate natural discharge points. Site drainage is to Master Drainage Channels via swales.
- No step allowed at accessible entrance doors.
- All utilities will be installed underground.
- Approval of sign locations does not constitute sign approval.
- The location and height of any light standards on site shall be as approved by the Planning Commission on the Site Development Plan and shall be in conformance with the City of Chesterfield regulations.
- All trash enclosures are placed in service areas with screen walls blocking their view.
- The developer shall be required to provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.
- The streets surrounding this development and any street used for construction access thereto shall be cleaned prior to the end of each work day.
- Erosion and siltation control shall be installed prior to any grading and be maintained throughout the project until acceptance of the work by the Owner and/or controlling regulatory agency and adequate vegetative growth insures no future erosion of the soil.
- The final location of biofiltration shall be subject to change following final design and review by MSD and subject to MSD regulations at the time of review.
- Storm water and roadway improvement contributions shall be paid prior to building permit issuance. An approved Site Development Section Plan will need to be submitted for assessment of those contributions.
- All required road improvements within St. Louis County right of way for the Blue Valley development shall be in place prior to occupancy permit issuance for the St. Louis Premium Outlets.

Setbacks per Ordinance 2612

Buildings or structures other than freestanding project identification signs, light standards or flag poles:

- 100 feet from the northern boundary line of the "PC" District N34°00'30"E.
- 30 feet from the eastern boundary line of the "PC" District.
- 20 feet from any interior road.
- Structures which are 6 stories in height shall be no closer than 150 feet from the paved portion of I-64.

Parking Setbacks:

- 10 feet from the principal internal street (Outlet Boulevard).
- 20 feet from the eastern boundary of the "PC" District (I-64).
- 20 feet from the northern boundary line of the "PC" District N34°00'30"E.
- 10 feet from internal lot lines.
- 0 feet for shared driveways.

Site Development Data:

Overall Site Area = 50.72 Acres
 Zoning: PC - Planned Commercial
 Proposed Use: Retail
 Total proposed building footprint area = 390,098 sf
 F.A.R. = 0.18

Open Space Calculation (30% Min.):

Overall Site Area	50.72 acres (2,209,363 sf)	100%
Total Building Area	390,098 sf	18%
Gallery Roof Area - No Waste	34,303 sf	1%
Total Paved Parking Area	914,324 sf	41%
Total Hardscape Area w/in Mega Pad	169,121 sf	8%
Total Open Space	704,365 sf	32%

Maximum Building Height per Ordinance 2612: 4 stories or 65 feet.

Building Height proposed: 65 feet.

Tree Preservation Plan: There are no existing trees on the site, so no separate tree preservation plan will be provided.

Site access is via a new 5 lane subdivision road (Outlet Boulevard) which connects to an improved Olive Street Road.

SITE IS SERVED BY:

CHESTERFIELD MONARCH FIRE PROTECTION DISTRICT 155 LONG ROAD CHESTERFIELD, MO. 63005	MISSOURI AMERICAN WATER CO. 727 CRAIG ROAD ST. LOUIS, MO. 63141 SUE MOYNIHAN (314) 991-3404, x2306
ROCKWOOD R-6 SCHOOL DISTRICT 111 EAST NORTH STREET EUREKA, MO. 63025	METROPOLITAN ST. LOUIS SEWER DISTRICT 2350 MARKET ST. ST. LOUIS, MO. 63103
AMEREN ILE 1901 CHOUTEAU P.O. BOX 66149 MAIL CODE 200 ST. LOUIS, MO. 63166-6149	CHARTER COMMUNICATIONS 2275 CASSENS DR. SUITE 138 FENTON, MO. 63026 (800) 314-7195
SBC 14780 MANCHESTER ROAD BALLWIN, MO. 63011	CHESTERFIELD MONARCH LEVEE DISTRICT C/O FULLER, MOSSBARGER, SCOTT & MAY ENGINEERS, INC. 1858 CRAIG PARK COURT ST. LOUIS, MO. 63146 (314) 678-8800
LACLEDE GAS 720 OLIVE ST., ROOM 1408 ST. LOUIS, MO. 63101 KELI KRAMER (314) 342-0678	

FLOOD / HIGH WATER NOTES:

- SUBJECT PROPERTY LIES WITHIN FLOOD ZONES AE (SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD, BASE FLOOD ELEVATIONS DETERMINED), ZONE AH (SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD, FLOOD DEPTHS OF 1 - 3 FEET, USUALLY AREAS OF PONDING; BASE FLOOD ELEVATIONS DETERMINED), AND ZONE X (AREAS OF 500-YEAR FLOOD, AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE, AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS PER MAP NO. 29180C0120H, WITH AN EFFECTIVE MAP DATE OF AUGUST 2, 1995 AND REVISED TO REFLECT LOMR DATED APRIL 17, 2000.
- THE REGULATORY 100-YEAR WATER SURFACE ELEVATION FOR THE SITE IS CONTROLLED BY THE CHESTERFIELD VALLEY STORM WATER MASTER PLAN MODEL. THE LOWEST FLOOR OF ANY BUILDING NEEDS TO BE AT LEAST 1 FOOT ABOVE THE ELEVATION OF THE 100-YEAR WATER SURFACE OF ANY CHANNEL WITHIN 200 FEET OF THE BUILDING FOOTPRINT. THE 100-YEAR HIGH WATER ELEVATION VARIES FROM 462.48 AT THE SOUTH EAST CORNER OF THE SITE TO 460.44 AT THE SOUTH WEST CORNER OF THE SITE.

ST. LOUIS PREMIUM OUTLETS BUILDING DATA:

GROSS FLOOR AREA (GFA)
 BUILDING 1 GFA = 49,213 SF
 BUILDING 2 GFA = 37,699 SF
 BUILDING 3 GFA = 36,341 SF
 BUILDING 4 GFA = 40,411 SF
 BUILDING 5 GFA = 53,141 SF
 BUILDING 6 GFA = 19,592 SF
 BUILDING 7 GFA = 78,844 SF
 BUILDING 8 GFA = 74,851 SF
 TOTAL BLDG GFA = 390,098 SF

PARKING CALCULATIONS:

PHASE 1:
 BUILDING GFA (includes 11,800 SF restaurant) = 390,098 SF
 OUTDOOR RESTAURANT SEATING AREA = 1,000 SF
 TOTAL BUILDING GFA = 391,098 SF
 Percentage of restaurant use 12,800/391,098 3.3 %
 TOTAL PARKING STALLS REQ. BY CITY
 4.5 SPACES PER 1,000 SF GFA = 1,760 SPACES
 TOTAL PARKING PROVIDED:
 REGULAR SPACES (9'x19') = 1,987 SPACES
 ADA SPACES:
 20, PLUS 1 FOR EACH 100 OVER 1,000
 OR 31 SPACES REQUIRED
 ADA SPACES (8'x19' MIN.) PROVIDED = 48 SPACES
 TOTAL PROVIDED = 2,035 SPACES

LOADING CALCULATIONS:
 10'x40' LOADING SPACES REQUIRED: 7 SPACES
 LOADING SPACES PROVIDED: 12 SPACES

GEOTECHNICAL STATEMENT

Midwest Testing at the request of Chesterfield Blue Valley, LLC, has provided limited geotechnical services for the project proposed hereon. A geotechnical feasibility study was conducted during August 2007 for a portion of the development proposed hereon. Our preliminary findings indicate that the earth related aspects are suitable for the development proposed pursuant to the geotechnical recommendations set forth in our August 17, 2007 report titled, "Geotechnical Feasibility Study MT Job No. 11376 Blue Valley Development Phase II Chesterfield, Missouri."

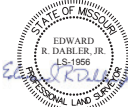
MIDWEST TESTING

Daniet J. Barczykowski 4-27-12
 Daniet J. Barczykowski
 MO PE-25861

This Site Development Plan is a correct representation of existing and proposed land divisions. It is a preliminary plan not for construction and represents the proposed site development of this tract.

THE CLAYTON ENGINEERING COMPANY

Edward R. Dabler, Jr. 4-27-12
 Edward R. Dabler, Jr.
 MO LS-1956



PROPERTY DESCRIPTION

A tract of land in part of Lot 1 of the BOUNDARY ADJUSTMENT PLAT OF LOT 1 OF MCGRATH PLAZA, per the plat thereof recorded in Plat Book 358, Page 273 of the St. Louis County records and part of Lots 1 through 8 of the Partition of the Estate of Conrad Kroenung as said lots were established by Report of Commissioners recorded August 13, 1879 in Book 4, Page 583 of the St. Louis County (now St. Louis City) records, being located in Township 45 North, Range 3 East, St. Louis County, Missouri and being described as follows:

Commencing at the easternmost corner of said Lot 1, being a point in the west line of Highway 40 TR; thence along the west line of said Highway 40 TR, northwesterly along arc of a curve to the right having a radius of 4,006.54 feet, an arc distance of 604.91 feet to a point, South 42° 58' 34" West, 5.00 feet to a point, northwesterly along the arc of a curve to the right having a radius of 4,011.54 feet, an arc distance of 304.56 feet to a point, South 47° 19' 34" West, 5.00 feet to a point, northwesterly along the arc of a curve to the right having a radius of 4,016.54 feet, an arc distance of 508.24 feet to a point, North 42° 52' 58" West, 102.58 feet to a point, and North 32° 06' 57" West, 287.20 feet to the point of beginning of the herein described tract of land; thence leaving the west line of said Highway 40 TR, South 50° 28' 46" West, 647.43 feet to a point; thence South 21° 11' 01" West, 196.83 feet to a point; thence North 68° 48' 59" West, 86.92 feet to a point of tangency; thence along the arc of a curve to the right having a radius of 973.00 feet, an arc distance of 656.12 feet to a point of reverse curve; thence along the arc of a curve to the left having a radius of 1,012.00 feet, an arc distance of 512.65 feet to a point; thence North 30° 47' 43" East, 139.32 feet to a point; thence North 12° 46' 08" West, 739.13 feet to a point on the north line of the area rezoned as PC - Planned Commercial District per City of Chesterfield Ordinance 2612; thence along the north line of said rezoned area, North 34° 09' 07" East, 502.05 feet to a point, North 34° 20' 48" East, 2.86 feet to a point, North 34° 07' 57" East, 111.64 feet to a point, North 33° 47' 33" East, 56.93 feet to a point, North 34° 00' 30" East, 462.42 feet to a point, and North 35° 05' 58" East, 80.82 feet to a point on the west line of said Highway 40 TR; thence along the west line of said Highway 40 TR, South 24° 20' 55" East, 10.34 feet to a point, South 22° 51' 07" East, 602.70 feet to a point, South 21° 36' 20" East, 757.94 feet to a point, South 20° 36' 24" East, 457.22 feet to a point, and South 32° 06' 57" East, 430.76 feet to the point of beginning and containing 50.72 acres.

The Woodmont Company and Simon Property Group, Inc., owners under contract of the property shown on this plan for and in consideration of being granted a permit to develop property under the provisions of chapter _____ of the city of Chesterfield Ordinance No. _____, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the Planning Commission, or voided or vacated by order of the city of Chesterfield Council.

The Woodmont Company Simon Property Group, Inc.

State of Missouri)
) ss.

County of St. Louis)

On this _____ day of _____, 2012, before me personally appeared _____ to me known, who, being by me duly sworn in, did say that say (s)he is the owner of the property shown on this plan, and that the seal affixed to the foregoing instruments is the seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have signed and sealed the foregoing the day and year first above written. my commission expires: _____

notary public:

State of Missouri)
) ss.

County of St. Louis)

On this _____ day of _____, 2012, before me personally appeared _____ to me known, who, being by me duly sworn in, did say that say (s)he is the owner of the property shown on this plan, and that the seal affixed to the foregoing instruments is the seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have signed and sealed the foregoing the day and year first above written. my commission expires: _____

notary public:

This Site Development Section Plan was approved by the city of Chesterfield Planning Commission and duly verified on the _____ day of _____, 2012, by the Chairperson of said Commission, authorizing the recording of this Site Development Section Plan pursuant to Chesterfield Ordinance number 200, as attested to by the Planning and Development Services Director.

Aimee E. Nassif, AICP, Planning and Development Services Director

Judith Naggar, City Clerk

SITE DEVELOPMENT PLAN SHEET INDEX:

- Cover Sheet
- Site Plan
- Landscape Plan
- Lighting Plan



NO.	DATE	DESCRIPTION
1	03/02/12	PRELIMINARY CITY COMMENTS
2	03/02/12	REVISIONS
3	03/02/12	REVISIONS
4	03/02/12	REVISIONS
5	03/02/12	REVISIONS
6	03/02/12	REVISIONS
7	03/02/12	REVISIONS
8	03/02/12	REVISIONS

Prepared by: The Woodmont Company
 Simon Property Group, Inc.
 105 Eisenhower Parkway
 Roseland, NJ 07068

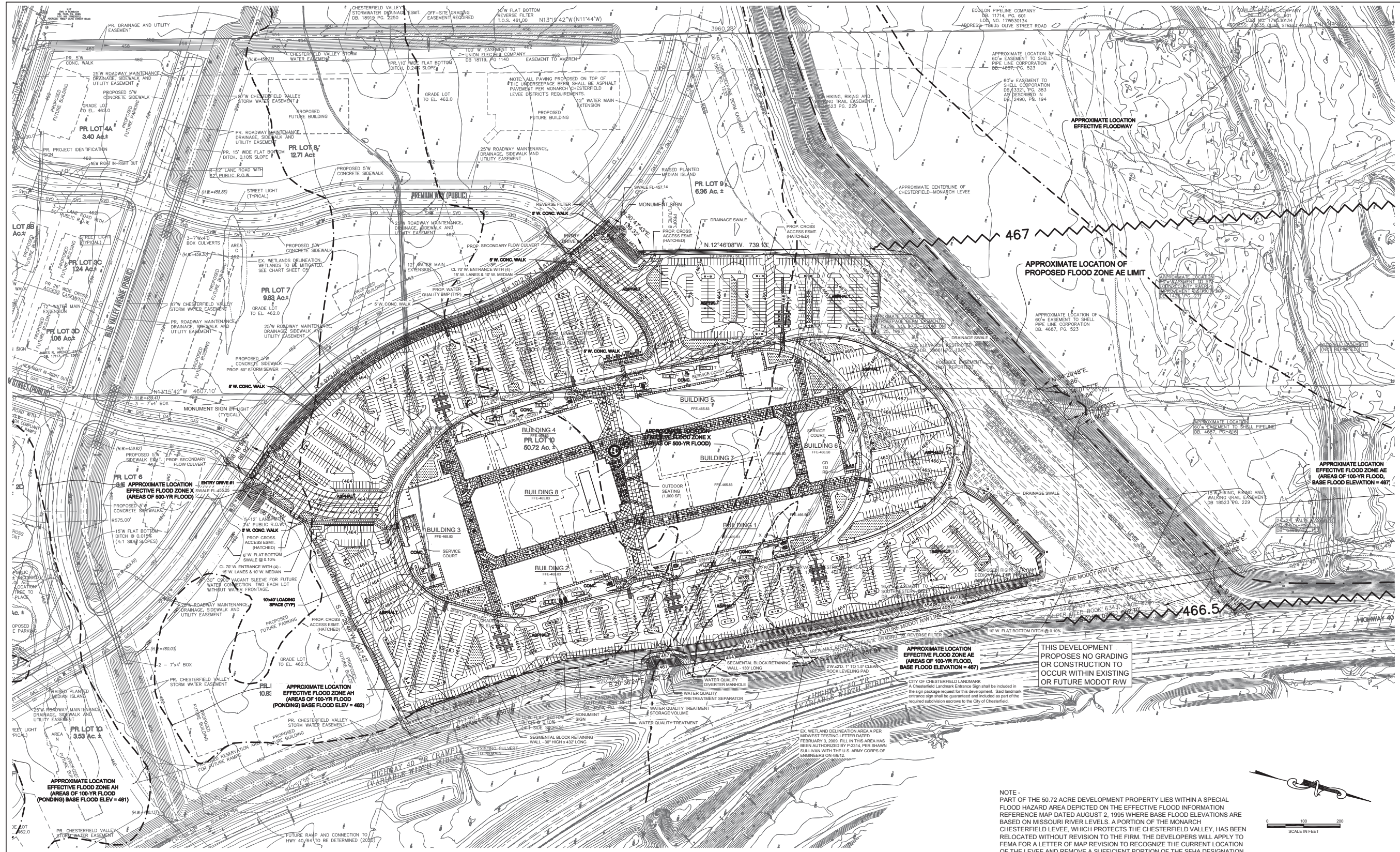
Cover Sheet
 ST. LOUIS PREMIUM OUTLETS

Designed	GMS
Drawn	GMS
Checked	
Date	4/27/2012
Project Number	11141
Sheet Number	1 of 4



Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMo.

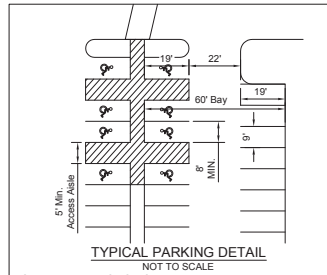


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Call Before you DIG
TOLL FREE
1-800-344-7483
MISSOURI ONE CALL SYSTEM INC.

The signed and sealed original of this drawing is on file at the office of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.



- GENERAL PARKING NOTES:
- ADA parking spaces shall be a min. of 8'x19' with a 5' min. adjacent access aisle.
 - ADA van accessible spaces shall be at least 8'x19' with a 5' min. adjacent access aisle. Total width of parking space & access aisle shall be 16' min. Spaces may share access aisles.
 - Dimensions are face of curb where applicable.

- SERVICE COURT LEGEND:
- C Typical Cardboard Compactor
 - T Typical Trash Compactor
 - W Wet Compactor w/Drainlines for Liquids
 - TD Trash Dumpster (7 Cu yd.)
 - CD Cardboard Dumpster (7 Cu yd.)
 - X Transformer
 - S Switch
 - RB Recycling Bin

WATER QUALITY BMP - BIORETENTION

BASE FLOOD ELEVATION (100 YR) ON THE MISSOURI RIVER PER FLOOD PROFILE FROM REVISED FIS DATED 8/23/2000.

NOTE - PART OF THE 50.72 ACRE DEVELOPMENT PROPERTY LIES WITHIN A SPECIAL FLOOD HAZARD AREA DEPICTED ON THE EFFECTIVE FLOOD INFORMATION REFERENCE MAP DATED AUGUST 2, 1995 WHERE BASE FLOOD ELEVATIONS ARE BASED ON MISSOURI RIVER LEVELS. A PORTION OF THE MONARCH CHESTERFIELD LEVEE, WHICH PROTECTS THE CHESTERFIELD VALLEY, HAS BEEN RELOCATED WITHOUT REVISION TO THE FIRM. THE DEVELOPERS WILL APPLY TO FEMA FOR A LETTER OF MAP REVISION TO RECOGNIZE THE CURRENT LOCATION OF THE LEVEE AND REMOVE A SUFFICIENT PORTION OF THE SFHA DESIGNATION SO THAT ALL OF THE PROPOSED STRUCTURES ARE OUT OF THE FLOOD PLAIN. IN ADDITION, FOLLOWING GRADING OF THE SITE, THE DEVELOPERS WILL APPLY TO FEMA FOR A LETTER OF MAP REVISION TO RECOGNIZE THE FILLING OF A PORTION OF THE PROPERTY TO REMOVE THE SFHA DESIGNATION DUE TO INTERIOR PONDING SO THAT ALL OF THE PROPOSED STRUCTURES ARE OUT OF THE FLOOD PLAIN. A LETTER OF MAP REVISION FOR THE LEVEE REALIGNMENT WILL BE REQUIRED PRIOR TO IMPROVEMENT PLAN APPROVAL OR BUILDING PERMIT FOR ANY STRUCTURES IN THE AFFECTED FLOOD PLAIN AREA.

PREMIUM OUTLETS
SIMON
WOODMONT OUTLETS

the clayton engineering company, inc.
ENGINEERS - SURVEYORS - PLANNERS

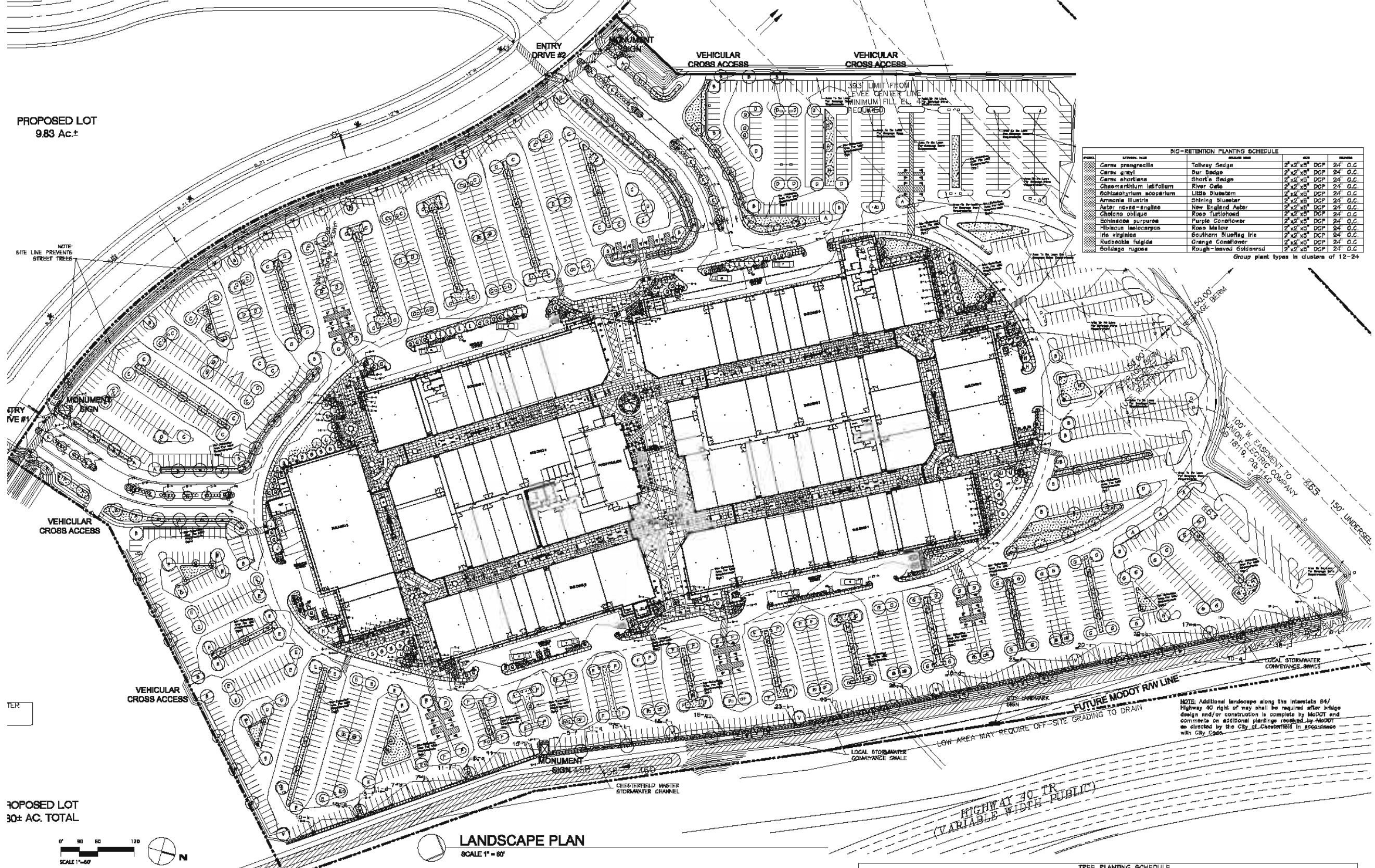
NO.	DATE	DESCRIPTION
1	3/20/12	DATE SUBMITTED
2	03/07/12	DATE APPROVED
3	3/19/12	DATE MODIFIED
4	3/27/12	DATE CITY COMMENTS
5	4/13/12	DATE CITY COMMENTS
6		DATE CITY COMMENTS
7		DATE CITY COMMENTS
8		DATE CITY COMMENTS

The Woodmont Company
Simon Property Group, Inc.
105 Eisenhower Parkway
Roseland, NJ 07068

SITE DEVELOPMENT PLAN
ST. LOUIS PREMIUM OUTLETS

Designed: GMS
Drawn: GMS
Checked: GMS
Date: 4/27/2012
Project Number: 11141
Sheet Number: 2 of 4

PROPOSED LOT
9.83 Ac.±



DIG-RETENTION PLANTING SCHEDULE

PLANT	COMMON NAME	SIZE	QUANTITY	REMARKS
Carex praeacutis	Tallway Sedge	2' x 2' x 2'	24	O.C.
Carex sylvatica	Bar Sedge	2' x 2' x 2'	24	O.C.
Carex stricta	Short's Sedge	2' x 2' x 2'	24	O.C.
Cheamantium latifolium	River Oats	2' x 2' x 2'	24	O.C.
Golizaphyllum scoparium	Little Bluestem	2' x 2' x 2'	24	O.C.
Ammonia blustris	Shining Bluestem	2' x 2' x 2'	24	O.C.
Aster novae-angliae	New England Aster	2' x 2' x 2'	24	O.C.
Chechea obliqua	Rose Turk'shead	2' x 2' x 2'	24	O.C.
Solidago purpurea	Purple Coneflower	2' x 2' x 2'	24	O.C.
Hibiscus laevis	Rose Mallow	2' x 2' x 2'	24	O.C.
Iris virginica	Southern Blueflag Iris	2' x 2' x 2'	24	O.C.
Rudbeckia hirta	Orange Coneflower	2' x 2' x 2'	24	O.C.
Solidago rugosa	Rough-leaved Goldenrod	2' x 2' x 2'	24	O.C.

Group plant types in clusters of 12-24

LANDSCAPE PLAN
SCALE 1" = 80'

SHRUB PLANTING SCHEDULE

PLANT	QUANTITY	COMMON NAME	REMARKS
a	16	Barbarts thunbergii 'Royal Burgundy'	Royal Burgundy Barbary
b	80	Buxus microphylla 'Winter Gem'	Winter Gem Boxwood
c	79	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass
d	63	Cornus sericea 'Flavirama'	Yellow Twig Dogwood
e	50	Euonymus alatus 'Compacta'	Dwarf Burning Bush
f	99	Juniperus chinensis 'Sea Green'	Sea Green Juniper
g	40	Spiraea x bumalda 'Anthony Waterer'	A.W. Spiraea
h	85	Sporobolus heterolepis	Prairie Dropseed Grass
i	66	Syringa patula 'Miss Kim'	Miss Kim Lilac
k	94	Viburnum x burkwoodii	Burkwood Viburnum
m	22	Hydrangea macrophylla 'Red Sensation'	Forever Red Hydrangea
n	52	Cornus sericea 'Cardinal'	Red Twig Dogwood
o	25	Chaenomeles speciosa 'Texas Scarlet'	Texas Scarlet Quince
q	62	Taxus x media 'Densiformis'	Densiformis Yew
r	100	Rosa x 'Radrazz'	Knockout Rose
e	45	Spiraea japonica 'Lemon Princess'	Lemon Princess Spiraea
t	27	Rhus aromatica 'Gro-low'	Gro-Low Sumac
u	26	Rosa virginica 'Sprich'	Little Henry Virginia Sweetapple
v	31	Pennisetum alopecuroides 'Mouduy'	Mouduy Fountain Grass
w	13	Festuca glauca 'Elijah's Blue'	Elijah's Blue Fescue
x	14	Rhododendron x 'Hot Shot'	Hot Shot Azalea
PE		Perennials	Daylily, Black Eyed Susan, Coreopsis, Hosta, Liriod

TREE PLANTING SCHEDULE

PLANT	QUANTITY	COMMON NAME	REMARKS
A	53	Acer rubrum 'Armstrong'	Armstrong Maple
B	30	Zelkova serrata	Japanese Zelkova
C	57	Acer x freemanii 'Jefferson'	Autumn Blaze Maple
D	35	Gleditsia tricanthos 'Inermis'	Thornless Honeylocust
E	30	Prunus serotina 'Columnaris'	Columnar Sargent Cherry
F	40	Oxydendrum arboreum	Bourwood
G	40	Carpinus betulus	European Hornbeam
H	44	Carpinus caroliniana	American Hornbeam
J	9	Carole canadensis	Redbud
K	16	Pyrus calleryana 'Chanticleer'	Chanticleer Pear
L	45	Amelanchier arborea	Serviceberry
M	4	Tilia cordata	Littleleaf Linden
N	10	Quercus coccoloba	Scarlet Oak
P	5	Carpinus betulus 'Franz Fontaine'	Franz Fontaine Hornbeam
Q	59	Pinus strobus	Eastern White Pine
R	67	Platycladus orientalis	Oriental Arborvitae
S	22	Prunus serrulata 'Kwanzen'	Kwanzen Cherry
T	34	Syringa mayeri 'Palbin'	Dwarf Lilac Tree
U	19	Malus x 'Spring Snow'	Spring Snow Crab
V	20	Quercus bicolor	Swamp White Oak
W	14	Prunus cerasifera 'Thundercloud'	Purple Leaf Plum
X	12	Crateagus phenocoryum	Washington Hawthorn

- GENERAL NOTES:**
- 1) Open space required: 30% of total site (15.20 acres)
Open Space provided: 15.57 acres
 - 2) All street trees will be located at least 3' from proposed curb.
 - 3) All street trees will be located at least 10' from all storm sewer structures.
 - 4) All turf areas will be seeded.
 - 5) An in-ground irrigation system will be provided. Bioretention and naturalized planting areas shall be established and maintained with alternative watering methods.

200 Madison Ave
Toldeo, OH 43084
614.242.7463 fax
614.242.7464 fax
www.thecollaborativeinc.com
©1999thecollaborativeinc.com



ARCHITECTS
LANDSCAPE ARCHITECTS
INTERIOR DESIGNERS
PLANNERS
CONTRACT FURNISHINGS



Plan prepared by:
JAS
Landscape Architect

PREMIUM
OUTLETS
SIMON

WOODMONT
OUTLETS

PROJECT TITLE
ST. LOUIS
PREMIUM
OUTLETS

Chesterfield, MO

CHECKED JAS
APPROVED BAR

SHEET TITLE
SECTION
LANDSCAPE
PLAN

SHEET NO.
L-1

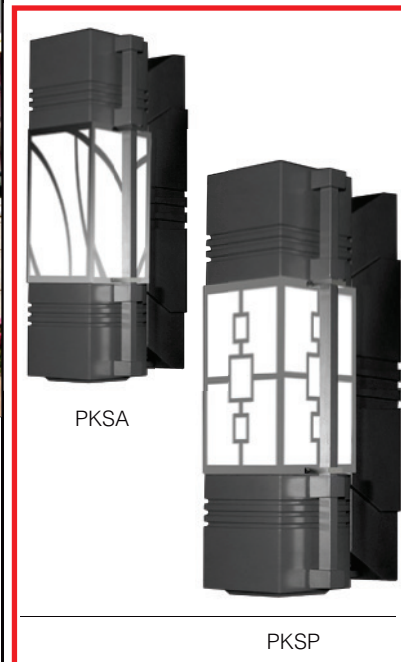
PKSA/PKSP

Parkway Square™ – Sconce

1 FIXTURE	2 LAMP/BALLAST	3 DECORATIVE SCREEN	4 OPTIONS			5 COLOR
			GENERAL	HOOD	SCREEN	



PAKWAY SQUARE
SCONCE



PARKWAY SQUARE FAMILY OF FIXTURES



PKWM



PKWS



PKWB



PKSA/PKSP

Features

- Six configuration, including down beam, down spread, up beam, up spread, down beam/up spread, up beam/down spread, and egress
- Available with highly efficient LEDs
- Six decorative screen options
- Tamper resistant hardware
- Cast aluminum struts
- Full cutoff options
- EISA compliant
- IP65 rated for horizontal configurations and IP66 rated for vertical configurations
- Powder coat finish in 13 standard colors with a polymer primer sealer

JOB INFORMATION

TYPE

JOB NAME

LAMP (BY OTHERS)

CUSTOMER

DATE

*Consult factory for any custom/
modified products*

APPROVALS



16555 East Gale Ave.
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1 FIXTURE	2 LAMP/BALLAST	3 DECORATIVE SCREEN	4 OPTIONS			5 COLOR
			GENERAL	HOOD	SCREEN	

1. FIXTURE

ACCENT (SMALL) SCALE

<input type="checkbox"/>	PKSA DB	Small - Down beam & egress
<input type="checkbox"/>	PKSA DS	Small - Down spread & egress
<input type="checkbox"/>	PKSA UB	Small - Up beam & egress
<input type="checkbox"/>	PKSA US	Small - Up spread & egress
<input type="checkbox"/>	PKSA DBUS	Small - Down beam/up spread & egress
<input type="checkbox"/>	PKSA UBDS	Small - Up beam/down spread & egress

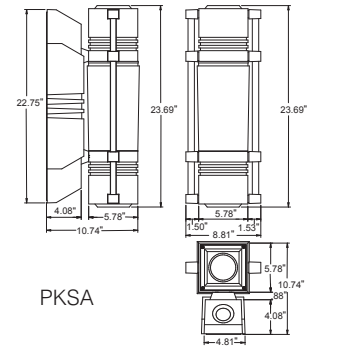
PEDESTRIAN (MEDIUM) SCALE

<input type="checkbox"/>	PKSP DB	Large - Down beam & egress
<input type="checkbox"/>	PKSP DS	Large - Down spread & egress
<input type="checkbox"/>	PKSP UB	Large - Up beam & egress
<input type="checkbox"/>	PKSP US	Large - Up spread & egress
<input type="checkbox"/>	PKSP DBUS	Large - Down beam/up spread & egress
<input type="checkbox"/>	PKSP UBDS	Large - Up beam/down spread & egress

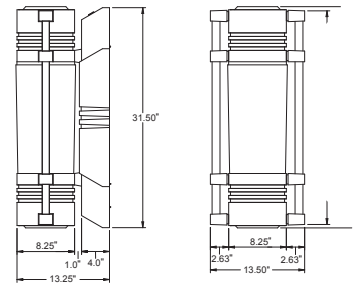
2. LAMP/BALLAST

<input type="checkbox"/>	15LED-WW	15 light emitting diode array. Warm white (3500K). Class 2, 120 thru 277 volt. <i>For PKSA DS/US only.</i>
<input type="checkbox"/>	15LED-BW	15 light emitting diode array. Bright white (5100K). Class 2, 120 thru 277 volt. <i>For PKSA DS/US only.</i>
<input type="checkbox"/>	18LED-WW	18 light emitting diode array. Warm white (3500K). Class 2, 120 thru 277 volt. <i>For PKSP DS/US only.</i>
<input type="checkbox"/>	18LED-BW	18 light emitting diode array. Bright white (5100K). Class 2, 120 thru 277 volt. <i>For PKSP DS/US only.</i>
<input type="checkbox"/>	24LED-WW	24 light emitting diode array. Warm white (3500K). Class 2, 120 thru 277 volt. <i>For PKSA DBUS/UBDS only.</i>
<input type="checkbox"/>	24LED-BW	24 light emitting diode array. Bright white (5100K). Class 2, 120 thru 277 volt. <i>For PKSA DBUS/UBDS only.</i>
<input type="checkbox"/>	30LED-WW	30 light emitting diode array. Warm white (3500K). Class 2, 120 thru 277 volt. <i>For PKSP DBUS/UBDS only.</i>
<input type="checkbox"/>	30LED-BW	30 light emitting diode array. Bright white (5100K). Class 2, 120 thru 277 volt. <i>For PKSP DBUS/UBDS only.</i>
<input type="checkbox"/>	24PLL	24 watt PL-L compact fluorescent electronic 120/277 volt ballast. Specify wattage. <i>PKSA only.</i>
<input type="checkbox"/>	35R111	35 watt electronic metal halide R111, 120/277 volt. <i>PKSA only.</i>
<input type="checkbox"/>	20MMC	20 watt electronic metal halide ballast, 120 thru 277 volt. Use PGJ5 base, MiniMastercolor lamp. <i>PKSA only.</i>
<input type="checkbox"/>	39MMC	39 watt electronic metal halide ballast, 120 thru 277 volt. Use PGJ5 base, MiniMastercolor lamp. <i>PKSA only.</i>
<input type="checkbox"/>	50PLL	50 watt PL-L compact fluorescent electronic 120/277 volt ballast. Specify wattage. <i>PKSP only.</i>
<input type="checkbox"/>	39MHT6EB	39 watt electronic metal halide, 120 thru 277 volt ballast. Use G12 base, T-6 ceramic lamp. <i>PKSP only.</i>
<input type="checkbox"/>	70MHT6EB	70 watt metal halide ballast, 120/277/347 volt ballast. Use G12 base, T-6 ceramic lamp. <i>PKSP only.</i>
<input type="checkbox"/>	35R111	35 watt electronic metal halide R111, 120/277 volt. <i>PKSP only.</i>
<input type="checkbox"/>	70R111	70 watt electronic metal halide R111, 120/277 volt. <i>PKSP only.</i>

All fixtures prewired for 277 volts unless specified. Lamps not included (except IL and LED options). All applicable ballasts are EISA compliant. Mini MasterColor® is a registered trademark and CosmoPolis™ is a trademark of Philips Lighting®.



PKSA



PKSP

JOB INFORMATION

TYPE

JOB NAME

LAMP (BY OTHERS)

CUSTOMER

DATE

Consult factory for any custom/modified products

APPROVALS

1 FIXTURE	2 LAMP/BALLAST	3 DECORATIVE SCREEN	4 OPTIONS			5 COLOR
			GENERAL	HOOD	SCREEN	

5. DECORATIVE SCREENS (OPTIONAL)

Painted to match fixture. Also available in stainless steel or copper. Not available with horizontal or LED optics.



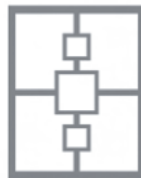
DSIN
*Infinity design
painted to
match fixture.*



DSOF
*Offset design
painted to
match fixture.*



DSWH
*Wheat design
painted to
match fixture.*



DSTR
*Trio design
painted to
match fixture.*



DSSH
*Shutter design
painted to
match fixture.*



DSCS
Custom design
painted to
match fixture.*

6. OPTIONS

GENERAL

- DS39** Dual source - 39 watt mini mastercolor. Specify primary or secondary
- BBU** Integral battery backup
- NEG** No egress lamp. Opening is sealed with a cap and painted to match fixture.

DECORATIVE SCREEN

- CPR** Screen in brushed copper
- SSP** Screen in brushed stainless steel

7. COLOR

- | | |
|--|---|
| <input type="checkbox"/> AWT Arctic White | <input type="checkbox"/> MDG Medium Grey |
| <input type="checkbox"/> BLK Black | <input type="checkbox"/> ATG Antique Green |
| <input type="checkbox"/> MTB Matte Black | <input type="checkbox"/> LGY Light Grey |
| <input type="checkbox"/> DGN Dark Green | <input type="checkbox"/> SPP Salt and Pepper (premium) |
| <input type="checkbox"/> DBZ Dark Bronze | <input type="checkbox"/> SFM Seafoam (premium) |
| <input type="checkbox"/> WRZ Weathered Bronze | <input type="checkbox"/> WCP Weathered Copper (premium) |
| <input type="checkbox"/> BRM Metallic Bronze | <input type="checkbox"/> SHK Shamrock (premium) |
| <input type="checkbox"/> VBL Verde Blue | <input type="checkbox"/> RAL COLOR Provide a RAL 4 digit color number |
| <input type="checkbox"/> CRT Corten | <input type="checkbox"/> CUSTOM COLOR Please provide a color chip for matching |
| <input type="checkbox"/> MAL Matte Aluminum | |

JOB INFORMATION

TYPE

JOB NAME

LAMP (BY OTHERS)

CUSTOMER

DATE

*Consult factory for any custom/
modified products*

APPROVALS

1	2	3	4			5
FITURE	LAMP/BALLAST	DECORATIVE SCREEN	OPTIONS			COLOR
			GENERAL	HOOD	SCREEN	

HOUSING

Parkway Square housings shall be cast aluminum, A356 alloy, free of any porosity, foreign materials, or cosmetic fillers. The vertical lens shall be opal, semi translucent high impact injection molded lighting grade acrylic and shall not be field replaceable. The vertical struts shall be cast aluminum and painted to match the fixture. The lens shall be sealed to the housing with a molded silicone gasket on the top and bottom. The optical lens frame shall be secured with four captive socket cap screws and shall be sealed with a one piece memory retentive, molded silicone gasket. The lamp compartment shall have a molded silicone plug to completely seal the optical system from insects or dirt emanating from the electrical box or conduit. Four stainless steel screws shall release the canopy to allow electrical access. All internal and external hardware shall be stainless steel and zinc.

REFLECTOR

The reflector is formed aluminum with bright dip anodized finish for pedestrian scale and bead blasted finish for accent scale fixtures.

ELECTRICAL

The ballast or LED driver electrical assembly shall be integral to the fixture and mounted to the cast canopy, the electrical assembly shall be prewired with a quick disconnect plug and removable by loosening two screws. All metal halide ballasts shall be electronic. T6 metal halide lamps shall use G12 sockets; R111 lamps shall use GX8.5 sockets; PL-L fluorescent lamps shall use 2G11 sockets. LED drivers shall have a drive current of 350mA. Standard color temperatures for Nichia NS6L183 and NS6W183 LEDs shall be 3500K and 5100K. The ballast or LED driver shall accept an input voltage of 120 through 277 volts and shall be wired at the factory for 277 volts, unless specified. The MR16 lamp for emergency egress feature shall be included and powered by 120 volt input transformed into low-voltage (12 volt) by the electronic transformer (included). The MR16 lamp shall use a miniature bi-pin base.

SAFETY

The fixture shall include an integral secondary source to provide path of egress illumination from building to the public way. The hidden MR16 lamp, powered as a remote head is able to be angle up to 15° in either direction.

WALL PLATE

Wall plate shall be secured into wall over j-box and shall be wired to the power circuit. Fixture shall be attached to the wall plate by four set-screws.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

CERTIFICATION

The fixture is listed with ETL for outdoor, wet location use and shall conform to UL1598 and Canadian CSA Std. C22.2 no.9. IP65 rated for horizontal configurations and IP66 rated for vertical configurations.

WARRANTY

Fixture is warranted for three years. Driver components carry the driver manufacturer's limited warranty. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by AAL and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. Contact AAL for complete warranty language, exceptions, and limitations.

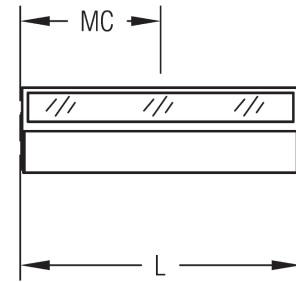
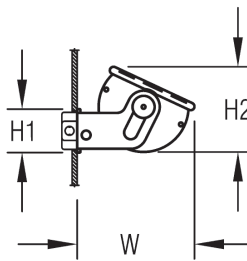
JOB INFORMATION
TYPE _____
JOB NAME _____
LAMP (BY OTHERS) _____
CUSTOMER _____
DATE _____
<i>Consult factory for any custom/modified products</i>
APPROVALS



SPL specification sheets are generated on demand in order to ensure the most current information possible. This sheet is current as of 12/28/11 02:17:39 and is subject to change without notice.

SPI
 Echo Round 9.0
 Exterior Wall
 EEW9501 Forward Throw

JOB NAME	TYPE 'C'
MODEL NO.	
LAMP	



Dimensions

W	L	MC	H1	H2
11.4 in (29 cm)	27.5 in (69.8 cm)	13.7 in (34.8 cm)	4.2 in (10.7 cm)	8.3 in (21.1 cm)

Description

Echo Round 9.0 is designed to address larger, high-ceiling spaces such as atriums, gymnasiums, libraries, natatoriums and open offices. Its vast lamping range and premium light control provides sufficient and visually uniform illumination to surfaces. Round's proportionate size and basic shape integrates seamlessly into a space.

Features

- Formed stainless steel yoke brackets equip the fixture with durable mounting components that will not rust or corrode.
- Standard thermoset polyester powder coat paint provides durable protection in a palette of color options. Custom colors available upon request.
- Extruded aluminum construction provides durable protection for internal components and is recyclable.
- Cast aluminum end caps protect internal components and are recyclable.
- Field adjustable housing locks into position, enabling precise fixture alignment for high-quality design performance.
- Tempered glass lens protects HID and tungsten halogen lamp engines.
- Premium 95% reflective aluminum is utilized in the highly-efficient and effective reflector design.

Weight

Consult Factory.

Contents
Features
Technical Notes
Ordering Information
Finishes

EEW9501 Technical Notes

Accessories

- Only one louver option can be specified per fixture.

Construction

- Luminaires over 27" in length have a two-piece yoke assembly.

Electrical

- Black weatherproof power cord with watertight fittings.
- HID versions have integral ballasts eliminating the need for remote mounting, simplifying installation.
- Thermally protected ballast limits operating temperature.
- Class "C" sound rated ballast.
- ETL listed to UL standards (US and Canada) for use in wet locations.

Finish


- Housing and mounting components painted to match, unless otherwise specified.

Mounting







- Steel cover fits over standard 4" octagonal junction box.

SPI specification sheets are generated on demand in order to ensure the most current information possible. This sheet is **current as of 12/28/11 02:17:39** and is subject to change without notice.

EEW9501 Forward Throw

Model Number/Style	Select Lamping		Select Voltage	Select Lamp Options
EEW9501 [FT]				

Not all options are available in all configurations, consult factory for details.

Lamping		Photometry		Voltage
1M175PS	1PSMH175/BT28/MOG/U	ITL62257		120V 120 Volt
1M250PS	1PSMH250/BT28/MOG	ITL62257		277V 277 Volt
1M315PS	1PSCMH315/T9/PGZ18			
1M320PS	1PSMH320/ED28/MOG			
1M350PS	1PSMH350/ED28/MOG	ITL62257		
1M400PS	1PSMH400/ED28/MOG	ITL62257		

Lamp Options	
CS	Cut-off Shield
F	Fusing

 Finish must be selected.

SPI specification sheets are generated on demand in order to ensure the most current information possible. This sheet is current as of 12/28/11 02:17:39 and is subject to change without notice.

EEW9501 Forward Throw

The finishes shown here are representations of the standard color selections available for SPI Lighting products. There may be variations in color, texture and finish between the samples shown here and the actual product finishes. If a more accurate paint color or metal finish is required, please contact us at finishes@spilighting.com.

Painted Aluminum

 PT01² SuperWhite	 PT02¹ White	 PT03¹ Morning Light	 PT04¹ Warm White	 PT05¹ Putty
 PT06¹ Warm Beige	 PT07¹ Light Taupe	 PT08¹ Medium Taupe	 PT09¹ Medium Gray	 PT10¹ Dark Gray
 PT11¹ Black	 PT12¹ Dark Chocolate	 PT13¹ Warm Gray	 PT14¹ Light Gray	 PT15¹ Sage
 PT16¹ Spruce	 PT17¹ Red	 PT18¹ Deep Red	 PT19¹ Blue	 PT20¹ Dark Green
 PT21⁴ Pearl White	 PT22⁴ Platinum	 PT27⁴ Deep Copper	 PT28⁴ Dark Stainless	 PT29⁴ Red Brass
 PT31⁴ Medium Bronze	 PT32⁴ Dark Bronze	 PT33¹ Dark Blue	 PT40¹ Yellow	 PT41¹ Orange
 PT42¹ Sky Blue	 PT43¹ Teal	 PT44¹ Green	 PT45¹ Purple	 PT46³ Aluminum
 PT47³ Deep Red Brass	 PT48³ Brass	 PT49³ Bronze		

¹Textured ²Glossy ³Metallic Textured ⁴Metallic Glossy

Custom colors available, consult factory for details.

SPI specification sheets are generated on demand in order to ensure the most current information possible. This sheet is current as of 12/28/11 02:17:39 and is subject to change without notice.

FEATURES & SPECIFICATIONS

INTENDED USE— For building- and wall-mounted applications.

CONSTRUCTION — Rugged, die-cast, single-piece aluminum housing. Die-cast door frame has a 1/8" thick tempered glass lens. Door frame is fully gasketed with one-piece solid silicone.

OPTICS — Segmented reflectors for superior uniformity and control. Reflectors are interchangeable. Three full cutoff distributions available: FT (forward throw), MD (medium throw) and WT (wide throw).

ELECTRICAL — Ballast: 50W-150W utilizes a high reactance, high power factor ballast. Metal halide 150W and below are standard with pulse-start technology. 35S utilizes a reactance high power factor ballast. 175W utilizes a constant-wattage autotransformer ballast. CSA, NOM or INTL required for probe start shipments outside of the US for 175M. Not available 175M SCWA. Ceramic metal halide lamps are recommended for use in applications where superior color rendition, lumen maintenance and longer lamp life are desired.

Quick disconnect plug easily disconnects reflector from ballast. Ballasts are 100% factory-tested.

Socket: Porcelain, medium-base socket with copper alloy, nickel-plated screw shell and center contact. UL listed 660W, 600V 4KV pulse rated.

Finish: Standard finish is textured dark bronze (DDBT) corrosion-resistant polyester powder finish. Additional architectural colors are available. Striping is also available.

INSTALLATION — Universal mounting mechanism with integral mounting support allows fixture to hinge down. Bubble level provides correct alignment with each installation.

LISTINGS — UL Listed (standard). CSA Certified (see Options). Suitable for wet locations (damp location listed in lens-up orientation). WLU option offers wet location listing in up orientation (see Options). IP65 rated. 25°C ambient. ELED: U.S. Patent No. 7,737,640.

Note: Specifications subject to change without notice.

Catalog Number
Notes
Type 'D'



Decorative Wall-Mounted Lighting

WST

METAL HALIDE: 50W-175W
HIGH PRESSURE SODIUM: 35W-150W

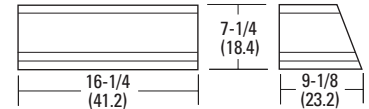
Specifications

Length: 16-1/4 (41.2)

Depth: 9-1/8 (23.2)

Overall Height: 7-1/4 (18.4)

*Weight: 30 lbs (13.6 kg)



All dimensions are inches (centimeters) unless otherwise indicated.

*Weight as configured in example below.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: WST 100M FTTB LPI

WST	Wattage/source			MD	Voltage	Ballast	Mounting	Options
Series	Distribution			Voltage	Ballast	Mounting	Options	
WST	High pressure sodium	Metal halide	Ceramic metal halide	FT Forward throw	120 208 ³	(blank) Magnetic ballast	(blank) Surface mount	Shipped installed in fixture
	35S ¹	50M	50MHC	MD Medium throw (coated lamp std.)	240 ³	CWI Constant wattage isolated	Shipped separately ⁷	SF Single fuse (120, 277, 347V) ⁸
	50S	70M	70MHC	WT Wide throw	277	Pulse Start NO REGULATORY SERVICE	BBW Surface mount back box	DF Double fuse (208, 240V) ⁸
	70S	100M	100MHC		347		UT5 Uptilt 5 degrees	DC12 Emergency circuit 12-volt (35W lamp included) ⁹
	100S	150M	150MHC		TB ⁴			2DC12 Emergency circuit 12-volt (two 35W lamps included) ⁹
	150S	175M ²	150MHC		23050HZ ⁵	SCWA Super CSA pulse start ballast ⁶		DC2012 Emergency circuit 12-volt (20W lamp included) ⁹
								2DC2012 Emergency circuit 12-volt (two 20W lamps included) ⁹

Options (continued)						Finish ¹⁶	Lamp ¹⁸
ELED	Emergency LED secondary source battery pack with time delay (-4°F min. operating temperature) ¹⁰			QRS	Quartz restrike system ^{11, 15}	(blank) Dark bronze, textured	LPI Lamp included
2ELED	Emergency LED secondary source (two modules) battery pack with time delay (-4°F min. operating temperature) ¹⁰			WLU	Wet location door for up orientation	DSST Sandstone, textured	L/LP Less lamp
DFL	Diffusing lens			CSA	CSA certified	DNAT Natural aluminum, textured	
EC	Emergency circuit ^{11, 12}			NOM	NOM certified ⁵	DWHG White, textured	
IBS	Internal backlight shield ¹³			INTL	International shipment for 175M	DBLB Black, textured	
PE	Photoelectric cell-button type (n/a TB) ¹⁴					CR Corrosion-resistance	
						CRT Non-stick protective coating ¹⁷	

Notes

- 120V.
- These wattages do not comply with California Title 20 regulations.
- Must specify CWI for use in Canada.
- Optional multi-tap ballast (120, 208, 240, 277V); (120, 277, 347V in Canada; ships as 120V/347V).
- Consult factory for available wattages.
- Available with 150M or 150MHC only.
- May be ordered as an accessory with prefix "WS". Must specify finish.
- Not available with DC options.
- Not available with ELED, SF, DF, EC or QRS.
- Maximum wattage 100M, 70S. Must specify 120V or 277V. Not available with QRS, EC or DC.
- Maximum allowable wattage lamp included.
- Not available with ELED, QRS or DCs.

- Not available with medium throw (MD, MDU, MDU5) distributions.
- Must be ordered with fixture; cannot be field installed.
- Not available with ELED, EC or DCs.
- See www.lithonia.com/archcolors for additional color options.
- Black finish only.
- Must be specified. L/LP not available with MHC.

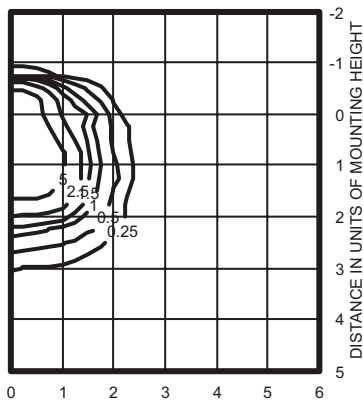


Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

WST Metal Halide, High Pressure Sodium Wall Mounted

WST 150MHC FT LTL11069P

ISOILLUMINANCE PLOT (Footcandle)

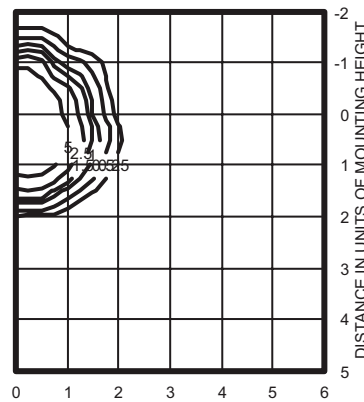


150W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 14000 rated lumens.

Luminaire Efficiency: 52.9%

WST 150MHC MD LTL11068P

ISOILLUMINANCE PLOT (Footcandle)

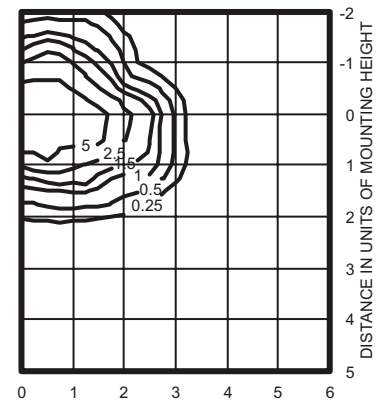


150W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 12500 rated lumens.

Luminaire Efficiency: 60.2%

WST 150MHC WT LTL11070P

ISOILLUMINANCE PLOT (Footcandle)



150W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 14000 rated lumens.

Luminaire Efficiency: 62.5%

Lamp	Initial lumens	Mounting height			
		10'	12'	14'	16'
Metal Halide					
50W MH	3,900	0.43	0.30	0.22	0.17
70W MH	5,500	0.62	0.43	0.31	0.24
100W MH	8,500	0.95	0.66	0.48	0.37
150W MH	12,500	1.41	0.98	0.72	0.55
175W MH	12,800	1.44	1.0	0.73	0.56
High Pressure Sodium					
35W HPS	1,250	0.26	0.18	0.13	0.10
50W HPS	4,000	0.45	0.31	0.23	0.17
70W HPS	6,400	0.72	0.50	0.37	0.28
100W HPS	9,500	1.07	0.74	0.54	0.41
150W HPS	16,000	1.80	1.25	0.91	0.70

Emergency Option Lamp Compatibility							
Lamp options	DC12	2DC12	DC2012	2DC2012	EC	ELED	2ELED
# of lamps/wattage							
35S	■	■	■	■	■	■	■
50S	■	■	■	■	■	■	■
70S	■	■	■	■	■	■	■
100S	■	■	■	■	■		
150S	■	■	■	■	■		
50M	■	■	■	■	■	■	■
70M	■	■	■	■	■	■	■
100M	■	■	■	■	■	■	■
150M	■	■	■	■	■		
175M	■	■	■	■	■		

FEATURES & SPECIFICATIONS

INTENDED USE — For landscape and facade lighting.

CONSTRUCTION — Rugged, die-cast, single piece low copper alloy aluminum housing. Die-cast doorframe has impact-resistant, tempered, glass lens. Doorframe is fully sealed with a closed-cell silicone gasket. Standard finish is textured dark bronze (DDBT) polyester powder finish, with other architectural colors available. Patent No. D552,778.

OPTICS — Anodized aluminum reflectors; segmented, specular or hammertone finish for superior uniformity and control. Reflectors are interchangeable and allow for tool-less access to electrical components.

ELECTRICAL — 50W-150W utilizes a high reactance, high power factor ballast. 175W utilizes a constant-wattage autotransformer ballast. Quick disconnect plug easily disconnects reflector from ballast and fixture from supply wires. Ballasts are precision wound and 100% factory tested. UL Listed. CSA, NOM or INTL required for probe start shipments outside of the US for 175M. Not available with 175M SCWA. Ceramic metal halide lamps are recommended for use in applications where superior color rendition, lumen maintenance and longer lamp life are desired.

Socket: Porcelain, medium-base socket with copper alloy, nickel-plated screw shell and center contact.

INSTALLATION — Standard mounting is cast 3/4" threaded knuckle. Mounting mechanism features infinite locking points for aiming precision. Optional yoke mounting available, heavy-duty compact cast aluminum yoke adaptor to maintain fixture aesthetics. Provided with painted steel yoke and three feet of 16/3 SE00W cable.

LISTING — UL listed suitable for wet locations in all orientations. UL Listed to U.S. and Canadian safety standards (see Options). NOM Certified (see Options). IP66 rated. Canadian patent pending.

Note: Specifications subject to change without notice.

Catalog Number
Notes
Type 'E'



AERIS™
Architectural Floodlighting

ASF1

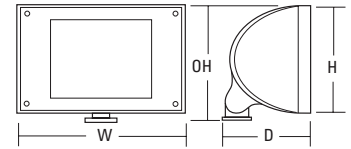
METAL HALIDE: 50W-175W
HIGH PRESSURE SODIUM: 50W-150W

Specifications

EPA: 1.20 ft²
Width: 15-1/2 (39.4)
Depth: 7-5/8 (19.4)
Height: 10 (25.4)
Overall Height: 10-7/8 (27.6)
*Max. Weight: 20 lbs (9.1 kg)

All dimensions are inches (centimeters) unless otherwise indicated.

*Weight as configured in example below.



ORDERING INFORMATION

For shortest lead times, configure products using **standard options** (shown in bold).

Example: ASF1 100M HSP TB LPI

Series	Wattage	Distribution	Voltage	Ballast	Mounting	Options	Finish ⁹	Lamp ¹⁰
ASF1	Metal halide	SP Spot	120	(blank) Magnetic ballast	Shipped installed	Shipped installed in fixture	DDBT Dark bronze, textured	LPI Lamp included
	50M	HSP Horizontal spot	208 ²		(blank) Threaded knuckle	SF Single fuse (120, 277, 347V n/a TB)		
	70M	NSP Narrow spot	240 ²	CWI Constant wattage isolated	YK Yoke mount	DF Double fuse (208, 240, 480V n/a TB)	DNAT Natural aluminum, textured	L/LP Less lamp
	100M		277	Pulse Start	Shipped separately^{6,7}	PE Photoelectric cell-button type (n/a 480V or TB) ⁸		
	150M	WDF Wide flood	347		SCWA Super CWA pulse start ballast ⁵	AFSTMTHK Stanchion mount	CSA CSA certified	DWHG White, textured
	175M ¹	MDF medium flood	480 ²	AFWMATHK Wall mount arm		NOM NOM certified ⁴		
	Ceramic metal halide	VFN Vertical narrow	TB ³	23050HZ ⁴	AFTS Tenon slipfitter	INTL International shipment for 175M	DBLB Black, textured	
	50MHC	VFW Vertical wide	100MHC		AFTMBTHK Twin mounting bar			Shipped separately⁶
	70MHC	150MHC		High pressure sodium	AFWMPTHK Wall mount plate	ASF1GS Glare shield (upper or bottom visor) ⁷	CR Corrosion resistance	
	100MHC		AFJB Architectural J-box		ASF1EV Eggcrate visor (black only)	CRT Non-stick protective coating (black only)		
	150MHC	ASF1FV Full visor ⁷	ASF1BD Barn door ⁷	ASF1BVG Vandal guard	ASF1FV/BVG Full visor/vandal guard ⁷			
	50S							
	70S							
	100S							
	150S							

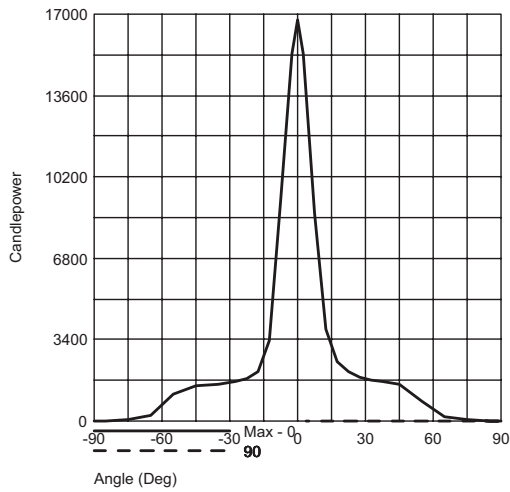
Notes

- These wattages do not comply with California Title 20 regulations.
- Must specify CWI in Canada.
- Optional multi-tap ballast (120, 208, 240, 277); (120, 277, 347V in Canada ships as 120/347).
- Consult factory for availability.
- Available with 150M or 150MHC only.
- May be ordered as an accessory.
- Must specify finish when ordered as an accessory.
- Must be ordered with fixture; cannot be field installed.
- See www.lithonia.com/archcolors for additional color options.
- Must be specified. L/LP not available with MHC.

ASF1 Metal Halide, High Pressure Sodium Architectural Flood

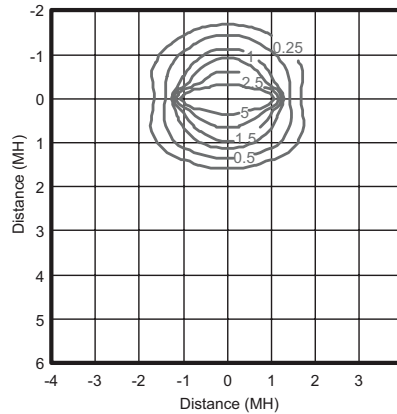
ASF1 150M HSP

TEST NO. LTL 14889P
Cartesian Plot



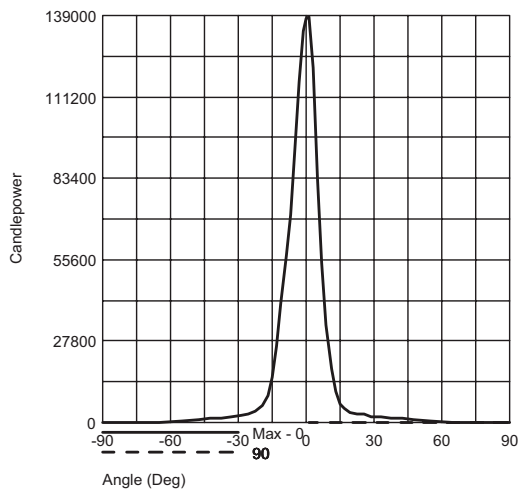
ISOILLUMINANCE PLOT (FC)

Mounting Height = 20 ft.
Classification: Unclassified (Type I, Very Short), Cutoff



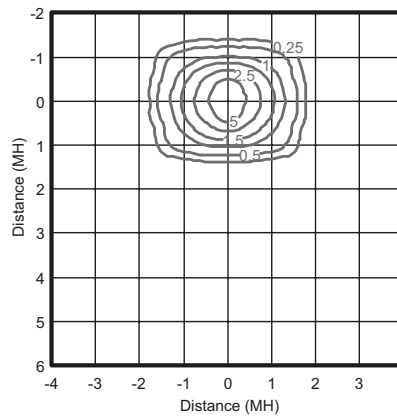
ASF1 150M NSP

TEST NO. LTL 148256P
Cartesian Plot



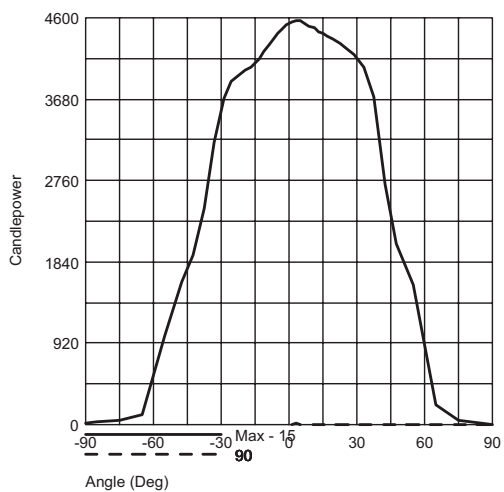
ISOILLUMINANCE PLOT (FC)

Mounting Height = 20 ft.
Classification: Unclassified (Type I, Very Short), Cutoff



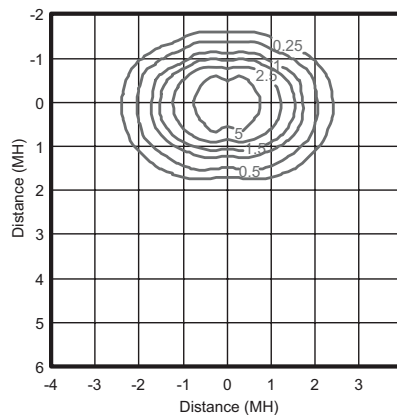
ASF1 150M WDF

TEST NO. LTL 14888P
Cartesian Plot



ISOILLUMINANCE PLOT (FC)

Mounting Height = 20 ft.
Classification: Unclassified (Type II, Very Short), Cutoff



FEATURES

OPTICAL SYSTEM

- Aluminum upper reflector coated with highly reflective white paint provides high efficiency and an evenly illuminated aperture appearance.
- Available with tempered prismatic lens (T73), flat Fresnel lens (FFL) or flat opal lens (FOL).
- Regressed white door (RW) or stepped black baffle (SB) available with white painted flange provided.
- Door is retained by self-aligning, torsion support springs, preventing gaps between door and ceiling.

MECHANICAL SYSTEM

- 16-gauge galvanized steel mounting/plaster frame with integral brackets to retain optical system. Maximum 1-1/2" ceiling thickness.
- 16-gauge galvanized steel mounting bars with continuous 4" vertical adjustment are shipped pre-installed. Post installation adjustment possible without the use of tools from above or below ceiling.
- Galvanized steel junction box with hinged access covers and spring latch. Two combination 1/2"-3/4" and three 1/2" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out) No. 12 AWG conductors rated for 90°C.

ELECTRICAL SYSTEM

- Rugged aluminum lampholder housing.
- Vertically-mounted, four-pin, positive-latch, thermoplastic socket.
- Class P, thermally-protected, high power factor, electronic ballast mounted to the junction box.

LISTING

- Fixtures are UL Listed for thru-branch wiring, Non-IC recessed mounting and wet locations. Listed and labeled to comply with Canadian Standards.

Type

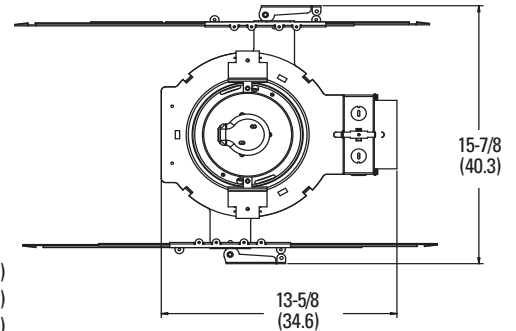
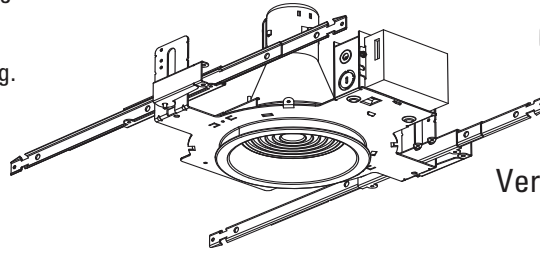
Catalog number

' F ' _____

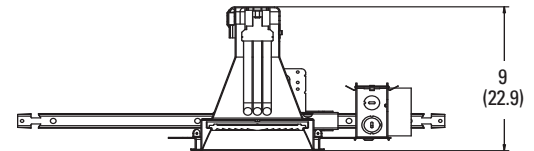
Compact Fluorescent Downlights

6" LGFV

Round Lens
 Wet Location
 Vertical Triple-Tube Lamp



Aperture: 6-1/4 (15.9)
 Ceiling Opening: 7-1/8 (17.8)
 Overlap Trim: 7-1/2 (19.1)
 All dimensions are inches (centimeters).



ORDERING INFORMATION

Example: **LGFV 26TRT 6RW T73 MVOLT**

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line. Order accessories as separate catalog numbers (shipped separately).

LGFV

Series	Wattage/Lamp	Door Frame	Shielding	Voltage	Ballast ³	Options
LGFV	18TRT¹	6RW Regressed white door	T73 Tempered prismatic lens	MVOLT²	(blank) Electronic ballast standard	CP Chicago Plenum TRDA Tamper-Resistant Door Assembly LRC⁶ Provides compatibility with Lithonia Reloc [®] System. Lithonia Reloc System can be installed less this option with connectors provided by others. Access above ceiling required GMF Single slow-blow fuse (not available with MVOLT) GLR Single fast-blow fuse (not available with MVOLT) WLP 3500 ^o K Lamp (shipped separately) RIF Radio Interference Filter ELR⁷ Emergency battery pack. Remote test switch provided GSKT Foam gasketing, ships uninstalled NSD⁸ Sensorswitch nLight [™] dimming relay
	26TRT¹					
	32TRT	6SB Stepped black baffle	FFL Flat Fresnel lens	277	ECOS EcoSystem electronic dimming ballast. Minimum dimming level 5%.	
	42TRT					
				S5⁵ Simply5 system ballast		

NOTES

- Will also operate DTT 4-PIN lamps of same wattage.
- Multi-volt electronic ballast capable of operating on any line voltage from 120V through 277V, 50 or 60 Hz.
- For additional ballast types, refer to Technical Bulletins tab.
- 120 or 277V only.
- SIMPLY5[™] includes 9' S5 MLC Reloc wiring system (shipped separately). Available in 120 or 277V only. Not available in 18W. See Simply5.net for more information.
- For compatible Reloc systems, refer to Technical Bulletins tab.
- Not available with ELR option.
- For dimensional changes refer to Technical Bulletins tab.
- One 5A relay with one 0-10 VDC dimming output, shipped installed. Requires additional nLight bus power supply.

Accessories

Order as separate catalog number.
SCA6 Sloped ceiling adapter. Degree of slope must be specified (10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D.

6" LGFV Round Lens

Distribution curve

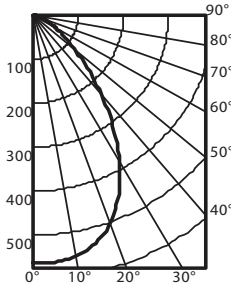
Distribution data

Output data

Coefficient of utilization

Illuminance Data at 30" Above Floor for a Single Luminaire

LGFV 32TRT 6RW T73, 32TRT lamp, 1.1 s/mh, 2400 rated lumens, Test no. LTL14208

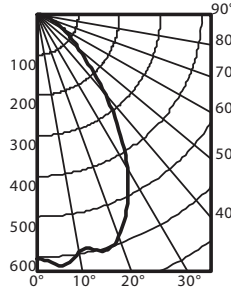


From 0°	Ave	Lumens	Zone	Lumens	% Lamp
0	563		0° - 30°	408.5	17.0
5	563	53	0° - 40°	600.8	25.0
15	536	150	0° - 60°	810.1	33.8
25	449	205	0° - 90°	873.8	36.4
35	309	192	90° - 180°	0.0	0.0
45	171	133	0° - 180°	873.8	*36.4
55	83	76			*E efficiency
65	41	42			
75	16	18			
85	4	4			
90	0				

pf	pc	20%				50%			
		80%	30%	50%	30%	50%	30%		
1	.39	.38	.39	.37	.37	.36			
2	.36	.34	.35	.33	.34	.32			
3	.32	.30	.32	.30	.31	.29			
4	.29	.27	.29	.27	.28	.26			
5	.27	.24	.26	.24	.26	.24			
6	.25	.22	.24	.22	.24	.21			
7	.23	.20	.23	.20	.22	.20			
8	.21	.18	.21	.18	.20	.18			
9	.20	.17	.19	.17	.19	.17			
10	.18	.16	.18	.16	.18	.16			

Mount height	Initial fc		50% beam angle		10% beam angle	
	at beam center	Beam diameter	fc at beam edge	Beam diameter	fc at beam edge	Beam diameter
8	18.6	5.9	9.3	11.2	1.9	
10	10.0	8.0	5.0	15.3	1.0	
12	6.2	10.1	3.1	19.4	0.6	
14	4.3	12.3	2.1	23.5	0.4	
16	3.1	14.4	1.5	27.6	0.3	

LGFV 32TRT 6RW FFL, 32TRT lamp, 1.1 s/mh, 2400 rated lumens, Test no. LTL14209



From 0°	Ave	Lumens	Zone	Lumens	% Lamp
0	604		0° - 30°	463.7	19.3
5	624	58	0° - 40°	679.7	28.3
15	605	169	0° - 60°	914.0	38.1
25	517	236	0° - 90°	995.1	41.5
35	348	216	90° - 180°	0.0	0.0
45	184	144	0° - 180°	995.1	*41.5
55	99	90			*E efficiency
65	54	54			
75	21	22			
85	4	5			
90	0				

pf	pc	20%				50%			
		80%	30%	50%	30%	50%	30%		
1	.45	.43	.44	.43	.42	.41			
2	.40	.38	.40	.38	.38	.37			
3	.37	.34	.36	.33	.35	.33			
4	.33	.30	.33	.30	.32	.29			
5	.30	.27	.30	.27	.29	.27			
6	.28	.25	.28	.25	.27	.24			
7	.26	.23	.25	.23	.25	.22			
8	.24	.21	.24	.21	.23	.20			
9	.22	.19	.22	.19	.22	.19			
10	.21	.18	.21	.18	.20	.18			

Mount height	Initial fc		50% beam angle		10% beam angle	
	at beam center	Beam diameter	fc at beam edge	Beam diameter	fc at beam edge	Beam diameter
8	20.0	6.1	10.0	11.3	2.0	
10	10.7	8.3	5.4	15.3	1.1	
12	6.7	10.6	3.3	19.4	0.7	
14	4.6	12.8	2.3	23.5	0.5	
16	3.3	15.0	1.7	27.6	0.3	

NOTES:

- For electrical characteristics consult Technical Bulletins tab.
- Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory data and actual field measurements. Dimensions and specifications are based on the most current available data and are subject to change without notice.

DCF-530

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gotham
An Acuity Brands Company

GOTHAM ARCHITECTURAL DOWNLIGHTING
1400 Lester Road Conyers Georgia 30012
P 800 315 4982 F 770 860 3129
www.gothamlighting.com



Exhibitor Series

TOKISTAR® Exhibitor Series is a wet-location festoon lighting system widely used in amusement parks, shopping centers, street decorations and promenades. Exhibitor fixtures may also be surface mounted to accent rooflines and other architectural features.

Light sources include solid-state LEDs and incandescent xenon lamps, enclosed within shatterproof polycarbonate globes. These globes are injection blow-molded for a seamless appearance and excellent clarity. Each globe includes two o-rings for a secure and weatherproof seal to the socket.



LEDs

Tokistar LEDs operate at 24VAC and consume only 0.48 Watts. This makes them our most energy-efficient light source and dramatically increases the maximum run length of each fixture. With incredible life ratings, LEDs are ideally suited for continuous operation in commercial applications.

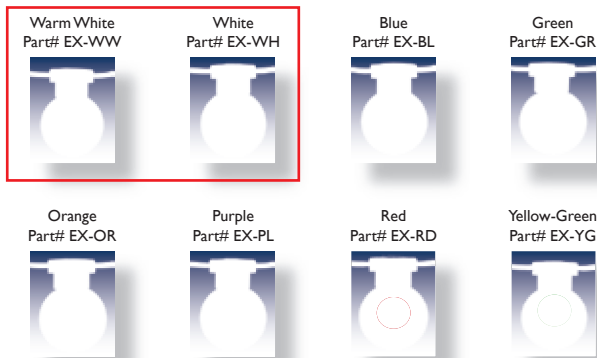


Xenon Lamps

For a traditional incandescent look, our wedge-base lamps create crisp pin-points of light when specified with transparent globes. These xenon-gas lamps have the apparent brightness of much higher wattage standard incandescent lamps, and significantly longer life.



LEDs shown below with frosted globes.

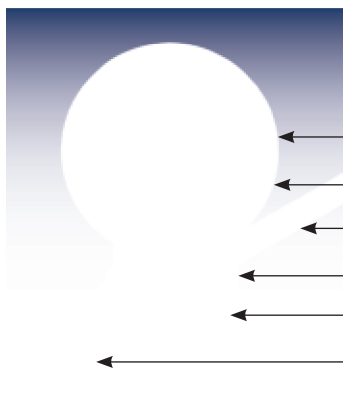


Lamp	Watts/Volts	Hours	Lumens	Color
EX-212	4.2 Watts / 12VAC	10,000	35	2550K
EX-124	7.5 Watts / 24VAC	10,000	65	2500K



In addition to clear and frosted globes, xenon lamps are available with green, amber, blue, red, and violet colored globes.

Specifications



All plastic components comply with UL746C in respect to Ultraviolet Light and Water Absorption testing.

Light Sources include LEDs and xenon lamps

Polycarbonate Globe with flammability rating UL 94V-0

Flexible Conductors #12 AWG stranded and plated wire

Two O-Rings on each globe for weatherproof seal

Sockets permanently fastened to cable with sealant

Insulation is flexible PVC with flammability rating UL 94 HB



EXBK - 12 - WW - F

How to Specify

Three key considerations in specifying an Exhibitor Lighting System are:

1) Socket Spacing

Consider viewing distance and perspective when deciding on socket spacing. Wider spacings (18"-24") are the best choice for most festooning applications. Closer spacings (6"-12") are appropriate for applications at closer viewing range.

2) Light Source

LEDs create a softer lighting effect and are the most energy-efficient choice. Since LEDs consume so little energy, they can run much greater distances from a single feed point. Xenon lamps will produce brighter distinct points of light.

3) Globe Selection

Clear globes have excellent clarity and will emphasize the distinct points of incandescent or LED light. Frosted globes will diffuse light on their entire surface. Colored globes in combination with xenon lamps create vibrant color.

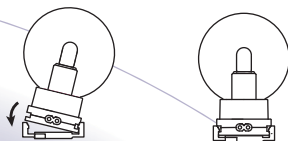
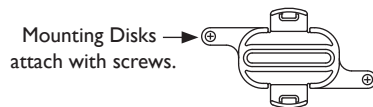
Cable / Socket Color		Socket Spacing		LED			Globe		
Code	Color	Code	Inches (mm)	Code	Color	Watts/Volts	Code	Globe Color	
BK	Black	6	6" (150 mm)	WW	Warm White	0.48 W / 24 VAC	C	Clear	
WH	White	12	12" (300 mm)	WH	White	0.48 W / 24 VAC	F	Frosted	
		18	18" (450 mm)	BL	Blue	0.48 W / 24 VAC	G	Green	
		24	24" (600 mm)	GR	Green	0.48 W / 24 VAC	A	Amber	
			(Custom Spacing is Available)	OR	Orange	0.48 W / 24 VAC	B	Blue	
				PL	Purple	0.48 W / 24 VAC	R	Red	
				RD	Red	0.48 W / 24 VAC	V	Violet	
				YG	Yellow-Green	0.48 W / 24 VAC	M	Multi-Colors	
				(Any Combination of Colors is Possible)					
Xenon Lamp									
		112	2550K	4.2 W / 12VAC					
		124	2500K	7.5 W / 24VAC					

Mounting Options

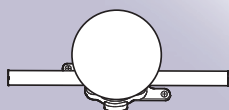
Exhibitor Series can be surface mounted to structures using our mounting disks or straps. For festoon applications, our wire rope adaptor securely holds each socket in place to 1/16" or 1/8" ø wire rope.

Surface Mounting using Disks

Part# EX-MD-WH (White)
Part# EX-MD-BK (Black)

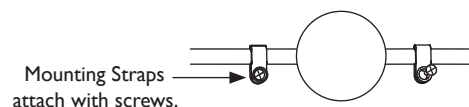


Exhibitor fixture snaps directly into the Mounting Disk and locks in place.



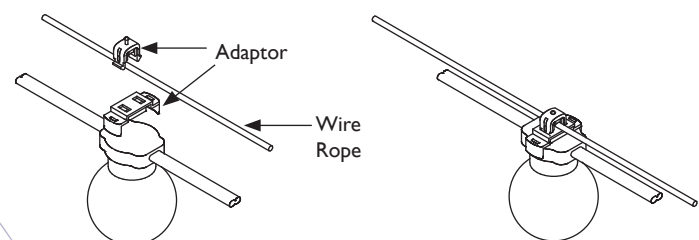
Surface Mounting using Straps

Part# EX-MS-WH (White)
Part# EX-MS-BK (Black)

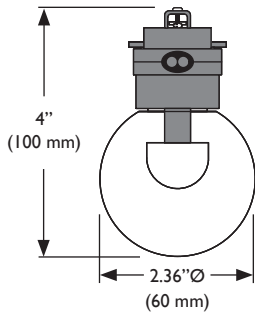


Festoon Applications w/Wire Rope Adaptors

Part# EX-MDA-WH (White)
Part# EX-MDA-BK (Black)



Sizes and Lengths



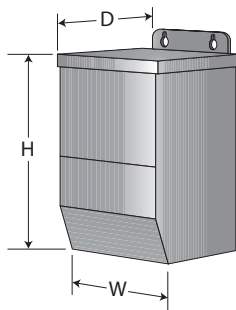
To minimize voltage drop and keep conductors safely within their ratings, do not exceed the maximum lengths shown for each independent fixture.

Socket Spacing	Maximum Run Lengths		
	LED	Xenon Lamps	
	.48 Watt / 24VAC	4.2 Watt / 12VAC	7.5 Watt / 24VAC
6" (150 mm)	250' (76 M)	24' (7 M)	32' (10 M)
12" (300 mm)	350' (106 M)	36' (11 M)	56' (17 M)
18" (450 mm)	426' (130 M)	45' (14 M)	72' (22 M)
24" (600 mm)	492' (150 M)	50' (15 M)	80' (24 M)

Transformers

Tokistar transformers operate from a 120 VAC/60 Hz input and are fully dimmable. They are provided in a Nema 3R enclosure suitable for wet locations. The secondary outputs are protected by circuit breakers.

Transformers should be installed in an accessible location. Magnetic transformers generate heat and must be installed in locations where there is free air circulation.



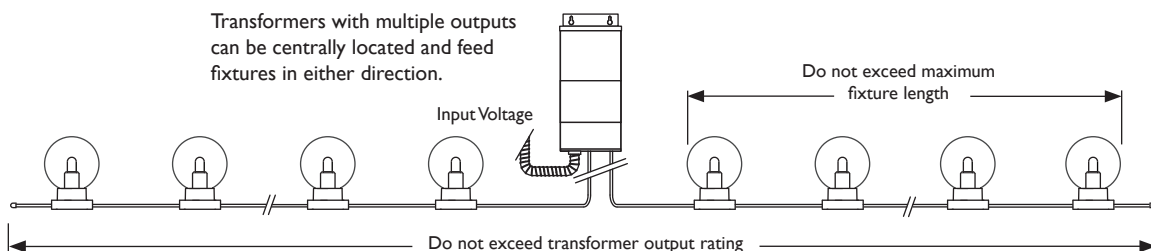
T12 Series Transformers					
Number	Outputs	D	H	W	Weight
T12-100	1 @ 100 Watt / 12VAC	3.0"	9.0"	3.0"	5 lbs
T12-150	1 @ 150 Watt / 12VAC	3.0"	9.0"	3.0"	5 lbs
T12-250	1 @ 250 Watt / 12VAC	3.5"	9.5"	4.5"	8 lbs
T12-300	1 @ 300 Watt / 12VAC	3.5"	9.5"	4.5"	8 lbs
T12-500	2 @ 250 Watt / 12VAC	4.5"	10.5"	4.5"	12 lbs
T12-600	2 @ 300 Watt / 12VAC	4.5"	10.5"	4.5"	15 lbs
T12-750	3 @ 250 Watt / 12VAC	4.5"	10.5"	4.5"	15 lbs
T12-1000	4 @ 250 Watt / 12VAC	5.0"	11.5"	7.0"	28 lbs
T12-1200	4 @ 300 Watt / 12VAC	5.0"	11.5"	7.0"	28 lbs

T24 Series Transformers					
Number	Outputs	D	H	W	Weight
T24-100	1 @ 100 Watt / 24 VAC	3.0"	9.0"	3.0"	5 lbs
T24-150	1 @ 150 Watt / 24 VAC	3.0"	9.0"	3.0"	5 lbs
T24-250	1 @ 250 Watt / 24 VAC	3.5"	9.5"	4.5"	8 lbs
T24-300	1 @ 300 Watt / 24 VAC	3.5"	9.5"	4.5"	8 lbs
T24-500	1 @ 500 Watt / 24 VAC	4.5"	10.5"	4.5"	12 lbs
T24-600	1 @ 600 Watt / 24 VAC	4.5"	10.5"	4.5"	15 lbs
T24-750	2 @ 375 Watt / 24 VAC	4.5"	10.5"	4.5"	15 lbs
T24-1000	2 @ 500 Watt / 24 VAC	5.0"	11.5"	7.0"	28 lbs
T24-1200	2 @ 600 Watt / 24 VAC	5.0"	11.5"	7.0"	28 lbs

Consult factory for transformers with input voltages of 230 or 277 VAC. Sizes and weights shown are approximate and subject to change without notice.

The recommended maximum distance between the fixture and the transformer varies based on the load of each fixture and the size of secondary wire feeding the fixture. Electrical engineers and contractors can calculate these distances.

Should you need guidance, consult the factory.



TOKISTAR® LIGHTING INC.

1015 E. Discovery Lane • Anaheim, CA 92801

Tel: 714.772.7005 • Fax: 714.772.7014 • Toll free in U.S.A.: 877.340.7633

E-mail: info@tokistar.com • Web site: www.tokistar.com

1	2	3	4	5	6			7	8
					OPTIONS				
LUMINAIRE	HOOD	OPTICS	LAMP/BALLAST	DECORATIVE SCREEN	GENERAL	HOOD	SCREEN	COLOR	MOUNTING
PKWM									



PAKWAY SQUARE
MEDIUM SCALE HOUSING



PKWM

DESIGNER
SSL SERIES
FEATURING
MICROEMITTER™
TECHNOLOGY



PARKWAY SQUARE FAMILY OF FIXTURES



PKWM



PKWS



PKWB



PKSA/PKSP

Features





- Four optical systems, including LED, horizontal, vertical, and indirect
- Features highly efficient, exclusive MicroEmitter™ technology
- Available with exclusive wiHUBB® technology
 - Wireless control system for 0-10VDC full range dimming control
 - Programmable autonomous operation
- Three hood styles to configure a look in harmony with your architecture
- Six decorative screen options
- Wide variety of custom arm options.
- Tool-less access
- EISA compliant
- IP65 rated for horizontal configurations and IP66 rated for vertical configurations
- Powder coat finish in 13 standard colors with a polymer primer sealer

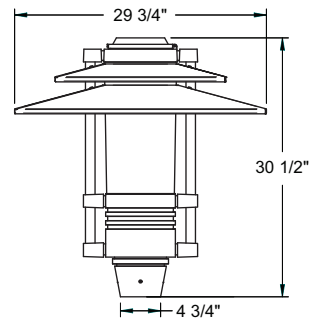
JOB INFORMATION
TYPE
JOB NAME
LAMP (BY OTHERS)
CUSTOMER
DATE
<i>Consult factory for any custom/modified products</i>
APPROVALS

1	2	3	4	5	6			7	8
					OPTIONS				
LUMINAIRE	HOOD	OPTICS	LAMP/BALLAST	DECORATIVE SCREEN	GENERAL	HOOD	SCREEN		
PKWM									

1. LUMINAIRE

- PKWM Parkway Square Pedestrian (Medium) scale.
Slips over a 4" open top square pole or 2 3/8" tenon.

<input type="checkbox"/> ANG Angled Hood  Horizontal Optics HT: 30.5"/775 mm DIA: 23"/584 mm EPA: 3.18 WT: 57 lbs.	<input type="checkbox"/> IND Indirect Hood (Underside finished in high reflectance white)  Vertical Optics HT: 30.5"/775 mm DIA: 23"/584 mm EPA: 3.22 WT: 49 lbs.	<input type="checkbox"/> STR Straight Hood  Vertical Optics HT: 30.5"/775 mm DIA: 29.75"/756 mm EPA: 3.21 WT: 63 lbs.	<input type="checkbox"/> DBL Double Hood  Vertical Optics HT: 30.5"/775 mm DIA: 29.75"/756 mm EPA: 3.28 WT: 79 lbs.
---	---	--	---



3. OPTICS

HORIZONTAL LED OPTICAL SYSTEM – Available with ANG hood and LEDs only. Flat glass lens.

- T2 Horizontal LED optical system. IES Type 2 distribution.
- T3 Horizontal LED optical system. IES Type 3 distribution.
- T4 Horizontal LED optical system. IES Type 4 distribution.
- T5 Horizontal LED optical system. IES Type 5 distribution.

VERTICAL LED OPTICAL SYSTEM

- VL3 Asymmetric distribution
- VL5 Symmetric distribution

HORIZONTAL OPTICAL SYSTEM – Available with ANG hood only. Not available with LEDs. Flat glass lens.

- H2 Horizontal optical system. IES Type 2 distribution.
- H3 Horizontal optical system. IES Type 3 distribution.
- H4 Horizontal optical system. IES Type 4 distribution.
- H5 Horizontal optical system. IES Type 5 distribution.

VERTICAL OPTICAL SYSTEM – Not available with IND or LEDs. Clear acrylic cylinder.

- GLA Vertical optical system. Frosted glass diffuser.
- GR3 Vertical optical system. IES Type 3 glass refractor.
- GR5 Vertical optical system. IES Type 5 glass refractor.

INDIRECT OPTICAL SYSTEM – Available with IND hood only. Not available with LEDs. Clear acrylic cylinder. Underside of hood is painted in high reflectance white.

- 3 Indirect reflector. IES Type 3 distribution.
- 5 Indirect reflector. IES Type 5 distribution.

BARE LAMP – Available with IL system only. Lightly diffused acrylic cylinder.

- BLO Bare lamp system, only for induction lamp system.

JOB INFORMATION
TYPE _____
JOB NAME _____
LAMP (BY OTHERS) _____
CUSTOMER _____
DATE _____
<i>Consult factory for any custom/modified products</i>
APPROVALS

1	2	3	4	5	6			7	8
LUMINAIRE	HOOD	OPTICS	LAMP/BALLAST	DECORATIVE SCREEN	OPTIONS			COLOR	MOUNTING
					GENERAL	HOOD	SCREEN		
PKWM									

4. LAMP/BALLAST

- 55LED-BW 42 light emitting diode array. Bright white (5100K). Class 2, 120 thru 277 volt. *VL3 & VL5 only.*
- 60LED-WW MicroEmitter™ 60 light emitting diode array. Warm white (3500K). Class 1, 120 thru 277 volt. *Horizontal LED only.*
- 60LED-BW MicroEmitter™ 60 light emitting diode array. Bright white (5100K). Class 1, 120 thru 277 volt. *Horizontal LED only.*
- 70MH 70 watt metal halide 120/208/240/277 volt ballast. Use medium base, ED-17 lamp.
- 70MHEB 70 watt electronic metal halide 120 thru 277 volt ballast. Use medium base, ED-17 lamp.
- 70MHT6 70 watt metal halide 120/277/347 volt ballast. Use G12 base, T6 ceramic lamp.
- 70MHT6EB 70 watt electronic metal halide 120 thru 277 volt ballast. Use G12 base, T6 ceramic lamp.
- 100MH 100 watt metal halide 120/208/240/277 volt ballast. Use medium base, ED-17 lamp.
- 100MHEB 100 watt electronic metal halide 120 thru 277 volt ballast. Use medium base, ED-17 lamp.
- 150PSMH Pulse start 150 watt metal halide 120/208/240/277 volt ballast. Use medium base, ED-17 lamp.
- 150PSMHT6 Pulse start 150 watt metal halide 120/277 volt ballast. Use G12 base, T6 ceramic lamp.
- 150MHEB 150 watt electronic metal halide 120 or 277 volt ballast. Use medium base, ED-17 lamp.
- 150MHT6EB 150 watt electronic metal halide 120 or 277 volt ballast. Use G12 base, T6 ceramic lamp.
- 70HPS 70 watt high pressure sodium 120/208/240/277 volt ballast. Use medium base, ED-17 lamp.
- 100HPS 100 watt high pressure sodium 120/208/240/277 volt ballast. Use medium base, ED-17 lamp.
- 150HPS 150 watt high pressure sodium 120/208/240/277 volt ballast. Use medium base, ED-17 lamp.
- IL85 85 watt induction lamp system. 120, 208, 240 or 277 volt. -25°C min. start temp. Available in bare lamp configuration (BLO) with LDL lens only.
- CF Compact fluorescent electronic 120 thru 277 volt ballast. Use GX24q base, 26, 32 or 42 watt lamp. Not available with horizontal or LED optics. -18° C min start temp. Specify wattage.
- 140CO 140 watt electronic CosmoPolis™ 120 or 208 thru 277 volt ballast. Use PGZ12 base, CosmoPolis™ lamp. Not available with horizontal or LED optics.

All fixtures prewired for 277 volts unless specified. Lamps not included (except IL and LED options). All applicable ballasts are EISA compliant. Mini MasterColor® is a registered trademark and CosmoPolis™ is a trademark of Philips Lighting®.

JOB INFORMATION TYPE <hr/> JOB NAME <hr/> LAMP (BY OTHERS) <hr/> CUSTOMER <hr/> DATE <hr/> <p style="font-size: small; text-align: center;"><i>Consult factory for any custom/modified products</i></p>
APPROVALS



1	2	3	4	5	6			7	8
LUMINAIRE	HOOD	OPTICS	LAMP/BALLAST	DECORATIVE SCREEN	OPTIONS			COLOR	MOUNTING
					GENERAL	HOOD	SCREEN		
PKWM									

5. DECORATIVE SCREENS (OPTIONAL)

Painted to match fixture. Also available in stainless steel or copper. Not available with horizontal or LED optics.



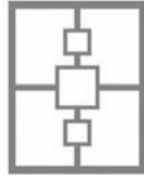
DSIN
Infinity design
painted to
match fixture.



DSOF
Offset design
painted to
match fixture.



DSWH
Wheat design
painted to
match fixture.



DSTR
Trio design
painted to
match fixture.



DSSH
Shutter design
painted to
match fixture.



DSCS
Custom design*
painted to
match fixture.

6. OPTIONS

GENERAL

- WIH-IM** In fixtures wireless control module. *For use with LED only.
- ULS** Upper lens shield above the hood. Reduces light above hood.
- TEN** 2 3/8" O.D. x 4" long tenon. Required for all poles, except for PS4. *GLA only.*
- TEN23** Tenon adaptor slips over a 2 3/8" O.D. x 4" long tenon. Required for poles by others or used in conjunction with the TEN pole option by AAL. *GLA only.*
- LDL** Lightly diffused lens
- 347** 120/240/347 volt ballast for HID only, except 50MH and 50HPS.

HOOD

- COP** Brushed copper hood
- STS** Stainless steel hood

DECORATIVE SCREEN

- CPR** Screen in brushed copper
- SSP** Screen in brushed stainless steel

7. COLOR

- | | |
|--|---|
| <input type="checkbox"/> AWT Arctic White | <input type="checkbox"/> MDG Medium Grey |
| <input type="checkbox"/> BLK Black | <input type="checkbox"/> ATG Antique Green |
| <input type="checkbox"/> MTB Matte Black | <input type="checkbox"/> LGY Light Grey |
| <input type="checkbox"/> DGN Dark Green | <input type="checkbox"/> SPP Salt and Pepper (premium) |
| <input type="checkbox"/> DBZ Dark Bronze | <input type="checkbox"/> SFM Seafoam (premium) |
| <input type="checkbox"/> WRZ Weathered Bronze | <input type="checkbox"/> WCP Weathered Copper (premium) |
| <input type="checkbox"/> BRM Metallic Bronze | <input type="checkbox"/> SHK Shamrock (premium) |
| <input type="checkbox"/> VBL Verde Blue | <input type="checkbox"/> RAL COLOR Provide a RAL 4 digit color number |
| <input type="checkbox"/> CRT Corten | <input type="checkbox"/> CUSTOM COLOR Please provide a color chip for matching |
| <input type="checkbox"/> MAL Matte Aluminum | |

JOB INFORMATION TYPE <hr/> JOB NAME <hr/> LAMP (BY OTHERS) <hr/> CUSTOMER <hr/> DATE <hr/> <i>Consult factory for any custom/modified products</i>
APPROVALS

1	2	3	4	5	6			7	8
					OPTIONS				
LUMINAIRE	HOOD	OPTICS	LAMP/BALLAST	DECORATIVE SCREEN	GENERAL	HOOD	SCREEN	COLOR	MOUNTING
PKWM									

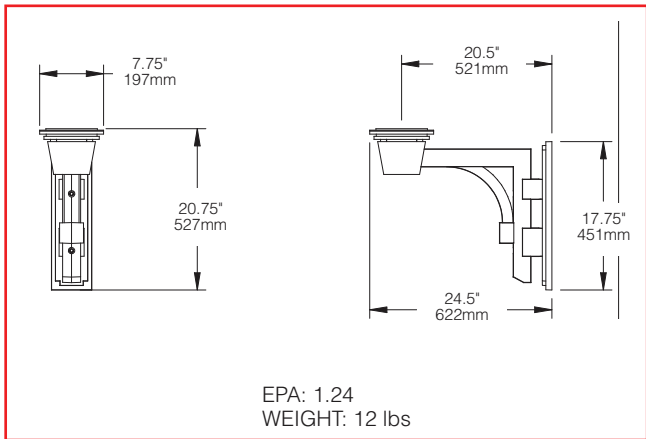
8. MOUNTING

WALL MOUNT – *Mounting plate included. Hardware by others.*

- PSWM-TU Fixture above with arm mounted up.
- PSWM-TD Fixture above with arm mounted down.
- PSWM-BU Fixture below with arm mounted up. Not available with indirect.
- PSWM-BD Fixture below with arm mounted down. Not available with indirect.

POLE MOUNT – *Mounts to the side of 4" O.D. pole.*

- PSA-TU Fixture above with arm mounted up.
- PSA-TD Fixture above with arm mounted down.
- PSA-BU Fixture below with arm mounted up. Not available with indirect.
- PSA-BD Fixture below with arm mounted down. Not available with indirect.



JOB INFORMATION

TYPE _____

JOB NAME _____

LAMP (BY OTHERS) _____

CUSTOMER _____

DATE _____

Consult factory for any custom/modified products

APPROVALS

1	2	3	4	5	6			7	8
LUMINAIRE	HOOD	OPTICS	LAMP/BALLAST	DECORATIVE SCREEN	OPTIONS			COLOR	MOUNTING
					GENERAL	HOOD	SCREEN		
PKWM									

HOUSING

Parkway Square housings shall be cast aluminum A356 alloy, free of any porosity, foreign materials, or cosmetic fillers. The driver shall be mounted internally and accessed by loosening four captive bolts and lifting away the lamp compartment. The lamp compartment shall be sealed with a molded silicone gasket. All lenses shall be molded, seamless high impact lighting grade acrylic. The lens shall be sealed to the housing with a molded silicone gasket on the top and bottom. The vertical struts shall be cast aluminum and painted to match the fixture. All internal and external hardware shall be stainless steel. The fixture shall slip over a 4"/100mm square post top and secured with four stainless steel set screws. The hood shall be formed from 5052 H32 aluminum, 304 stainless steel or 110 copper. The underside of the hood shall be finished in a high reflectance white powder coating. Copper hoods shall be unfinished to develop a patina.

The horizontal optical system door shall be cast aluminum painted to match the fixture. The internal horizontal optical system shall be sealed from the outer housing with a silicone gasket. The tempered glass lens shall be sealed to the housing with a silicone gasket. A pair of stainless steel latches shall release the door to allow access to the optical system. The horizontal optical system shall be rotatable on 90° centers for orienting the light distribution. The horizontal optical system shall meet ANSI IES standards for full cutoff reflector systems when using arm in the BU or BD configuration.

MICROEMITTER™ REFLECTOR

Precision injection molded, high specular reflectors shall be positioned to achieve directional control toward desired task. Secondary reflectors shall have a concave, specular medium hammertone finish that shall be used to redirect light downward. No fasteners shall be placed on the reflective surface. The entire assembly shall fasten to the housing as a one-piece module and shall feature wiring quick-connects for easy installation. MicroEmitters™ shall be field replaceable and shall be driven at 350mA current.

ELECTRICAL

The driver shall be integral to the fixture, mounted on a prewired module with a quick disconnect plug, and shall be removable by loosening four screws. The driver shall accept 120 thru 277 volts input, with output drive current of 350ma, and shall be wired at the factory for 277 volts, unless specified. Standard color temperatures for LEDs shall be 3500k and 5100k. Rated luminous efficacy of luminaire shall be >40 lm/W, with rated light output of >2960 for 5100k LED. The vertical LED configuration shall have a self contained light engine consisting of a diode array mounted to a die-cast aluminum heat sink and sealed behind an injection molded and optically clear lens.

INSTALLATION & MOUNTING

The PKWM shall be factory supplied as a complete, prewired assembly. The fixture shall slip over a 4" open top pole or 2 3/8" tenon and secured and leveled with 4 stainless steel set screws or arm mounted to the side 4"/100mm round or square pole.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

CERTIFICATION

The fixture is listed with ETL or outdoor, wet location use and shall conform to ul1598 and Canadian CSA std. C22.2 No.9. Ip65 rated for horizontal configurations and ip66 rated for vertical configurations.

WARRANTY

Fixture is warranted for three years, with the exception of Parkway Square MicroEmitter™ LED models. Parkway square MicroEmitter™ LED, including housing, LEDs and electrical components, are warranted for five years. Driver components carry the driver manufacturer's limited warranty. Any unauthorized return, repair, replacement or modification of the product(s) shall void this warranty. This warranty applies only to the use of the product(s) as intended by AAL and does not cover any misapplication or misuse of said product(s), or installation in hazardous or corrosive environments. Contact AAL for complete warranty language, exceptions, and limitations.

JOB INFORMATION
TYPE
JOB NAME
LAMP (BY OTHERS)
CUSTOMER
DATE
<i>Consult factory for any custom/modified products</i>
APPROVALS



9100 SERIES HID 150 WATT MAX. IN-GRADE LUMINAIRE

DESCRIPTION:

The 9100 Series HID flush mounted Up-lights are designed for flush mounting in planting areas or in concrete, and are used for illuminating building facades, walls, trees, and similar applications. The lamp module and power modules are factory sealed, thermally protected, and connected by submersible rated connectors.

SPECIFICATIONS:

DOOR MATERIAL: Cast aluminum or bronze that locks the lamp housing into the Rough-In Section with a single tamperproof stainless steel fastener.

ROUGH-IN SECTION: Injection molded ABS, U.V. stabilized, impact and corrosion resistant for use in all types of environments.

LAMP MODULE HOUSING: Stainless steel, sealed and purged of all moisture to 100°F (38°C). Electrical access to lamp module is done through submersible rated connector. **THERMALLY PROTECTED.**

LAMP TYPE: See ordering guide. **LAMP INCLUDED.**

VOLTAGE: See ordering guide.

DISTRIBUTIONS: The Spot Reflector is specular spun aluminum. The Wide Flood Reflector is diffuse spun aluminum and the Wall Wash Reflector is diffuse hydroformed aluminum. The Spot and Flood Reflector assemblies have 15° of internal lamp tilt on a 360° axis of rotation. Lamp tilt is not used in the Wall Wash units. The lenses are clear tempered flat glass. Convex lenses are available.

THE COMMON LIGHT DISTRIBUTIONS ARE:

SPOT = 7° spread; **WFL** = 140° spread;

NFL = 30° spread; **MFL** = 60° spread;

WW = 10 to 1 Uniformity Ratio

Reflectorized lamp distributions vary depending on manufacturer. Check Photometric Sheets.

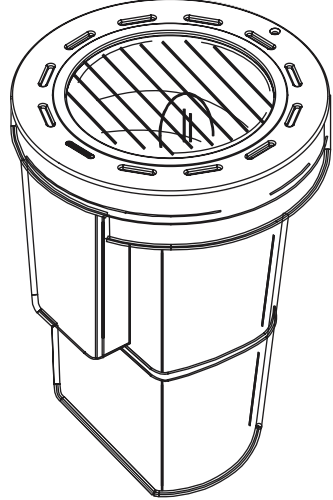
POWER MODULE: Sealed unit encapsulated in an engineered composite resin to eliminate all water entry.

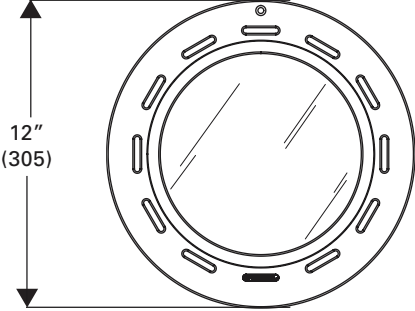
CONDUIT ENTRIES: 3/4" NPT are available in the cast aluminum integral Junction Box. Suitable for thru-branch wiring. This box has 24 cubic inches of volume.

LISTING: U.L., CSA, NEMKO

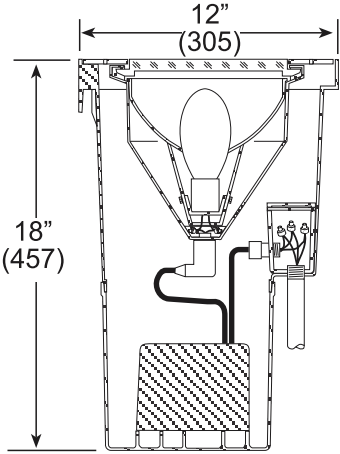
NOTE: HYDREL RESERVES THE RIGHT TO MODIFY SPECIFICATION WITHOUT NOTICE. Any dimension on this sheet is to be assumed as a reference dimension: "Used for information purposes only. It does not govern manufacturing or inspection requirements." (ANSI Y14.5-1973)

TYPE ' J '		JOB NAME			
PART NUMBER					
Model	Material	Lamp Type	Voltage	Distribution	Lens
Conduit	Accessories	Options	Lamp	Listing	





12"
(305)



12"
(305)

18"
(457)

APPROVALS

9100 ORDERING INFORMATION

60 Hz Application

Choose the boldface catalog nomenclature that best suits your needs. *Designates required selection.

PART NO.

EXAMPLE:

9100	A	150CMT6	MVOLT	MFL	FLC	34B	GEB	LP		
*Model		*Voltage		*Lens		Options				
<input type="checkbox"/> 9100 Round		<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 220 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> MVOLT⁴		<input type="checkbox"/> FLC Flat Lens Clear <input type="checkbox"/> FLC5 Flat Lens 5° Axial Spread <input type="checkbox"/> FLC10 Flat Lens 10° Tilt <input type="checkbox"/> FLF Flat Lens Frosted <input type="checkbox"/> FLCAS Flat Lens Clear Anti-Slip <input type="checkbox"/> FLC5AS Flat Lens 5° Axial Spread - Anti-Slip <input type="checkbox"/> CLC Convex Lens Clear		<input type="checkbox"/> GEB⁵ Electronic Ballast				
*Material						*Conduit				
<input type="checkbox"/> A Aluminum <input type="checkbox"/> B Bronze						<input type="checkbox"/> 34B 3/4" NPT Bottom				
*LampType		*Distribution				*Lamp				
MH <input type="checkbox"/> 35CMT6 T6, G-12 base <input type="checkbox"/> 70CMT6¹ T6, G-12 base <input type="checkbox"/> 150CMT6 T6, G-12 base <input type="checkbox"/> 50M⁸ E17, med. base <input type="checkbox"/> 70M⁷ E17, med. base <input type="checkbox"/> 70CM⁷ E17, med. base <input type="checkbox"/> 100M E17, med. base <input type="checkbox"/> 100CM E17, med. base <input type="checkbox"/> 150M E17, med. base <input type="checkbox"/> 150CM E17, med. base <input type="checkbox"/> 150M E17, med. base <input type="checkbox"/> P3870M⁷ PAR38, med. base <input type="checkbox"/> P3870CM⁷ PAR38, med. base <input type="checkbox"/> P38100M PAR38, med. base <input type="checkbox"/> P38100CM PAR38, med. base <input type="checkbox"/> P38150M PAR38, med. base <input type="checkbox"/> P38150CM PAR38, med. base		<input type="checkbox"/> SP Spot <input type="checkbox"/> MFL¹ Medium Flood <input type="checkbox"/> NFL¹ Narrow Flood <input type="checkbox"/> WFL¹ Wide flood <input type="checkbox"/> WWD¹ Wall Wash Reflector, 5° spread lens <input type="checkbox"/> FL Flood (PAR lamps only)				<input type="checkbox"/> LP Lamp installed				
HPS <input type="checkbox"/> 50S⁸ E17, med. base <input type="checkbox"/> 70S E17, med. base <input type="checkbox"/> 100S E17, med. base <input type="checkbox"/> 150S E17, med. base						Accessories				
						Internal <input type="checkbox"/> MSR Modular support ring <input type="checkbox"/> IHL Internal honeycomb louver <input type="checkbox"/> ISS¹⁶ Internal source shield <input type="checkbox"/> WWL¹ Wall Wash Louver				
						External <input type="checkbox"/> GS² Glare Shield <input type="checkbox"/> RG²³ Rock Guard <input type="checkbox"/> PC21 35 cu. in. potting compound				
						Finish⁹ <input type="checkbox"/> BL Black <input type="checkbox"/> BZ Bronze <input type="checkbox"/> DDB Dark Bronze <input type="checkbox"/> DNA Natural Alum. <input type="checkbox"/> GN Green <input type="checkbox"/> GR Gray <input type="checkbox"/> SND Sand <input type="checkbox"/> STG Steel Gray <input type="checkbox"/> TVG Terra Verde Green <input type="checkbox"/> WH White <input type="checkbox"/> CF Custom Finish				

Notes:

- ¹ Not Available with PAR Lamps.
- ² RG and GS are mutually exclusive.
- ³ Not available with CLC Lens.
- ⁴ MVOLT only valid if GEB is Chosen.
- ⁵ GEB only available with MH lamps to 150 watts, MVOLT is the default voltage for GEB lamps.
- ⁶ Not available with WWD distribution.
- ⁷ Not available in 220 Volt.
- ⁸ Only available in 120 or 277 Volt.
- ⁹ Finish is only valid with "A" door material.

Consisting of:
 RIS Rough-In Section
 ACL Lamp Module
 HSL Ballast Module

9100 ORDERING INFORMATION

50 Hz Application

Choose the boldface catalog nomenclature that best suits your needs. *Designates required selection.

PART NO.

EXAMPLE:

9100	A	150CMT6	22050Hz	SP	FLC	16B	ISS	GEB	LP	IEC
*Model										
<input type="checkbox"/> 9100 Round			<input type="checkbox"/> 22050Hz <input type="checkbox"/> 23050Hz <input type="checkbox"/> 24050Hz <input type="checkbox"/> MVOLT ⁴			<input type="checkbox"/> 16B PG16 Bottom <input type="checkbox"/> 20B M20 Bottom			<input type="checkbox"/> LP Lamp Installed	
*Material										
<input type="checkbox"/> A Aluminum <input type="checkbox"/> B Bronze			*Distribution			Accessories			Finish⁷	
			<input type="checkbox"/> SP Spot <input type="checkbox"/> MFL Medium Flood <input type="checkbox"/> WFL Wide flood <input type="checkbox"/> NFL Narrow Flood <input type="checkbox"/> WWD Wall Wash Reflector, 5° spread lens			Internal <input type="checkbox"/> MSR Modular support ring <input type="checkbox"/> IHL Internal honeycomb louver <input type="checkbox"/> ISS ^{1,6} Internal source shield <input type="checkbox"/> WWL ¹ Wall Wash Louver External <input type="checkbox"/> GS ² Glare Shield <input type="checkbox"/> RG ^{2,3} Rock Guard <input type="checkbox"/> PC21 35 cu. in. potting compound			<input type="checkbox"/> BL Black <input type="checkbox"/> BZ Bronze <input type="checkbox"/> DDB Dark Bronze <input type="checkbox"/> DNA Natural Alum. <input type="checkbox"/> GN Green <input type="checkbox"/> GR Gray <input type="checkbox"/> SND Sand <input type="checkbox"/> STG Steel Gray <input type="checkbox"/> TVG Terra Verde Green <input type="checkbox"/> WH White <input type="checkbox"/> CF Custom Finish	
*LampType										
HID <input type="checkbox"/> 35CMT6 T6, G-12 base <input type="checkbox"/> 70CMT6 T6, G-12 base <input type="checkbox"/> 150CMT6 T6, G-12 base <input type="checkbox"/> 70M E27 base <input type="checkbox"/> 70CM E27 base <input type="checkbox"/> 100M E27 base <input type="checkbox"/> 100CM E27 base <input type="checkbox"/> 150M E27 base <input type="checkbox"/> 150CM E27 base					*Lens			Options		Listing
HPS <input type="checkbox"/> 50S E27 base <input type="checkbox"/> 70S E27 base <input type="checkbox"/> 100S E27 base					<input type="checkbox"/> FLC Flat Lens Clear <input type="checkbox"/> FLC5 Flat Lens 5° Axial Spread <input type="checkbox"/> FLC5AS Flat Lens 5° Axial Spread - Anti-Slip <input type="checkbox"/> FLC10 Flat Lens 10° Tilt <input type="checkbox"/> FLF Flat Lens Frosted <input type="checkbox"/> FLCAS Flat Lens Clear Anti-Slip <input type="checkbox"/> CLC Convex Lens Clear			<input type="checkbox"/> GEB ⁵ Electronic Ballast		<input type="checkbox"/> IEC

Notes:

- Not Available with PAR Lamps.
- RG and GS are mutually exclusive.
- Not available with CLC Lenses.
- MVOLT only valid if GEB is Chosen.
- GEB only available with MH lamps to 150 watts, MVOLT is the default voltage for GEB lamps.
- Not available with WWD distribution.
- Finish is only valid with "A" door material.

Consisting of:
 RIS Rough-In Section
 ACL Lamp Module
 HSL Transformer Module/
 Power Cord

STERNBERG**Ornamental Bollards****730LB PRAIRIE LIGHTED BOLLARD****SPECIFICATIONS****GENERAL**

The Model 730LB decorative lighted bollard shall be aluminum, one-piece construction. The square aluminum shaft base shall be constructed with decorative cast window grilles and overhung roof cap. The Model shall be Sternberg Lighting #730LB lighted bollard or #730LB-QR quick release lighted bollard.

CONSTRUCTION

The bollard housing shaft shall be 7" square having a wall thickness of $\frac{3}{16}$ " and made of ASTM 6061 extruded aluminum and tempered to a T6 condition. The bollard features four 6" wide windows with cast tree design grille work. The cast 12" square roof shall cantilever the fixture body and have a solid aluminum soffit. The assembly comes standard with a 1-piece white lens made of $\frac{1}{4}$ " thick square heavy-duty acrylic for vandal resistance. Optional lenses are available. The internal anchor base shall be 6 $\frac{1}{2}$ " square and made of heavy wall, 356 alloy cast aluminum and shall be vertically fastened to bollard housing. It shall have a $\frac{1}{2}$ " thick floor cast as an integral part of the base. The overall height of the bollard shall be 48". (For other heights, consult factory).*

ELECTRICAL

All electrical components shall be U.L. approved. H.I.D. ballasts shall be high power factor with lamp starting down to -30 degrees C. Medium base porcelain sockets to be 4KV rated. The ballast/socket assembly shall be pre-wired. Optional compact fluorescent (PL) ballasts shall be instant start electronic with a starting temperature of down to 0 degrees F. They shall have a 4-pin socket and support quad tube and triple tube lamps. Ballasts shall be DOE EISA compliant.

QUICK RELEASE MOUNTING (Optional)

The Model 730LB-QR shall have a quick release option which allows quick removal of the bollard for convenience or emergency access. The burial portion shall be made of ASTM 6061 aluminum extrusion and shall have a keyway and flexible connection system for securing to bollard. The bollard shall have a mated extension and anti-rotation key and padlock slot. The quick release system shall allow for a flush pavement installation after temporary bollard removal.

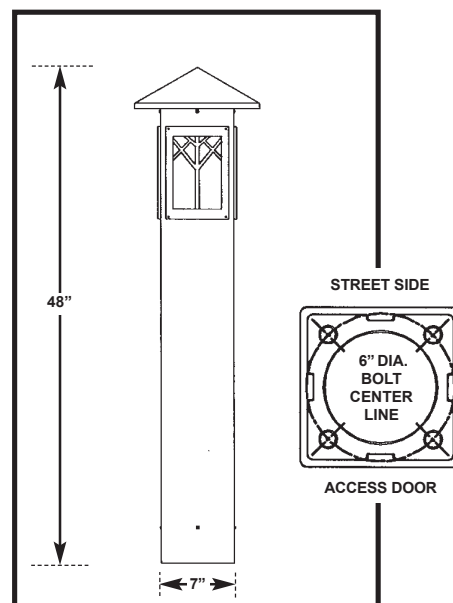
FINISH

Prior to coating, each assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance and excellent adhesion for the finish coating. The finish coating shall be electrostatically applied semi-gloss, super durable polyester powder baked at 400 degrees for a durable and superior, color retentive finish. Our optional antique Verde Green finish and Swedish Iron finish are hand brushed using a 3-step process. The total assembly shall be wrapped in shockproof wrapping or fully enclosed in corrugated cartons.

INSTALLATION

Four, hot-dipped galvanized "L" type anchor bolts shall be provided with the post for non-quick release bollard anchorage. Quick release anchorage requires no anchor bolts. Bollard will be provided with a grounding stud mounted on the base floor.

WARRANTY Five-year limited warranty. See product and finish warranty guide for details.



See installation template for exact door position.

BUILDING A PART NUMBER**PART NUMBER SELECTIONS**

BOLLARD MODEL	OPTIONAL CHAIN LOOP	OPTIONS	LIGHT SOURCE BALLAST WATTS/TYPE/VOLTS	FINISH
730LB		FHS	70HPS120	VG

**MODELS***

- 730LB
- 730LB-QR

* NOTE: For custom heights, designate height after bollard model.
Example: 730LB-42"

** TO ORDER CHAIN: Specify total length of chain required for project.

MHP - Metal halide systems are pulse start.

BALLASTS

- 35HPS
- 50HPS
- 70HPS
- 100HPS
- 50MHP
- 70MHP
- 100MHP
- 26PLT
- 32PLT
- 42PLT
- INCAND

VOLTAGES

- 120
- 208
- 240
- 277
- 480
- MULTI (120-277)

LAMPS

- HPS35/MED
- HPS50/MED
- HPS70/MED
- HPS100/MED
- MHP50/MED
- MHP70/MED
- MHP100/MED
- PLT26
- PLT32
- PLT42

OPTIONAL CHAIN LOOP**

- CL1 Chain Loop
- CL2 Chain Loops 180°

FINISHES STANDARD

- BKT Black Textured
- BK Black
- VG Verde Green
- PGT Park Green Textured
- PG Park Green
- ABZT Architectural Medium Bronze Textured
- ABZ Architectural Medium Bronze
- SI Swedish Iron
- DBT Dark Bronze Textured
- DB Dark Bronze

OPTIONS

- PEC1 Photocell-Bimetal 120 Volt
- PEC2 Photocell-Bimetal 208-277 Volt
- PEC1-E Photocell-Electronic 120 Volt
- PEC2-E Photocell-Electronic 208-277 Volt
- FHS Single Fuse and Holder-120,277 Volt
- FHD Dual Fuse and Holder-208,240,480 Volt
- GFI Ground Fault Interrupter Duplex Outlet
- LAMPS Select from List

- OWGT Old World Gray Textured
- OWG Old World Gray

FINISHES CUSTOM

- WHT White Textured
- WH White
- CV Copper Vein
- WBK Weathered Black
- WBR Weathered Brown
- CD Cedar
- RT Rust
- OI Old Iron
- TT Two Tone
- CM Custom Match

STERNBERG
LIGHTING

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4421 BASE OR YOKE MOUNT

LINE VOLTAGE FOUNTAIN FIXTURE

DESCRIPTION

The 4421 series is ideal for shallow pool installations. Designed for the 120V T-4 mini-can tungsten halogen (quartz) lamp, 500W Max. It is compact in size with an over all height of 8 3/8". The standard unit employs a medium-angle flood pattern reflector. The reflector is chrome plated spun copper.

FEATURES & SPECIFICATIONS

FIXTURE HOUSING & ROCK GUARD: Heavy wall cast bronze construction. Natural bronze finish.

LAMP: 500W Max., T-4 mini-can.

SOCKET: Mini-can base type with 200°C insulated leads.

DISTRIBUTION: Reflector is parabolic chrome plated spun copper.

LENS: 7 9/16" diameter convex clear tempered heat resistant glass.

MOUNTING: ALB custom base enables underwater lighting fixtures to be mounted 2" below the water level regardless of the depth of the fountain. This is achieved by securing the base in 3 places and cutting a length of 3/4" red brass pipe (threaded on one end) to the desired size. The locking mechanism allows you to remove the fixture for re-lamping without upsetting the fixture adjustment.

RISER: RSR6 if no length specified and ALB is chosen. 4"-24" Riser stem, available in 2" increments.

GASKET: Single-piece molded U-shaped silicone.

CORD: Minimum of 10' of #16-3ST submersible rated cord. Cord entrance is brass, water-tight seal and epoxy encapsulated. **Cord length must be specified.**

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI (0.70kg/cm²) internal pressure while totally submerged in water.

LOW WATER CUT-OFF: Temperature sensing low water cut-off standard.

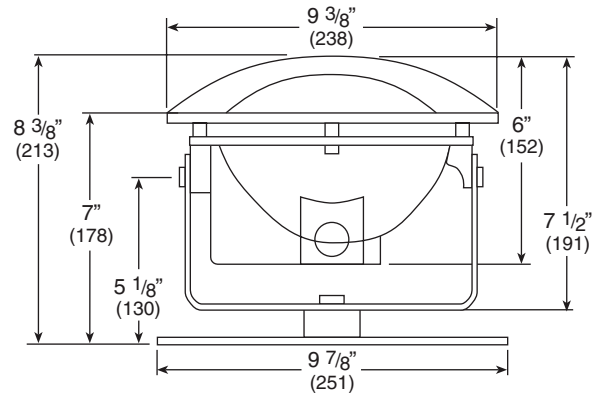
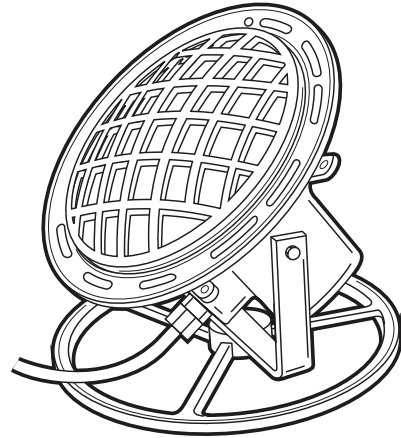
FASTENERS: Stainless steel.

LISTING: U.L., C.S.A.

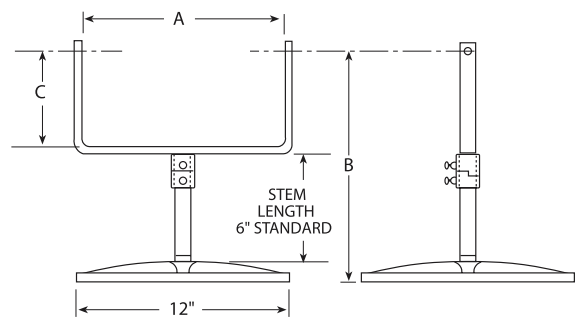
NOTE: HYDREL RESERVES THE RIGHT TO MODIFY SPECIFICATION WITHOUT NOTICE. Any dimension on this sheet is to be assumed as a reference dimension: "Used for information purposes only. It does not govern manufacturing or inspection requirements." (ANSI Y14.5-1973)

TYPE ' L '	JOB NAME
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PART NUMBER									
Model	Lamp Type	Voltage	Lens	Mounting	Mounting Access.	Cord	Lamp	Options	



ALB DIMENSIONS



A INSIDE WIDTH	B STANDARD HEIGHT	C YOKE CLEARANCE	B MIN. (CUT STEM)
7 7/8	11	3 7/8	7

APPROVALS

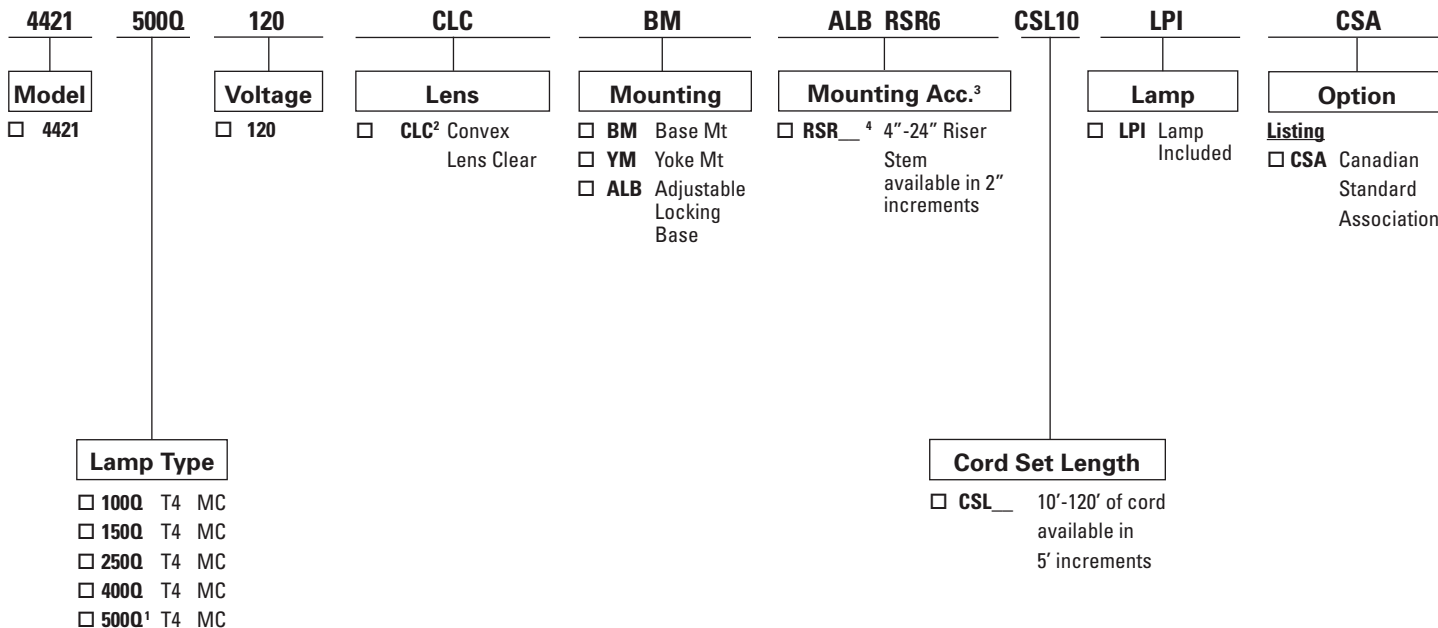
4421 ORDERING INFORMATION

60 Hz Application

Choose the boldface catalog nomenclature that best suits your needs.

PART NO.

EXAMPLE:



Notes:

- ¹ 500Q will be used if no lamp is chosen.
- ² CLC will be used if no lens is chosen.
- ³ Mounting Accessories are only available with BM.
- ⁴ RSR6 will be used if no riser length is specified and ALB is chosen.



D-Series Size 1 LED Area Luminaire



DESIGNLIGHTS
CONSORTIUM



Catalog
Number

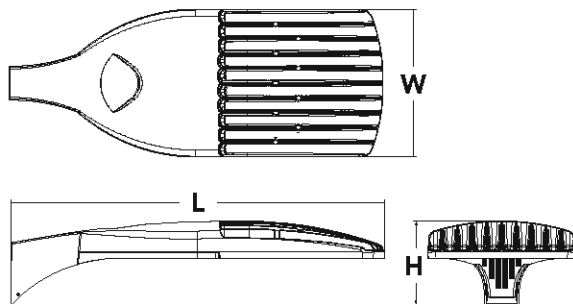
Notes

Type

Mouse, tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.8 ft ² (0.07 m ²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height:	7-1/2" (19.0 cm)
Weight (max):	27 lbs (12.2 kg)



Introduction

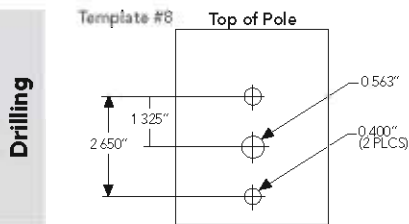
The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing 100 – 400W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED 2 30B700/40K SR3 MVOLT SPA DDBXD

DSX1 LED	Series	Light Engines	Performance Package ¹	Distribution	Voltage	Mounting	Options	Finish (in comments)
DSX1 LED	1	One engine (30 LEDs)	530 mA options: 30B530/30K 3000K 30B530/40K 4000K 30B530/50K 5000K	SR2 TypeII SR3 TypeIII SR4 TypeIV SR5 TypeV FT Forward throw	MVOLT ² 120 ² 208 ² 240 ² 277 ² 347 ³ 480 ³	Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket	Shipped installed PER NEMA twist-lock receptacle only (no controls) DMG 0-10V dimming driver (no controls) ⁴ DCR Dimmable and controllable via ROAM® (no controls) ⁵ HS House-side shield ⁶ SF Single fuse (120, 277, 347V) ⁷ DF Double fuse (208, 240, 480V) ⁷ WTB Utility terminal block TLS Tool-less entry trigger latch	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white
	2	Two engines (60 LEDs)	700 mA options: 30B700/30K 3000K 30B700/40K 4000K 30B700/50K 5000K					



DSX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

DM19AS	Single unit	DM29AS	2 at 90°
DM28AS	2 at 180°	DM39AS	3 at 90°
DM49AS	4 at 90°	DM32AS	3 at 120°*

Example: SSA 20 4C DM19AS DDBXD

Visit Lithonia Lighting's **POLES CENTRAL**, to see our wide selection of poles, accessories and educational tools.

Tenon Mounting Slipfitter*

Tenon Size	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

* For round pole mounting (RPA) only.

NOTES

- Configured with 4000K (40K) provides the shortest lead times. Consult factory for 3000K (30K) and 5000K (50K) lead times.
- MVOLT driver operates on any line voltage from 120-277V. Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options).
- Not available with with single board, 530 mA product (1 30B530).
- Not available with 347 or 480V.
- Specifies a ROAM® enabled luminaire with 0-10V dimming capability; PER option required. Not available with 347 or 480V. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roomservices.net.
- Also available as a separate accessory; see Accessories information at left.
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.

Accessories
Ordered and shipped separately.

Controls & Shields

DSS124N1.5TJEU	Photo cell - SSL twist-lock (120-277V) ⁸
REN277-NM1 U	ROAM® node (277V) ⁸
SCU	Shorting cap ⁸
DSX1 LED 1 HS U	House-side shield (for one light engine)
DSX1 LED 2 HS U	House-side shield (for two light engines)

For more control options, visit **CTL** and **ROAM** online.



D-Series - Size 1

30 or 60 LEDs
33"L x 13"W x 7.5"H
28 lbs
144W

D-Series - Size 2

120 LEDs
40"L x 15"W x 7.5"H
39 lbs
290W



Family
Comparison



DSX 2
Area