



III.A.

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Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Architectural Review Board Staff Report

Project Type: Site Development Section Plan

Meeting Date: July 14, 2016

From: Jonathan Raiche, AICP
Senior Planner

Cc: Aimee Nassif, Planning & Development Services Director

Location: 17298 North Outer 40 Road

Applicant: Dawdy & Associates, Inc.

Description: **Boone’s Crossing NE, Lot 1B (Midwest Regional Bank):** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 1.18 acre tract of land zoned “PC” Planned Commercial District located north of US Highway 40/Interstate 64 and east of its intersection with Boone’s Crossing (17U620194).

PROPOSAL SUMMARY

The proposed plan is for construction of a new 4,711 square foot, 1-story bank building with two drive-thru service lanes and one additional ATM lane. The subject site, Lot 1B of Boones Crossing NE subdivision, is the middle lot in a three lot subdivision. The eastern most lot is currently developed with a mixed-use office and bank building. The westernmost lot is currently vacant and is not included in the current proposal.

HISTORY OF SUBJECT SITE

The subject site was incorporated into the City of Chesterfield under an “NU” Non-Urban District from St. Louis County. The zoning was first amended through a site-specific ordinance in 2006 to a “PC” Planned Commercial District. The site-specific ordinance was amended in 2012 to amend the Permitted Use Requirements and a structure setback requirement and again in 2014 to accommodate for three total lots rather than the original two lots proposed. A lot split was subsequently approved in 2015 which approved the current three lot configuration of the subdivision as seen in Figure 1 on the next page.



Figure 1

STAFF ANALYSIS

General Requirements for Site Design:

A. Site Relationships

The subject site is approximately 1.1 acres and, as required by the governing ordinance, is proposing pedestrian and vehicular connections to Lot 1A and Lot 2 of the development. The site layout provides clear separation for the proposed drive-thru component while still maintaining a connection to and transition between the existing and future phases of the development. The main façade of the building has been oriented toward the Interstate 64 corridor and includes a main entryway plaza area.

B. Circulation System and Access

As seen in Figure 1, the subject site does not have direct access to North Outer 40 Road and is not permitted to have access from the Interstate 64 exit ramp. During the previously mentioned Lot Split, cross access was required to the subject site from the one existing full access drive located on North Outer 40 Road. Provisions are also made to accommodate the possibility of cross-access to an additional right-in only access point located on Lot 1A; however, as it is not located on the subject property, it is not being proposed with this project.

Internal sidewalks are provided to link the subject site to the other two lots of the subdivision and are located at narrow points of the drive-thru area as to provide for safe pedestrian movement. The drive-thru is designed with a counter-clockwise traffic pattern on the northern portion of the site that will provide for efficient and safe vehicular movement. The clear separation of the customer parking and the drive-thru will also assist in providing safe and efficient circulation through the site.

C. Topography

Minimal changes are proposed to the site's generally flat existing topography. The primary changes will accommodate the various proposed bio-retention areas located on the north and east portions of the site.

General Requirements for Building Design:

A. Scale

The applicant is proposing an approximately 23 feet tall building with an extended entryway that is approximately 28 feet tall. The governing ordinance for the site restricts building height to a maximum of 45 feet on Lots 1A and 1B while the existing building on Lot 2 is approximately 37 feet tall. The applicant has designed a relatively tall 1-story building and utilized the taller entryway which both bring a general compatibility of scale with the existing adjacent 2-story building. Various horizontal architectural elements, including the stone banding and brick soldier course details, also break up the façade and help to provide a sense of human scale to the building.

B. Design

The proposed building features a v-shaped design centered on a taller stone-clad entryway which clearly denote the intended pedestrian access and visual focus of the building as seen in the rendering provided by the applicant in Figure 2 below. The proposed landscaping and pedestrian-scale bollard lighting also highlight the building's entry. All facades have been coordinated with similar materials proposed throughout with the exception of the proposed metal which is found only over the drive-thru canopy on the northern façade of the building.



Figure 2

C. Materials and Color

The main proposed materials consist of a medium tone brick, tan architectural stone, dark bronze colored aluminum framed tinted windows, and a sandstone colored metal panel. The type and color of materials chosen by the developer are similar to those used on the existing adjacent building and help to provide a consistent architectural theme throughout the development. Although the proposed canopy introduces a metal panel for the upper portion, a compatible color has been chosen. Additionally, the columns of the proposed canopy are proposed to be constructed of the same brick and stone as used on the main building to provide continuity as shown in the excerpt from the elevations seen on the next page in Figure 3.

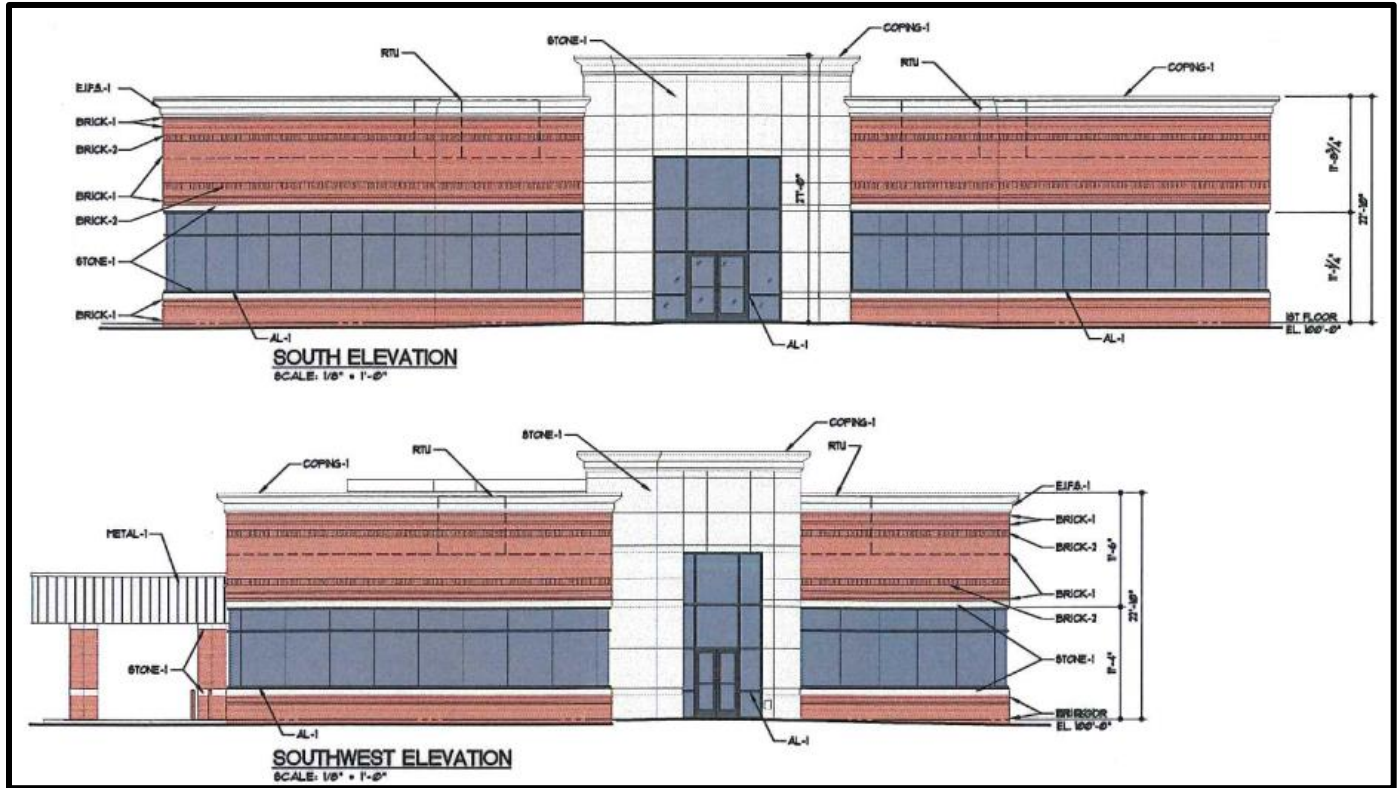


Figure 3

D. Landscape Design and Screening

The proposed landscape plan includes the following elements:

- 1) The required 30 feet wide landscape buffer along Interstate 64,
- 2) Various parking lot trees,
- 3) Bioretention plantings along the north and east property lines, and
- 4) A combination of trees, shrubs, and annuals/perennials placed around the building.

The proposed plantings around the building serve to emphasize and bring visual focus to the building's entryway as well as providing visual interest on both sides of the proposed drive-thru canopy. Additionally, the applicant has utilized evergreen trees to soften and screen the proposed dumpster enclosure which consists of brick to match the building and white vinyl gates. All mechanical equipment is proposed to be roof-mounted which is screened by the large building parapet that has been integrally designed into the overall building.

E. Signage

Signage is not part of the proposal before Architectural Review Board and will be reviewed by Staff.

F. Lighting

The proposal includes a combination of ground-mounted, pole-mounted, building-mounted, bollard, and canopy style lighting fixtures. The parking lot lighting proposed is fully-enclosed and shielded LED fixtures. Staff has commented and the applicant is aware that some of the site lighting provided for the parking areas exceeds the maximum lighting levels permitted by City Code. Staff will continue to work with the applicant to address this item.

The proposed bollard lights once again serve to highlight the entryway area and are proposed at a height of 2.5 feet with downcast light. The applicant has also applied ground-mounted accent lighting to serve two purposes. The first application is spot lighting for the proposed flag pole located southwest of the building which will be required to be directed toward the flag. The second application is the same style of fixture but as a flood style lamp rather than a spot light style along the main southern façade of the building. The applicant has confirmed and provided a note on the plan that the ground-mounted lighting will be shielded and aimed to avoid light spillage above the roofline.

DEPARTMENTAL INPUT

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design and finds that the plans are in compliance with the City's Architectural Review Design Standards. Staff requests action on the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Boone's Crossing NE, Lot 1B (Midwest Regional Bank).

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Boone's Crossing NE, Lot 1B (Midwest Regional Bank), as presented, with a recommendation for approval (or denial) to the Planning Commission."
- 2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Boone's Crossing NE, Lot 1B (Midwest Regional Bank), to the Planning Commission with a recommendation for approval with the following conditions..."

Attachments

1. Architectural Review Packet Submittal



ARCHITECTURAL REVIEW BOARD
Project Statistics and Checklist

Date of First Comment Letter Received from the City of Chesterfield 5/19/16

Project Title: Midwest Regional Bank Location: Lot 1B per site plan

Developer: Midwest Regional Bank Architect: Dawdy & Assoc. Engineer: Grimes Consulting

PROJECT STATISTICS:

Size of site (in acres): 1.18 Total Square Footage: 4,711 s.f. Building Height: 22'-10" 27'-0" Entry

Proposed Usage: Business - (Financial)

Exterior Building Materials: Brick, Stone, EIFS, Architectural metal panel

Roof Material & Design: Stl. bar joist, insul. & membrane roofing

Screening Material & Design: Trash enclosure to match building materials

Description of art or architecturally significant features (if any): _____

ADDITIONAL PROJECT INFORMATION:

Checklist: Items to be provided in an 11" x 17" format

- Color Site Plan with contours, site location map, and identification of adjacent uses.
- Color elevations for all building faces.
- Color rendering or model reflecting proposed topography.
- Photos reflecting all views of adjacent uses and sites.
- Details of screening, retaining walls, etc.
- Section plans highlighting any building off-sets, etc. (as applicable)
- Architect's Statement of Design which clearly identifies how each section in the Standards has been addressed and the intent of the project.
- Landscape Plan.
- Lighting cut sheets for any proposed building lighting fixtures. (as applicable)
- Large exterior material samples. (to be brought to the ARB meeting)
- Any other exhibits which would aid understanding of the design proposal. (as applicable)
- Pdf files of each document required.



Architect's Statement of Design

Midwest Regional Bank – Chesterfield, MO

The proposed new Chesterfield branch building for Midwest Regional Bank will be located in the center lot on North Outer 40 Road and Boones Crossing Road adjacent to the existing West Bridge Mortgage building.

The design of the building strengthens the existing street alignment and patterns of the city. While it has its own expression, it is designed as a good neighbor to the surrounding buildings. The site design allows movement around the site, continuously activating the streetscape. The form of the building maximizes the opportunity offered from the site and naturally directs traffic around the drive-thru without impacting neighboring business.

The careful proportioning of the entry element adds character to the streetscape. The overall building design closely relates to the neighboring buildings in material, scale and detail. A simple palette of materials detailed carefully, creates an impression of quality and longevity.

Terry L. Dawdy, AIA



A perfect blend of design, performance and value

LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3



PHILIPS STONCO LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3

The Philips Stonco LytePro LED Medium Floodlight allows precision and flexibility in a compact design. The LPF3 features state-of-the-art long-life LED technology and is ideal for landscapes, accenting signage or displays, facades, and many other lighting applications.

Project: _____
 Location: _____
 Catalog No: _____
 Fixture Type: _____
 Mfg: _____ Lamps: _____ Qty: _____
 Notes: _____

Ordering guide¹

example: LPF3-C-4K-FL-S-F1-PCB-1-BZ

Series / # of COB ¹	Drive Current	Color Temperature	Distribution	Mounting	Options	Voltage	Finish
LPF3 -	C -	4K -	SP -	S -	-	8 -	BZ
LPF3 LytePro LED Medium Floodlight 85W	C 700 mA	4K 4000K ² 5K 5000K ²	FL Flood SP Spot	S Slipfitter 2-3/8" O.D. T Trunnion	F1 ⁴ Single Fusing F2 ⁵ Double Fusing F3 ⁴ Double Fusing, Canada PCB ⁷ Photocontrol DM25 ^{8,9} Dynadimmer	1 120V 2 208V 3 240V 4 277V 6 347V 8 120-277V	BZ Textured Dark Bronze WH Textured White DGY Textured Dark Gray

Accessories – Ordering Guide (must be ordered separately)

Catalog #	Description
LPF3WG ^{10,11}	Wire Guard
LPF3SG ^{10,11}	Stone Guard

Stocked Luminaires – Ordering Guide^{12,13,14,15}

Catalog #	Description	Master Pack, QTY	UPC Code
STKLPF3S-8	LPF3, Slipfitter Mount, 120-277V	Yes, 2	786034956949

Footnotes:

- MTO configurations are assembled in the USA.
- COB denotes Chip On Board LED platform.
- Both 4K and 5K options have a minimum 80 CRI.
- 'F1' for 120, 277, 347V.
- 'F2' for 208, 240V.
- 'F3' for 208, 240V Canadian double pull.
- Specify voltage. 'PCB' not available with '8' universal voltage option.
- 'DM25' only available 120-277V and dims to 25% for 6 hours.
- Dynadimmer is suitable for use from +30°C to 40° temperature ambient only.
- Limited quantities stocked in our Carrollton RDC.
- Contact factory for availability of large order quantities.
- All stock products are 'BZ' Textured Dark Bronze, '4K' Neutral White and 'FL' Flood Optics.
- Stock LFF products ship out of our Carrollton Distribution facility within 2-days of receipt of order.
- Always consult factory for current inventory levels. Larger quantities may be converted to MTO if necessary.
- LPF3 is provided with full 4-color POP packaging.



**PHILIPS
Stonco**

LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3

Features

- LPF3 flood distribution delivers 7,012 lumens at 85W, with an efficacy of 82 lumens per watt
- LPF3 spot distribution delivers 6,807 lumens at 85W, with an efficacy of 80 lumens per watt
- Effectively replaces equivalent 175-250W HID
- 4000K neutral white is standard, 5000K cool white is optional, minimum 80 CRI
- DLC certified optics provide excellent uniformity ideal for general facade, target and landscape illumination
- Fixtures are IP66 rated and suitable for use in ambients from -40°C to 40°C
- Rated system life of 80K hours for the driver and LED (>L₇₀) at ambients up to 30°C
- 5-year limited warranty, see philips.com/warranties for details
- LPF3 stocked in dark bronze, slipfitter mount, flood optic, 120-277V, and 4000K Neutral White for quick 2-day shipment
- Additional made to order versions available that are assembled in the USA, consult factory for current lead time

Performance Specifications

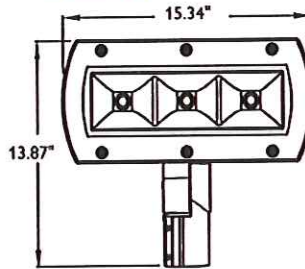
Beam Specs	Flood (FL)	Spot (SP)
Initial Lumens (4K and 5K) ¹⁶	7,012	6,807
Average Wattage ¹⁷	85W	85W
Lumens/Watt	82	80
NEMA Beam	6H x 6V	3H x 3V
50% beam (horizontal x vertical)	101° x 97°	17° x 17°
10% beam (horizontal x vertical)	130° x 125°	41° x 38°
Max Candela	3,100 cd	33,122 cd

16. Lumen values based on photometric tests performed in compliance with IESNA LM-79.
17. System input wattage may vary based on input voltage, by up to +/- 8%, and based on manufacturer forward voltage, by up to +/- 4%.

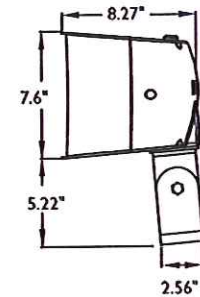
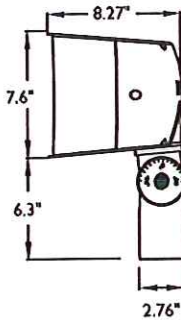
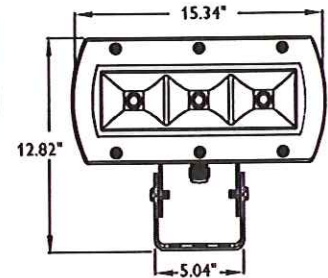
Dimensions

Approximate luminaire weight – 19lbs (8.6kg)
Fixture EPA - 0.74 sq. ft.

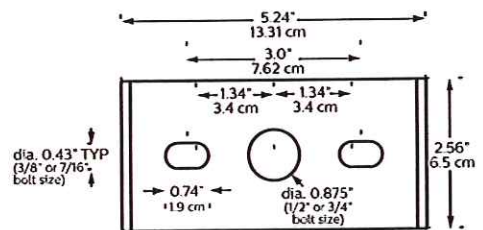
Slipfitter (S)



Trunnion Mount (T)

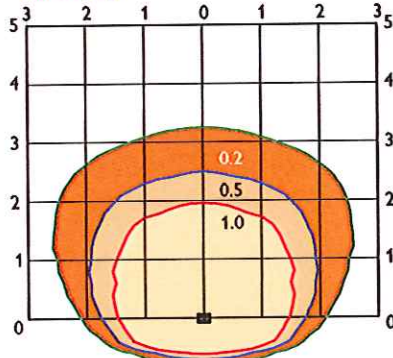


Trunnion Mount Bolt Pattern



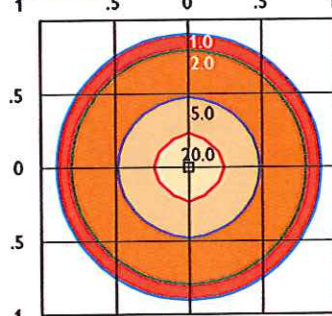
Photometrics

Flood (FL)



LPF3 85W - 15' Mounting Height, 30° Tilt
Mounting Height 25 20 15 12 10
Multiplier 0.20 0.44 1.0 1.7 2.7

Spot (SP)

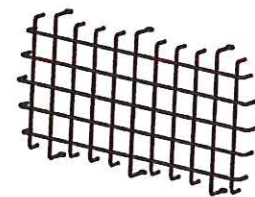


LPF3 85W - 20' Mounting Height, 0° Tilt
Mounting Height 30 25 20 15 10
Multiplier 0.44 0.64 1.0 1.8 4.0

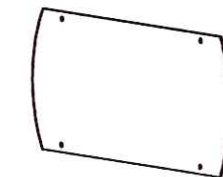
Notes: Grid is in multiples of mounting height and values shown are in footcandles.
Values shown are based on initial lumens.

Accessory Details (must be ordered separately)

LPF3WG wire guard (field installed)



LPF3SG stone guard (field installed)



LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3

Specifications

General Description

The Philips Stonco LytePro LED Medium Floodlight 85W LPF3 combines excellent performance, design and value to meet the needs for the energy and budget conscious. The LPF3 is available with slipfitter or trunnion mounting and flood or spot optical distributions suitable for use on a wide range of applications. A single primary SKU is available in stock for 2-day quick ship while a more comprehensive offering is available made-to-order with multiple offerings that include fusing, photocontrol, Dimmer, NW and CW color temps and three standard finishes.

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates integrated heatsinking to maximize thermal performance and reliability.

Mounting

The LPF3 is available with slipfitter or trunnion mounting to allow for wide range of aiming and adjustability. Caution: Philips Stonco is not responsible for failure of mounting components supplied by others. Proper care should be exercised in mounting component selection and installation to insure adequate luminaire support, given system weight, vibration potential, exposure to the elements, thermal conditions present in the given application, etc. If luminaires are not properly supported and installed correctly per local codes and requirements, this may result in damage or injury caused by the luminaire, for which Philips Stonco is not responsible.

IP Rating

Entire fixture is rated IP66, including driver and optical assemblies.

LED Board and Array

The LPF3 utilizes three Citizen CLL032 COB (Chip On Board) LEDs. Provides up to 82 lm/W at the system level. Standard color temp is 4000K +/- 250K, with optional 5000K available. Both color temps have a minimum 80 CRI.

LED Thermal Management

Housing design integrates thermal heatsinking between the optical and driver assemblies, allowing for pass-through convective cooling which promotes airflow for improved and maximum heat dissipation. This results in maximized performance and reliability of critical components to ensure long LED system life.

Optical Systems

LPF3 Flood 'FL' is standard with a Flood 'FL' optic that consists of a specular vacuum metalized reflector that provides a very uniform and highly efficient all purpose flood distribution. Optional Spot 'SP' optic consists of a TIR lens to provide a tight spot. Both optics are suitable for use in wide range of applications.

Energy saving benefits and controls

The LPF3 has a system efficacy of 82 lm/W at a system wattage of 85W using the flood distribution. With the spot distribution it has a system efficacy of 80 lm/W at a system wattage of 85W. It provides significant energy savings over traditional HID systems less controls. Optional Dimmer controls provides additional maximum energy savings by dimming to 25% low for 6 hours.

Electrical

Driver efficiency (>90% standard). 120-347V available (restrictions apply). Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. RoHS compliant. Surge protector standard and is in accordance with IEEE / ANSI C62.41.2 guidelines, with a surge current rating of 10,000 amps (10KVA).

Listings

Product is UL and cUL listed to the UL1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). The LPF3 luminaire with either 4K Neutral White or 5K Cool White LEDs and flood or spot optics is DesignLights Consortium® qualified. Stock SKUs of the LPF family are made in China while all made-to-order configurations are assembled in the USA.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard finish on all stocked LPF luminaires is Textured Dark Bronze. Textured White and Dark Gray are also available as optional colors for made-to-order products.

Warranty

LPF3 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See philips.com/warranties for details.

Predicted Lumen Depreciation Data¹⁸

Ambient Temp. °C	TM-21 Calculated L ₇₀ hrs ¹⁹	Reported L ₇₀ Per TM-21 ^{18,20}	Lumen Maint. % @60,000 hrs
up to 40°C	269,000 hrs	>48,000 hrs	91.5%

18. Calculated performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
19. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
20. Reported per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.



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Specifications are subject to change without notice.
www.philips.com/luminaires

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Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216

Philips Lighting Company
281 Hillmount Road
Markham ON, Canada L6C 2S3
Phone: 800-668-9008

A perfect blend of design, performance and value

LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3



PHILIPS STONCO LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3

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Project: MIDWEST REGIONAL BANK
 Location: _____
 Catalog No: LPF3-C-4K-FL-S-8-BZ
 Fixture Type: S
 Mfg: _____ Lamps: _____ Qty: _____
 Notes: _____

Ordering guide¹

example: LPF3-C-4K-FL-S-F1-PCB-1-BZ

Series / # of COB ¹	Drive Current	Color Temperature	Distribution	Mounting	Options	Voltage	Finish
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Footnotes:

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- Limited quantities stocked in our Carrollton RDC.
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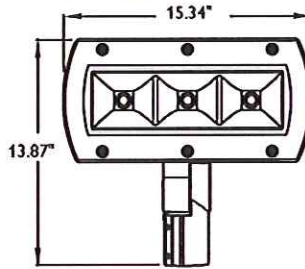
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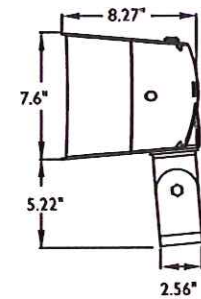
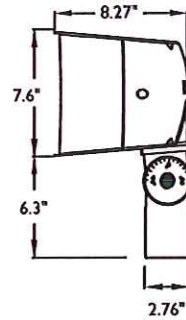
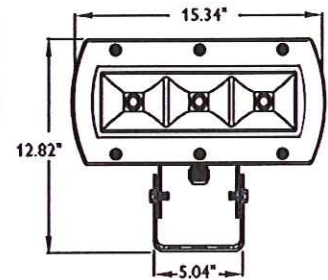
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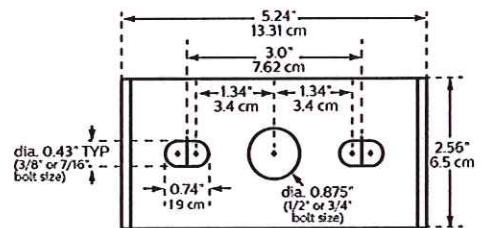
Slipfitter (S)



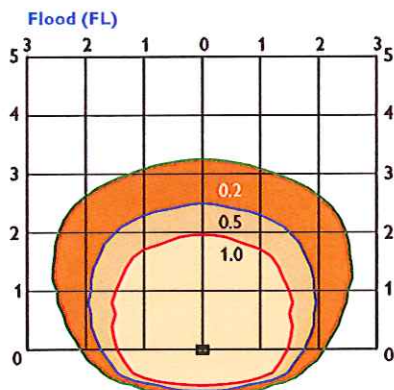
Trunnion Mount (T)



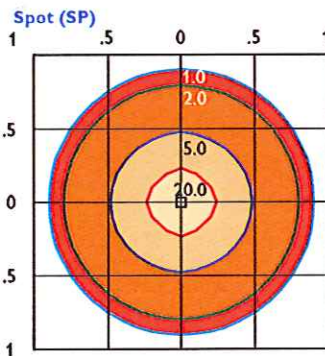
Trunnion Mount Bolt Pattern



Photometrics



LPF3 85W - 15' Mounting Height, 30° Tilt
Mounting Height 25 20 15 12 10
Multiplier 0.20 0.44 1.0 1.7 2.7

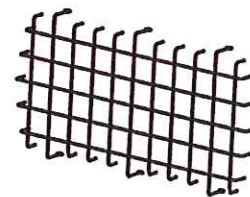


LPF3 85W - 20' Mounting Height, 0° Tilt
Mounting Height 30 25 20 15 10
Multiplier 0.44 0.64 1.0 1.8 4.0

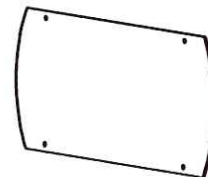
Notes: Grid is in multiples of mounting height and values shown are in footcandles.
Values shown are based on Initial lumens.

Accessory Details (must be ordered separately)

LPF3WG wire guard (field installed)



LPF3SG stone guard (field installed)



LYTEPRO LED MEDIUM FLOODLIGHT 85W LPF3

Specifications

General Description

The Philips Stonco LytePro LED Medium Floodlight 85W LPF3 combines excellent performance, design and value to meet the needs for the energy and budget conscious. The LPF3 is available with slipfitter or trunnion mounting and flood or spot optical distributions suitable for use on a wide range of applications. A single primary SKU is available in stock for 2-day quick ship while a more comprehensive offering is available made-to-order with multiple offerings that include fusing, photocontrol, Dynadimmer, NW and CW color temps and three standard finishes.

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates integrated heatsinking to maximize thermal performance and reliability.

Mounting

The LPF3 is available with slipfitter or trunnion mounting to allow for wide range of aiming and adjustability. Caution: Philips Stonco is not responsible for failure of mounting components supplied by others. Proper care should be exercised in mounting component selection and installation to insure adequate luminaire support, given system weight, vibration potential, exposure to the elements, thermal conditions present in the given application, etc. If luminaires are not properly supported and installed correctly per local codes and requirements, this may result in damage or injury caused by the luminaire, for which Philips Stonco is not responsible.

IP Rating

Entire fixture is rated IP66, including driver and optical assemblies.

LED Board and Array

The LPF3 utilizes three Citizen CLL032 COB (Chip On Board) LEDs. Provides up to 82 lm/W at the system level. Standard color temp is 4000K +/- 250K, with optional 5000K available. Both color temps have a minimum 80 CRI.

LED Thermal Management

Housing design integrates thermal heatsinking between the optical and driver assemblies, allowing for pass-through convective cooling which promotes airflow for improved and maximum heat dissipation. This results in maximized performance and reliability of critical components to ensure long LED system life.

Optical Systems

LPF3 Flood 'FL' is standard with a Flood 'FL' optic that consists of a specular vacuum metalized reflector that provides a very uniform and highly efficient all purpose flood distribution. Optional Spot 'SP' optic consists of a TIR lens to provide a tight spot. Both optics are suitable for use in wide range of applications.

Energy saving benefits and controls

The LPF3 has a system efficacy of 82 lm/W at a system wattage of 85W using the flood distribution. With the spot distribution it has a system efficacy of 80 lm/W at a system wattage of 85W. It provides significant energy savings over traditional HID systems less controls. Optional Dynadimmer controls provides additional maximum energy savings by dimming to 25% low for 6 hours.

Electrical

Driver efficiency (>90% standard). 120-347V available (restrictions apply). Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. RoHS compliant. Surge protector standard and is in accordance with IEEE / ANSI C62.41.2 guidelines, with a surge current rating of 10,000 amps (10KVA).

Listings

Product is UL and cUL listed to the UL1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). The LPF3 luminaire with either 4K Neutral White or 5K Cool White LEDs and flood or spot optics is DesignLights Consortium® qualified. Stock SKUs of the LPF family are made in China while all made-to-order configurations are assembled in the USA.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard finish on all stocked LPF luminaires is Textured Dark Bronze. Textured White and Dark Gray are also available as optional colors for made-to-order products.

Warranty

LPF3 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See philips.com/warranties for details.

Predicted Lumen Depreciation Data¹⁸

Ambient Temp. °C	TM-21 Calculated L ₇₀ hrs ^{18,19}	Reported L ₇₀ Per TM-21 ^{18,20}	Lumen Maint. % @60,000 hrs
up to 40°C	269,000 hrs	>48,000 hrs	91.5%

18. Calculated performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

19. L₇₀ is the predicted time when LED performance deprecates to 70% of initial lumen output.

20. Reported per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.



Notch Bollard LED

selux



Project: MIDWEST REGIONAL BANK

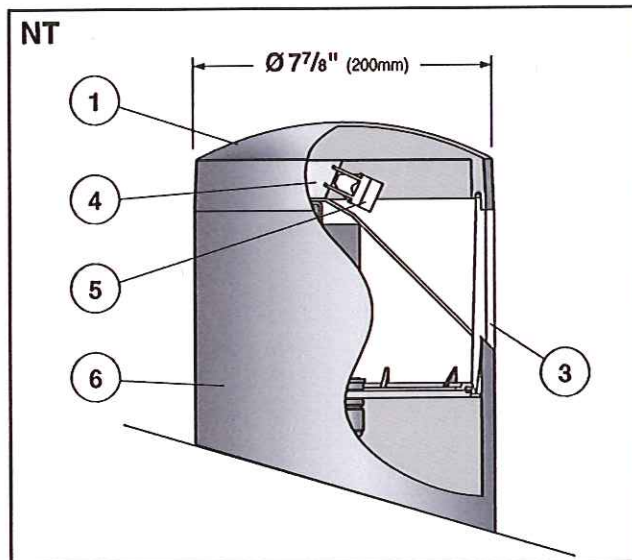
Type: T

Qty: _____

NT - **2.5** - **LG3700** - **40** - **BZ** - **120**
 Series - Height - Light Engine - CCT - Finish - Voltage

Options

Series	Height	Light Engine	CCT	Finish	Voltage	Options
NT	2 2 ft. (.6m)	LG3500 8.5W	30 3000K	WH White	120	HL ¹ Hi-Lo Switching for LG3700 only (see p.4 for details) DM 0-10V Dimming for LG3700 only
Notch Bollard LED	2.5 2.5 ft. (.74m)	LG3700 12W	35 3500K	BK Black	208	
	3 3 ft. (.9m)	(6) high flux white LEDs	40 4000K	BZ Bronze	240	
	3.5 3.5 ft. (1.1m)		50 5000K	SV Silver	277	
	4 4 ft. (1.2m) or specify custom height		For other CCT please consult factory	SP Specify Premium Color	347 ² 480 ²	
¹ 120V, 240V and 277 only. ² With internal stepdown transformer						



1. Luminaire Cover - Die-cast, aluminum cover, low copper alloy.

2. Gasketing - (not shown) Continuous gasket provides weather-proofing, dust, and insect control at shielding base, and fixture cover.

3. Shielding - Transparent, continuous one-piece injection molded, UV stabilized polycarbonate lens, minimum wall thickness 5/16" (8.25mm).

Shielding is flush with column surface completely enclosing optic chamber.

4. Light Engine - (6) High flux LEDs mounted to metal core PC boards attached to an aluminum heatsink for maximum LED performance and life. Includes LED drivers and precise high performance Injection-molded lenses. Complete light engine can be easily replaced. LEDs can be started and re-started instantly at

temperatures as low as -20°C. For lumen maintenance information, see IESTM-21-11 details.

5. Optics - Six individual precision injected molded lenses consisting of total internal reflection (TIR) collimator and precision light shaping lens. Lenses produce an asymmetric distribution.

6. Column - Extruded, thick-walled low copper aluminum, minimum wall thickness 0.118" (3mm) with internal anchor bolts and flush handhole cover.

7. Surge Protector - (not shown) Designed to protect luminaire from electrical surge (10kA).

Exterior Luminaire Finish - Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ),

and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

5 Year Limited LED Luminaire Warranty - Selux offers a 5 year limited warranty to the original purchaser that the Notch LED Bollard shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LEDs when installed and operated according to Selux instructions. Luminaire suitable for ambient temperature up to 45°C. For details and exclusions, see Selux Terms and Conditions of sale.

Listings and Ratings - Luminaire Tested to IESNA LM-79-08, LEDs tested to LM-80 standards.

Selux Corp. © 2014
 TEL (845) 834-1400
 FAX (845) 834-1401
 www.selux.us
 NT-0914-01 (ss-v3.2)

NRTL Listed (i.e. UL, CSA) for wet locations

Union Made Affiliated
 with IBEW Local 363

IP65

IK10

In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product. Specification sheets found at www.selux.us are the most recent versions and supercede all other printed or electronic versions.

Notch Bollard LED

selux

Photometry

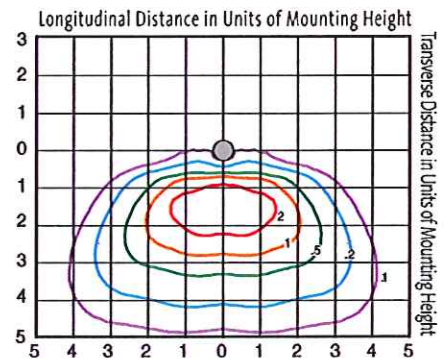
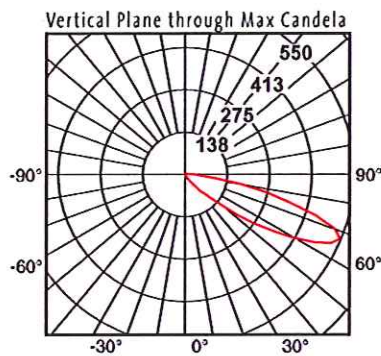
8.5W LED / 3500K CCT

Catalog # NT-4-LG3500-35
Report # S1207053-R1-1

- Ideal for applications requiring linear distributions.
- Maximum candela of 550 at 67.5° from vertical.
- IES classification - B0-U1-G1
- Mounting Height = 4' (1.22 M)
- 434 Delivered Lumens
- 51 Lumens per Watt

DOWNLOAD IES FILE:

http://www.selux.us/fileadmin/user_upload/for_files_fileNT_IES.zip



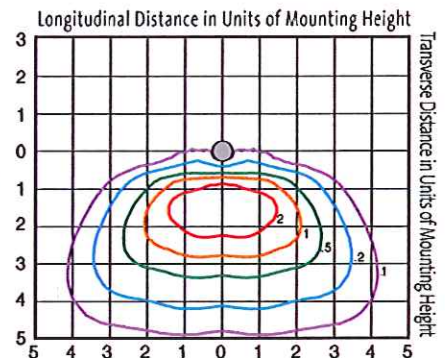
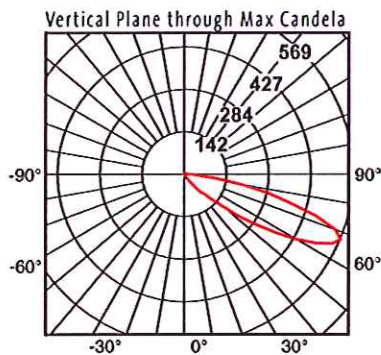
8.5W LED / 5000K CCT

Catalog # NT-4-LG3500-50
Report # S1207053-R1-3

- Ideal for applications requiring linear distributions.
- Maximum candela of 569 at 67.5° from vertical.
- IES classification - B0-U1-G1
- Mounting Height = 4' (1.22 M)
- 449 Delivered Lumens
- 53 Lumens per Watt

DOWNLOAD IES FILE:

http://www.selux.us/fileadmin/user_upload/for_files_fileNT_IES.zip



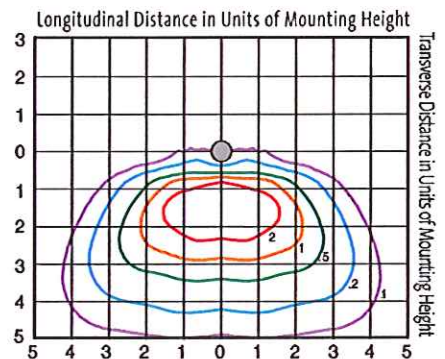
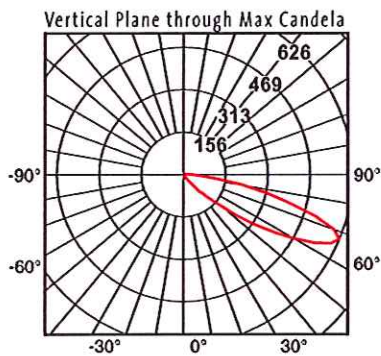
12W LED / 3500K CCT

Catalog # NT-4-LG3700-35
Report # S1207053-R1-1

- Ideal for applications requiring linear distributions.
- Maximum candela of 626 at 67.5° from vertical.
- IES classification - B0-U1-G1
- Mounting Height = 4' (1.22 M)
- 494 Delivered Lumens
- 35 Lumens per Watt

DOWNLOAD IES FILE:

http://www.selux.us/fileadmin/user_upload/for_files_fileNT_IES.zip



Notch Bollard LED



Photometry

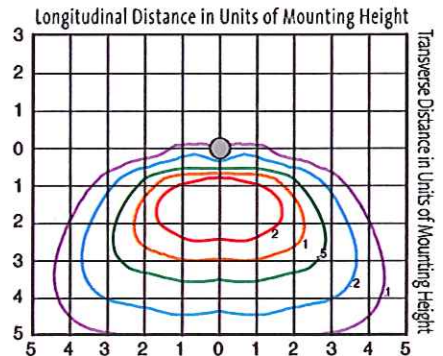
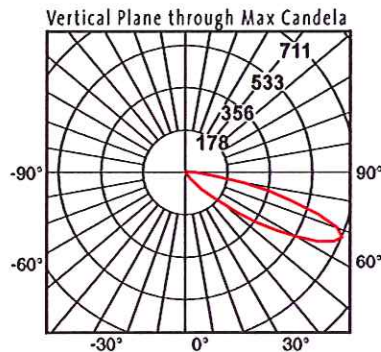
12W LED / 5000K CCT

Catalog # NT-4-LG3700-50
Report # S1207053-R1

- Ideal for applications requiring linear distributions.
- Maximum candela of 711 at 67.5° from vertical.
- IES classification - B0-U1-G1
- Mounting Height = 4' (1.22 M)
- 561 Delivered Lumens
- 40 Lumens per Watt

DOWNLOAD IES FILE:

http://www.selux.us/files/4/in/us/ext40r/fas_file/NT_IES.zip



Conversion Chart	
Values based on 3' (.9m) mounting height	
Mounting Height	Multiply
2.0' (.6m)	1.22
2.5' (.8m)	1.09
3.0' (.9m)	1.00
3.5' (1.1m)	0.92
4.0' (1.2m)	0.87

IES TM-21-11 Report Results	
Based on an ambient temperature of 25°C / 77°F	
• Reported L70 (6k)(hours) > 36,000	
• Calculated L70 (6k)(hours) 601,000	
• 25,000h lumen maintenance predicted to be 98.75%	

LED CCT Prorate Table	
Values based on Flux Binning	
CCT	Theoretical Multiplier
3000K	0.77
3500K	0.85
4000K	0.92
5000K	1.00

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens) **551**
Watts **14.06**
Lumens per Watt (Efficacy) **39**

Color Accuracy
Color Rendering Index (CRI) **76**

Light Color
Correlated Color Temperature (CCT) **4755 (Daylight)**

Warm White | Bright White | Daylight
2700K | 3000K | 4500K | 6500K

LED Lumen Maintenance Projection at 25,000 Hours at 25°C Ambient* **98.75%**

Warranty** **Yes**

All results, except LED Lumen Maintenance, are according to IESNA LM-79 2008. Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results. Electronically controlled to maintain light output over time. Information based on initial test performance. Wattage may increase over time.

* Based on TM-21 projections for the light source.
** See www.lightingfacts.com/products for details.

Registration Number: WYZA-MRQJZY (10-23-05-12)
Model Number: NT-4-LG3700-50+120 (Revised 03-16-12)
Type: Bollard

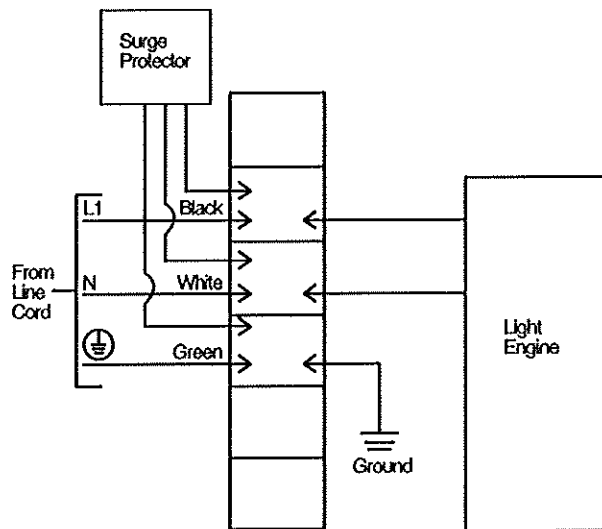
Notch Bollard LED

selux

Wiring

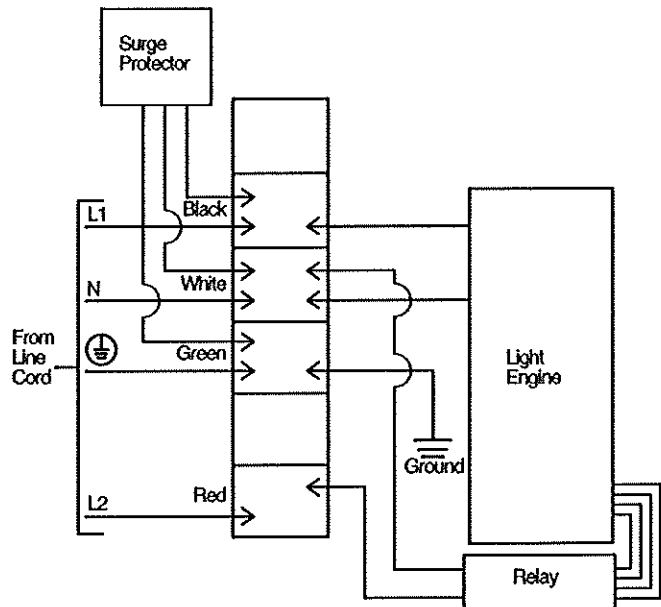
Standard Single Wiring

LG3700 at 120-277V for high output. LG3500 at 120-277V for low output.



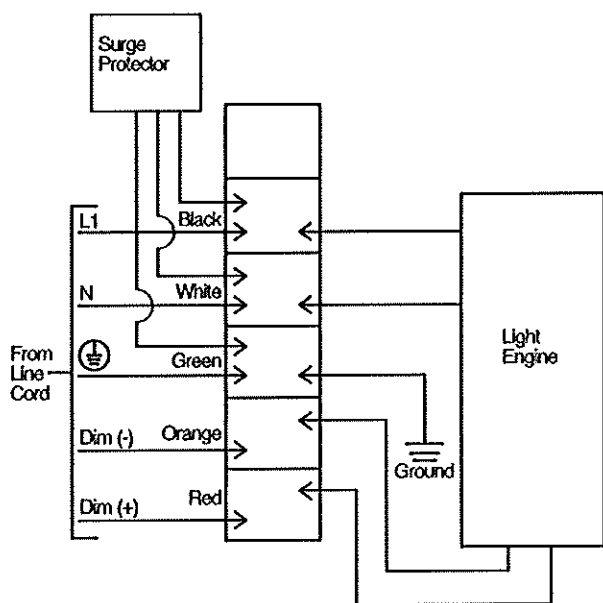
Hi-Lo Switching Option (HL) Wiring

LG3700 120-277V. When red is energized, power consumption will be at "Lo" level. Lo = 70% power consumption.



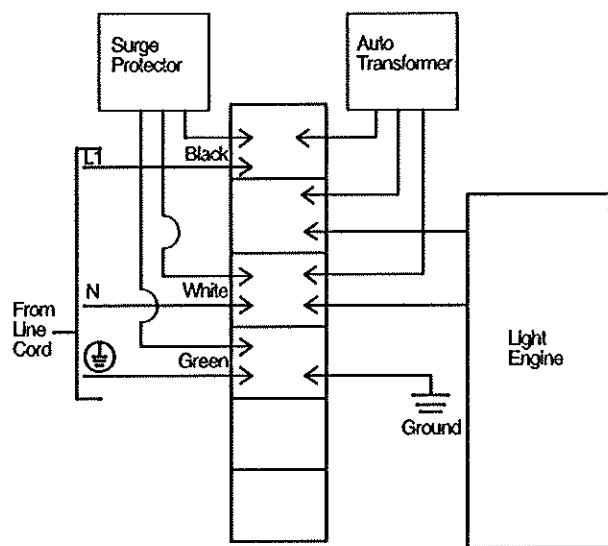
0-10V Dimming Option (DM) Wiring

LG3700 120-277V.



347/480V

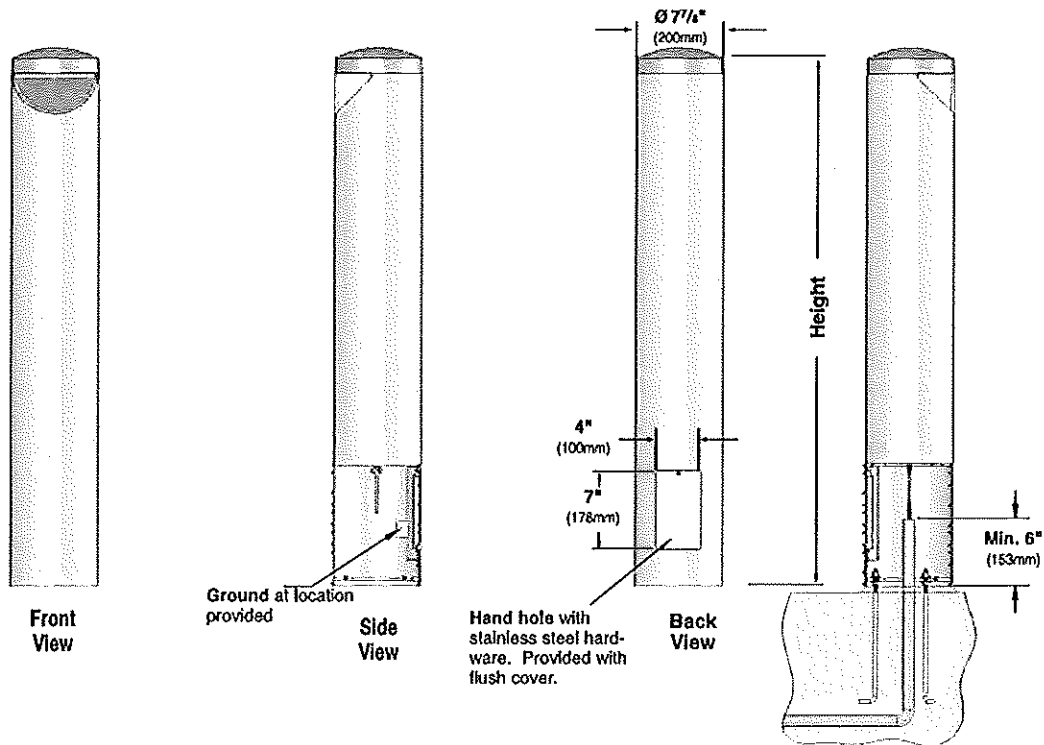
LG3700 at 347/480V for high output. LG3500 at 347/480V for low output.



Notch Bollard LED

selux

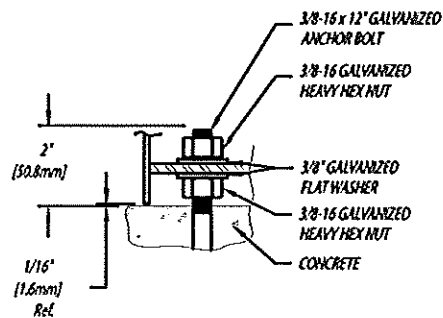
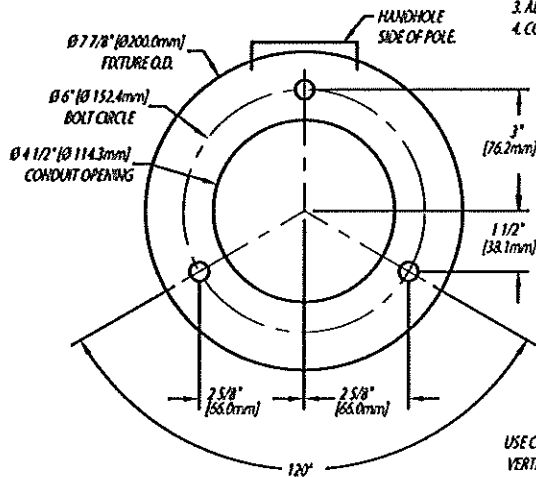
Profile



Anchorage Information

NOTES:

1. BOLLARD ORIENTATION IS CRITICAL, ROD & HAND HOLE LOCATIONS ARE CRITICAL
2. LOCATE SINGLE BOLT AT HAND HOLE LOCATION
3. ADEQUATE DRAINAGE MUST BE PROVIDED IN CONCRETE FOUNDATION
4. CONDUIT SHOULD BE STUBBED UP ABOVE THE CONCRETE FOOTING



BOLT CIRCLE DETAIL (Not to Scale)

USE CAUTION WHEN SETTING ANCHOR BOLTS. BOLTS MUST BE VERTICALLY STRAIGHT AND CENTERED ON DIMENSIONS SHOWN

**PHILIPS
Stonco**



Wall mount

LytePro LED Sconce

LPW16



Project: MIDWEST REGIONAL BANK

Location: _____

Cat.No: LPW16-78BZ

Type: Q

Quantity: _____

Notes: _____

The Philips Stonco LytePro LED Small Wall Sconce LPW16 features outstanding value in a compact, architectural design. This wall sconce features state-of-the-art, long-life and maintenance savings, in a combined discreet LED package with high precision over-optic design. This powerful and precise combination offers outstanding energy savings with excellent photometric performance. LPW16 is ideal for entryways and corridors in addition to wall lighting applications requiring strong lateral spacing and forward pattern projection.

Stocked luminaires – Ordering guide (LPW16 products are only available in the following stock luminaire configurations shown)

Catalog Number	Description	Master Pack, Qty	UPC Code
LPW16-58BZ	LPW16, 30W, 530mA, 4000K, 120-277V, Bronze textured paint	6	786034960540
LPW16-51BZPCB	LPW16, 30W, 530mA, 4000K, 120V, Bronze textured paint, w/button photocell	6	786034960557
LPW16-78BZ	LPW16, 40W, 700mA, 4000K, 120-277V, Bronze textured paint	6	786034960502
LPW16-78DGY	LPW16, 40W, 700mA, 4000K, 120-277V, Dark gray textured paint	6	786034960489
LPW16-71BZPCB	LPW16, 40W, 700mA, 4000K, 120V, Bronze textured paint, w/button photocell	6	786034960519

Stocked accessories - Ordering guide (Must be ordered separately)

Catalog Number	Description	Master Pack, Qty	UPC Code
LPWCVRPLT-BZ	LPW Universal wall cover mounting plate, Bronze textured paint	(none)	786034960618

LPW16 LytePro LED Small Wall Sconce

Features

LPW16 wall sconce delivers 3,374 lumens at 36W, with an efficacy of 93 lumens per watt. Other wattages available per charts noted below--.

- LPI6W-5, 30W LED may effectively replace 70-100W HID luminaires²
- LPI6W-7, 40W LED may effectively replace 100-150W HID luminaires²
- 4000K neutral white at 70 CRI (minimum) is standard
- Button photocell available in 120V, bronze luminaires only
- 5-year limited warranty, see philips.com/warranties for specific details

Performance/Specifications (LPI6W-7)

Distribution	Type 3
Initial Lumens	3,374
Average Wattage	36
Lumens/Watt	93
BUG Rating*	B1/U0/G1
Luminaire Weight	~6lbs (2.7Kg)

Performance/Specifications (LPI6W-5)

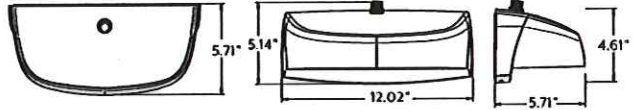
Distribution	Type 3
Initial Lumens	2,698
Average Wattage	28
Lumens/Watt	96
BUG Rating	B1/U0/G1
Luminaire Weight	~6lbs (2.7Kg)

Ratings/Approbations/Certifications

Ingress Protection	IP65 Optical
DLC Listed	DLC QPL
cETLus	Certified for use in wet locations
Rated Ambient Temperature	-40°C (-40°F) to 40°C (104°F)

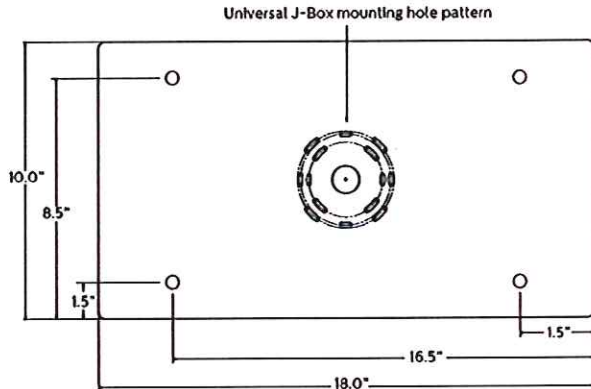
2. Comparable equivalency to HID and other lamp sources depends on multiple criteria including mounting height, fixture spacing, efficiency, performance and classification of the luminaire being replaced and application lighting criteria required for the given project.
3. PCB shown for placement only, available on specific models only (see ordering guide).

Fixture Dimensions³



Accessory Dimensions (ordered separately)

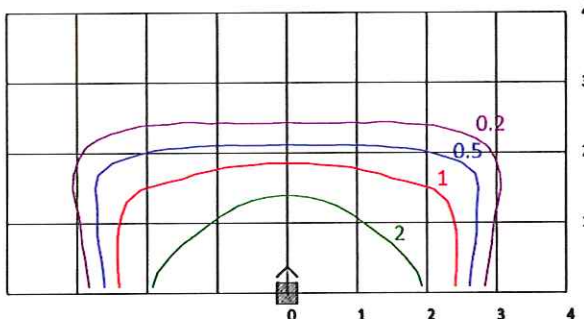
LPWCVRPLT-BZ LPW Universal wall cover mounting plate, 0.08" aluminum, bronze textured paint (used to cover larger pre-existing opening or surfaces, field installed). Offers same J-Box pattern as luminaire or may lagged to wall using (4) knockouts.



Distribution Pattern

LPW16-7 10' MOUNTING HEIGHT			
MOUNTING HEIGHT	8'	10'	12'
MULTIPLIER	1.60	1.0	0.70

- Isolines shown at 2.0, 1.0, 0.5, & 0.2 FC.
- Choose mounting height. Use MULTIPLIER (X)
EXISTING FC VALUE = NEW FC VALUE.
- FC values are based on Initial lumen output.
- Gridline spacing is in units of chosen mounting height
- For LPW16-5 configuration, scale down by 29%.



LPW16 LytePro LED Small Wall Sconce

General Description

The Philips Stonco LytePro LED Small Wall Sconce LPW16 combines excellent performance, design and value to meet the needs of the energy and budget conscious. The LPW16 is available for use in downward facing, surface wall mount applications, over recessed J-boxes or where power can be directly fed through back surface, whereby connections splices can be made inside the luminaire housing. Five SKU's are available as In-stock configurations only (2-day quick ship).

40W Model: Two standard units are available in two different finishes. 120V button photocell is available in bronze only. 30W Model: Standard units available in bronze only, with and without photocell. 30W model is California Title 24 compliant.

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates an integrated heat sink to maximize thermal performance and reliability. Backplate is corrosion free, composite polycarbonate, with built-in level bubble, offers integral interlocking hook and mount design for easy installation.

Mounting

Easy interlocking hook and mount housing/backplate design for easy installation. Mounts over 3.5", 4" octagonal J-boxes and single gang switch boxes or can be directly lagged to surface. Ensure proper steps for gasket/sealing luminaire to surface.

IP Rating

Optical compartment is IP65 rated.

LED Board and Array

Provides up to 93 lm/W in LPW16-7 and 96 lm/W in LPW16-5 at the system level. Standard color temp is 4000K +/- 250K, minimum 70 CRI.

Electrical

Driver efficiency (>90% standard). 120-277V. Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. Inherent surge protection up to (4KVA). RoHS compliant.

Listings

Product is cETLus listed suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). DesignLights Consortium® qualified. Stocked SKUs of the LPW family are made in China.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish.

Warranty

LPW16 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See philips.com/warranties for details.

LED Performance:

PREDICTED LUMEN DEPRECIATION DATA^{4,6}

Ambient Temp. °C	Calculated L70 hrs ⁵	Reported L70 Per TM-21 ^{3,6}	Calculated Lumen Maint. % @60,000 hrs
up to 40°C	>200,000 hrs	>60,000 hrs	94.0%

4. Calculated performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

5. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.

6. Reported per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.



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Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

PHILIPS LIGHTOLIER

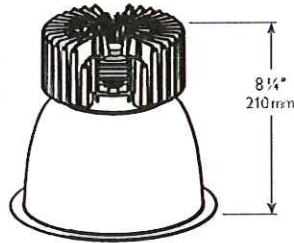
Downlighting

Calculite LED 7" Downlight

Round aperture,
Narrow, Medium & Wide beam
1500/2000/3500/6000lm



Total height of
Light engine
+
Reflector



Calculite LED 7" features an LED array of high brightness white light LEDs. The new LED boards in Calculite LED ensure a less than 2-step SDCM color variation between luminaires.

Complete product = Frame-in kit + Trim kit
Lumen package for the frame-in kit must match the trim kit.

Project: MIDWEST REGIONAL BANK
Location:
Cat.No: C7L35N1VBZ10V
Type: N
Lamps: Qty:
Notes: C7L1520DL40KWC
LWVB

Frame-in kit

example: C7L15NUVBZ10V

Series	Lumens	Installation	Input voltage	Version	Dimming	Options ⁵
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VB	<input type="checkbox"/>	<input type="checkbox"/>
C7L Calculite 7" LED round aperture	15 1500lm	N New construction R Remodeler	U Universal (120/277V)	VB Version B	Z10V 0-10V dimming LD Lutron driver	EM Emergency ¹ LC Chicago Plenum ³
	20 2000lm 35 3500lm 50 6000lm	N New construction R Remodeler ⁶	1 120V 2 277V	VB Version B	Z10V 0-10V dimming LD Lutron driver	EM Emergency ¹ LC Chicago Plenum ³
	C7L Calculite 7" LED round aperture (347v configurations)	15 1500lm 20 2000lm 35 3500lm	N New construction R Remodeler	1 120V	VB Version B	Z10V 0-10V dimming
50 6000lm		N New construction	2 277V	VB Version B	Z10V 0-10V dimming	-347 347V (for Canada) ²
CUL Calculite LED Universal aperture	15 1500lm	J J-box mount retrofit	U Universal (120/277V)	VB Version B	Z10V 0-10V dimming Existing wiring will determine if dimming is an option.	
	20 2000lm	J J-box mount retrofit	1 120V 2 277V	VB Version B	Z10V 0-10V dimming Existing wiring will determine if dimming is an option.	
	15 1500lm 20 2000lm	S Screw-in base retrofit	1 120V	VB Version B	Existing wiring will determine if dimming is an option.	

Trim kit

example: C7L1520DL35KWCCDPVB

Series	Lumens	Style	CCT	Beam	Reflector	Flange	Version ¹
C7L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VB
C7L Calculite 7" LED round aperture	1520 1500/2000/ 3500lm 50 6000lm	DL Downlight	27K 2700K 30K 3000K 35K 3500K 40K 4000K	N Narrow, 20° 0.3 s.c. ⁷ M Medium, 55° 0.8 s.c. W Wide, 70° 1.1 s.c.	CL Clear CCL Comfort clear CCD Comfort clear diffuse CCZ Champagne bronze WH White (painted)	W White (painted) P Polished (matches aperture) FT Flangeless (flush-mount) ^{4,5}	VB Version B

- Consult LED-EM spec sheet for Emergency (**EM**) option details and restrictions. Not available with Lutron driver (**LD**) dimming.
 - Consult factory for availability of other 347V (**-347**) option configurations.
 - Consult factory for availability for other Chicago Plenum (**LC**) option configurations. Not available for 6000 (**50**) lumen frame-in kits.
 - Accessory **CA7FMR** required for gypsum applications and flangeless (**FT**) trims (minimal 1/4" reflector flange).
 - Available for new construction (**N**) Installation frame-in kits only.
 - Available for 2000 (**20**) lumen frame-in kits only.
 - Available for 6000 (**50**) lumen trim kits only.
- Note: See page 3 for Energy Star[®] compatibility.



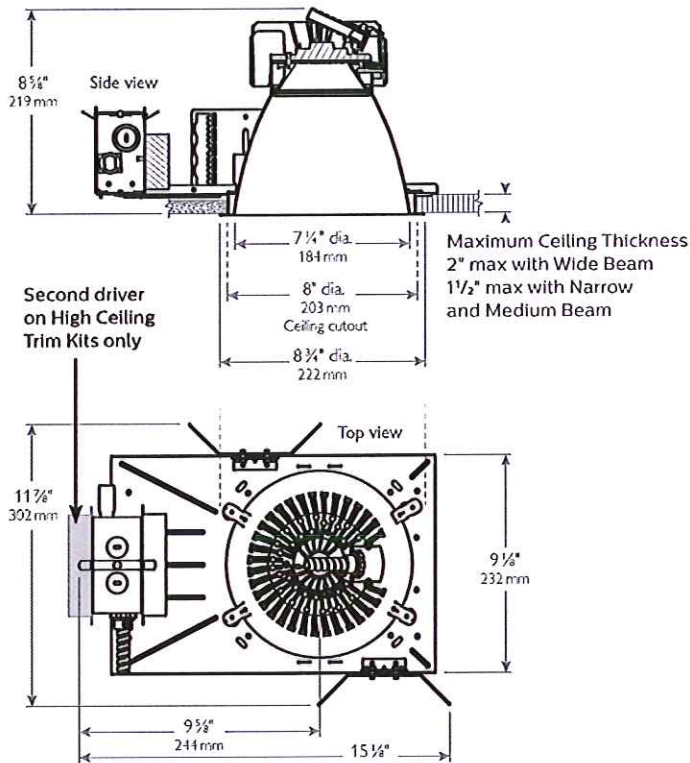
CA7FMR
Flangeless trim with plaster ring accessory.
(Required for gypsum installations)



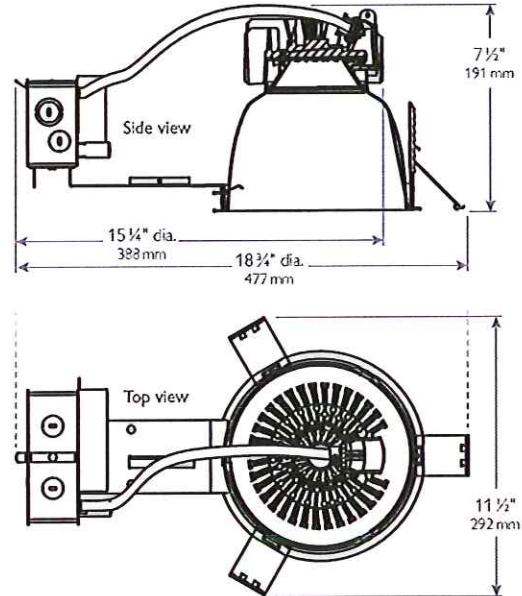
C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

New Construction



Remodeler



Frame-in kits

New construction

Mounting frame: Galvanized stamped steel for dry or plaster ceilings.

Vertical adjustment: Light engine adjusts in frame below ceilings up to 1 1/8" max.

Mounting brackets: Galvanized Steel. Adjustable through aperture. Use 3/4" or 1 1/2" lathing channel, 1/2" EMT or optional mounting bars (see Options and Accessories for optional mounting bars).

Remodeler

Compatibility: Flanged downlight only.
Power pack: Swivel junction box for tight plenum spaces. Snap-off covers permits wiring from top.

Spring holder: Galvanized steel. Accepts up to 2 1/2" (64mm) ceiling thickness.

Retrofit

Compatibility: Downlight only.

Capability: Converts 6" (153mm) or 7" (178mm) Lightolier Incandescent frame-in kit without additional wiring using existing Calculite E26 base.

Socket cup support: Spun steel. Holds Calculite Incandescent socket cup.
Socket extender: Phenolic E26 base. Connect to existing lamp holder.

CalculiteLED-7in-Downlight-C7LDLVB 09/15

Quick-ship

Philips is committed to providing customers with the products they need when they need them. For Service Smart (2 day) and Spec Smart (2 week) availability please reference the Philips Luminaire Smart Service Guide or contact your Philips Lighting representative. Quick-ship SKUs apply to the United States only.

Options and accessories

Dimming capability: 0-10V or Lutron dimming (see LED-DIM spec sheet).

Emergency capability: Inverter (see CP-60150 spec sheet - Z1 series). Integral (see LED-EM spec sheet - add "EM" suffix).

Sloped ceilings: Compatible with slope ceiling adapters (see SCA spec sheet).

Mounting bars:

- 1950 18" long (set of 2)
- 1951 27" long (set of 2)
- 7994 Wood joist telescoping mounting bars (minimum 13 1/4" and maximum 24 1/2")

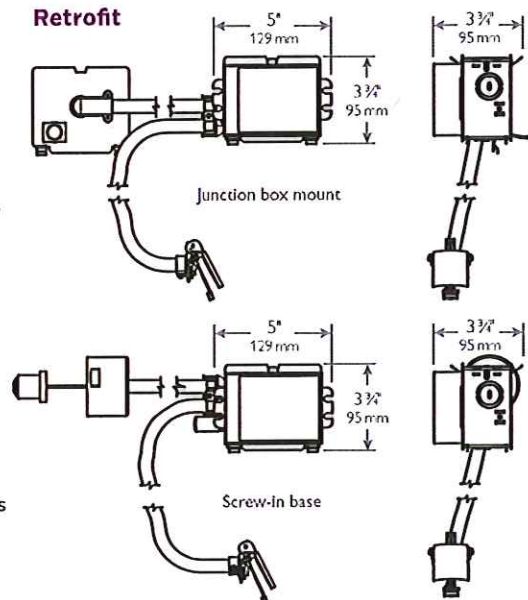
T-Bar anchor clips:

- 1956 For 18"/27" mounting bars (set of 4)

Decorative elements:

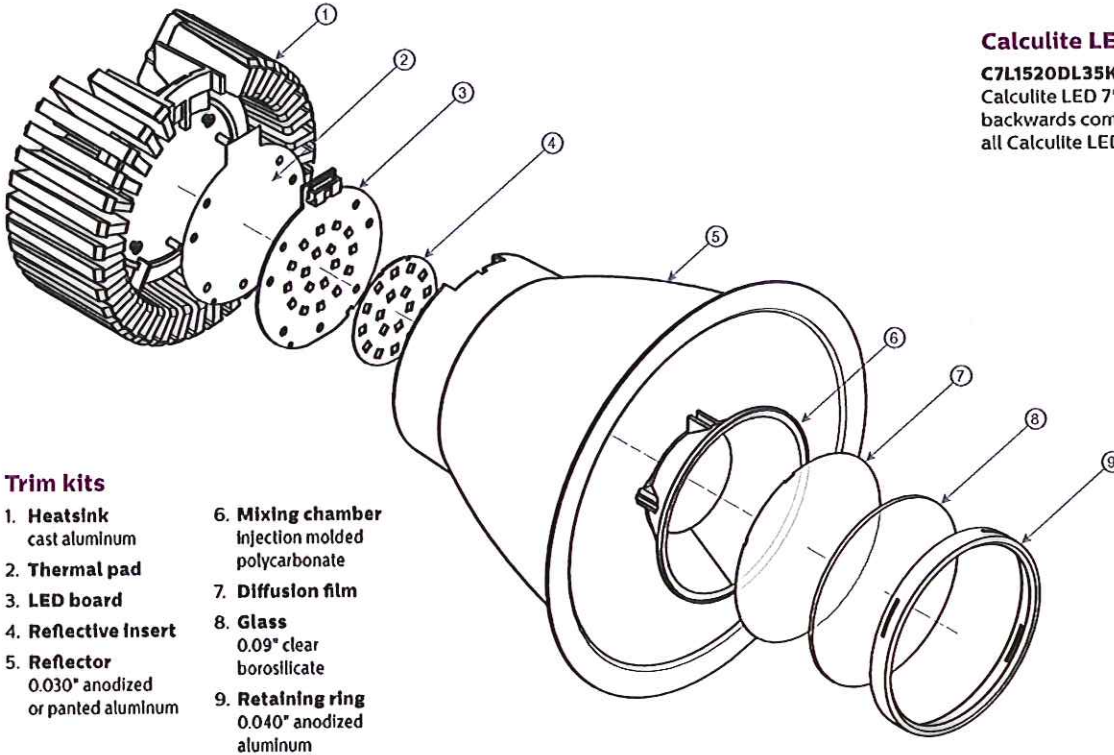
- D7A Consult 7in Vetro spec sheet

Retrofit



C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm



Calculite LED 7"
C7L1520DL35KWCCDPVB
 Calculite LED 7" Trim kits are backwards compatible with all Calculite LED 7" Frame-In Kits.

Trim kits

- | | |
|--|--|
| 1. Heatsink
cast aluminum | 6. Mixing chamber
Injection molded polycarbonate |
| 2. Thermal pad | 7. Diffusion film |
| 3. LED board | 8. Glass
0.09" clear borosilicate |
| 4. Reflective Insert | 9. Retaining ring
0.040" anodized aluminum |
| 5. Reflector
0.030" anodized or painted aluminum | |

Features

Ceiling cutout: 7" aperture; 8" (203mm).
Depth: 8 5/8" (219mm) including light engine.
Power connection: Attaches to light engine via push-in connector (on frame). Removable cover provides access.
Junction box: Allows inspection from below. UL listed for 8 No. 12 AWG, 90°C through branch circuit connectors.
Thermal protector: Meets NEC & UL requirements. Do not install insulation above or within 3" of luminaire.
Thermal Management: Heat sink and thermal design along with the clean room assembly process ensures specified performance levels are maintained.

ENERGY STAR®

All new construction (N) frame-in and trim kit configurations are ENERGY STAR® certified except for the following:
 - Trim Kits: Champagne bronze (CCZ) reflector finishes.
 - All 3500 lumen (35) optics configurations.
 - All 6000 lumen (50) optics configurations.
 - All emergency (EM) configurations.
 - All 347V configurations.

Electrical

Electronic power supply: 120 or 277V, 50/60Hz, encased, overload and short circuit protected, thermal regulation to protect against overheating, sound rating, "A", -20°C minimum starting temperature.
Rated life: Offers 60,000 hour rated life (3500lm offer 40,000 hour rated life) at 70% lumen maintenance (L70). Tested in accordance with IES LM-80-08 and TM-21-11.

Frame-In kit	Input volts	Input freq.	Input current	LED drive current	Input power*	LED power	THD	Power factor
C7L15 □ UVBZ10V	120V	50/60Hz	0.16A	300mA	18W	15W	<15%	>0.90
1500lm w/0-10V dimming	277V	50/60Hz	0.08A	300mA	18W	15W	<20%	>0.90
C7L20 □ _VBZ10V	120V	50/60Hz	0.20A	400mA	25W	20W	<15%	>0.90
2000lm w/0-10V dimming	277V	50/60Hz	0.09A	400mA	25W	20W	<15%	>0.90
C7L35N _VBZ10V	120V	50/60Hz	0.35A	700mA	41W	35W	<10%	>0.95
3500lm w/0-10V dimming	277V	50/60Hz	0.16A	700mA	41W	35W	<15%	>0.90

* +/- 5%

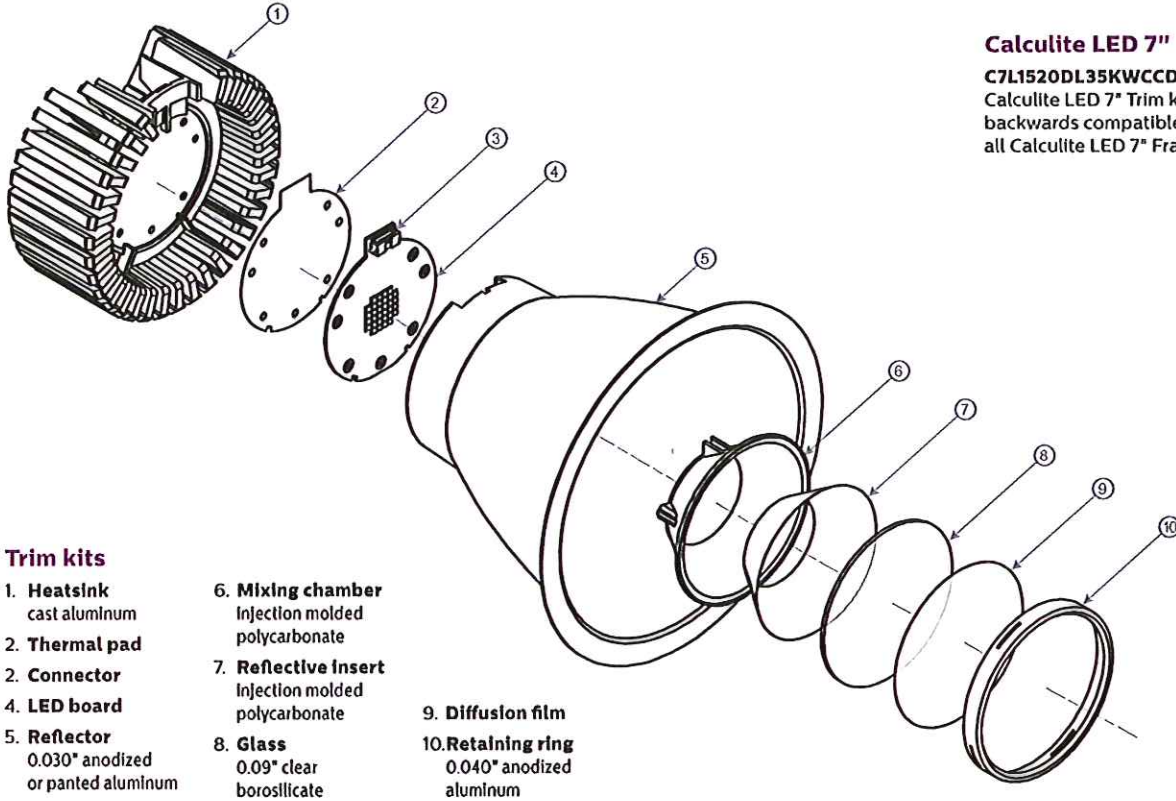
□ = Applies to both New Construction (N) and Remodeler (R) Installations.
 _ = Applies to both 120V (1) and 277V (2) Input voltages.

Labels

cULus, I.B.E.W.
 Suitable for wet locations.
 5 year warranty.
 ENERGY STAR® certified
 (see exclusions to the left).

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm



Calculite LED 7"
C7L1520DL35KWCCDPVB
 Calculite LED 7" Trim kits are backwards compatible with all Calculite LED 7" Frame-In Kits.

Trim kits

- | | | |
|--|--|---|
| <p>1. Heatsink
cast aluminum</p> <p>2. Thermal pad</p> <p>2. Connector</p> <p>4. LED board</p> <p>5. Reflector
0.030" anodized or panted aluminum</p> | <p>6. Mixing chamber
Injection molded polycarbonate</p> <p>7. Reflective Insert
Injection molded polycarbonate</p> <p>8. Glass
0.09" clear borosilicate</p> | <p>9. Diffusion film</p> <p>10. Retaining ring
0.040" anodized aluminum</p> |
|--|--|---|

Features

Ceiling cutout: 7" aperture; 8" (203mm).
Depth: 8 1/4" (210mm) including light engine.
Power connection: Attaches to light engine via push-in connector (on frame). Removable cover provides access.
Junction box: Allows inspection from below. UL listed for 8 No. 12 AWG, 90°C through branch circuit connectors.
Thermal protector: Meets NEC & UL requirements. Do not install insulation above or within 3" of luminaire.
Thermal Management: Heat sink and thermal design along with the clean room assembly process ensures specified performance levels are maintained.

Electrical

Electronic power supply: 120 or 277V, 50/60Hz, encased, overload and short circuit protected, thermal regulation to protect against overheating, sound rating, "A", -20°C minimum starting temperature.
Rated life: Offers 60,000 hour rated life at 70% lumen maintenance (L70). Tested in accordance with IES LM-80-08 and TM-21-11.

Frame-In kit Electrical specifications	Input volts	Input freq.	Input current	LED drive current	Input power*	LED power	THD factor	Power factor
C7L50N_VBZ10V 6000lm w/0-10V dimming	120V	50/60Hz	0.58A	650mA	70W	57W	<20%	>0.90
	277V	50/60Hz	0.27A	650mA	70W	57W	<20%	>0.90

* +/- 5%

— = Applies to both 120V (1) and 277V (2) Input voltages.

Labels

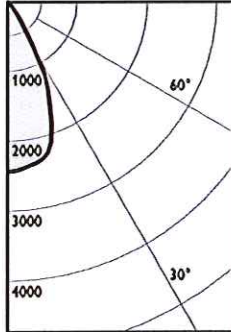
cULus, I.B.E.W.
 Suitable for wet locations.
 5 year warranty.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

18W LED, 3500K, 55° Medium 1500 lumen

Candela Curve



Frame: **C7L15NUVBZ10V**
 Trim: **C7L1520DL35KMCLWVB**
 CCT¹: 3500K
 Output lumens: 1716 lms
 Input watts²: 18.3 W
 Efficacy: **93.7 lm/w**
 CRI: 80 min
 Spacing Crit.: 0.8
 Beam Spread: 55°
 Report no³: 70IGFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1459	85.1%
0-40	1683	98.1%
0-60	1714	99.9%
0-90	1716	100.0%

Angle	Mean CP	Lumens
0	2450	
5	2419	229
10	2363	
15	2255	617
20	1869	
25	1386	613
30	734	
35	335	224
40	124	
45	25	29
50	4	
55	2	2
60	1	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	98	4.0'
6'	68	4.8'
7'	50	5.6'
8'	38	6.4'
9'	30	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	79.5	0.81
6'	52.2	0.53
7'	37.3	0.38
8'	31.0	0.32
9'	24.8	0.25

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

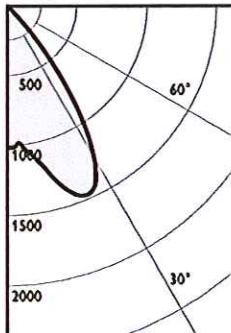
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%					
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%																									
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	106	106	100	100	100	100	100	100	100	100	100
	1	114	111	109	107	109	105	103	97	100	95	97	93	89	102	99	95	97	93	89	88	82	80	80	80	80
	2	109	105	101	98	103	97	95	88	95	88	84	80	77	95	91	87	85	81	78	77	75	75	75	75	75
	3	104	99	94	91	97	90	88	82	90	83	80	77	75	88	82	78	75	72	70	69	69	67	67	67	67
	4	100	93	88	84	92	84	82	78	84	78	75	72	70	80	75	72	70	68	66	65	64	64	64	64	64
	5	95	88	83	79	87	78	77	74	78	74	71	69	67	76	72	69	67	65	64	63	62	62	62	62	62
	6	91	83	78	74	83	74	73	70	74	71	69	67	65	73	70	68	66	64	63	62	62	62	62	62	62
	7	87	79	74	70	78	70	69	67	70	68	66	64	63	70	68	66	64	63	62	62	62	62	62	62	62
	8	84	75	70	66	75	66	65	64	66	64	63	62	61	66	64	63	62	61	61	61	61	61	61	61	61
	9	80	71	66	63	71	62	61	60	62	61	60	59	58	62	61	60	59	58	58	58	58	58	58	58	58
	10	77	68	63	59	68	59	58	57	59	58	57	56	55	59	58	57	56	55	55	55	55	55	55	55	55

18W LED, 3500K, 70° Wide 1500 lumen

Candela Curve



Frame: **C7L15NUVBZ10V**
 Trim: **C7L1520DL35KWCLWVB**
 CCT¹: 3500K
 Output lumens: 1733 lms
 Input watts²: 18.3 W
 Efficacy: **94.7 lm/w**
 CRI: 80 min
 Spacing Crit.: 1.1
 Beam Spread: 70°
 Report no³: 70ZGFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1118	64.5%
0-40	1635	94.4%
0-60	1730	99.8%
0-90	1733	100.0%

Angle	Mean CP	Lumens
0	1016	
5	991	99
10	1104	
15	1274	366
20	1441	
25	1458	653
30	1249	
35	850	518
40	402	
45	52	90
50	7	
55	5	4
60	3	
65	2	2
70	1	
75	1	1
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	41	5.5'
6'	28	6.6'
7'	21	7.7'
8'	16	8.8'
9'	13	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	78.4	0.81
6'	51.5	0.53
7'	36.8	0.38
8'	30.6	0.32
9'	24.5	0.25

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%					
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%																									
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	106	106	100	100	100	100	100	100	100	100	100
	1	113	110	108	105	108	104	104	101	104	101	100	98	93	100	98	95	97	93	89	88	82	80	80	80	80
	2	107	102	98	95	101	93	93	85	91	83	88	82	79	95	91	87	85	81	78	77	75	75	75	75	75
	3	102	95	90	85	93	85	85	78	85	78	75	72	70	88	82	78	75	72	70	69	69	67	67	67	67
	4	96	88	82	78	87	77	77	71	79	73	70	67	65	78	73	70	68	66	64	63	62	62	62	62	62
	5	91	82	76	71	81	71	71	65	73	68	65	63	61	72	68	65	63	62	61	61	61	61	61	61	61
	6	86	76	70	65	75	65	65	60	68	64	62	61	60	68	65	63	62	61	61	61	61	61	61	61	61
	7	81	71	65	60	70	60	60	56	66	62	60	59	58	65	62	60	59	58	58	58	58	58	58	58	58
	8	76	66	60	56	66	55	55	52	62	59	57	56	55	62	59	57	56	55	55	55	55	55	55	55	55
	9	72	62	56	51	61	51	51	48	58	55	53	52	51	58	55	53	52	51	51	51	51	51	51	51	51
	10	68	58	52	48	58	48	48	45	54	51	49	48	47	54	51	49	48	47	47	47	47	47	47	47	47

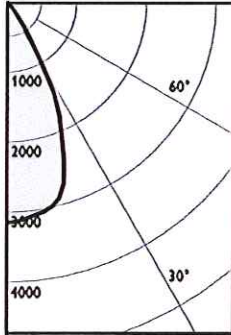
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Wattage controlled to within +/-5%.
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

25W LED, 3500K, 55° Medium 2000 lumen

Candela Curve



Frame: **C7L20N1VBZ10V**
 Trim: **C7L1520DL35KMCLWVB**
 CCT¹: 3500K
 Output lumens: 2209 lms
 Input watts²: 25.2 W
 Efficacy: **87.7 lm/w**
 CRI: 80 min
 Spacing Crit.: 0.8
 Beam Spread: 55°
 Report no³: 705GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1879	85.1%
0-40	2167	98.1%
0-60	2207	99.9%
0-90	2209	100.0%

Angle	Mean CP	Lumens
0	3153	
5	3110	295
10	3040	
15	2903	794
20	2410	
25	1785	790
30	943	
35	432	288
40	160	
45	32	38
50	5	
55	3	3
60	2	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	126	4.0'
6'	88	4.8'
7'	64	5.6'
8'	49	6.4'
9'	39	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	102.3	1.12
6'	67.2	0.73
7'	48.0	0.52
8'	40.0	0.44
9'	32.0	0.35

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

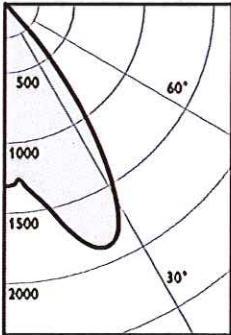
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	114	112	109	107	109	106	105	102	102	99	99	95
2	109	105	101	98	103	97	100	95	97	93	89	89
3	104	99	94	91	97	90	95	88	92	87	84	84
4	100	93	88	84	92	84	90	83	88	82	80	80
5	95	88	83	79	87	79	85	78	84	77	75	75
6	91	83	78	74	83	74	81	73	80	73	71	71
7	87	79	74	70	78	70	77	69	76	69	67	67
8	84	75	70	66	75	66	74	66	73	65	64	64
9	80	71	66	63	71	62	70	62	69	62	61	61
10	77	68	63	59	68	59	67	59	66	59	58	58

25W LED, 3500K, 70° Wide 2000 lumen

Candela Curve



Frame: **C7L20N1VBZ10V**
 Trim: **C7L1520DL35KWCLWVB**
 CCT¹: 3500K
 Output lumens: 2224 lms
 Input watts²: 25.2 W
 Efficacy: **88.3 lm/w**
 CRI: 80 min
 Spacing Crit.: 1.1
 Beam Spread: 70°
 Report no³: 706GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1432	64.4%
0-40	2098	94.3%
0-60	2220	99.8%
0-90	2224	100.0%

Angle	Mean CP	Lumens
0	1304	
5	1267	127
10	1413	
15	1631	468
20	1844	
25	1870	837
30	1604	
35	1095	666
40	519	
45	66	116
50	9	
55	6	6
60	4	
65	3	3
70	2	
75	1	1
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	52	5.5'
6'	36	6.6'
7'	27	7.7'
8'	20	8.8'
9'	16	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	100.7	1.12
6'	66.1	0.73
7'	47.2	0.52
8'	39.3	0.44
9'	31.5	0.35

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	113	110	108	106	108	104	104	101	100	98	93	93
2	107	102	98	95	101	93	97	91	94	89	86	86
3	102	95	90	85	93	85	91	83	88	82	79	79
4	96	88	82	78	87	77	85	76	83	75	73	73
5	91	82	76	71	81	71	79	70	77	69	67	67
6	86	76	70	65	75	65	74	65	72	64	62	62
7	81	71	65	60	70	60	69	60	68	59	57	57
8	76	66	60	56	66	55	65	55	63	55	53	53
9	72	62	56	51	61	51	60	51	60	51	49	49
10	68	58	52	48	58	48	57	48	56	47	46	46

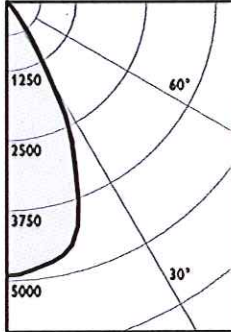
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Wattage controlled to within +/- 5%.
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

41W LED, 3500K, 55° Medium 3500 lumen

Candela Curve



Frame: C7L35N1VBZ10V
Trim: C7L1520DL35KMCLWVB

CCT: 3500K
Output lumens: 3434 lms
Input watts: 40.5W
Efficacy: 84.8 lm/w
CRI: 80 min
Spacing Crit.: 0.8
Beam Spread: 55°
Report no: 709GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	2920	85.0%
0-40	3370	98.1%
0-60	3432	99.9%
0-90	3434	100.0%

Angle	Mean CP	Lumens
0	4899	
5	4832	458
10	4724	
15	4511	1234
20	3746	
25	2772	1228
30	1475	
35	674	449
40	249	
45	50	58
50	7	
55	4	4
60	3	
65	2	2
70	1	
75	1	1
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	196	4.0'
6'	136	4.8'
7'	100	5.6'
8'	77	6.4'
9'	60	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	159.1	1.80
6'	104.4	1.18
7'	74.6	0.84
8'	62.2	0.70
9'	49.7	0.56

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
CCL = 95%
CCD = 87%
CCZ = 63%
WH = 87%

CCT Adjust. factors

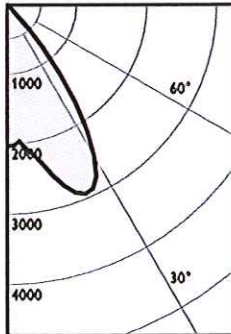
4000K = 103%
3500K = 100%
3000K = 97%
2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	100		
	1	114	112	109	107	109	106	105	102	102	99	95	95	93	89	89	89	89	89		
	2	109	105	101	98	103	97	100	95	97	93	89	89	89	89	89	89	89	89		
	3	104	99	94	91	97	90	95	88	92	87	84	84	84	84	84	84	84	84		
	4	100	93	88	84	92	84	90	83	88	82	80	80	80	80	80	80	80	80		
	5	95	88	83	79	87	79	85	78	84	77	75	75	75	75	75	75	75	75		
	6	91	83	78	74	83	74	81	73	80	73	71	71	71	71	71	71	71	71		
	7	87	79	74	70	78	70	77	69	76	69	67	67	67	67	67	67	67	67		
	8	84	75	70	66	75	66	74	66	73	65	64	64	64	64	64	64	64	64		
	9	80	71	66	63	71	62	70	62	69	62	61	61	61	61	61	61	61	61		
	10	77	68	63	59	68	59	67	59	66	59	58	58	58	58	58	58	58	58		

41W LED, 3500K, 70° Wide 3500 lumen

Candela Curve



Frame: C7L35N1VBZ10V
Trim: C7L1520DL35KWCLWVB

CCT: 3500K
Output lumens: 3446 lms
Input watts: 40.5W
Efficacy: 85.1 lm/w
CRI: 80 min
Spacing Crit.: 1.1
Beam Spread: 70°
Report no: 710GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	2217	64.3%
0-40	3249	94.3%
0-60	3439	99.8%
0-90	3446	100.0%

Angle	Mean CP	Lumens
0	2019	
5	1962	197
10	2186	
15	2523	724
20	2853	
25	2896	1297
30	2488	
35	1694	1032
40	804	
45	107	181
50	14	
55	10	9
60	7	
65	4	4
70	3	
75	2	2
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	81	5.5'
6'	56	6.6'
7'	41	7.7'
8'	32	8.8'
9'	25	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	155.9	1.80
6'	102.3	1.18
7'	73.1	0.84
8'	60.9	0.70
9'	48.7	0.56

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
CCL = 95%
CCD = 87%
CCZ = 63%
WH = 87%

CCT Adjust. factors

4000K = 103%
3500K = 100%
3000K = 97%
2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	100		
	1	113	110	108	105	108	104	104	101	100	98	93	93	93	93	93	93	93	93		
	2	107	102	98	94	100	93	97	91	94	89	86	86	86	86	86	86	86	86		
	3	102	95	90	85	93	85	91	83	88	82	79	79	79	79	79	79	79	79		
	4	96	88	82	78	87	77	85	76	83	75	73	73	73	73	73	73	73	73		
	5	91	82	76	71	81	71	79	70	77	69	67	67	67	67	67	67	67	67		
	6	86	76	70	65	75	65	74	65	72	64	62	62	62	62	62	62	62	62		
	7	81	71	65	60	70	60	69	60	68	59	57	57	57	57	57	57	57	57		
	8	76	66	60	55	66	55	65	55	63	55	53	53	53	53	53	53	53	53		
	9	72	62	56	51	61	51	60	51	60	51	49	49	49	49	49	49	49	49		
	10	68	58	52	48	58	48	57	47	56	47	46	46	46	46	46	46	46	46		

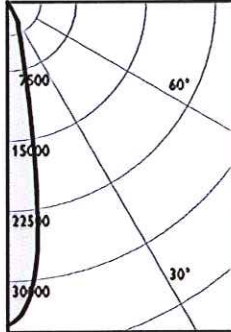
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2. Wattage controlled to within +/- 5%.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

69W LED, 3500K, 20° Narrow 6000 lumen

Candela Curve



Frame: C7L50N1VBZ10V
 Trim: C7L50DL35KNCLWVB
 CCT¹: 3500K
 Output lumens: 6174 lms
 Input watts²: 69.4 W
 Efficacy: 89.0 lm/w
 CRI: 80 min
 Spacing Crit.: 0.3
 Beam Spread: 20°
 Report no³: 327GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	5902	95.6%
0-40	6133	99.3%
0-60	6169	99.9%
0-90	6174	100.0%

Angle	Mean CP	Lumens
0	34747	
5	30669	2475
10	16592	
15	6860	2151
20	4015	
25	2810	1276
30	1411	
35	146	231
40	100	
45	39	33
50	5	
55	2	3
60	3	
65	2	2
70	3	
75	1	2
80	0	
85	1	1
90	1	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft) [*]
5'	1390	1.5'
6'	965	1.8'
7'	709	2.1'
8'	543	2.4'
9'	429	2.7'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	294	3.08
6'	193	2.02
7'	138	1.44
8'	115	1.20
9'	92	0.96

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

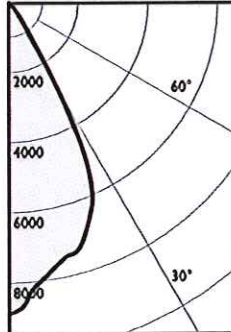
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	106	106	100	100	97	97		
1	115	113	111	109	111	108	107	104	103	101	103	99	100	97	93	91	94	90	88		
2	111	108	105	102	106	101	100	95	97	93	91	94	90	88	85	83	81	78	76		
3	108	103	100	97	102	96	100	95	97	93	91	94	90	88	85	83	81	78	76		
4	105	99	95	92	98	92	96	91	94	90	88	85	83	81	78	76	74	72	70		
5	102	96	92	89	95	88	93	88	92	87	85	83	81	78	76	74	72	70	68		
6	99	93	88	85	92	85	91	85	89	84	83	81	78	76	74	72	70	68	66		
7	96	90	86	83	89	82	88	82	87	82	80	78	76	74	72	70	68	66	64		
8	93	87	83	80	86	80	86	80	85	79	78	76	74	72	70	68	66	64	62		
9	91	84	80	78	84	78	83	77	83	77	76	74	72	70	68	66	64	62	60		
10	89	82	78	76	82	76	81	75	81	75	74	72	70	68	66	64	62	60	58		

69W LED, 3500K, 55° Medium 6000 lumen

Candela Curve



Frame: C7L50N1VBZ10V
 Trim: C7L50DL35KMCLWVB
 CCT¹: 3500K
 Output lumens: 5963 lms
 Input watts²: 69.2 W
 Efficacy: 86.2 lm/w
 CRI: 80 min
 Spacing Crit.: 0.8
 Beam Spread: 55°
 Report no³: 329GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	5171	86.7%
0-40	5833	97.8%
0-60	5954	99.8%
0-90	5963	100.0%

Angle	Mean CP	Lumens
0	8911	
5	8195	770
10	7673	
15	7395	2052
20	6676	
25	5541	2348
30	2654	
35	839	662
40	421	
45	80	113
50	13	
55	10	8
60	7	
65	7	5
70	4	
75	3	4
80	1	
85	0	1
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft) [*]
5'	356	4.0'
6'	248	4.8'
7'	182	5.6'
8'	139	6.4'
9'	110	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	276	3.07
6'	181	2.01
7'	129	1.44
8'	108	1.20
9'	86	0.96

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	116	116	111	111	106	106	100	100	106	106	100	100	97	97			
1	114	111	109	107	109	105	105	102	102	99	95	97	93	89	84	81	78	76			
2	109	105	101	98	103	97	100	95	97	93	91	94	90	88	85	83	81	78			
3	104	98	94	90	97	90	95	88	92	87	85	83	81	78	76	74	72	70			
4	100	93	88	84	92	84	90	83	88	82	79	75	73	71	69	67	65	63			
5	95	88	83	79	87	78	85	78	84	77	75	73	71	69	67	65	63	61			
6	91	83	78	74	82	74	81	73	80	73	71	69	67	65	63	61	59	57			
7	87	79	73	70	78	69	77	69	76	69	67	65	63	61	59	57	55	53			
8	83	75	69	66	74	66	73	65	72	65	64	62	60	58	56	54	52	50			
9	80	71	66	62	71	62	70	62	69	62	60	58	56	54	52	50	48	46			
10	77	68	63	59	67	59	67	59	66	59	57	55	53	51	49	47	45	43			

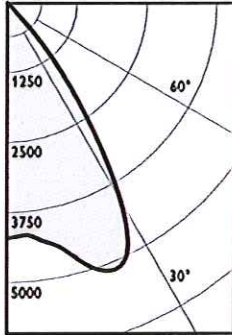
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 2. Wattage controlled to within +/- 5%.
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

69W LED, 3500K, 70° Wide 6000 lumen

Candela Curve



Frame: C7L50N1VBZ10V
Trim: C7L50DL35KWCLWVB

CCT¹: 3500K
Output lumens: 5889 lms
Input watts²: 69.2 W
Efficacy: 85.1 lm/w
CRI: 80 min
Spacing Crit.: 1.1
Beam Spread: 70°
Report no³: 328GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	4013	68.1%
0-40	5608	95.2%
0-60	5881	99.9%
0-90	5889	100.0%

Angle	Mean CP	Lumens
0	4197	
5	4120	404
10	4350	
15	4705	1348
20	5106	
25	5077	2261
30	4159	
35	2538	1595
40	1197	
45	150	265
50	11	
55	10	8
60	7	
65	4	5
70	3	
75	2	2
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft) [*]
5'	168	5.5'
6'	117	6.6'
7'	86	7.7'
8'	66	8.8'
9'	52	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	268	3.07
6'	176	2.01
7'	125	1.44
8'	105	1.20
9'	84	0.96

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
CCL = 95%
CCD = 87%
CCZ = 63%
WH = 87%

CCT Adjust. factors

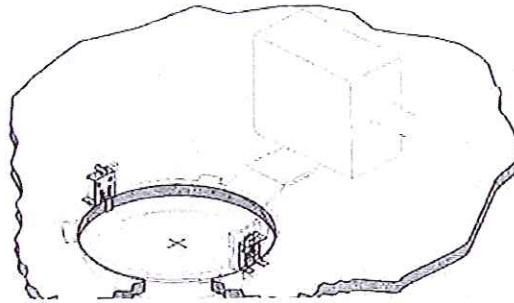
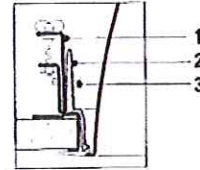
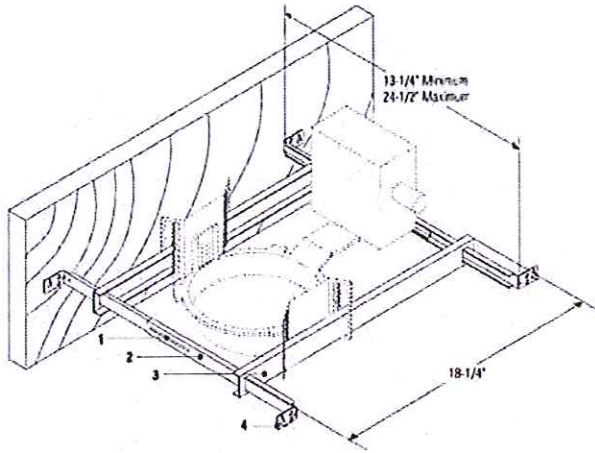
4000K = 103%
3500K = 100%
3000K = 97%
2700K = 87%

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	113	111	108	106	108	104	104	101	101	101	98	93
2	108	103	99	95	101	94	98	92	95	90	86	86
3	102	95	90	86	94	86	91	84	89	83	80	80
4	97	89	83	79	88	78	85	77	83	76	74	74
5	91	83	77	72	82	72	80	71	78	71	69	69
6	86	77	71	67	76	66	75	66	74	66	64	64
7	82	72	66	62	72	61	70	61	69	61	59	59
8	78	68	61	57	67	57	66	57	65	57	55	55
9	74	63	57	53	63	53	62	53	61	53	51	51
10	70	60	54	50	59	50	58	49	58	49	48	48

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Wattage controlled to within +/- 5%.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.





Catalog No.

7994 Wood Joist Mounting Bars

Catalog No.

7998 Retaining Clips – Package of (2)

Features

1. **Adjustment Slot:** Lockable with screws.
2. **Telescoping Mounting Bars:** Allow fixture to be positioned anywhere between joists spaced up to 24" on center. Can also be used on suspended ceilings.
3. **Crossbars:** Allow fixture to be positioned lengthwise or crosswise to the wood joist.
4. **Nail Tab**

Options & Accessories

- Mounting Bars: 1950 - 18" Set of (2)
 1951 - 27" Set of (2)
- T-Bar Anchor Clips: 1956 - Set of (4), for use with above

Features

1. **Retaining Clips:** 24 ga. steel with blackoxide finish.
2. **Mounting Frame:** Calculite® Modular System die-cast mounting frame (order separately) with integral brackets attaches directly to existing ceiling retaining clips in place of the fixture's standard mounting bars.
3. **Mounting Screws:** (4) for mounting on each side.

Job Information	Type: N
Job Name: MIDWEST REGIONAL BANK	
Cat. No.: 1951	
Lamp(s):	
Notes:	

Lightolier a Genlyte Thomas Company www.lightolier.com
 631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
 We reserve the right to change details of design, materials and finish.
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LIGHTOLIER®

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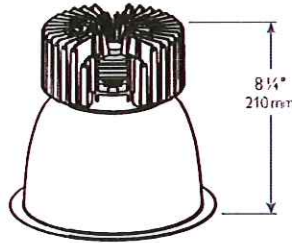


Downlighting

Calculite LED 7" Downlight

Round aperture,
Narrow, Medium & Wide beam
1500/2000/3500/6000lm

Total height of
Light engine
+
Reflector



Calculite LED 7" features an LED array of high brightness white light LEDs. The new LED boards in Calculite LED ensure a less than 2-step SDCM color variation between luminaires.

Complete product = Frame-In kit + Trim kit
Lumen package for the frame-in kit must match the trim kit.

Project: MIDWEST REGIONAL BANK
Location: C7L50N1VBZ10V /
Cat.No:
Type: M
Lamps: Qty:
Notes: C7L50DL40KWCL
WVB

Frame-in kit

example: C7L15NUVBZ10V

Series	Lumens	Installation	Input voltage	Version	Dimming	Options ⁵
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VB	<input type="checkbox"/>	<input type="checkbox"/>
C7L Calculite 7" LED round aperture	15 1500lm	N New construction R Remodeler	U Universal (120/277V)	VB Version B	Z10V 0-10V dimming LD Lutron driver	EM Emergency ¹ LC Chicago Plenum ³
	20 2000lm 35 3500lm 50 6000lm	N New construction R Remodeler ⁶	1 120V 2 277V	VB Version B	Z10V 0-10V dimming LD Lutron driver	EM Emergency ¹ LC Chicago Plenum ³
	C7L Calculite 7" LED round aperture (347v configurations)	15 1500lm 20 2000lm 35 3500lm 50 6000lm	N New construction R Remodeler	1 120V 2 277V	VB Version B	Z10V 0-10V dimming
CUL Calculite LED Universal aperture	15 1500lm 20 2000lm	J J-box mount retrofit	U Universal (120/277V)	VB Version B	Z10V 0-10V dimming Existing wiring will determine if dimming is an option.	
	15 1500lm 20 2000lm	J J-box mount retrofit	1 120V 2 277V	VB Version B	Z10V 0-10V dimming Existing wiring will determine if dimming is an option.	
	15 1500lm 20 2000lm	S Screw-in base retrofit	1 120V	VB Version B	Existing wiring will determine if dimming is an option.	

Trim kit

example: C7L1520DL35KWCCDPVB

Series	Lumens	Style	CCT	Beam	Reflector	Flange	Version ¹
C7L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VB
C7L Calculite 7" LED round aperture	1520 1500/2000/3500lm 50 6000lm	DL Downlight	27K 2700K 30K 3000K 35K 3500K 40K 4000K	N Narrow, 20° 0.3 s.c. ⁷ M Medium, 55° 0.8 s.c. W Wide, 70° 1.1 s.c.	CL Clear CCL Comfort clear CCD Comfort clear diffuse CCZ Champagne bronze WH White (painted)	W White (painted) P Polished (matches aperture) FT Flangeless (flush-mount) ^{4,5}	VB Version B

- Consult LED-EM spec sheet for Emergency (**EM**) option details and restrictions. Not available with Lutron driver (**LD**) dimming.
 - Consult factory for availability of other 347V (**-347**) option configurations.
 - Consult factory for availability for other Chicago Plenum (**LC**) option configurations. Not available for 6000 (**50**) lumen frame-in kits.
 - Accessory **CA7FMR** required for gypsum applications and flangeless (**FT**) trims (minimal 1/4" reflector flange).
 - Available for new construction (**N**) installation frame-in kits only.
 - Available for 2000 (**20**) lumen frame-in kits only.
 - Available for 6000 (**50**) lumen trim kits only.
- Note: See page 3 for Energy Star[®] compatibility.



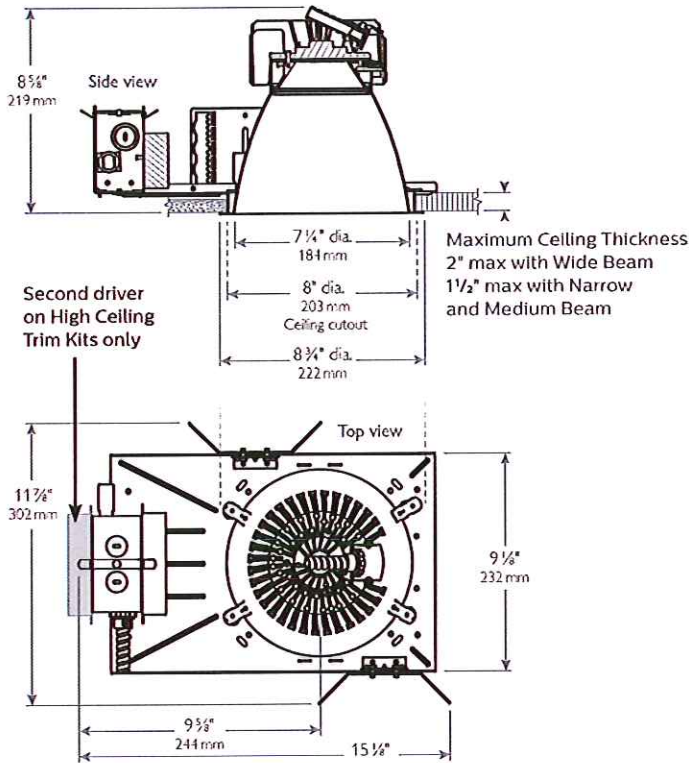
CA7FMR
Flangeless trim with plaster ring accessory.
(Required for gypsum installations)



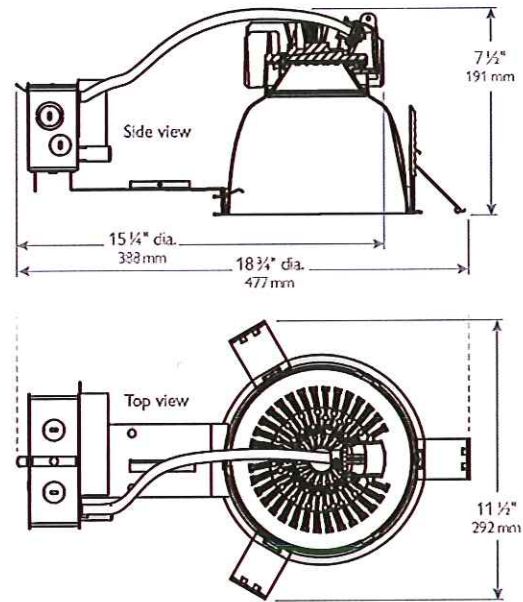
C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

New Construction



Remodeler



Frame-in kits

New construction

Mounting frame: Galvanized stamped steel for dry or plaster ceilings.

Vertical adjustment: Light engine adjusts in frame below ceilings up to 1 1/8" max.

Mounting brackets: Galvanized Steel. Adjustable through aperture. Use 3/4" or 1 1/2" lathing channel, 1/2" EMT or optional mounting bars (see Options and Accessories for optional mounting bars).

Remodeler

Compatibility: Flanged downlight only.
Power pack: Swivel junction box for tight plenum spaces. Snap-off covers permits wiring from top.

Spring holder: Galvanized steel. Accepts up to 2 1/2" (64mm) ceiling thickness.

Retrofit

Compatibility: Downlight only.

Capability: Converts 6" (153mm) or 7" (178mm) Lightolier incandescent frame-in kit without additional wiring using existing Calculite E26 base.

Socket cup support: Spun steel. Holds Calculite incandescent socket cup.
Socket extender: Phenolic E26 base. Connect to existing lamp holder.

CalculiteLED-7in-Downlight-C7LDLVB 09/15

Quick-ship

Phillips is committed to providing customers with the products they need when they need them. For Service Smart (2 day) and Spec Smart (2 week) availability please reference the Phillips Luminaire Smart Service Guide or contact your Phillips Lighting representative. Quick-ship SKUs apply to the United States only.

Options and accessories

Dimming capability: 0-10V or Lutron dimming (see LED-DIM spec sheet).

Emergency capability: Inverter (see CP-60150 spec sheet - Z1 series). Integral (see LED-EM spec sheet - add "EM" suffix).

Sloped ceilings: Compatible with slope ceiling adapters (see SCA spec sheet).

Mounting bars:
1950 18" long (set of 2)
1951 27" long (set of 2)
7994 Wood Joist telescoping mounting bars (minimum 13 1/4" and maximum 24 1/2")

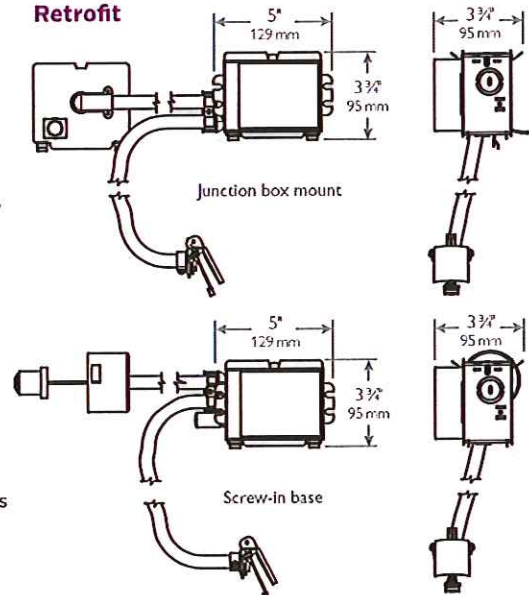
T-Bar anchor clips:

1956 For 18"/27" mounting bars (set of 4)

Decorative elements:

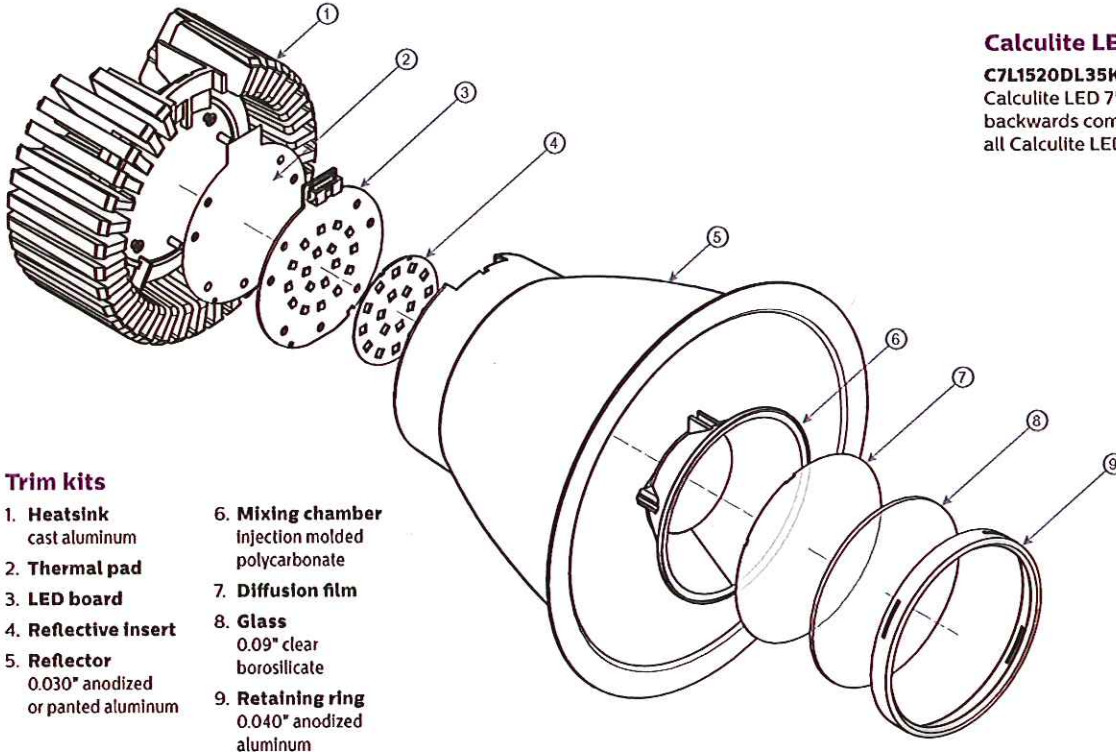
D7A Consult 7in Vetro spec sheet

Retrofit



C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm



Calculite LED 7"
C7L1520DL35KWCCDPVB
 Calculite LED 7" Trim kits are backwards compatible with all Calculite LED 7" Frame-In Kits.

Trim kits

- | | |
|--|--|
| 1. Heatsink
cast aluminum | 6. Mixing chamber
injection molded polycarbonate |
| 2. Thermal pad | 7. Diffusion film |
| 3. LED board | 8. Glass
0.09" clear borosilicate |
| 4. Reflective insert | 9. Retaining ring
0.040" anodized aluminum |
| 5. Reflector
0.030" anodized or painted aluminum | |

Features

Ceiling cutout: 7" aperture; 8" (203mm).
Depth: 8 5/8" (219mm) including light engine.
Power connection: Attaches to light engine via push-in connector (on frame). Removable cover provides access.
Junction box: Allows inspection from below. UL listed for 8 No. 12 AWG, 90°C through branch circuit connectors.
Thermal protector: Meets NEC & UL requirements. Do not install insulation above or within 3" of luminaire.
Thermal Management: Heat sink and thermal design along with the clean room assembly process ensures specified performance levels are maintained.

ENERGY STAR®

All new construction (N) frame-in and trim kit configurations are ENERGY STAR® certified except for the following:
 - Trim Kits: Champagne bronze (CCZ) reflector finishes.
 - All 3500 lumen (35) optics configurations.
 - All 6000 lumen (50) optics configurations.
 - All emergency (EM) configurations.
 - All 347V configurations.

Electrical

Electronic power supply: 120 or 277V, 50/60Hz, enclosed, overload and short circuit protected, thermal regulation to protect against overheating, sound rating. "A", -20°C minimum starting temperature.
Rated life: Offers 60,000 hour rated life (3500lm offer 40,000 hour rated life) at 70% lumen maintenance (L70). Tested in accordance with IES LM-80-08 and TM-21-11.

Labels

cULus, I.B.E.W.
 Suitable for wet locations.
 5 year warranty.
 ENERGY STAR® certified
 (see exclusions to the left).

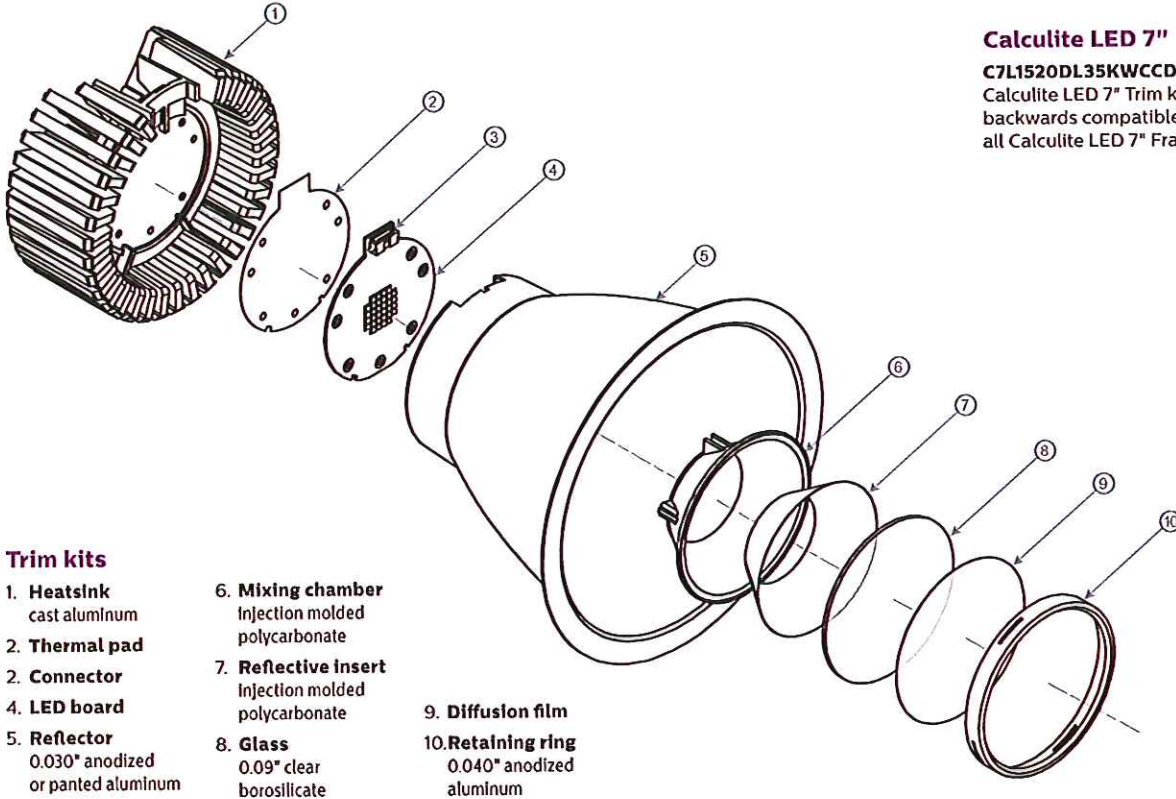
Frame-in kit Electrical specifications	Input volts	Input freq.	Input current	LED drive current	Input power*	LED power	THD factor	Power factor
C7L15 <input type="checkbox"/> UVBZ10V 1500lm w/0-10V dimming	120V	50/60Hz	0.16A	300mA	18W	15W	<15%	>0.90
	277V	50/60Hz	0.08A	300mA	18W	15W	<20%	>0.90
C7L20 <input type="checkbox"/> _VBZ10V 2000lm w/0-10V dimming	120V	50/60Hz	0.20A	400mA	25W	20W	<15%	>0.90
	277V	50/60Hz	0.09A	400mA	25W	20W	<15%	>0.90
C7L35N _VBZ10V 3500lm w/0-10V dimming	120V	50/60Hz	0.35A	700mA	41W	35W	<10%	>0.95
	277V	50/60Hz	0.16A	700mA	41W	35W	<15%	>0.90

* ±7.5%

= Applies to both New Construction (N) and Remodeler (R) Installations.
 — = Applies to both 120V (1) and 277V (2) Input voltages.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm



Calculite LED 7"
C7L1520DL35KWCCDPVB
 Calculite LED 7" Trim kits are backwards compatible with all Calculite LED 7" Frame-In Kits.

Trim kits

- | | | |
|--|---|---|
| 1. Heatsink
cast aluminum | 6. Mixing chamber
Injection molded polycarbonate | 9. Diffusion film |
| 2. Thermal pad | 7. Reflective insert
Injection molded polycarbonate | 10. Retaining ring
0.040" anodized aluminum |
| 2. Connector | 8. Glass
0.09" clear borosilicate | |
| 4. LED board | | |
| 5. Reflector
0.030" anodized or painted aluminum | | |

Features

Ceiling cutout: 7" aperture; 8" (203mm).
Depth: 8 1/4" (210mm) including light engine.
Power connection: Attaches to light engine via push-in connector (on frame). Removable cover provides access.
Junction box: Allows inspection from below. UL listed for 8 No. 12 AWG, 90°C through branch circuit connectors.
Thermal protector: Meets NEC & UL requirements. Do not install insulation above or within 3" of luminaire.
Thermal Management: Heat sink and thermal design along with the clean room assembly process ensures specified performance levels are maintained.

Electrical

Electronic power supply: 120 or 277V, 50/60Hz, enclosed, overload and short circuit protected, thermal regulation to protect against overheating, sound rating, "A", -20°C minimum starting temperature.
Rated life: Offers 60,000 hour rated life at 70% lumen maintenance (L70). Tested in accordance with IES LM-80-08 and TM-21-11.

Frame-In kit Electrical specifications	Input volts	Input freq.	Input current	LED drive current	Input power*	LED power	THD factor	Power factor
C7L50N_VBZ10V 6000lm w/0-10V dimming	120V	50/60Hz	0.58A	650mA	70W	57W	<20%	>0.90
	277V	50/60Hz	0.27A	650mA	70W	57W	<20%	>0.90

* +/- 5%

— = Applies to both 120V (1) and 277V (2) Input voltages.

Labels

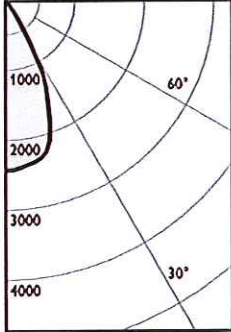
cULus, I.B.E.W.
 Suitable for wet locations.
 5 year warranty.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

18W LED, 3500K, 55° Medium 1500 lumen

Candela Curve



Frame: C7L15NUVBZ10V
 Trim: C7L1520DL35KMCLWVB
 CCT: 3500K
 Output lumens: 1716 lms
 Input watts: 18.3 W
 Efficacy: 93.7 lm/w
 CRI: 80 min
 Spacing Crit: 0.8
 Beam Spread: 55°
 Report no: 70IGFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1459	85.1%
0-40	1683	98.1%
0-60	1714	99.9%
0-90	1716	100.0%

Angle	Mean CP	Lumens
0	2450	
5	2419	229
10	2363	
15	2255	617
20	1869	
25	1386	613
30	734	
35	335	224
40	124	
45	25	29
50	4	
55	2	2
60	1	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	98	4.0'
6'	68	4.8'
7'	50	5.6'
8'	38	6.4'
9'	30	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	79.5	0.81
6'	52.2	0.53
7'	37.3	0.38
8'	31.0	0.32
9'	24.8	0.25

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

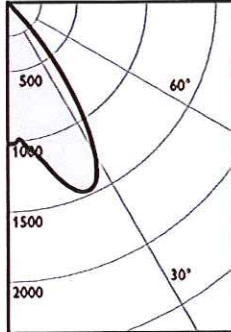
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%																
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0												
RCR	Zonal cavity method - Effective floor reflectance = 20%																																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	95	95	97	97	93	93	89	89	84	84	80	80	75	75	71	71	67	67	63	63	59	59	58
1	114	111	109	107	109	105	105	102	102	102	99	95	97	93	89	89	88	88	84	84	82	82	80	80	77	75	75	73	71	69	67	65	63	61	59	58	
2	109	105	101	98	103	97	100	95	97	95	95	97	93	89	89	88	88	84	84	82	82	80	80	77	75	75	73	71	69	67	65	63	61	59	58		
3	104	99	94	91	97	90	95	88	92	84	90	83	88	82	80	80	80	80	77	75	75	73	71	71	69	67	65	63	61	59	58	56	54	52	50	48	
4	100	93	88	84	92	84	92	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
5	95	88	83	79	87	78	85	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84	78	84
6	91	83	78	74	83	74	81	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80	73	80
7	87	79	74	70	78	70	77	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76	69	76
8	84	75	70	66	75	66	74	66	73	65	64	62	62	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
9	80	71	66	63	71	62	70	62	69	62	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
10	77	68	63	59	68	59	67	59	66	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58

18W LED, 3500K, 70° Wide 1500 lumen

Candela Curve



Frame: C7L15NUVBZ10V
 Trim: C7L1520DL35KWCLWVB
 CCT: 3500K
 Output lumens: 1733 lms
 Input watts: 18.3 W
 Efficacy: 94.7 lm/w
 CRI: 80 min
 Spacing Crit: 1.1
 Beam Spread: 70°
 Report no: 702GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1118	64.5%
0-40	1635	94.4%
0-60	1730	99.8%
0-90	1733	100.0%

Angle	Mean CP	Lumens
0	1016	
5	991	99
10	1104	
15	1274	366
20	1441	
25	1458	653
30	1249	
35	850	518
40	402	
45	52	90
50	7	
55	5	4
60	3	
65	2	2
70	1	
75	1	1
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	41	5.5'
6'	28	6.6'
7'	21	7.7'
8'	16	8.8'
9'	13	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	78.4	0.81
6'	51.5	0.53
7'	36.8	0.38
8'	30.6	0.32
9'	24.5	0.25

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%																
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0												
RCR	Zonal cavity method - Effective floor reflectance = 20%																																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	95	95	97	97	93	93	89	89	84	84	80	80	75	75	71	71	67	67	63	63	59	59	58
1	113	110	108	105	108	104	104	101	101	100	98	93	93	89	89	88	88	84	84	82	82	80	80	77	75	75	73	71	69	67	65	63	61	59	58		
2	107	102	98	95	101	93	97	91	91	94	89	86	86	82	80	80	80	80	77	75	75	73	71	71	69	67	65	63	61	59	58	56	54	52	50	48	
3	102	95	90	85	93	85	91	83	88	82	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
4	96	88	82	78	87	77	85	76	83	75	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
5	91	82	76	71	81	71	79	70	77	69	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
6	86	76	70	65	75	65	74	65	72	64	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
7	81	71	65	60	70	60	69	60	68	59	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
8	76	66	60	56	66	55	65	55	63	55	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
9	72	62	56	51	61	51	61	51	60	51	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
10	68	58	52	48	58	48	57	48	56	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46

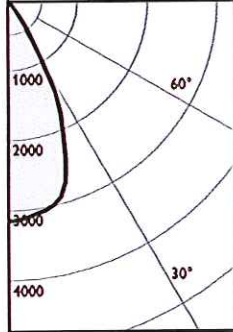
1. Correlated Color Temperature within specs as defined in ANSI/NEMA ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Wattage controlled to within +/- 5%.
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

25W LED, 3500K, 55° Medium 2000 lumen

Candela Curve



Frame: C7L20N1VBZ10V
 Trim: C7L1520DL35KMCLWVB
 CCT: 3500K
 Output lumens: 2209 lms
 Input watts: 25.2 W
 Efficacy: 87.7 lm/w
 CRI: 80 min
 Spacing Crit.: 0.8
 Beam Spread: 55°
 Report no: 705GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1879	85.1%
0-40	2167	98.1%
0-60	2207	99.9%
0-90	2209	100.0%

Angle	Mean CP	Lumens
0	3153	
5	3110	295
10	3040	
15	2903	794
20	2410	
25	1785	790
30	943	
35	432	288
40	160	
45	32	38
50	5	
55	3	3
60	2	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)
5'	126	4.0'
6'	88	4.8'
7'	64	5.6'
8'	49	6.4'
9'	39	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	102.3	1.12
6'	67.2	0.73
7'	48.0	0.52
8'	40.0	0.44
9'	32.0	0.35

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

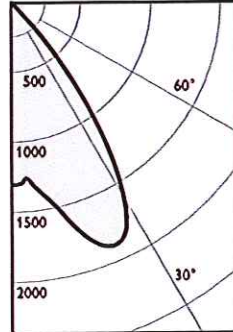
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%																								
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	106	106	100	100	99	99	95	95	97	93	89
	1	114	112	109	107	109	106	105	102	102	99	95	97	93	89	88	82	80	84	80	87	84	81	77	75
	2	109	105	101	98	103	97	100	95	97	90	85	88	82	80	80	77	75	75	75	75	75	75	75	75
	3	104	99	94	91	97	90	95	88	82	80	80	77	75	75	75	75	75	75	75	75	75	75	75	75
	4	100	93	88	84	92	84	90	83	88	82	80	80	77	75	75	75	75	75	75	75	75	75	75	75
	5	95	88	83	79	87	79	85	78	84	77	75	75	75	75	75	75	75	75	75	75	75	75	75	75
	6	91	83	78	74	83	74	81	73	80	73	71	71	71	71	71	71	71	71	71	71	71	71	71	71
	7	87	79	74	70	78	70	77	69	76	69	67	67	67	67	67	67	67	67	67	67	67	67	67	67
	8	84	75	70	66	75	66	74	66	73	65	64	64	64	64	64	64	64	64	64	64	64	64	64	64
	9	80	71	66	63	71	62	70	62	69	62	61	61	61	61	61	61	61	61	61	61	61	61	61	61
	10	77	68	63	59	68	59	67	59	66	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58

25W LED, 3500K, 70° Wide 2000 lumen

Candela Curve



Frame: C7L20N1VBZ10V
 Trim: C7L1520DL35KWCLWVB
 CCT: 3500K
 Output lumens: 2224 lms
 Input watts: 25.2 W
 Efficacy: 88.3 lm/w
 CRI: 80 min
 Spacing Crit.: 1.1
 Beam Spread: 70°
 Report no: 706GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1432	64.4%
0-40	2098	94.3%
0-60	2220	99.8%
0-90	2224	100.0%

Angle	Mean CP	Lumens
0	1304	
5	1267	127
10	1413	
15	1631	468
20	1844	
25	1870	837
30	1604	
35	1095	666
40	519	
45	66	116
50	9	
55	6	6
60	4	
65	3	3
70	2	
75	1	1
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)
5'	52	5.5'
6'	36	6.6'
7'	27	7.7'
8'	20	8.8'
9'	16	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	100.7	1.12
6'	66.1	0.73
7'	47.2	0.52
8'	39.3	0.44
9'	31.5	0.35

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%																								
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	106	106	100	100	99	99	95	95	97	93	89
	1	113	110	108	106	108	104	104	101	100	98	93	89	86	86	86	86	86	86	86	86	86	86	86	86
	2	107	102	98	95	101	93	97	91	94	89	86	86	86	86	86	86	86	86	86	86	86	86	86	86
	3	102	95	90	85	93	85	91	83	88	82	79	79	79	79	79	79	79	79	79	79	79	79	79	79
	4	96	88	82	78	87	77	85	76	83	75	73	73	73	73	73	73	73	73	73	73	73	73	73	73
	5	91	82	76	71	81	71	79	70	77	69	67	67	67	67	67	67	67	67	67	67	67	67	67	67
	6	86	76	70	65	75	65	74	65	72	64	62	62	62	62	62	62	62	62	62	62	62	62	62	62
	7	81	71	65	60	70	60	69	60	68	59	57	57	57	57	57	57	57	57	57	57	57	57	57	57
	8	76	66	60	56	66	55	65	55	63	55	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	9	72	62	56	51	61	51	60	51	60	51	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	10	68	58	52	48	58	48	57	48	56	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46

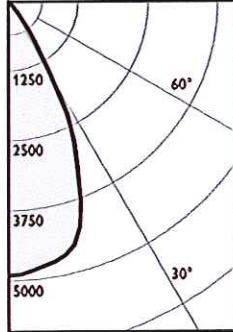
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Wattage controlled to within +/- 5%.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

41W LED, 3500K, 55° Medium 3500 lumen

Candela Curve



Frame: **C7L35N1VBZ10V**
 Trim: **C7L1520DL35KMCCLWVB**
 CCT: 3500K
 Output lumens: 3434 lms
 Input watts: 40.5 W
 Efficacy: **84.8 lm/w**
 CRI: 80 min
 Spacing Crit.: 0.8
 Beam Spread: 55°
 Report no: 709GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	2920	85.0%
0-40	3370	98.1%
0-60	3432	99.9%
0-90	3434	100.0%

Angle	Mean CP	Lumens
0	4899	
5	4832	458
10	4724	
15	4511	1234
20	3746	
25	2772	1228
30	1475	
35	674	449
40	249	
45	50	58
50	7	
55	4	4
60	3	
65	2	2
70	1	
75	1	1
80	0	0
85	0	
90	0	0

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)
5'	196	4.0'
6'	136	4.8'
7'	100	5.6'
8'	77	6.4'
9'	60	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	159.1	1.80
6'	104.4	1.18
7'	74.6	0.84
8'	62.2	0.70
9'	49.7	0.56

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

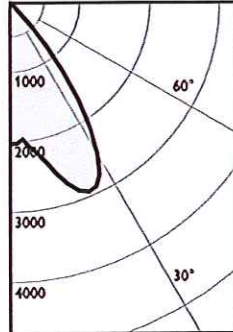
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	100		
	1	114	112	109	107	109	106	105	102	102	99	95	97	93	89	88	82	80	84		
	2	109	105	101	98	103	97	100	95	97	91	87	84	80	77	75	71	69	67		
	3	104	99	94	91	97	90	95	88	92	87	84	80	77	75	71	69	67	67		
	4	100	93	88	84	92	84	90	83	88	82	80	77	75	71	69	67	67	67		
	5	95	88	83	79	87	79	85	78	84	77	75	71	69	67	67	67	67	67		
	6	91	83	78	74	83	74	81	73	80	73	71	69	67	67	67	67	67	67		
	7	87	79	74	70	78	70	77	69	76	69	67	67	67	67	67	67	67	67		
	8	84	75	70	66	75	66	74	66	73	65	64	62	61	61	61	61	61	61		
	9	80	71	66	63	71	62	70	62	69	62	61	61	61	61	61	61	61	61		
	10	77	68	63	59	68	59	67	59	66	59	58	58	58	58	58	58	58	58		

41W LED, 3500K, 70° Wide 3500 lumen

Candela Curve



Frame: **C7L35N1VBZ10V**
 Trim: **C7L1520DL35KWCLWVB**
 CCT: 3500K
 Output lumens: 3446 lms
 Input watts: 40.5 W
 Efficacy: **85.1 lm/w**
 CRI: 80 min
 Spacing Crit.: 1.1
 Beam Spread: 70°
 Report no: 710GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	2217	64.3%
0-40	3249	94.3%
0-60	3439	99.8%
0-90	3446	100.0%

Angle	Mean CP	Lumens
0	2019	
5	1962	197
10	2186	
15	2523	724
20	2853	
25	2896	1297
30	2488	
35	1694	1032
40	804	
45	107	181
50	14	
55	10	9
60	7	
65	4	4
70	3	
75	2	2
80	1	0
85	0	
90	0	0

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)
5'	81	5.5'
6'	56	6.6'
7'	41	7.7'
8'	32	8.8'
9'	25	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	155.9	1.80
6'	102.3	1.18
7'	73.1	0.84
8'	60.9	0.70
9'	48.7	0.56

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%					70%					50%					30%					0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																				
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	100		
	1	113	110	108	105	108	104	104	101	100	98	93	94	89	86	82	79	79	79		
	2	107	102	98	94	100	93	97	91	94	89	86	82	79	79	79	79	79	79		
	3	102	95	90	85	93	85	91	83	88	82	79	79	79	79	79	79	79	79		
	4	96	88	82	78	87	77	85	76	83	75	73	73	73	73	73	73	73	73		
	5	91	82	76	71	81	71	79	70	77	69	67	67	67	67	67	67	67	67		
	6	86	76	70	65	75	65	74	65	72	64	62	62	62	62	62	62	62	62		
	7	81	71	65	60	70	60	69	60	68	59	57	57	57	57	57	57	57	57		
	8	76	66	60	55	66	55	65	55	63	55	53	53	53	53	53	53	53	53		
	9	72	62	56	51	61	51	60	51	60	51	49	49	49	49	49	49	49	49		
	10	68	58	52	48	58	48	57	47	56	47	46	46	46	46	46	46	46	46		

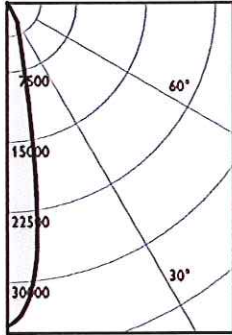
1. Correlated Color Temperature within specs as defined in ANSI/NEMA/ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Wattage controlled to within +/- 5%.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

69W LED, 3500K, 20° Narrow 6000 lumen

Candela Curve



Frame: **C7L50N1VBZ10V**
 Trim: **C7L50DL35KNCLWVB**
 CCT¹: 3500K
 Output lumens: 6174 lms
 Input watts²: 69.4 W
 Efficacy: **89.0 lm/w**
 CRI: 80 min
 Spacing Crit.: 0.3
 Beam Spread: 20°
 Report no³: 327GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	5902	95.6%
0-40	6133	99.3%
0-60	6169	99.9%
0-90	6174	100.0%

Angle	Mean CP	Lumens
0	34747	
5	30669	2475
10	16592	
15	6860	2151
20	4015	
25	2810	1276
30	1411	
35	146	231
40	100	
45	39	33
50	5	
55	2	3
60	3	
65	2	2
70	3	
75	1	2
80	0	1
85	1	
90	1	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	1390	1.5'
6'	965	1.8'
7'	709	2.1'
8'	543	2.4'
9'	429	2.7'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	294	3.08
6'	193	2.02
7'	138	1.44
8'	115	1.20
9'	92	0.96

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

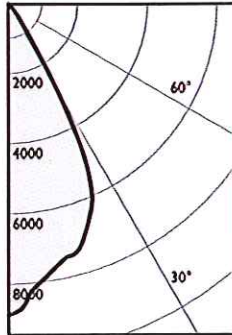
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100		
1	115	113	111	109	111	108	107	104	103	101	97	94	91	88	85		
2	111	108	105	102	106	101	103	99	100	97	94	91	88	85	82		
3	108	103	100	97	102	96	100	95	97	93	91	88	85	82	80		
4	105	99	95	92	98	92	96	91	94	90	88	85	82	80	78		
5	102	96	92	89	95	88	93	88	92	87	85	83	81	79	78		
6	99	93	88	85	92	85	91	85	89	84	83	81	79	78	76		
7	96	90	86	83	89	82	88	82	87	82	80	78	76	75	74		
8	93	87	83	80	86	80	86	80	85	79	78	76	75	74	73		
9	91	84	80	78	84	78	83	77	83	77	76	75	74	73	72		
10	89	82	78	76	82	76	81	75	81	75	74	73	72	71	70		

69W LED, 3500K, 55° Medium 6000 lumen

Candela Curve



Frame: **C7L50N1VBZ10V**
 Trim: **C7L50DL35KMCLWVB**
 CCT¹: 3500K
 Output lumens: 5963 lms
 Input watts²: 69.2 W
 Efficacy: **86.2 lm/w**
 CRI: 80 min
 Spacing Crit.: 0.8
 Beam Spread: 55°
 Report no³: 329GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	5171	86.7%
0-40	5833	97.8%
0-60	5954	99.8%
0-90	5963	100.0%

Angle	Mean CP	Lumens
0	8911	
5	8195	770
10	7673	
15	7395	2052
20	6676	
25	5541	2348
30	2654	
35	839	662
40	421	
45	80	113
50	13	
55	10	8
60	7	5
65	4	
70	4	4
75	3	
80	1	1
85	0	
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	356	4.0'
6'	248	4.8'
7'	182	5.6'
8'	139	6.4'
9'	110	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	276	3.07
6'	181	2.01
7'	129	1.44
8'	108	1.20
9'	86	0.96

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0		
RCR	Zonal cavity method - Effective floor reflectance = 20%																
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	100	100	100		
1	114	111	109	107	109	105	105	102	102	99	95	97	93	89	89		
2	109	105	101	98	103	97	100	95	95	88	92	87	84	84	84		
3	104	98	94	90	97	90	95	88	92	87	84	82	80	79	79		
4	100	93	88	84	92	84	90	83	88	82	79	77	75	75	75		
5	95	88	83	79	87	78	85	78	84	77	75	73	71	71	71		
6	91	83	78	74	82	74	81	73	80	73	71	70	69	69	69		
7	87	79	73	70	78	69	77	69	76	69	67	66	65	64	64		
8	83	75	69	66	74	66	73	65	72	65	64	63	62	62	62		
9	80	71	66	62	71	62	70	62	69	62	60	60	59	59	59		
10	77	68	63	59	67	59	67	59	66	59	57	57	56	56	56		

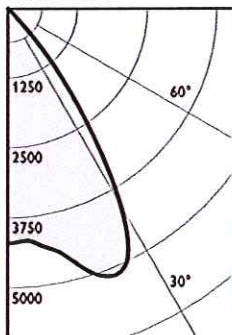
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Wattage controlled to within +/- 5%.
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C7L-DL-VB Calculite LED

7" Round Aperture, Downlight, Narrow Medium & Wide Beam 1500/2000/3500/6000lm

69W LED, 3500K, 70° Wide 6000 lumen

Candela Curve



Frame: C7L50N1VBZ10V
Trim: C7L50DL35KWCLWVB

CCT¹: 3500K
Output lumens: 5889 lms
Input watts²: 69.2 W
Efficacy: 85.1 lm/w
CRI: 80 min
Spacing Crit.: 1.1
Beam Spread: 70°
Report no³: 328GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	4013	68.1%
0-40	5608	95.2%
0-60	5881	99.9%
0-90	5889	100.0%

Angle	Mean CP	Lumens
0	4197	404
5	4120	
10	4350	1348
15	4705	
20	5106	2261
25	5077	
30	4159	1595
35	2538	
40	1197	265
45	150	
50	11	8
55	10	
60	7	5
65	4	
70	3	2
75	2	
80	1	0
85	0	
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	168	5.5'
6'	117	6.6'
7'	86	7.7'
8'	66	8.8'
9'	52	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	268	3.07
6'	176	2.01
7'	125	1.44
8'	105	1.20
9'	84	0.96

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
CCL = 95%
CCD = 87%
CCZ = 63%
WH = 87%

CCT Adjust. factors

4000K = 103%
3500K = 100%
3000K = 97%
2700K = 87%

Coefficients of utilization

Celling	80%				70%				50%				30%				0%
Wall	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%																
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100	106	106	100	100	
1	113	111	108	106	108	104	104	101	94	98	92	95	90	93	93	93	
2	108	103	99	95	101	94	98	92	85	88	82	85	80	83	86	86	
3	102	95	90	86	94	86	91	84	77	83	76	74	74	74	74	74	
4	97	89	83	79	88	78	85	77	71	78	71	69	69	69	69	69	
5	91	83	77	72	82	72	80	71	66	74	66	64	64	64	64	64	
6	86	77	71	67	76	66	75	66	61	69	61	59	59	59	59	59	
7	82	72	66	62	72	61	70	61	57	65	57	55	55	55	55	55	
8	78	68	61	57	67	57	66	57	53	61	53	51	51	51	51	51	
9	74	63	57	53	63	53	62	53	50	58	49	48	48	48	48	48	
10	70	60	54	50	59	50	58	49	48	58	49	48	48	48	48	48	

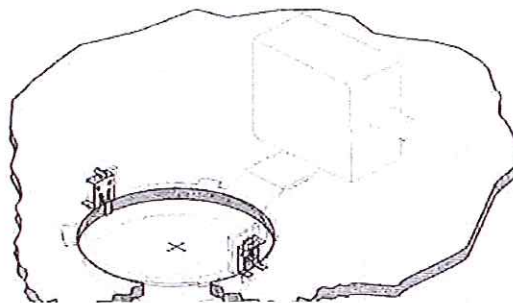
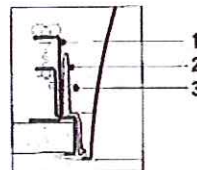
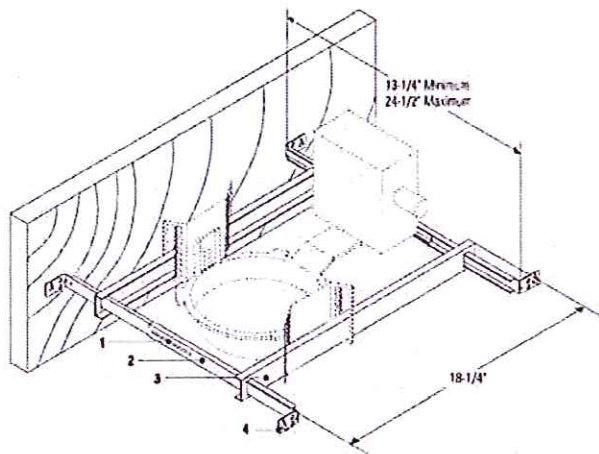
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Wattage controlled to within +/-5%.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

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philips.com/luminaires



Philips Lighting, North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Imported by: Philips Lighting,
A division of Philips Electronics Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008



Catalog No.

7994 Wood Joist Mounting Bars

Catalog No.

7998 Retaining Clips – Package of (2)

Features

1. **Adjustment Slot:** Lockable with screws.
2. **Telescoping Mounting Bars:** Allow fixture to be positioned anywhere between joists spaced up to 24" on center. Can also be used on suspended ceilings.
3. **Crossbars:** Allow fixture to be positioned lengthwise or crosswise to the wood joist.
4. **Nail Tab**

Options & Accessories

- Mounting Bars:** 1950 - 18" Set of (2)
 1951 - 27" Set of (2)
- T-Bar Anchor Clips:** 1956 - Set of (4), for use with above

Features

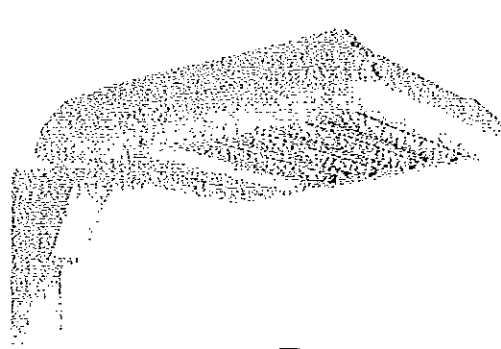
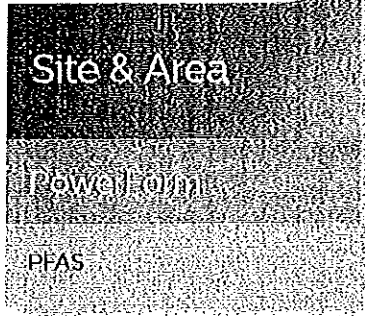
1. **Retaining Clips:** 24 ga. steel with blackoxide finish.
2. **Mounting Frame:** Calculite® Modular System die-cast mounting frame (order separately) with integral brackets attaches directly to existing ceiling retaining clips in place of the fixture's standard mounting bars.
3. **Mounting Screws:** (4) for mounting on each side.

Job Information	Type: M
Job Name: MIDWEST REGIONAL BANK	
Cat. No.: 1951	
Lamp(s):	
Notes:	

Lightolier a Genlyte Thomas Company www.lightolier.com
 631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
 We reserve the right to change details of design, materials and finish.
 © 2002 Genlyte Thomas Group LLC (Lightolier Division) • A0902

LIGHTOLIER®

PHILIPS



Project _____
 Location _____
 Cable _____
 Type _____
 Qty _____
 Notes _____

Philips Gardco PowerForm area LED luminaires provide up to 1,000W HID replacement while significantly reducing energy and maintenance costs. PowerForm features an architecturally styled, modular housing design available in five different sizes for a range of commercial, retail, industrial, and other large area outdoor applications. PowerForm is available with multiple lumen packages delivering approximately 20,000 to 95,000 lumens.

Ordering guide

example: PFAS-184L-1A-NW-G1-AR-5W-120-PCB-F1-BZ

Prefix	Number of LEDs	Drive Current	LED Color-Generation	Mounting	Distribution	Voltage	Controls	Electrical	Luminaire	Finish
PFAS										
PFAS Powerform Area Site	92L 92 LEDs (2 modules)	700 700mA	NW-G1 Neutral White 4000K, 70CRI Generation 1	AR Arm Mount	2 Type 2	120 120V 208 208V 240 240V	DD 0-10V Dimming Driver ¹ DCC Dual Circuit Control ¹ DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming, 7 hours ^{12,3} CM50 Median 50% Dimming, 6 hours ^{12,3} CE50 Economy 50% Dimming, 9 hours ^{12,3} DAS0 All Night 50% Dimming ^{12,3}	TB Terminal Block ⁹ Fusing F1 Single (120, 277, 347VAC) [*] F2 Double (208, 240, 480VAC) [*] F3 Canadian Double Pole (208, 240, 480VAC) [*]	SPA Square Pole Adaptor ¹⁰ HIS Internal Housing Side Shield ¹¹	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex. OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)
	184L 138 LEDs (3 modules)	1A 1Amp	NW90-G1 Neutral White 4000K, 90CRI Generation 1	SF 5/8" Filter Mount (fits to 2 1/4") O.D. (tenon) ⁴	3 Type 3 4 Type 4	347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	Photoelectric/Receptacle Systems (Twist Lock Receptacle) PCB Photocontrol Button ^{12,13} TLRD3 Twist Lock Receptacle 5 Pin ¹⁴ TLRD7 Twist Lock Receptacle 7 Pin ¹⁴ TLRPC Twist Lock Receptacle w/PhotoCell ^{14,15}	Pole Mount Fusing FP1 Single (120, 277, 347VAC) [*] FP2 Double (208, 240, 480VAC) [*] FP3 Canadian Double Pole (208, 240, 480VAC) [*]		
	184L LEDs (4 modules)			SW Type 5W			Infrared Motion Response Systems IMR13 Integral with #3 lens ^{12,16} IMR14 Integral with #4 lens ^{12,16} IMR17 Integral with #7 lens ^{12,16}			
	230L 230 LEDs (5 modules)			AFR Auto Front Row			Pole Mounted Infrared Motion Response Systems with DynaDimmer CS50-IMRO with Safety 50% Dimming ^{12,17} CM50-IMRO with Median 50% Dimming ^{12,17} CE50-IMRO with Economy 50% Dimming ^{12,17} DAS0-IMRO with All Night 50% Dimming ^{12,17}			
	276L 276 LEDs (6 modules)			AFR-90 Auto Front Row, Rotated 90° AFR-270 Auto Front Row, Rotated 270°			Wireless Controls LLC3 Integral module with #3 lens ^{12,18} LLC4 Integral module with #4 lens ^{12,18}			

- Not available with Dimming Driver (DD) option.
- Not available with Dual Circuit Control (DCC) option.
- Available in 120-277V or UNV only.
- Choose PCB or one of the TLRD Twist Lock Receptacle options or one of the LLC Wireless options. Not available with DCC.
- TLRD5/7 option not available with LLC, PCB, TLRPC or DCC. Max aiming angle 45°. Works with 3 or 5 pin NEMA photoCell/dimming. Dimming will not be connected to NEMA receptacle if ordering with DD, CS/CM/CE/DA, IMRI and HVRO.
- Not available with 480V.
- IMRI option not available with 230L-IA or 276L-IA in 120V (voltage restrictions). Available in 120 or 277V only. Must specify voltage. Not available with DD, LLC or DCC.
- IMRO option available in 120 or 277V only. Must specify voltage. Not available with DD, LLC or DCC.
- LLC not available with 230L-IA or 276L-IA in 120, 208 and 240V. Not available with TLRPC, PCB, IMRI, CS/CM/CE/DA or LLCR accessory.
- Terminal Block (TB) and Square Pole Adaptor (SPA) options available with arm mount only (AR).
- Must specify specific input voltage.
- HIS option not available with SW, AFR-90 and AFR-270 (see AFRES accessory).

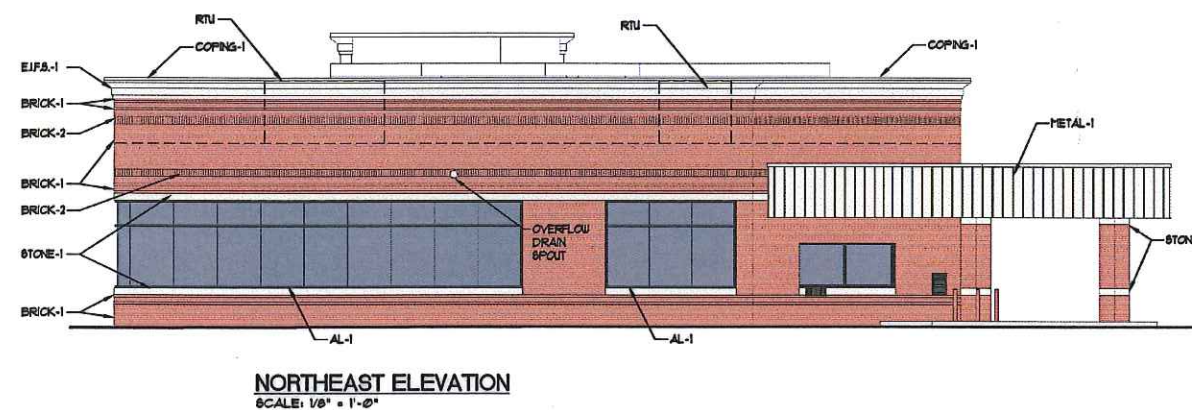
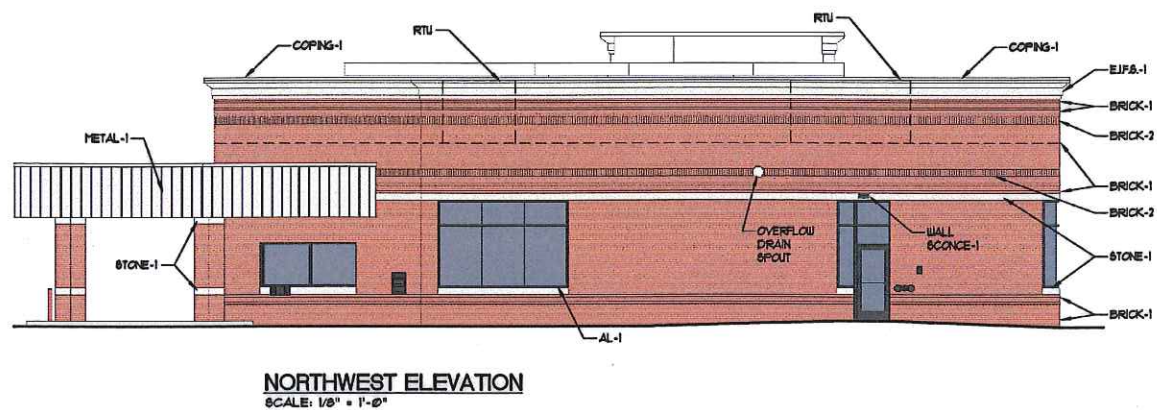
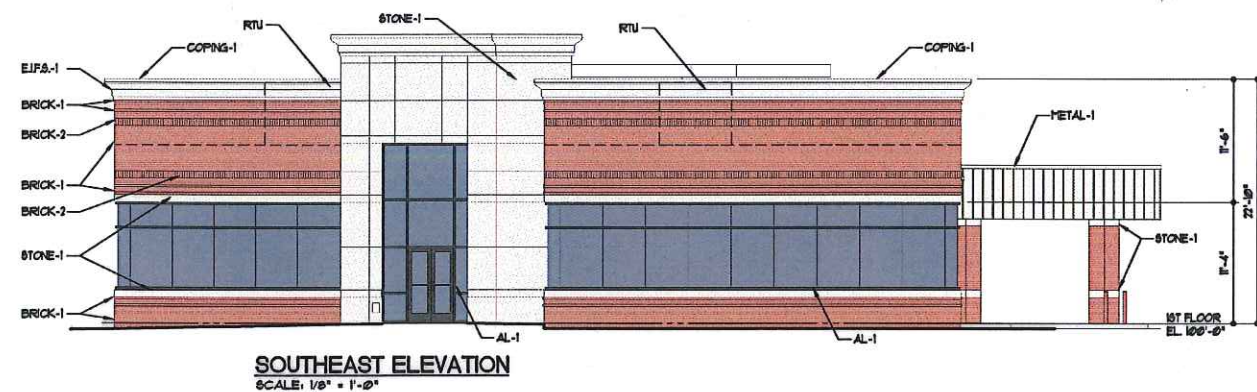
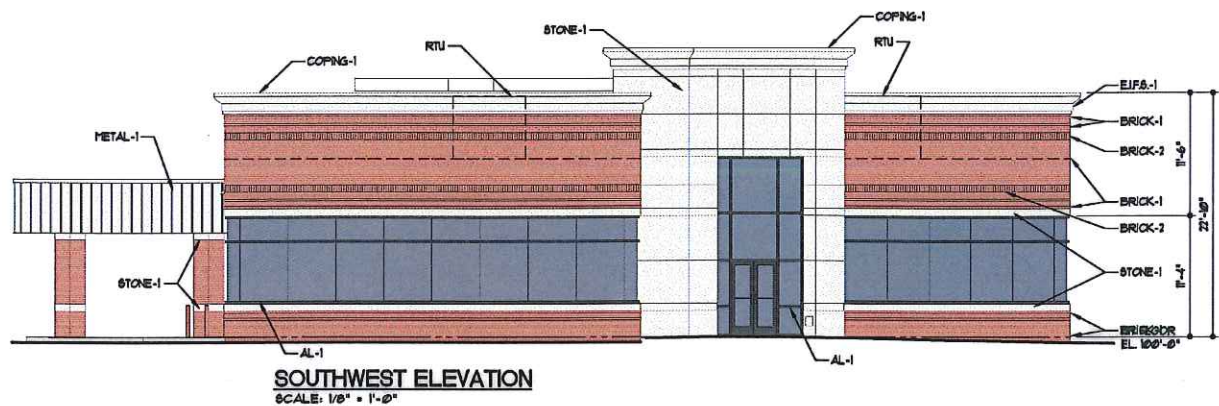
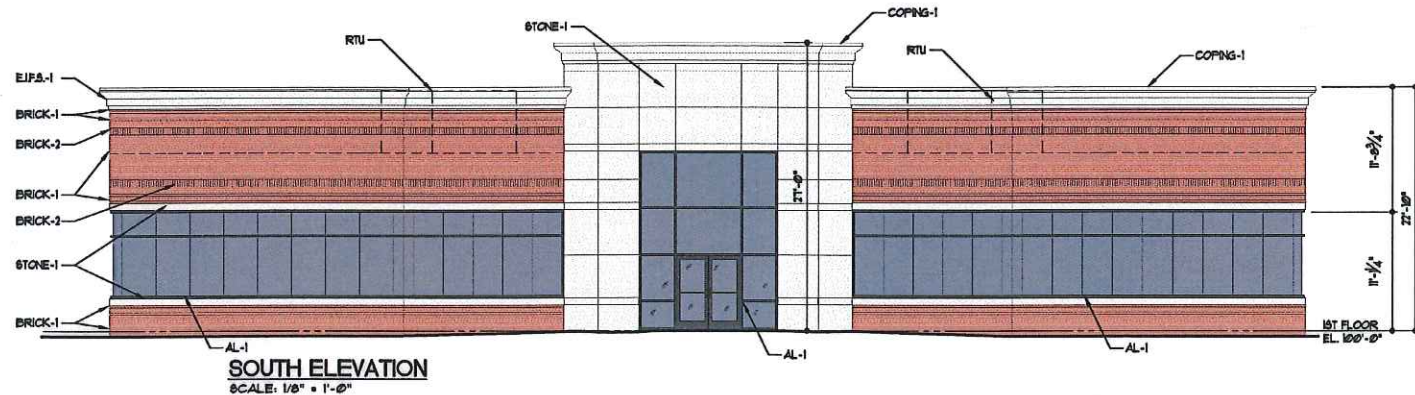


Handwritten signature in purple ink over a circular stamp.

Brinkmann
CONSTRUCTORS
16650 CHESTERFIELD GROVE ROAD
CHESTERFIELD MO 63005

MIDWEST REGIONAL BANK
CHESTERFIELD, MISSOURI

Dawdy
& ASSOCIATES, INC.
© 2016 D & A, I 06-10-2016
JOB # 21373



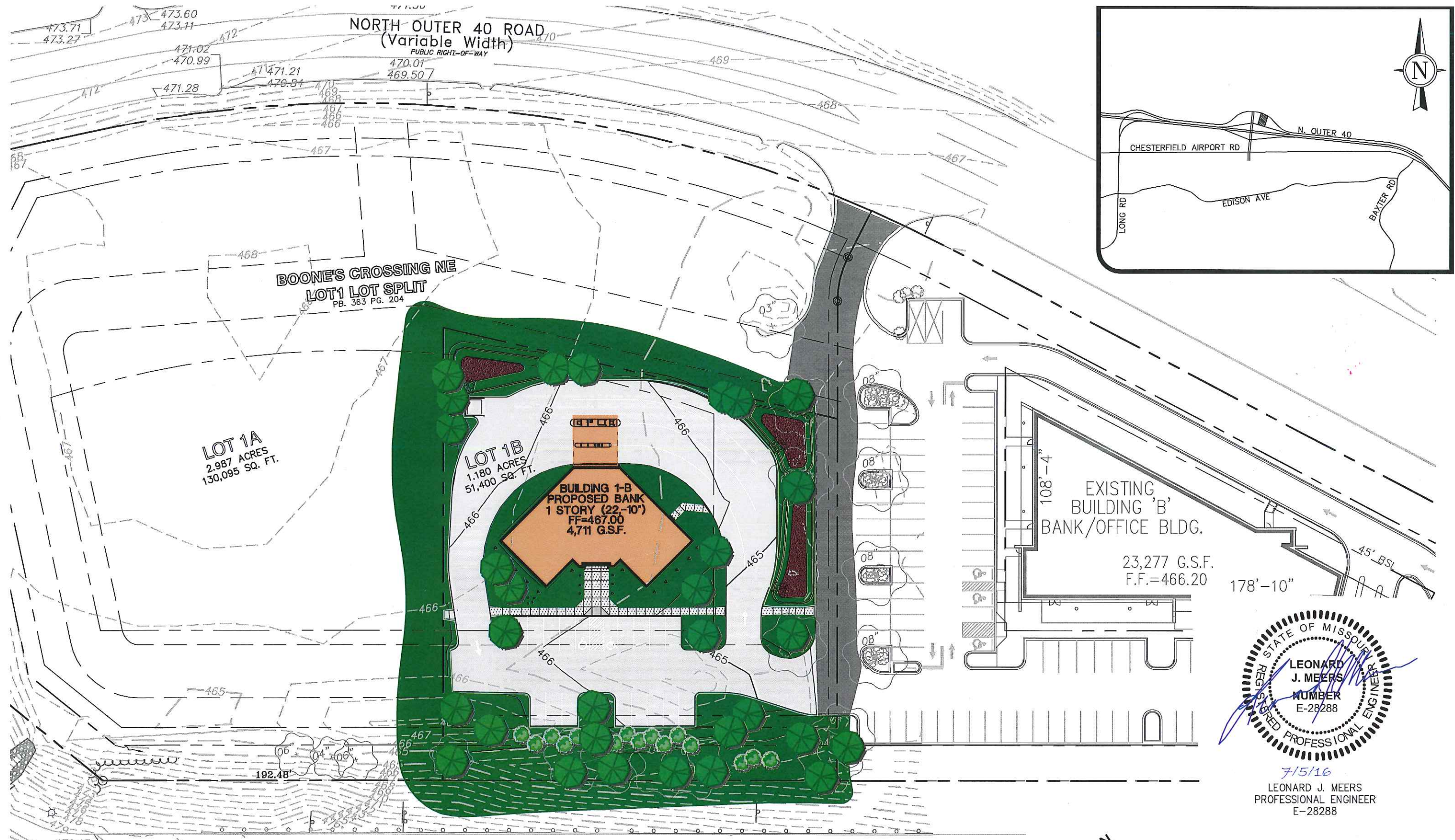
EXTERIOR FINISH LEGEND				
NO	MANUFACTURER	COLOR	FINISH	REMARKS
AL-1	TBS	DARK BRONZE	PREFINISHED	GLAZED ALUMN. CURTAIN WALL W/ 1" SOLAR GREY INSULATED GLASS
BRICK-1	BORAL	MONTICELLO BLEND	N/A	
BRICK-2	BORAL	MONTICELLO BLEND	N/A	SOLDER COURSE
COPING-1	DIMENSIONAL METALS INC.	SANDSTONE	PREFINISHED	
EIFS-1	DRYVIT	MATCH STONE-1	SANDBLAST	EIFS TO MATCH STONE-1 COLOR
STONE-1	ARCHITECTURAL CAST STONE	TAN	N/A	
METAL-1	DIMENSIONAL METALS INC.	SANDSTONE	PREFINISHED	
WALL SCONCE-1	PHILIPS STONCO	DARK BRONZE	PREFINISHED	EGRESS LIGHT

Handwritten signature and date: 7.5.16

Brinkmann
CONSTRUCTORS
16650 CHESTERFIELD GROVE ROAD
CHESTERFIELD MO 63005

MIDWEST REGIONAL BANK
CHESTERFIELD, MISSOURI

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JOB # 21373

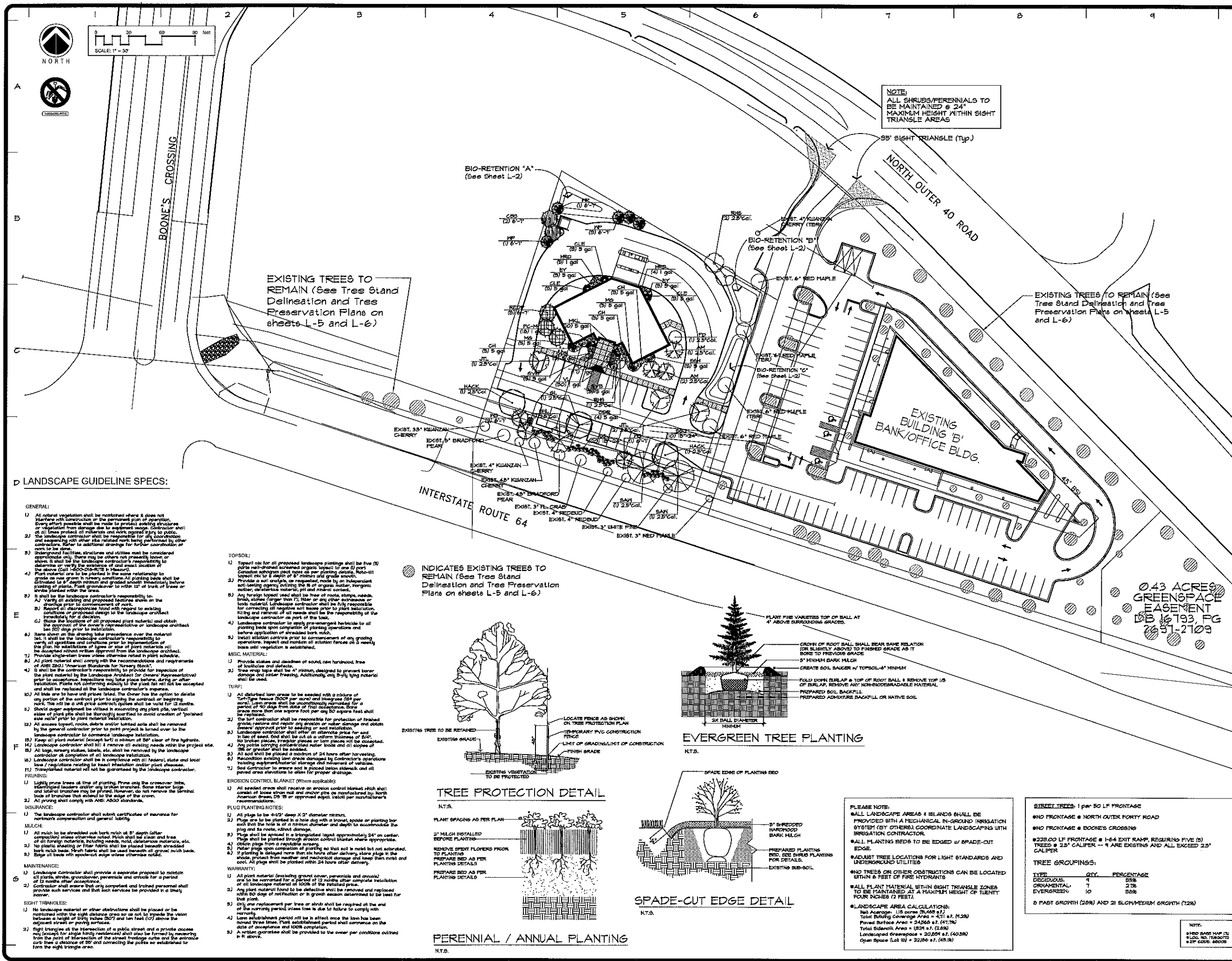


6/9/16
MIDWEST REGIONAL BANK

INTERSTATE ROUTE 64
 (Variable Width)
PUBLIC RIGHT-OF-WAY

ARB SITE PLAN
 SCALE 1"=50'
GRIMES CONSULTING, INC.
Civil Engineering & Surveying Services

STATE OF MISSOURI
 REGISTERED PROFESSIONAL ENGINEER
LEONARD J. MEERS
 NUMBER E-28288
 7/5/16
 LEONARD J. MEERS
 PROFESSIONAL ENGINEER
 E-28288



D LANDSCAPE GUIDELINE SPECS:

- GENERAL:**
- All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing structures or vegetation from damage due to equipment use. Contractor shall of all trees protect all materials and work against injury to public. The landscape contractor shall be responsible for any cutting and separating with other site related work being performed by other contractors. Refer to additional drawings for further coordination of work to be done.
 - Undesired facilities, structures and utilities must be considered appropriate only. There may be others not presently known or shown. It shall be the landscape contractor's responsibility to determine and verify the existence of and exact location of above and below ground utilities.
 - Plant material to be planted in the same relationship to grade as in situ. All planting shall be done in a 6" depth minimum and graded smooth immediately before planting of plants. First grade shall be within 12" of trunk of trees or shrubs planted within the area.
 - It shall be the landscape contractor's responsibility to:
 - Verify all existing and proposed features shown on the drawings prior to commencement of work.
 - Report all discrepancies found with regard to existing conditions or proposed design to the landscape architect immediately for decision.
 - State the location of all proposed plant material and obtain the approval of the owner's representative or landscape architect (as applicable) prior to installation.
 - It shall be the landscape contractor's responsibility to verify all conditions and conditions prior to implementation of the plan. No substitutions of types or size of plant material will be accepted without written approval from the landscape architect.
 - Provide single-stem trees unless otherwise noted in plant schedule.
 - All plant material shall comply with the recommendations and requirements of ANSI Z601 "American Standards for Nursery Stock".
 - It shall be the contractor's responsibility to provide for inspection of plant material by the Landscape Architect (or Owner's Representative) prior to acceptance. Inspections may take place before, during or after installation. Plants not conforming to the specifications shall not be accepted and shall be replaced at the landscape contractor's expense.
 - All bids are to have and prices listed. The Owner has the option to accept any portion of the contract prior to signing the contract or waiving work. The bid is a unit price contract; unit prices shall be valid for 12 months.
 - Shovel auger equipment be utilized in excavating any plant pits, vertical sides of pits shall be thoroughly surfaced to avoid creation of "loosened soil" prior to plant material installation.
 - All excess topsoil, rocks, debris and/or related soils shall be removed by the general contractor prior to post project is turned over to the landscape contractor to commence landscape installation.
 - Keep all plant material (soil) at a minimum of 50' clear of fire hydrants.
 - Landscape contractor shall kill & remove all existing weeds within the project site.
 - All logs, sawn stakes, labels, etc. shall be removed by the landscape contractor at completion of all landscape installation.
 - Landscape contractor shall be in compliance with all Federal, state and local laws & regulations relating to insect infestation and/or plant diseases.
 - Transplanted material will not be guaranteed by the landscape contractor.
- PRUNING:**
- Lightly prune trees at time of planting. Prune only the crossover limbs, identified leaders and/or any broken branches. Some starter limb and/or lateral branches may be pruned. However, do not remove the terminal buds of branches that extend to the edge of the crown.
 - All pruning shall comply with ANSI A800 standards.
- INSURANCE:**
- The landscape contractor shall submit certificate of insurance for contract completion and general liability.
- MULCH:**
- All mulch to be shredded oak bark mulch of 3" depth (after compaction) installed. Mulch shall be free of dirt and free of all foreign materials, including weeds, rocks, debris, etc.
 - No plastic sheeting or other fabric shall be placed beneath shredded bark mulch beds. Wood mulch shall be used beneath all gravel mulch beds.
 - Edge of beds with smooth edge unless otherwise noted.
- MAINTENANCE:**
- Landscape contractor shall provide a separate proposal to maintain all plants, shrubs, grasses, lawns, etc. for a period of 12 months after acceptance.
 - Contractor shall ensure that only personnel shall provide such services and that such services be provided in a timely manner.
- SIGHT TRIANGLES:**
- No landscape material or other obstructions shall be placed or be maintained within the sight triangle area so as not to impede the vision between a height of 30" to 50" and ten feet (10') above the adjacent street or parking surface.
 - Sight triangles at the intersection of a public street and a private access way (except for single-unit residential) shall also be formed by removing from the point of intersection of the street frontage curb and the entrance curb from a distance of 50' and connecting the points so established to form the sight triangle area.

TOPSOIL:

- Topsoil mix for all proposed landscape plantings shall be five (5) parts red loam (topsoil) and one (1) part sand. Provide a soil analysis, as requested, made by an independent soil-testing agency within 14 days of receipt. Organic matter, nutrient, pH and mineral content.
- Any foreign topsoil used shall be free of rocks, stumps, weeds, brush, stones, larger than 1" diameter, or any other extraneous toxic material. Landscape contractor shall be fully responsible for correcting all negative soil issues prior to plant installation. Killing and removal of all weeds shall be the responsibility of the landscape contractor at port of the bid.
- Landscape contractor to apply pre-emergent herbicide to all planting beds upon completion of planting operations and before application of shredded bark mulch.
- Insect/rodent control prior to commencement of any grading operations. Inspect and maintain all situation focus of a nearby boom until vegetation is established.

MISC. MATERIAL:

- Provide stakes and deadman of sound, new hardwood, three (3) inch diameter and 4' minimum, designed to prevent bearing damage and rutting. Additionally, only 2" x 4" lagging material shall be used.

TURF:

- All disturbed lawn areas to be seeded with a mixture of Turf-type fescue (90% per acre) and bluegrass (10% per acre). Lawn areas shall be continuously mowed for a period of 60 days from date of final acceptance. Same grass more than one square foot per any 50 square feet shall be replaced.
- The turf contractor shall be responsible for protection of finished grade, erosion and repair any erosion or water damage and obtain owners' approval prior to seeding and soil installation.
- Landscape contractor shall apply an alternative grade for seed in line of seed, and shall be out on a uniform thickness of 60/4".
- Option price from a separate invoice.
- After seeding, lawn areas shall be protected for 24 hours after harvesting.
- Recondition existing lawn areas damaged by contractor's operations including equipment material storage and movement of vehicles.
- Soil contractor to ensure seed is placed below sidewalk and all paved areas otherwise to allow for proper drainage.

EROSION CONTROL BLANKET (When applicable):

- All seeded areas shall receive an erosion control blanket which shall consist of loose straw mat and anchor pins as manufactured by North Carolina, 25" x 25" or approved equal, install per manufacturer's recommendations.

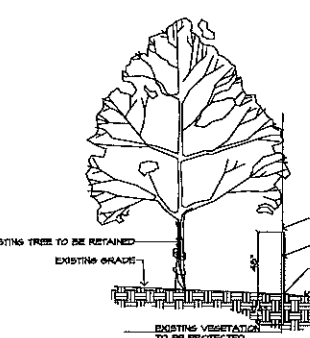
PLUG PLANTING NOTES:

- All plugs to be 4"-12" deep X 2" diameter minimum.
- Plugs are to be planted in a hole dug with a shovel, depth as planting bar such that the hole is of a minimum diameter and width to accommodate the plug and its roots, and shall be filled with topsoil.
- Plugs shall be spaced in a triangular layout approximately 24" on center.
- Plugs shall be planted through erosion control blankets where applicable.
- After plugs are planted, the soil shall be tamped but not compacted.
- Planting is delayed more than six hours after delivery, plugs shall be placed in plastic bags to protect from weather and mechanical damage and lower than noted and cool. All plugs shall be planted within 24 hours after delivery.

WARRANTY:

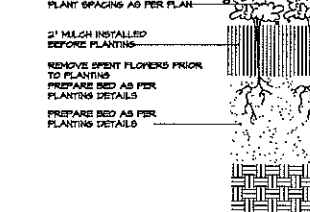
- All plant material (excluding ground cover, perennials and annuals) one to be warranted for a period of 12 months after complete installation of all landscape material at 100% of installed price.
- Any plant material found to be defective shall be removed and replaced within 90 days of notification or 90 growth season determined to be best for that plant.
- Only one replacement per tree or shrub shall be required at the end of the warranty period unless loss is due to failure to comply with warranty.
- Lawn establishment period will be in effect once the lawn has been mowed three times. Plant establishment period shall commence on the date of acceptance and 100% completion.
- A written guarantee shall be provided to the owner per conditions outlined in #1 above.

INDICATES EXISTING TREES TO REMAIN (See Tree Stand Delineation and Tree Preservation Plans on sheets L-5 and L-6)



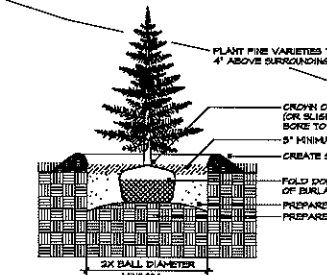
TREE PROTECTION DETAIL

N.T.S.



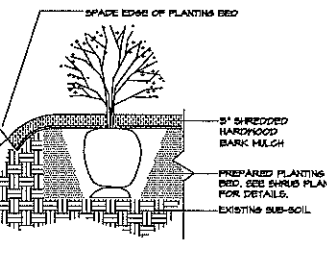
PERENNIAL / ANNUAL PLANTING

N.T.S.



EVERGREEN TREE PLANTING

N.T.S.



SPADE-CUT EDGE DETAIL

N.T.S.

PLEASE NOTE:

- ALL LANDSCAPE AREAS & ISLANDS SHALL BE PROVIDED WITH A MECHANICAL IN-GROUND IRRIGATION SYSTEM (BY OTHERS) COORDINATE LANDSCAPING WITH IRRIGATION CONTRACTOR.
- ALL PLANTING BEDS TO BE EDGED w/ SPADE-CUT EDGE.
- ADJUST TREE LOCATIONS FOR LIGHT STANDARDS AND UNDERGROUND UTILITIES.
- NO TREES OR OTHER OBSTRUCTIONS CAN BE LOCATED WITHIN 6 FEET OF FIRE HYDRANTS.
- ALL PLANT MATERIAL WITHIN SIGHT TRIANGLE ZONES TO BE MAINTAINED AT A MAXIMUM HEIGHT OF TWENTY FOUR INCHES (2 FEET).
- LANDSCAPE AREA CALCULATIONS:
 Net Acreage = 1.8 acres (3,460 sq ft)
 Total Building Coverage Area = 4,311 sq ft (4,320 sq ft)
 Paved Surface Area = 24,565 sq ft (47,724 sq ft)
 Total Sidewalk Area = 1,824 sq ft (2,090 sq ft)
 Landscaped Greenspace = 22,554 sq ft (49,530 sq ft)
 Open Space (Lot 10) = 22,862 sq ft (49,530 sq ft)

SISCEL TREES: 1 per 50 LF FRONTAGE

- NO FRONTAGE @ NORTH OUTER FORTY ROAD
- NO FRONTAGE @ BOONES CROSSING
- 225.00 LF FRONTAGE @ 1-6' EXIT RAMP, REQUIRING FIVE (5) TREES @ 2 1/2" CALIPEN -- 1 ARE EXISTING AND ALL EXCEED 2 1/2" CALIPEN

TREE GROUPINGS:

TYPE	QTY	PERCENTAGE
DECIDUOUS	4	80%
ORNAMENTAL	1	20%
EVERGREEN	10	50%

5 FAST GROWTH (20%) AND 21 SLOW/MEDIUM GROWTH (75%)

REVISIONS BY

landscape TECHNOLOGIES

67 Jackson Creek Drive
St. Charles, Missouri 63043
MO Landscape Architecture Corporation 52000000192

6630 422-0260
6630 422-0665
6630 422-0665

RANDALL A. HANCOCK
MISSOURI LANDSCAPE ARCHITECT REGISTERED
DATE: 12/17/16

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT

PLANTING PLAN FOR THE PROPOSED Midwest Regional Bank
17290 OUTER FORTY RD., CHESTERFIELD, MISSOURI

DRAWN BY: M.H./J.S.
CHECKED BY: R.M.
DATE: 4/2/16
SCALE: 1/8"=1'-0"
JOB NO.: 2016-109
SHEET: L-1

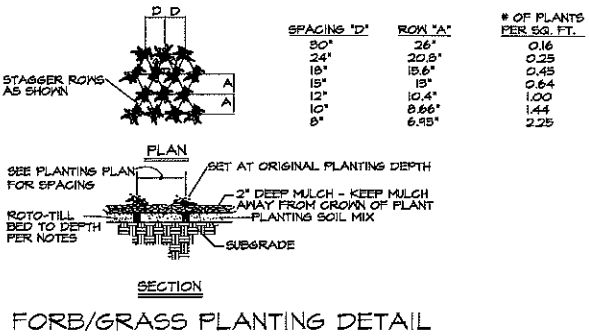
OF TWO SHEETS

PLANTING, WATER and MULCH REQUIREMENTS

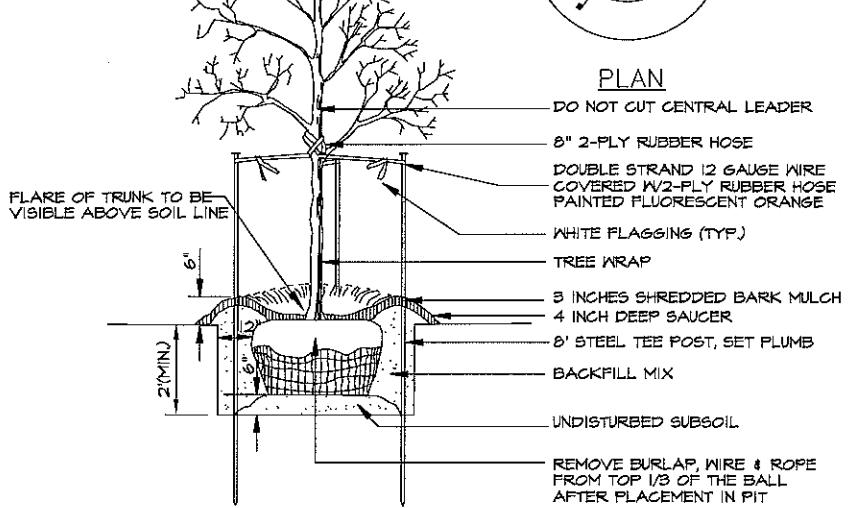
WATER AVAILABILITY	REQUIRED PLANTING PERIOD	MINIMUM CONTAINER SIZE	WATER REQUIREMENT FIRST 3 WEEKS	WATER REQUIREMENT AFTER 3 WEEKS	MAXIMUM MULCH DEPTH
NO AVAILABLE TOYER WATER	LATE FEB. - OCT. 7	2'0" x 6" x 7" LARGER	WATER EVERY 1-2 DAYS	1" (60 MIN) EVERY 4 DAYS UNTIL PLANTS ESTABLISHED	12" FOR PLUGS 24" FOR QUARTS
HAND WATERING SPRINKLER	LATE FEB. - OCT. 7	2'0" x 6" x 7" LARGER	1" (60 MIN) EVERY 4 DAYS	1" (60 MIN) EVERY 4 DAYS UNTIL PLANTS ESTABLISHED	12" FOR PLUGS 24" FOR QUARTS
AUTOMATIC WATERING SYSTEM	LATE FEB. - OCT. 7	2'0" x 6" x 7" LARGER	1" (60 MIN) EVERY 4 DAYS	1" (60 MIN) EVERY 4 DAYS UNTIL PLANTS ESTABLISHED	12" FOR PLUGS 24" FOR QUARTS

- MAINTENANCE PROCEDURES:**
- ADD 2-4 INCHES OF ORGANIC MULCH TO THE EXPOSED NEWLY PLANTED BARK/BARK-RETENTION AREA. DO NOT COVER THE GROUNDS OF THE PERENNIALS. REPLENISH THE MULCH AS NEEDED.
 - AVOID FINE CUT OR LIGHTER WEIGHT MULCHES AS THEY FLOAT IN WET CONDITIONS.
 - PRUNE ANY DEAD, DISEASED OR DAMAGED PLANTS AS SOON AS THE PROBLEM IS NOTICED. DISPOSED PLANTS AS APPROPRIATE AND REMOVE PERENNIALS EVERY 3-4 YEARS AS NEEDED. LEAVE STEMS AND SEED HEADS STANDING IN FALL/WINTER TO ADD VISUAL INTEREST AND TO PROVIDE FOOD AND COVER FOR BIRDS.
 - PRUNE THE FOLIAGE OF PERENNIALS WHEN THEY DIE BACK FOR THE WINTER AND ORNAMENTAL GRASSES BEFORE NEW GROWTH BEGINS IN THE SPRING.
 - WATER NEEDS VARY UNTIL PLANTS ARE ESTABLISHED. THEREAFTER REMOVE OR STOP FEEDING AS NECESSARY.
 - WATER THE GRASSES DURING THE ESTABLISHMENT AND EXTENDED DRY PERIODS. ONE INCH OF WATER PER WEEK IS RECOMMENDED.
 - DO NOT USE LAWN FERTILIZERS NEAR GRASS AREA AS THIS WILL STIMULATE NEED SODS.
 - EACH SPRING, MOW AND REMOVE DEAD VEGETATION. USE SCISSORS ONLY UNDER SUPERVISION OF LOCAL FIRE DEPARTMENT. NATIVE PLANTS THRIVE UNDER FIRE MANAGEMENT.

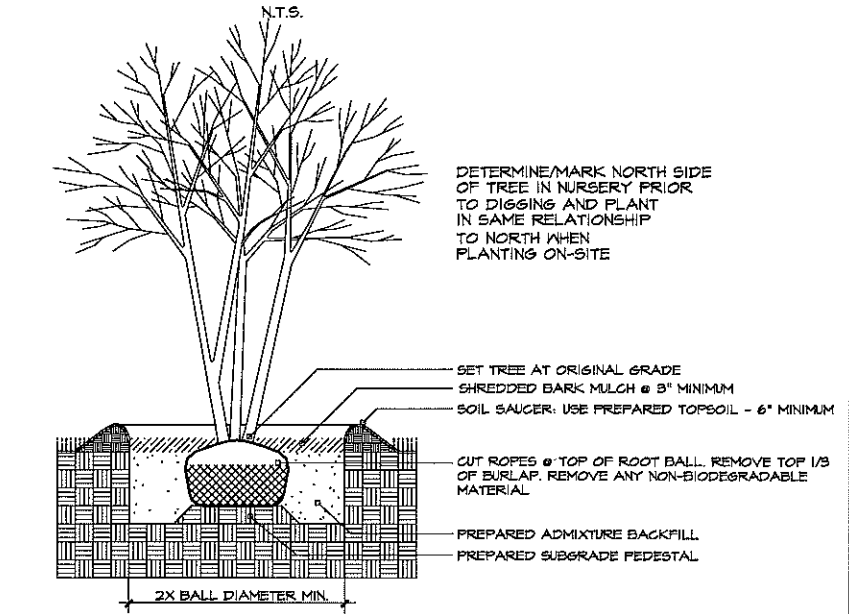
NOTE:
* ALL NATIVE GRASS PLUGS ARE TO BE 2" DIAMETER.
CONTRACTOR TO PROVIDE SHARP AND REELED SHARP PLANTERS TO BE APPROVED BY THE PROJECT ENGINEER. SEE NUMBER 3100000 AT 014-000-3073.



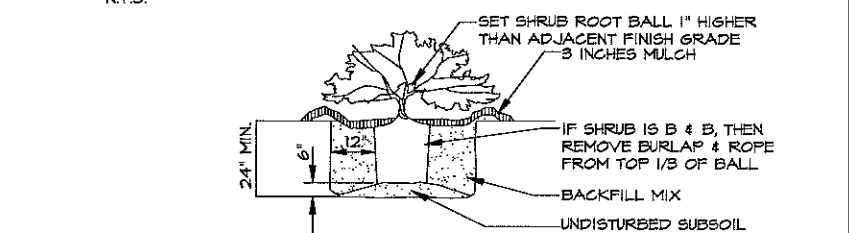
DETERMINE/MARK NORTH SIDE OF TREE IN NURSERY PRIOR TO DIGGING AND PLANT. IN SAME RELATIONSHIP TO NORTH WHEN PLANTING ON-SITE



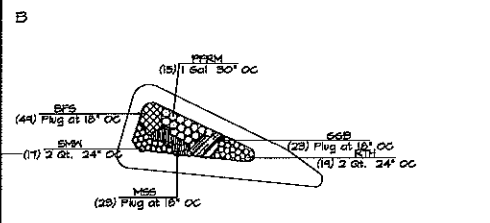
DECIDUOUS TREE PLANTING



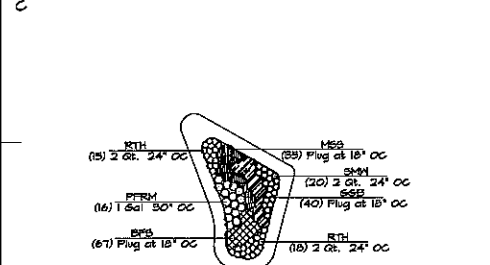
MULTI-STEM TREE PLANTING



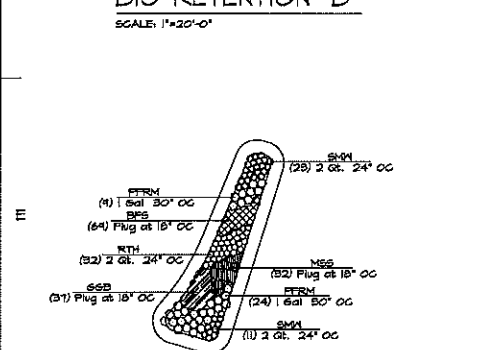
PRUNE ANY BROKEN BRANCHES AFTER PLANTING. DAMAGED SHRUBS OR BROKEN / CRUMBLING ROOT BALLS WILL BE REJECTED.



BIO-RETENTION "A"



BIO-RETENTION "B"



BIO-RETENTION "C"

PLANT SCHEDULE

TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
HACK	2	Common Hackberry / <i>Celtis occidentalis</i>	2.5" Cal
GL	1	Greenspire Littleleaf Linden / <i>Tilia cordata</i> 'Greenspire'	2.5" Cal.
SAN	2	Santooth Oak / <i>Quercus acutissima</i>	2.5" Cal.
AM	3	'Flame' Amur Maple / <i>Acer ginnala</i> 'Flame'	2.5" Cal.
SHL	1	'Skyline' Locust / <i>Gleditsia triacanthos</i> 'Skyline'	2.5" Cal.
EVERGREEN TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
CBS	2	Colorado Blue Spruce / <i>Picea pungens</i> 'Glauca'	6'-7'
REDP	3	Red Pine / <i>Pinus resinosa</i>	6'-7'
WP	5	White Pine / <i>Pinus strobus</i>	6'-7'
WS	3	White Spruce / <i>Picea glauca</i>	6'-7'
FLOWERING TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
JTL	3	Ivory Silk Japanese Tree Lilac / <i>Syringa reticulata</i> 'Ivory Silk'	2.5" Cal.
FD	1	Pink Flowering Dogwood / <i>Cornus florida</i> rubra	2.5" Cal.
RHS	3	Robin Hill Serviceberry / <i>Amelanchier X grandiflora</i> 'Robin Hill'	2.5" Cal.
SHRUBS	QTY	COMMON NAME / BOTANICAL NAME	SIZE
CH	13	China Bay/Girl Holly / <i>Ilex meserveae</i> 'China Bay/Girl' TM	5 gal
EY	8	Everlon Yew / <i>Taxus x media</i> 'Everlon'	5 gal
GVB	6	Green Velvet Boxwood / <i>Buxus</i> 'Green Velvet'	5 gal
MKL	10	Miss Kim Lilac / <i>Syringa patula</i> 'Miss Kim'	5 gal
SSH	3	Strawberry Sundae Hydrangea / <i>Hydrangea paniculata</i> 'Strawberry Sundae'	5 gal
CLE	9	'Hummingbird' Summersweet / <i>Clethra alnifolia</i> 'Hummingbird'	5 gal
ANNUALS/PERENNIALS	QTY	COMMON NAME / BOTANICAL NAME	SIZE
HRD	9	Happy Returns Daylily / <i>Hemerocallis</i> hybrid 'Happy Returns'	1 gal
PC-M	35	Purple Coneflower / <i>Echinacea purpurea</i> 'Magnus'	1 gal
VL	30	Variegated Liriope / <i>Liriope muscari</i> 'Variegata'	1 gal
FORBS	QTY	COMMON NAME / BOTANICAL NAME	SIZE
PFRM	64	Party Favor Rose Mallow / <i>Hibiscus lasiocarpus</i>	1 Gal @ 30" OC
RTH	64	Rose Turtle-Head / <i>Chelone obliqua</i>	2 Qt. @ 24" OC
SMA	71	Swamp Milkweed / <i>Asclepias incarnata</i>	2 Qt. @ 24" OC
GRASSES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
MG	10	Malden Grass / <i>Miscanthus sinensis</i> 'Gracillimus'	5 gal
ROSES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
CDR	7	Coral Drift Rose / <i>Rosa x 'Meidrifora'</i>	5 gal
NATIVE GRASSES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
	185	Brown Fox Sedge / <i>Carex vulpinoidea</i>	Plug at 18" OC
	100	Great Green Bulrush / <i>Scirpus atrovirens</i>	Plug at 18" OC
	90	Morning Star Sedge / <i>Carex grayi</i>	Plug at 18" OC

REVISIONS	BY

landscape TECHNOLOGIES
 5110 S. W. 11th St., Suite 100, Ft. Lauderdale, FL 33304
 Tel: (954) 525-1234 Fax: (954) 525-1234
 5110 S. W. 11th St., Suite 100, Ft. Lauderdale, FL 33304
 Tel: (954) 525-1234 Fax: (954) 525-1234

PLANTING PLAN FOR THE PROPOSED Midwest Regional Bank 17290 OUTER FORTY RD. CHESTERFIELD, MISSOURI

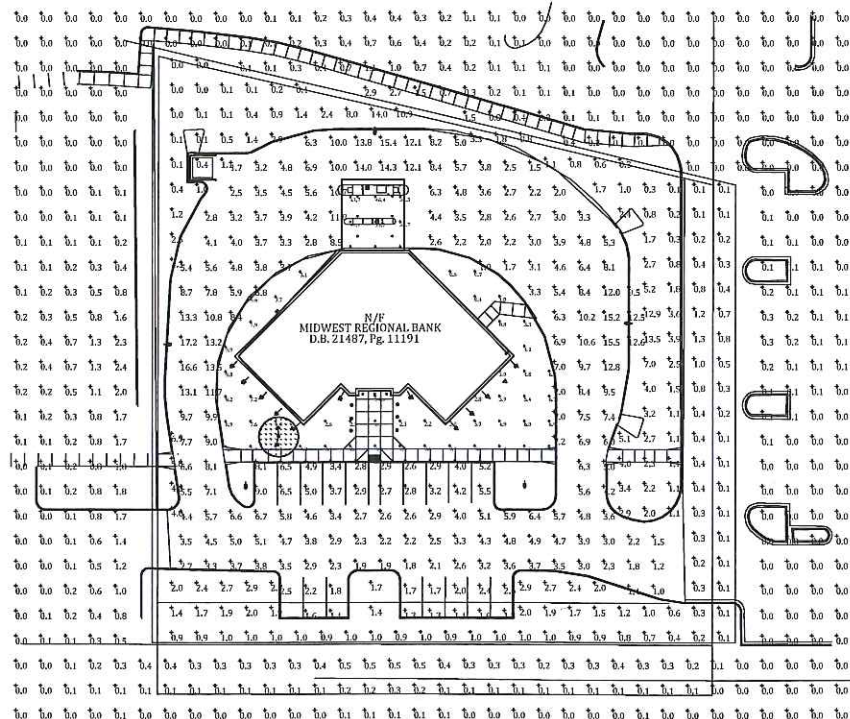
MISSOURI LANDSCAPE ARCHITECT ASSOCIATION
 RANSALL M. LANDSCAPE ARCHITECT #00007
 DATE: 8/27/16

PLANTING PLAN FOR THE PROPOSED Midwest Regional Bank 17290 OUTER FORTY RD. CHESTERFIELD, MISSOURI

MISSOURI LANDSCAPE ARCHITECT ASSOCIATION
 RANSALL M. LANDSCAPE ARCHITECT #00007
 DATE: 8/27/16

DRAWN BY: R. VANDERKAM
 CHECKED BY: R. VANDERKAM
 DATE: 8/27/16
 SCALE: 1"=20'-0"
 JOB NO.: 2016-188
 SHEET: L-2
 OF 170 SHEETS

NOTE:
* 1/2" BORE HOLE IN 1" LOG. NO. FR20022 * 1/2" GORE. #0009

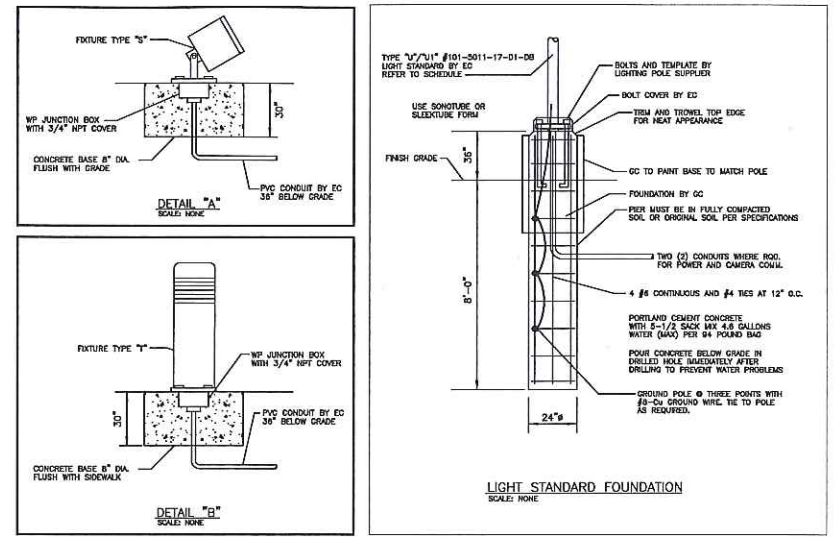


Symbol	Qty	Label	Arrangement	Manufacturer	Description	Lum. Watts	Total Watts	EF	BUG Rating
⊞	2	V	SINGLE	PHILIPS STONCO	LPF3-C-4X-SP-8-BZ	87	174	0.850	84-UG-00
⊞	6	T	SINGLE	SELUX CORPORATION	HT-3.5-103200-40-80-120	14	84	0.890	09-01-01
⊞	82	S	SINGLE	PHILIPS STONCO	LPF3-C-4X-FL-8-BZ	87	1544	0.850	83-UG-00
⊞	1	O	SINGLE	PHILIPS STONCO	LPW16-7882	37	37	0.850	01-UG-01
⊞	3	N	SINGLE	PHILIPS LIGHTSOLAR	CL35ALV8220V-CL35100L400VCL35V8	51	153	0.850	N.A.
⊞	6	M	SINGLE	PHILIPS LIGHTSOLAR	CL35ALV8220V-CL35100L400VCL35V8	70	420	0.850	83-UG-00
⊞	2	LI	SINGLE	PHILIPS GARDCO	PFAS-138L-2A-NW-01-AR-50W-VOLTS-SPA-BZ(VTE)POLES 121-0011-17-01-08	488	976	0.850	05-UG-05
⊞	3	LI	SINGLE	PHILIPS GARDCO	PFAS-138L-2A-NW-01-AR-3-VOLTS-SPA-BZ(VTE)POLES 121-0011-17-01-08	488	1465	0.850	84-UG-01

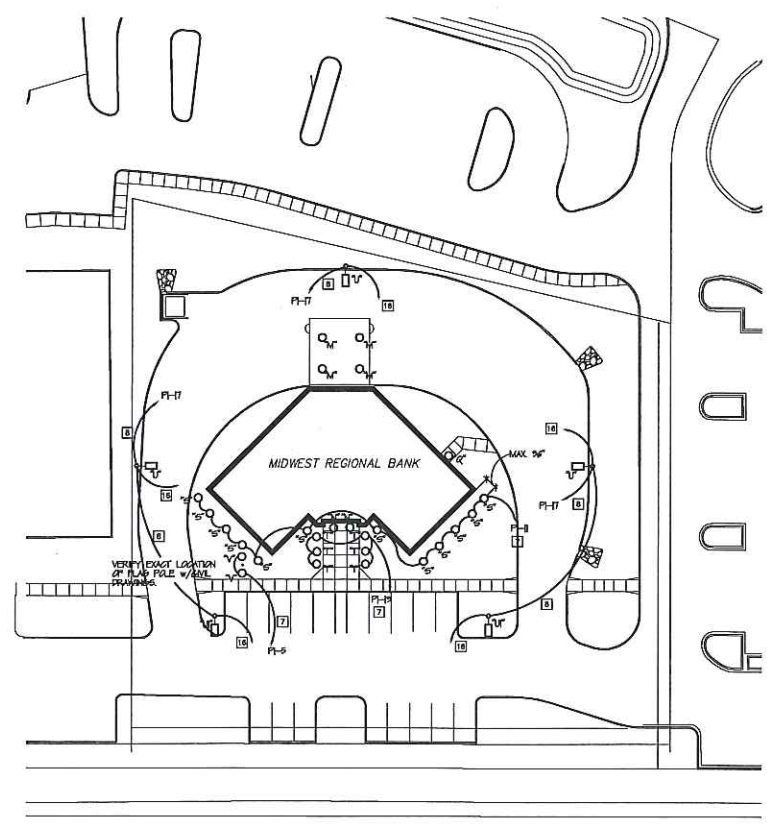
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Close to Building/Under canopy	illumiance	fc	10.28	14.6	0.4	25.70	136.50
High Room	illumiance	fc	32.74	86.3	14.8	2.24	4.38
Inside Property Line	illumiance	fc	1.66	14.8	0.0	N.A.	N.A.
Parking Lot	illumiance	fc	5.35	17.1	1.8	5.33	17.20
Spill Light	illumiance	fc	0.05	0.0	0.0	N.A.	N.A.

Designed By: SA
 Job Name: MIDWEST REGIONAL BANK - CHESTERFIELD, MO
 Drawing #: 163142
 Date: 6/29/2016

Notes:
 POLE FIXTURES:
 Mounting Height 20' / Pole 17' / Concrete Base 3'
 Calculation Points: 10' x 10' Spacing



NOTE:
 ALL POST TOP SITE LIGHTING MUST BE AIMED AND SHIELDED SO THAT THE AMBIENT LIGHT LEVELS ON THIS SITE DO NOT EXCEED 0.1 fc AT THE PROPERTY LINE AND THE ILLUMINATION OUT-OF-LINE IS ON THE PARKING SITE. GRADE LIGHTING IS TO HAVE THE SAME REQUIREMENT TO AVOID SPILLAGE ABOVE THE ROOF LINE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE REAR AND SIDE SHIELDING AFTER INSTALLATION TO ACHIEVE THIS CITY RESTRICTION.



ELECTRICAL SITE PLAN
 SCALE 1" = 50'-0"

Lloyd E. Moss
 Professional Engineer
 Missouri #E-15007
 MISSOURI STATE
 CERTIFICATE OF AUTHORITY
 Number 2001029034
 07/30/2016



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 1850 Chesapeake Road, Suite 108
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 Phone: (314) 434-0700
 Fax: (314) 434-0791

Dawdy & Associates, Inc.
 1850 Chesapeake Road, Suite 105
 Chesterfield, MO 63046
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 Fax: (314) 434-0791

Brinkmann CONSTRUCTORS
 16650 CHESTERFIELD GROVE ROAD
 CHESTERFIELD, MO 63005

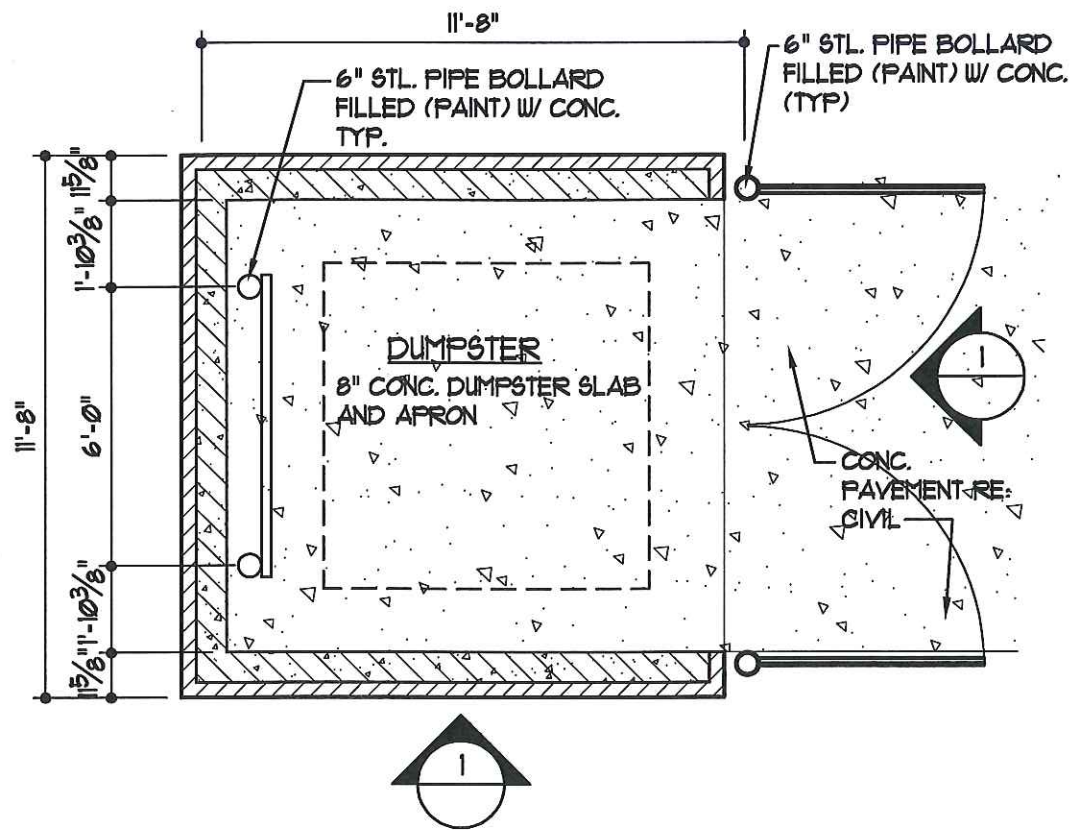
LINEA DESIGN, INC.
 INTERIOR DESIGN
 6000 Maryland Ave
 Suite Number 1320
 Clayton, MO 63105
 PH: 314-721-0044
 FAX: 314-721-6825
 online@linea-inc.com

CHESTERFIELD, MISSOURI
 17280 OUTER FORTY ROAD

MIDWEST REGIONAL BANK

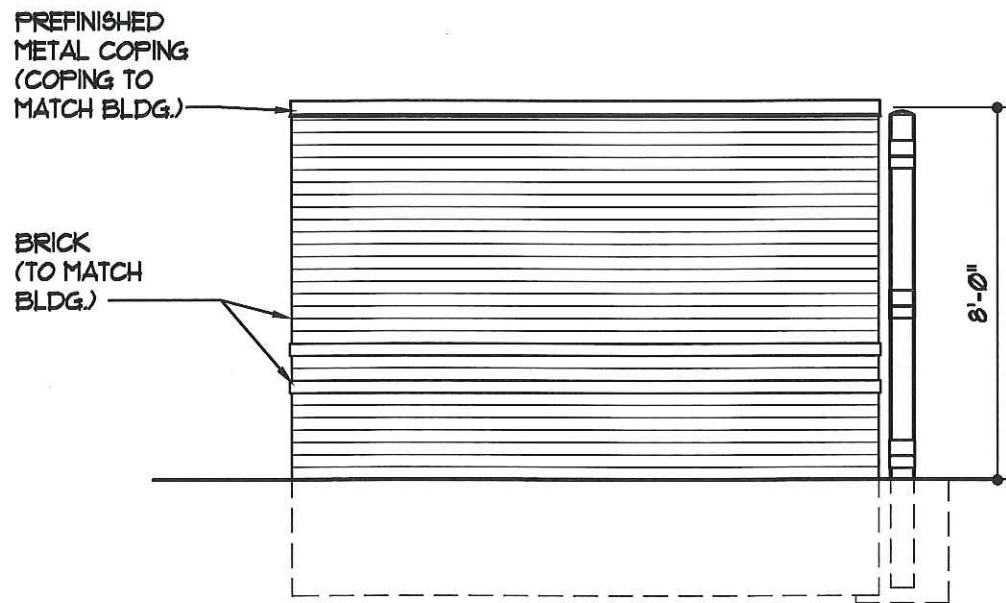
DESIGN NO.
 PROJECT NO.
 07/30/2016
 CL# 1617

E2.0

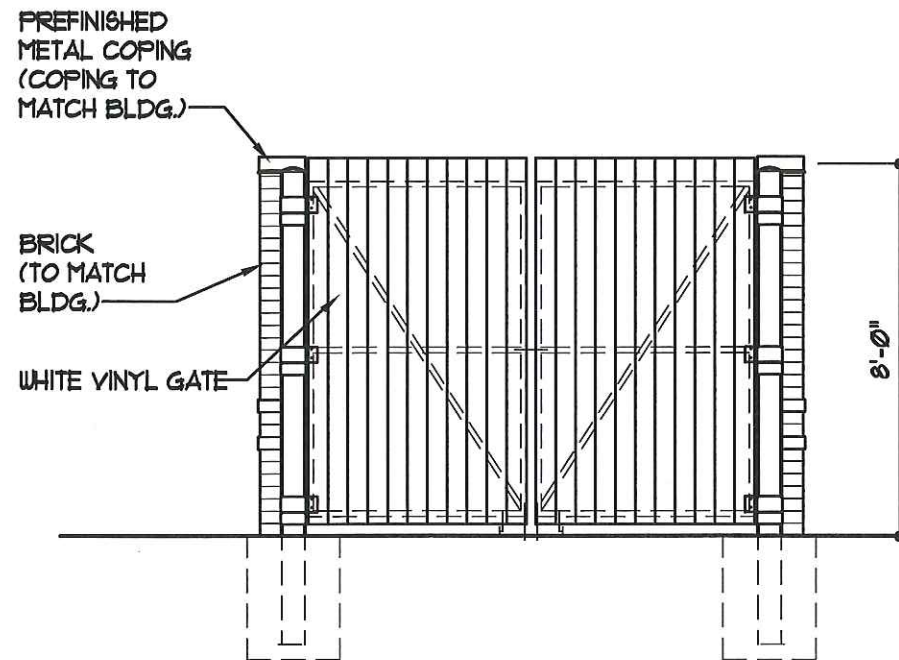


2 ASP-1
DUMPSTER SCREEN PLAN
 SCALE: 1/4" = 1'-0"

- TRASH ENCLOSURE NOTES**
1. ALL SWING GATES - GATE MANUFACTURER TO PROVIDE ALL NECESSARY HARDWARE
 2. DUMPSTER STOP - (2) 6" PIPE BOLLARDS 6'-0" C/C W/ 6" STL. CHANNEL WELDED TO BOLLARDS (PAINT) REF. DETAIL 13/ASP-1

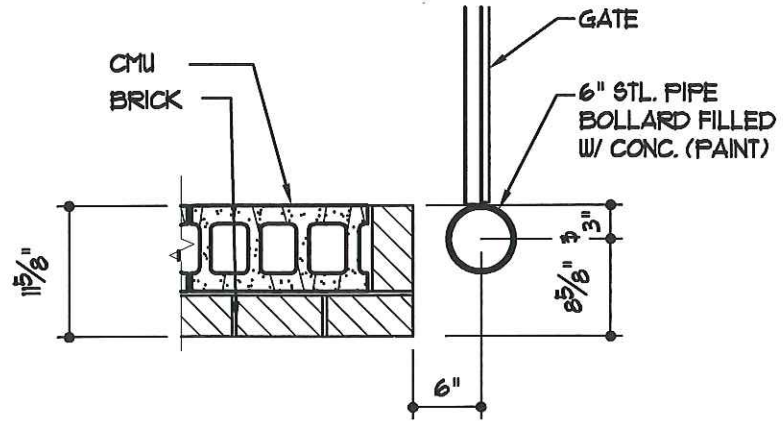


1
DUMPSTER ENCLOSURE ELEVATION
 SCALE: 1/4" = 1'-0"

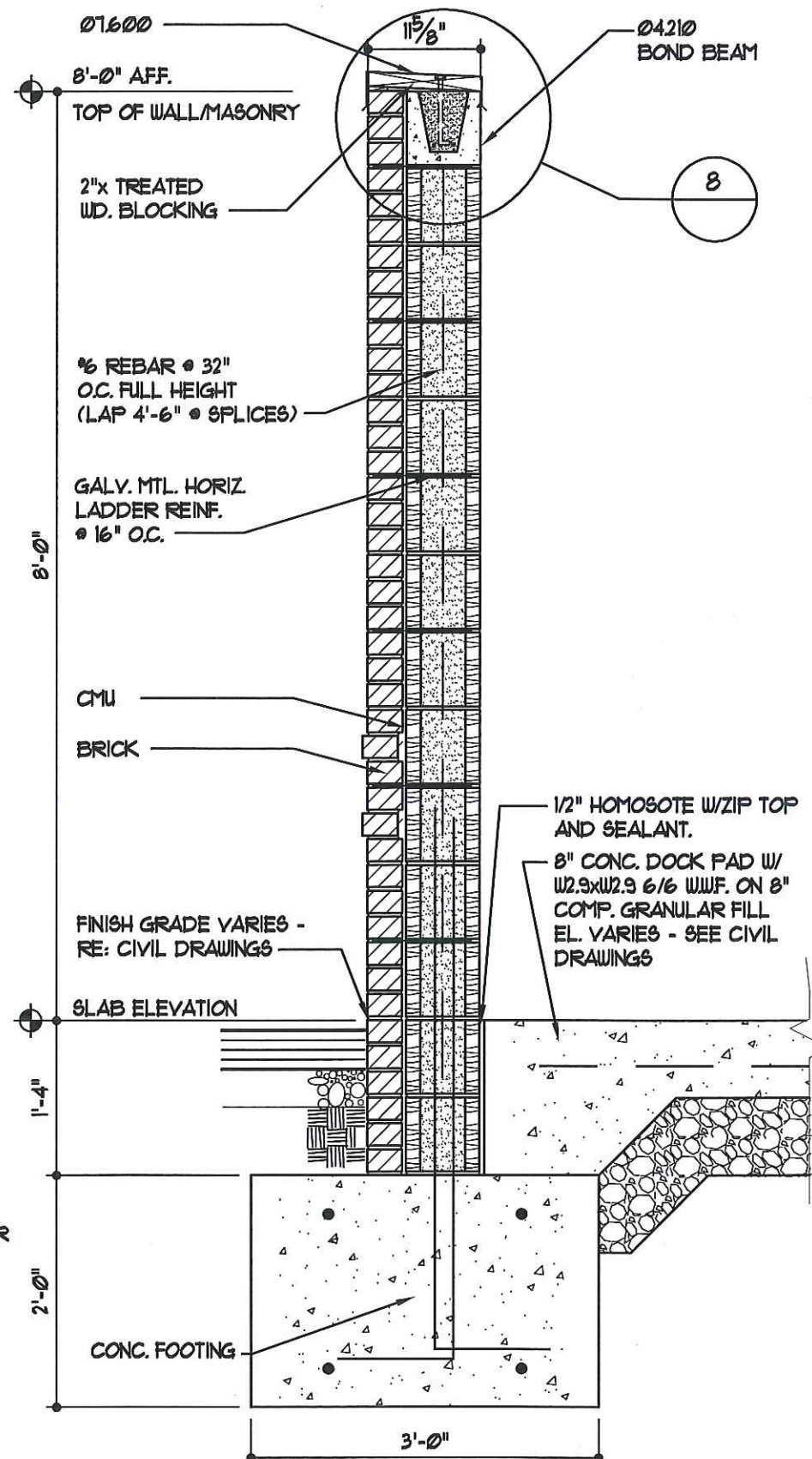


2
DUMPSTER SCREEN GATE ELEVATION
 SCALE: 1/4" = 1'-0"

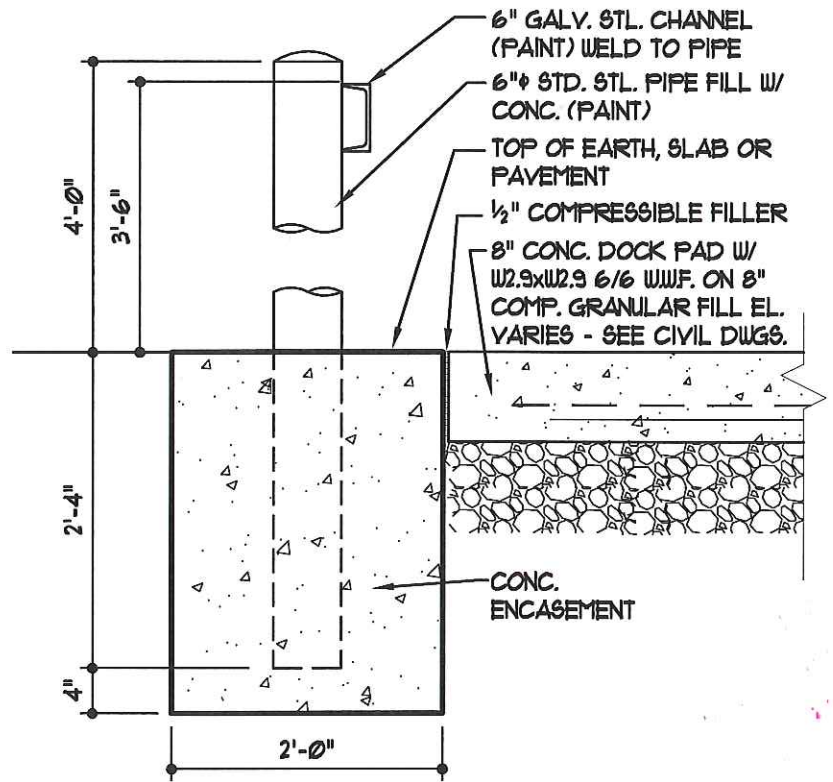
Handwritten signature and date:
 1.5.16



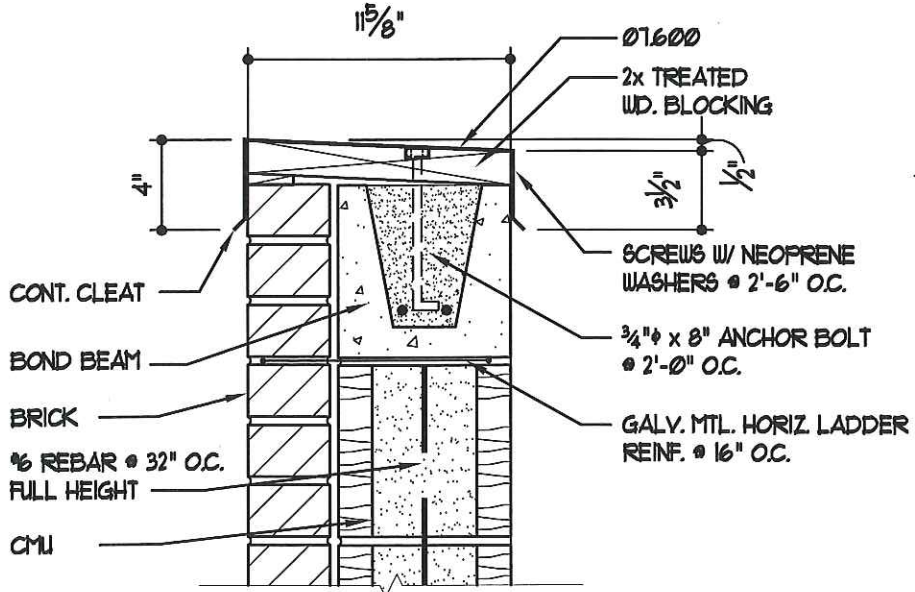
6 GATE POST DETAIL
SCALE: 3/4" = 1'-0"



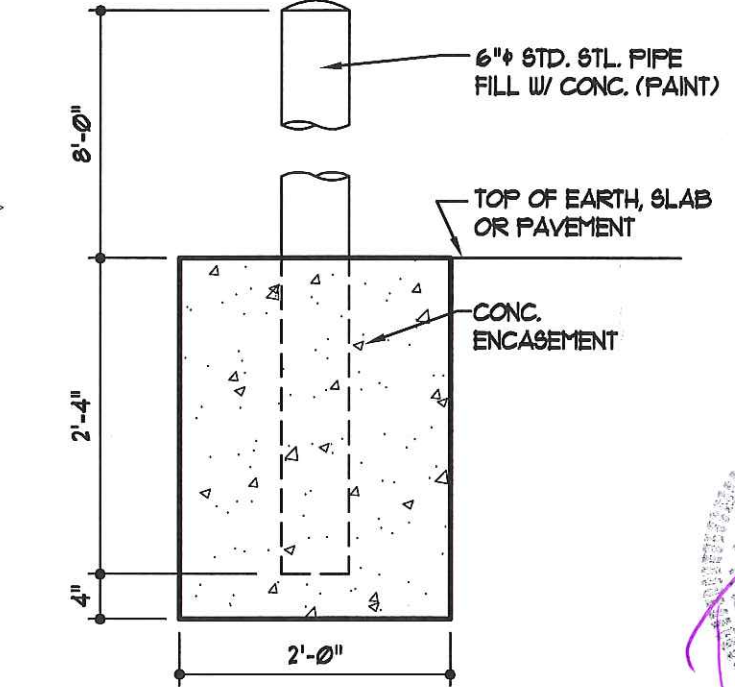
9 DUMPSTER ENCLOSURE WALL SECTION
SCALE: 3/4" = 1'-0"



13 DUMPSTER STOP DETAIL
SCALE: 3/4" = 1'-0"

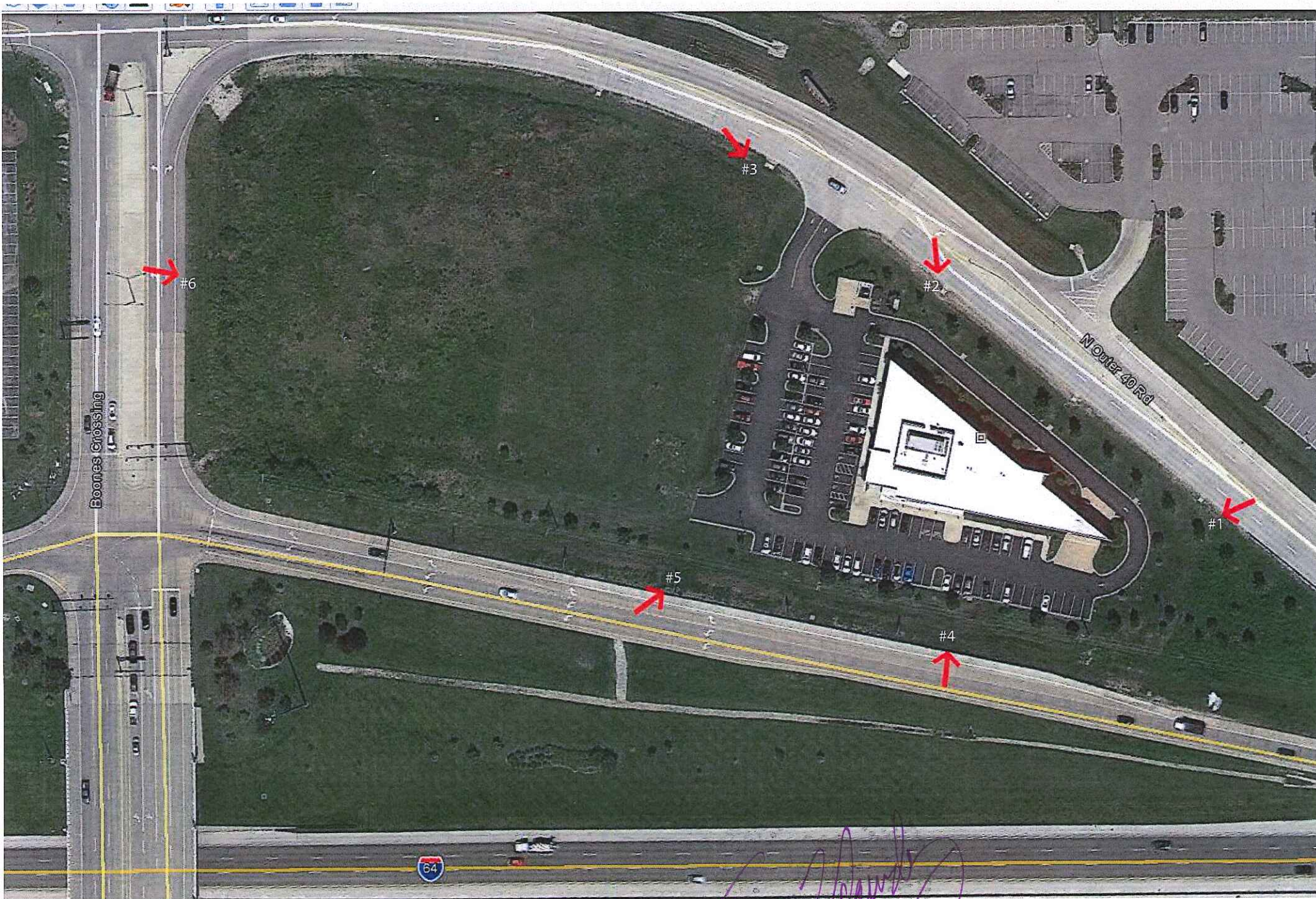


8 DUMPSTER ENCLOSURE COPING DET.
SCALE: 1 1/2" = 1'-0"



10 DUMPSTER STOP DETAIL
SCALE: 3/4" = 1'-0"

Tony A. Dawdy
7/5/16



Handwritten signature in purple ink, possibly reading "Tony Williams" and the date "7.5.16".

Site Photo Legend



#1



#4



#2



#5



#3



#6

Handwritten signature in purple ink
11/5/10