



VII.A.

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Planning Commission Staff Report

Project Type: Site Development Section Plan

Meeting Date: October 26, 2015

From: Jonathan Raiche, AICP
Senior Planner

Location: 18350 Wings Corporate Drive

Applicant: Dial Architects, on behalf of D.F. Adams and Associates

Description: **Wings Corporate Estates, Lot 14:** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 1.61 acre tract of land zoned "PI" Planned Industrial District located on the east side of Eatherton Road, south of Wings Corporate Drive.

PROPOSAL SUMMARY

The request is for a 16,640 square foot office/warehouse building located at the corner of Wings Corporate Drive and Buzz Westfall Drive in the interior of the Wings Corporate Estates development. The subject site is zoned "PI" Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance 2237. The exterior building materials will be comprised primarily of tilt-up concrete and glass with a prominent sloped roof.

HISTORY OF SUBJECT SITE

On February 6, 2006, the City of Chesterfield approved Ordinance 2237, which zoned the subject site from a "NU" Non-Urban District to a "PI" Planned Industrial District. Following the change of zoning, the City of Chesterfield approved the Site Development Concept Plan for Wings Corporate Estates on September 11, 2006. The Record Plat for the development was approved on February 4, 2008 to subdivide the development into twenty-one (21) lots. Of the twenty-one (21) lots in the Wings Corporate Estates development, three (3) lots have been developed with an additional lot near completion as seen in Figure 1 on the next page.

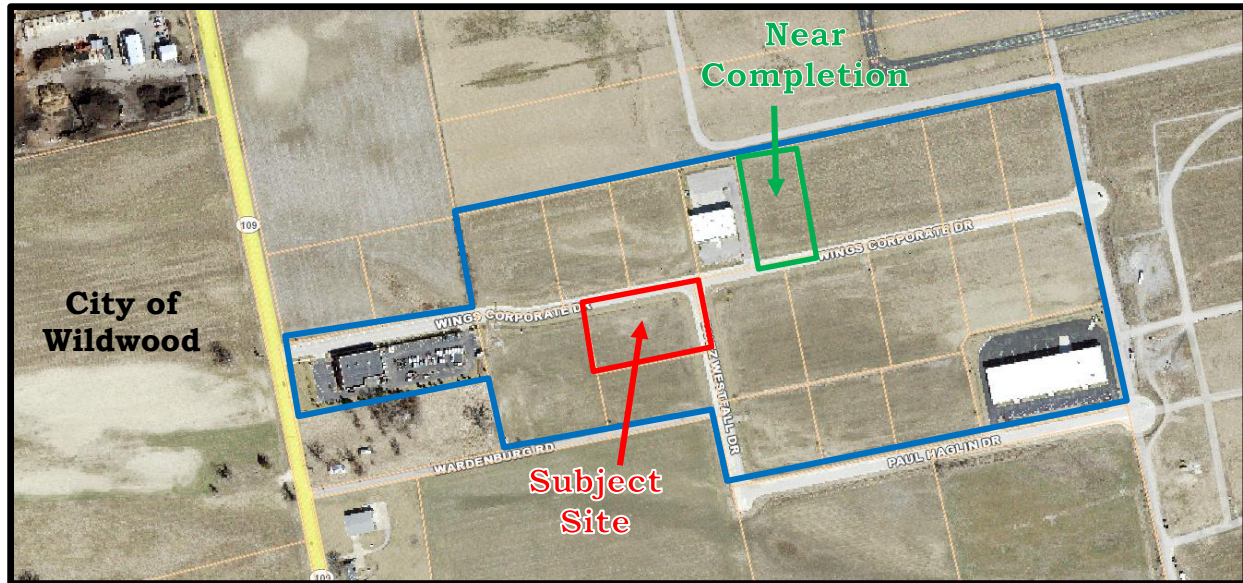


Figure 1. Aerial Photo

Surrounding Land Use and Zoning

The land use and zoning for the properties surrounding this parcel and shown in Figure 1 above are as follows:

- North:** The lots across Wings Corporate Drive are in Wings Corporate Estates. These lots are currently vacant and are zoned “PI” Planned Industrial.
- South:** The adjacent lot to the south is in Wings Corporate Estates and is currently vacant. It is also zoned “PI” Planned Industrial.
- East:** The lots across Buzz Westfall Drive are in Wings Corporate Estates. These lots are currently vacant and are zoned “PI” Planned Industrial.
- West:** The adjacent lot to the west is in Wings Corporate Estates and is currently vacant. It is also zoned “PI” Planned Industrial.

STAFF ANALYSIS

Zoning

The subject site is currently zoned “PI” Planned Industrial District under the terms and conditions of City of Chesterfield Ordinance Number 2237. The submittal was reviewed against the requirements of Ordinance Number 2237 and all applicable requirements of the Unified Development Code.

Comprehensive Plan

Staff has also evaluated this proposal against the Comprehensive Plan which indicates the subject site to be located in a Low-intensity Industrial land use designation. The proposed plan and office/warehouse uses are consistent with the City’s definition of Low-intensity Industrial development. The subject site is not located within any specific sub-areas and is consistent with the Comprehensive Plan.

Traffic Access and Circulation

The Site Development Section Plan proposes two access points into the property. Each of these access points is proposed as a shared drive with one located on Wings Corporate Drive at the west property line and the other located on Buzz Westfall Drive on the south property line. The alignment of the proposed drives is in compliance with the Access Management Plan submitted for the entire development. The drives have been evaluated by Staff and meet all City standards.

The proposed site also includes a pedestrian sidewalk along the Wings Corporate Drive. This proposed sidewalk is in compliance with the Concept Plan that has been approved for the overall development that ensures adequate pedestrian circulation throughout the development.

Open Space

City of Chesterfield Ordinance Number 2237 requires a minimum of 30% open space and a F.A.R. of 0.55 for the development. The site, as proposed, shows 31.6% open space with an F.A.R. of 0.24. Open space is generally located on the southern and western portions of the site and includes two bio-retention areas.

Parking

Parking for the site is proposed along the northern and eastern property lines. The number of parking spaces provided was calculated based on the mixture of office and warehouse use and meet the requirements of the City's UDC. In addition to the normal parking spaces, there are also two (2) loading spaces proposed located at the overhead garage doors on the west elevation of the building.

Tree Preservation

The subject site does not have any existing trees located on the property and therefore will have no tree preservation.

Landscaping

The proposal includes landscaping required by Section 04-02 of the City's Unified Development Code (UDC). The plantings include street trees along Wings Corporate Drive and Buzz Westfall Drive, as well as plantings dispersed throughout the site and along each side of the building which include screening for two different ground mounted equipment locations. The proposed plantings also enhance the proposed covered porch and parking island areas to create an aesthetically pleasant area for pedestrians utilizing these areas. The dumpster will be screened by a six (6) foot tall concrete panel enclosure. The concrete panels will be painted to match the building on three sides with a gate to access the dumpster on the fourth side. Two of the sides will be screened by proposed plantings and a third side will be bordered by one of the bio-retention areas as seen in Figure 2 on the next page.

façade to help continue this scale around three sides of the building. The south elevation has a larger expanse of tilt-up concrete which will be addressed later in this section.



Figure 3. Architectural Elevations

The loading area for this site is proposed on the western façade along with the dumpster enclosure. The applicant has proposed plantings along the building and dumpster enclosure as well as along the street that will provide screening for this area. In addition to the plantings, the proposed front porch will extend toward the west from the corner of the building and will also assist in providing a visual element to screen the loading area.

This development was presented to the City’s Architectural Review Board (ARB) on September 10, 2015. Due to a conflict of interest for one of the Board members, a quorum on this item was not present and thus no official vote was taken regarding the project. However, in an effort to provide input to the Planning Commission, discussion occurred amongst the three (3) remaining eligible members. As a result of these discussions, the Board provided the following recommendations to the applicant:

- 1) Consider extending the landscaping along the front porch/platform to the west. Alternatively, consider incorporating another pattern/material on the elevation of the platform.
- 2) Consider making the roofline more symmetrical when looking at the east and west elevations or add elements to give the perception of symmetry.

- 3) Consider matching the design of the dormers on the rear of the building with those on the front of the building.
- 4) Consider enlarging the size of the windows on the south façade and adding additional articulation on this façade.
- 5) Provide details on whether gutter downspouts will be needed along the front porch/platform and how they will affect the design.

Staff provided these recommendations from the ARB to the applicant in writing after the meeting. In response to these recommendations, the applicant provided updated Architectural Elevations which depict the gutter downspouts to address comment #5 above and are attached to this report; however, the applicant declined to incorporate the other recommendations into their design. Staff contacted the applicant to confirm that they wanted the project to be presented to the Planning Commission without incorporating the ARB's recommendations. The applicant verified that their written response was submitted with the intention of having the item move forward to the Planning Commission. A copy of the applicant's response letter is attached to this report for your reference.

While Staff believes that all of these items would enhance the site, items #3 and #4 are found to be areas in which the proposed design does not meet the City's Architectural Standards. Section 04-01 D. 2. of the UDC states that an applicant should "Design and coordinate all facades with regard to color, types and number of materials, architectural form and detailing". Without addressing comments #3 and #4 of the ARB, this design requirement is not met. The architectural form and detailing would be better coordinated if the south dormers were designed to resemble the north dormers. Additionally, more articulation on the south façade through enlarging the windows or through other design means would provide a more consistent use of materials for articulation.

DEPARTMENT INPUT

With consideration given to the input of the Architectural Review Board, Staff recommends that if the plan is approved, conditions be added that would, at a minimum, address the concerns regarding the south façade of the building. As the Board suggested, this could be through means of enlarging the windows, adding additional articulations in the tilt-up concrete, or a combination of both. Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design. Other than the architectural concerns previously mentioned, Staff has found the proposal to be in compliance with the site specific ordinance, the Site Development Concept Plan, Comprehensive Plan, and all City Code requirements.

MOTION

The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Wings Corporate Estates Lot 14, as presented.

- 2) “I move to approve the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect’s Statement of Design for Wings Corporate Estates Lot 14 with the following conditions (Conditions may be added, eliminated, altered or modified):
 - a. Revise the dormers on the southern façade to more closely resemble those on the north façade, and
 - b. Include more articulation on the southern façade through enlarging the windows or other design means.”

CC: Aimee Nassif, Planning and Development Services Director

Attachments: Applicant Response to ARB Recommendations
Architectural Elevations
Architect’s Statement of Design
Lighting Cut Sheets
Site Development Section Plan
Landscape Plan
Lighting Plan

dial architects

14364 Manchester Road
Manchester Missouri 63011
636 230 0400



September 29, 2015

Jonathan Raiche
City of Chesterfield
690 Chesterfield Parkway W.
Chesterfield, MO 63017-0760

RE: Wings Corporate Estates Lot-14 – Architects response to ARB questions.

Preface:

As you may know, the owner of this business park has a concept and a plan to make the Wings Development a special place in Chesterfield. His idea is to develop a park where the buildings are 'created' and 'designed' based on accurate historical concepts but constructed of modern and energy efficient materials. Future ideas of his include a highly energy efficient building on the property possibly utilizing solar panels or other ideas.

In the case of Lot 14, the idea is an accurate representation of a train station. To accomplish this, we purposefully did not go to the typical tilt-up concrete design tool box of standard horizontal reveals, stick-built aluminum windows, and a flat roof. In fact, we threw out that tool box and started over. The point is that it is antithetical to attempt to 'add' these modern elements to a historically accurate design and think that it is somehow an improvement because an additional element was added.

Quite a lot of professional design thought was put into creating a modern tilt-up building that emulated the concepts of a traditional train station. Making arbitrary additions for no other reason than 'because' will dramatically lessen the desired design effect of the owner and architect.

The following items are addressed in the order that they appear in the City comment letter. The original comments are repeated for clarity and efficiently.

- 1) Consider extending the landscaping along the front porch to the west or incorporating another pattern/material on the elevation of the front porch.

Response: The area in question is a Railway Platform. They were historically made of wood and later concrete to elevate loading to the height of the train cars. Our platform has a plain concrete side to it. Adding a texture or a pattern will draw undesired attention to this area AND addresses it with more importance than required or desired. However, knowing that the platform is there is important to the train station appearance. We frankly do not understand this comment, but the owner has intentions to increase the landscaping in the future with planting beds and/or other enhancements

We respectfully decline this suggestion.

- 2) Consider making the roofline more symmetrical when looking at the east and west elevations, or add elements to give the perception of symmetry.

Response: Symmetry as a design goal has its place in classical and in other historical architecture. However, in the history of train stations, we believe that the function was the goal and that the design grew out of its environment. The asymmetrical shape of this building is not merely a design thought that was pulled from thin air. On the contrary, the geometry of the roof was a direct result of the great depth of the roof overhanging the rail platform. If the ridgeline were centered on the building, the slope and overhang of the platform roof would not work out. So, as in history, the practical nature of this design predicated the end results. "A proper building grows naturally, logically and poetically out of all of its conditions". *Louis Sullivan*

Simply adding a 'fake' eave line to 'be more symmetrical' like so many homes in the area is not desirable.

We respectfully decline this suggestion.

- 3) Consider matching the dormers on the rear of the building with the front of the building.

Response: Again, we do not understand this comment other than thinking that arbitrary changes are a good thing. Anyway, the pitch of the roof does not allow for the south facing dormer to match the front.

We respectfully decline this suggestion.

- 4) Consider enlarging the size of the windows on the south façade and adding additional articulation on this façade.

Response: The windows in question are intentionally kept small. Their actual purpose is to let light into the warehouse above any racking that may exist. As to the lack of articulation, the elevation as a mass is our design intent. We do not wish to simply add reveals or other elements out of that old design toolbox.

We respectfully decline this suggestion.

- 5) Provide details on whether gutter downspouts will be needed on the front porch and how they will affect design.

Response: Thank you for this comment. The gutters and downspouts were negligently left off of the design. Please see the attached revised clarification drawings to resolve this issue.

- 6) (not numbered on City letter) – The windows on the north elevation, including in the dormers are unitized windows, (single hung type) not stick built. These will have clear, low E glass. The entry, the

south dormer windows, and the small south elevation 'high' windows are all stick built aluminum framed system with tinted glass as presented to the ARB.

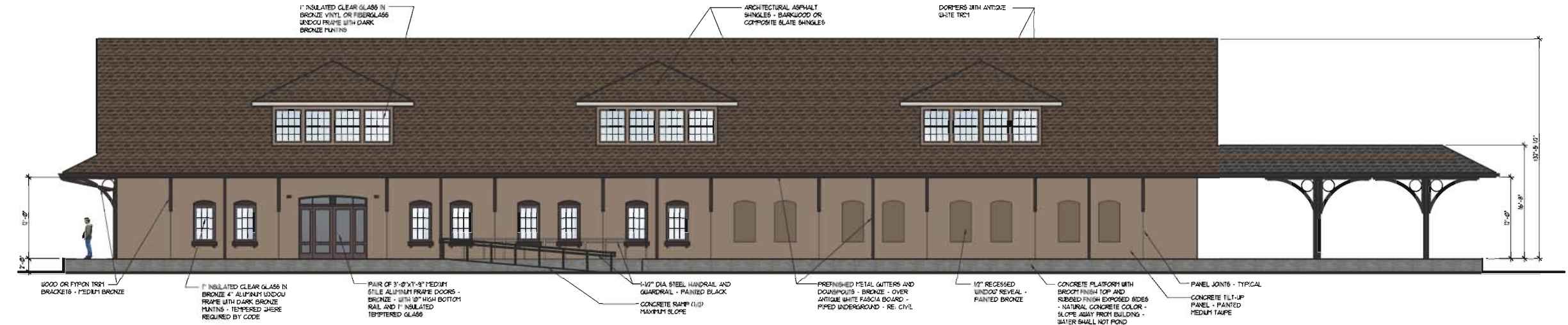
These comments are respectfully submitted. The Architect and the Owner spent quite a bit of time making sure the design was as historically accurate as could be within the constraints of modern tilt-up construction. The owner is specifically proud of this design and the hangar design building that he built in this park to meet his above stated goal. The next building is intended to be created of the same design principles. The owner respectfully requests the support of the city in this endeavor, noting that he is creating 'above and beyond' design for this building type and location in the City of Chesterfield – an industrial park.

Thanks for your honest consideration of these comments.

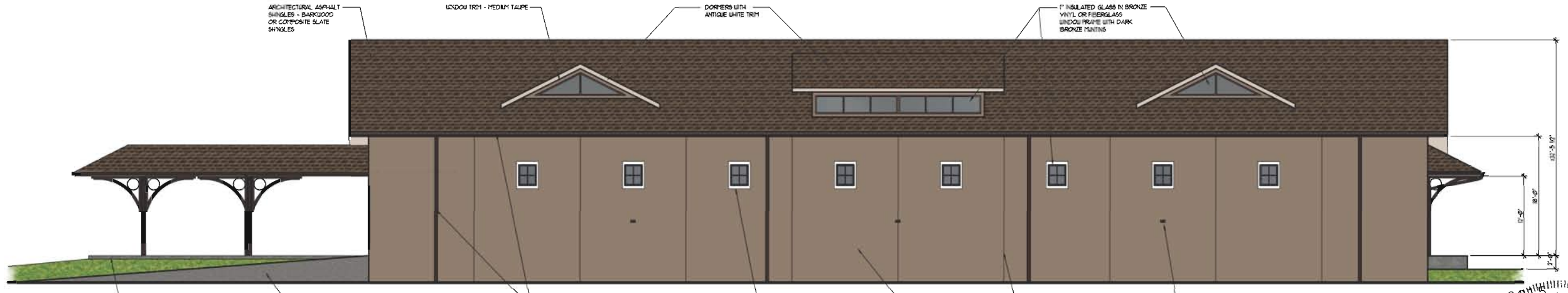
Thank you,
David W. Dial Architects, P.C.

A handwritten signature in blue ink, appearing to read 'Jeff Peterson', with a long horizontal flourish extending to the right.

Jeffrey Peterson

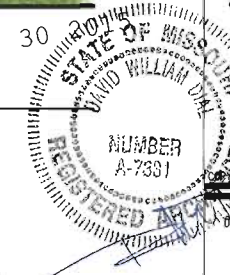


NORTH ELEVATION
1/8"=1'-0"



SOUTH ELEVATION
1/8"=1'-0"

SEP 30



STATE OF MISSOURI REGISTERED ARCHITECT:
DAVID WILLIAM DIAL - LICENSE NUMBER A-7331
DAVID W. DIAL ARCHITECTS, P.C.
ARCHITECTURAL CORPORATION #2000149091

THE ARCHITECT'S SEAL AFFIXED TO THIS SHEET INDICATES THAT THE NAMED ARCHITECT HAS PREPARED OR DIRECTED THE PREPARATION OF THE MATERIAL SHOWN ONLY ON THIS SHEET. OTHER DRAWINGS AND DOCUMENTS, NOT EXHIBITING THIS SEAL, SHALL NOT BE CONSIDERED PREPARED BY OR THE RESPONSIBILITY OF THE UNDERSIGNED.

dial architects
14364 Manchester Road • Manchester Missouri 63011
636 230 0400 www.dialarchitects.com

SHEET NUMBER:
ELEVATIONS
PROJECT NUMBER: 15020 DATE: 04-29-2015

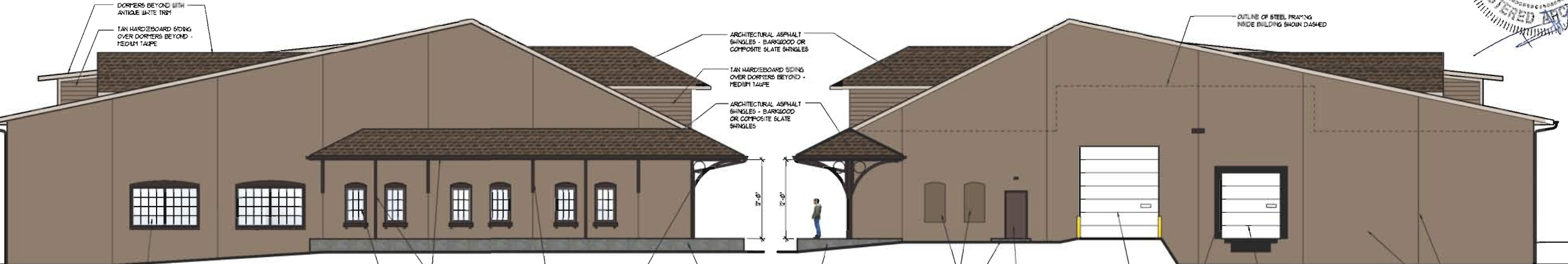
Structural Engineer:

Civil Engineer:

Mechanical/Electrical/Plumbing & Fire Protection Engineers:

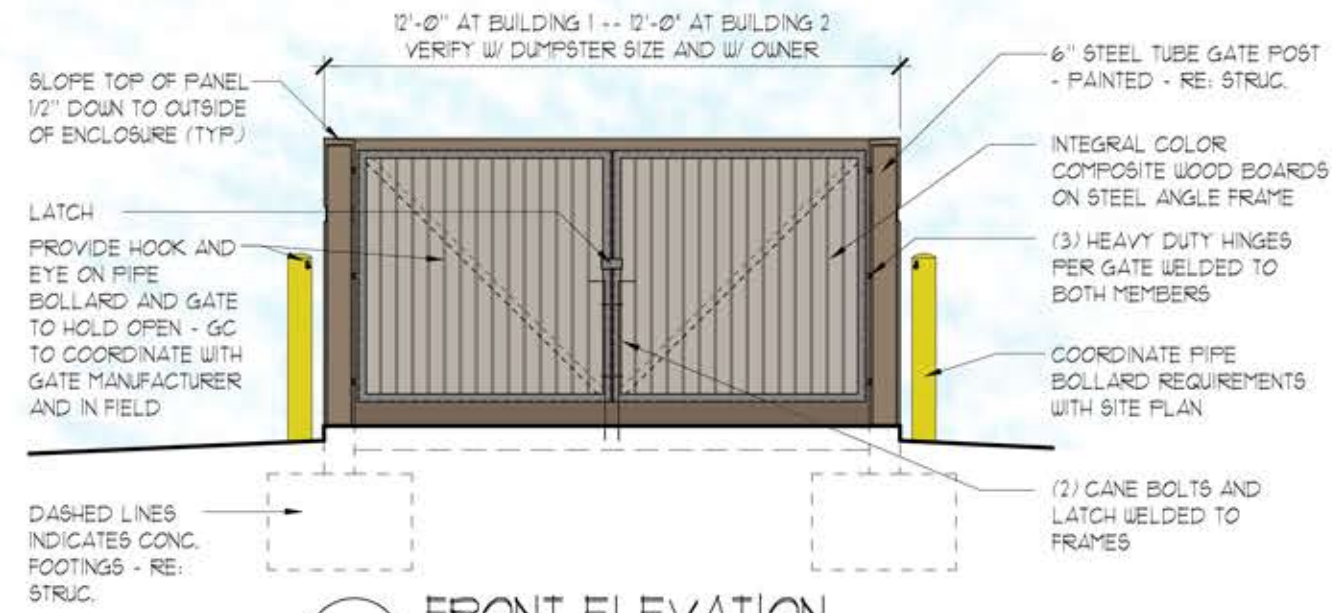
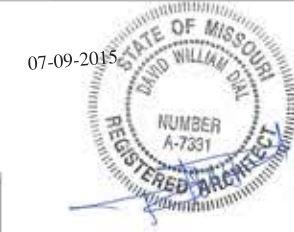
New Building for:
Wings Corporate Estates - Lot 14
Chesterfield, MO 63005

ISSUE DATES:
PRELIMINARY DESIGN: 03-06-2015
PRELIMINARY DESIGN: 03-13-2015
CITY SUBMITTAL: 04-29-2015
CITY COMMENTS: 06-08-2015
CITY COMMENTS: 08-13-2015
CITY COMMENTS: 09-30-2015

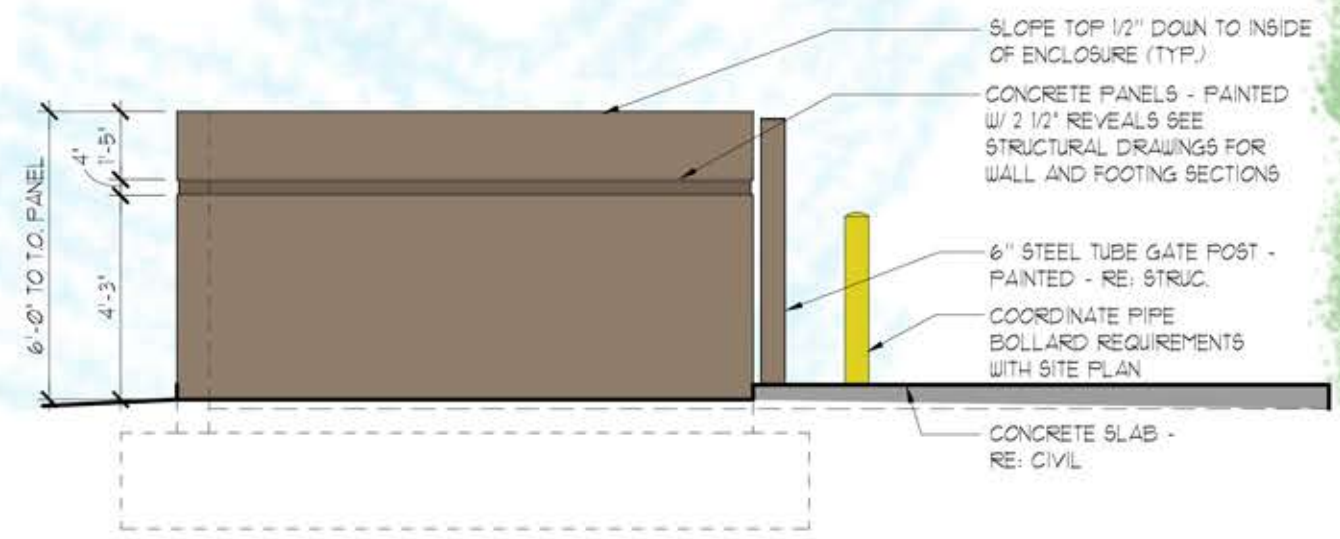


EAST ELEVATION
1/8"=1'-0"

WEST ELEVATION
1/8"=1'-0"

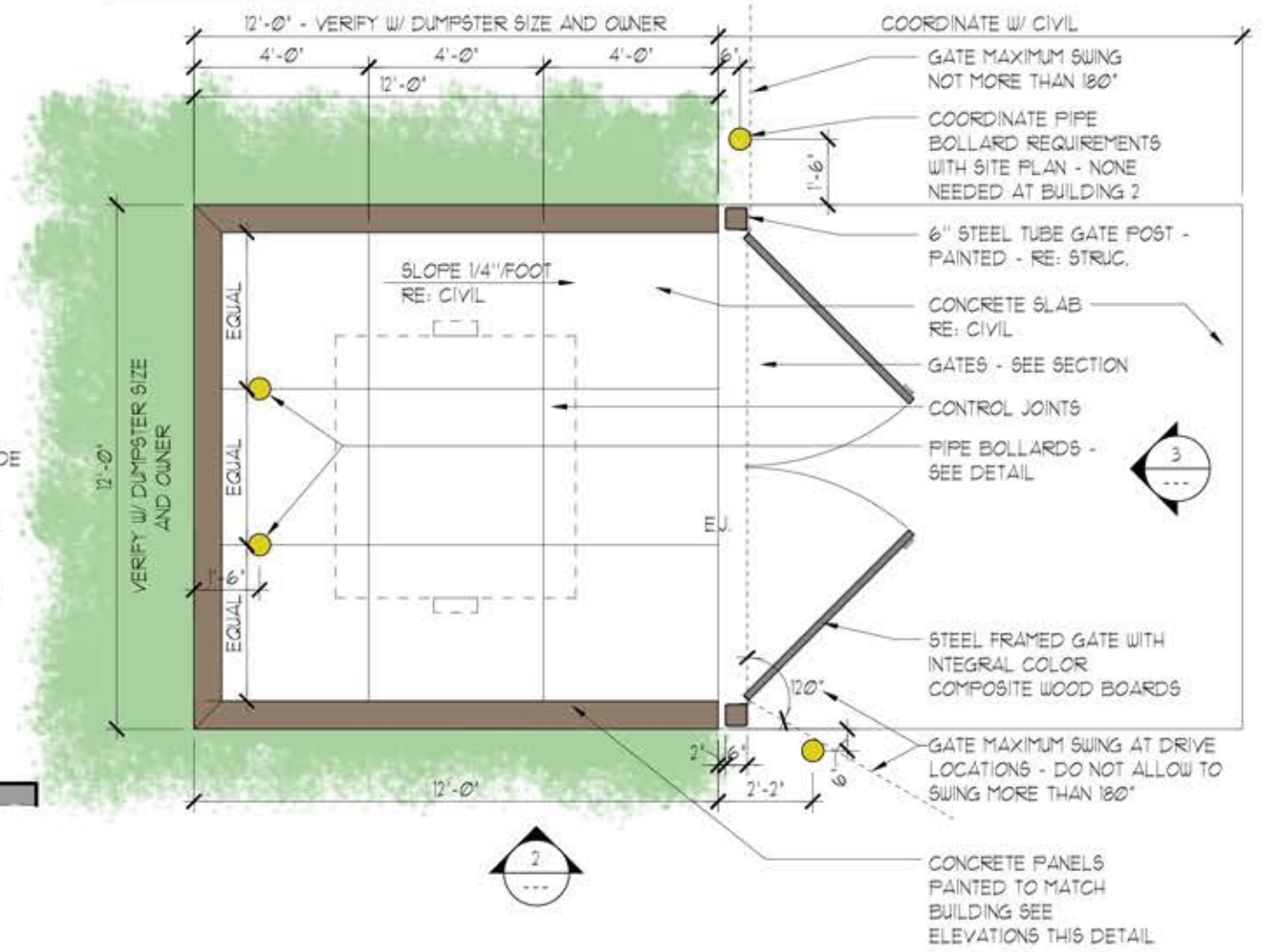


3 FRONT ELEVATION
1/4"=1'-0"



2 SIDE ELEVATION
1/4"=1'-0"

NOTE:
DUE TO VARYING DUMPSTER SIZES, THE G.C. MUST VERIFY THE SIZE OF THIS ENCLOSURE WITH THE OWNER AND/OR THE DUMPSTER SIZES INTENDED TO BE USED TO INSURE PROPER FIT.



1 DUMPSTER PLAN
1/4"=1'-0"

New Building for:

Wings Corporate Estates - Lot 14

Chesterfield, MO 63005

DATE:
07-09-15
DDA PROJECT NUMBER:
15020
DUMPSTER DETAILS

dial architects

14364 Manchester Road
Manchester Missouri 63011
636 230 0400

August 31, 2015

City of Chesterfield
Department of Planning
690 Chesterfield Parkway West
Chesterfield, Missouri 63017-0760

Members of the Architectural Review Board

Re: Architectural Statement
 Submittal for Approval of New Facility on Lot 14.
 Wings Corporate Estates, Lot 14 – 18350 Wings Corporate Drive

General Requirements for Site Design

This project consists of a single-story speculative office/warehouse building designed for a single tenant. The site is located at the corner of Wings Corporate Drive and Buzz Westfall Drive near Eatherton Road on the far west side of Chesterfield Valley in the Wings Development. The owner of this development is also the owner of this building. It is his intent to create an upscale business park by creating ‘specialty design’ buildings. This building is the second building of its kind in the park, but the fourth building in the park as a whole.

As you can see from the photos in this packet, the rectangular site is treeless and generally flat other than the drainage ditch and is otherwise featureless. The building is strategically located on the site to be compatible with the existing drainage system for the development.

The approved concept plan for the entire development shows a 5’ wide side walk on the south side of Wings Corporate Drive to provide pedestrian circulation. While we cannot control future development of neighboring sites, this specific site design forces shared entrances with future neighbors on each side. This concept is key to the park owners desires for this overall development.

We are not proposing the use of fencing nor retaining walls at this time.

Landscaping is designed per city ordinance in a similar fashion to the adjacent developments. Please see attached landscape plan.

General Requirements for Building Design

The owner of this facility, being a long time and current resident of the City of Chesterfield, places a high priority on the appearance of his facility and has played a major role in the design of this facility.

The intent of the design is to represent the spirit of transportation with the nearby airport and the old Centaur train station. The front (north) elevation is articulated with a large overhanging canopy with decorative posts and exposed brackets, glass, reveals and large dormers with operable windows. The canopy brackets and windows create rhythmically pleasing patterns accented with colors and opposing shapes to add depth and a sense of place. The full length canopy and railway platform extending around the street corner elevations addresses the intersection and encourages one to explore the building further.

The building will utilize an earth tone color, single hung operable windows and earth tone colored asphalt shingle sloped roof with dormers. The colors, glass and metal items are juxtaposed on the façades of the building to create a very nice overall building design. These include a main building color of a warm taupe and darker accent color of similar nature. In addition, the large railway platform canopy is designed to cover the northern and eastern facing walk to prevent the buildup of ice and snow in inclement weather. So the intended office area will receive the strong morning eastern light and the diffuse northern light provided by the compass orientation.

All sides of this building are treated in a historically accurate fashion. We have not only 'designed' the street elevations. The building materials are the same as all of the other buildings in this park, but are being used in more design appropriate ways to deliver an aesthetically pleasing solution. A special elastomeric coating designed specifically for concrete will protect the concrete panels. The sloped roof is covered with dark architectural asphalt shingles.

The windows for this project, in keeping with its strong design theme, are operable single-hung energy compliant windows. We have used the glass as an effective design element in the elevational articulation.

The design is respectful of the surrounding development in general and is harmonious in scale, material, and color. Nearby buildings are also constructed of tilt-up concrete and/or earth tone colors and materials similar to ours. Signage will be applied to the building in a similar fashion as adjacent buildings.

Site lighting is planned to be two light standards in the front of the building along Wings Corporate Drive, two light standards at the side of the building along Buzz Westfall Drive with wall-mounted, shoebox type fixtures on the west and south elevations of the building that will not shine off of the property in an unnecessary fashion and lighting on either side of the main building entry.

Please see the site development section plan for drainage information.

The proposed HVAC system is planned to be ground mounted.

Specific Requirements for the Chesterfield Valley

As stated above we encompass the building with reveals and colors for continuity while highlighting the visible front with glass. The trash receptacle will be screened from public view with tilt-up concrete to coordinate with the building.

The electrical service will be provided by a new transformer located along the south/east side of the property south of the building and will receive vegetation to screen the units. All utilities to this building are underground.

I-64/US-40 is to the north of this property and is not readily visible from the property. Automobile parking is north and east of the building and the service/loading area is on the west side of the building.

Street lighting is included in this project to match the existing industrial park street lighting and is located to the east of the building along Buzz Westfall Drive.

It remains our intention to provide a design that will enhance the local environment while blending with the building types already in Wings Corporate Estates. The owner is excited about providing a new quality designed facility for the City of Chesterfield.

Thank you for your assistance.

As required, building materials will be brought to the ARB meeting and will include:

- Glass and frame sample
- Color samples of the concrete coatings
- Asphalt Shingle Roof

End of Architects Statement



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____



EcoForm combines economy with performance in an LED area luminaire. Capable of delivering up to 20,000 lumens or more in a compact, low profile housing, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems, including motion response and wireless controls are available for further energy savings during off peak hours.

Ordering guide

example: ECF-APD-MRO-1-4-75LA-NW-120-NP-LF

Prefix	Controls	Mounting	Optics	LED Wattage	Color Temp	Voltage	Finish	Options
ECF								
ECF EcoForm	— Standard luminaire (leave blank) DIM 0-10V Dimming APD ¹ Auto Profile Dimming APD-MRO ² Auto Profile Dimming and Motion Response Override pole mounted motion sensor APD-MRI ^{2,3} APD with Motion Response Override luminaire sensor MRI ^{2,3} Motion Response at 50% low luminaire sensor MR50 ² Motion Response at 50% low, pole mounted sensor LimeLight Wireless Controls LLC2 ^{1,5} #2 lens for 8-15' mounted heights LLC3 ^{1,5} #3 lens for 15-25' mounted heights LLC4 ^{1,5} #4 lens for 25-40' mounted heights	1 Standard 2 2@180 2@90 2@90 3 3@90 3@120 3@120 4 4@90 WS Wall mount including surface conduit rear entry permitted MA Mast Arm Fitter (requires 2-3/8" O.D. Mast Arm)	2 Type 2 3 Type 3 4 Type 4 5 Type 5	530 mA 55LA-3253 ¹ 75LA-4853 100LA-6453 700mA 70LA-3270 105LA-4870 135LA-6470 1050mA 105LA-321A ¹ 160LA-481A 215LA-641A	CW Cool White 5,700K 70 CRI (nominal) NW Neutral White 4,000K 70 CRI (nominal) WW ⁴ Warm White 3,000K 70 CRI (nominal)	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V 50hz/60hz HVU 347-480V 50hz/60hz	BRP Bronze Paint BLP Black Paint WP White Paint NP Natural Paint OC Optional Color Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) SC Special color Specify, must supply color chip. Requires factory quote.	TL Tool-Less entry and driver removal hardware TB ³ Terminal Block IS ⁶ Internal Shield LF ⁷ Line Fusing LFC ⁷ Line Fusing for Canada PC ^{5,7,8} Receptacle with Photocell (Includes PCR5) PCB ^{5,7,8} Photocell Button PCRS ^{5,11,13} Photocell Receptacle only with 2 dimming connections PCR7 ^{5,12,13} Photocell Receptacle only with 2 dimming and 2 auxiliary connections RAM Retrofit Arm Mount kit PTF3 ⁹ Pole Top Fitter for 2 3/8"- 3" Tenon PTF3 ⁹ Pole Top Fitter for 3"- 3 1/2" Tenon PTF4 ⁹ Pole Top Fitter for 3 1/2"- 4" Tenon RPA ¹⁰ Round Pole Adapter for 3"- 3.9" O.D. BD Bird Deterrent (field installed only)

- Available in 120V-277V Voltages only (UNV, 120, 208, 240 & 277).
- MR50 and APD-MRO luminaires require one motion sensor per pole, ordered separately. See page 2 for Accessories. Available in 120V or 277V only.
- ECF-MRI requires outboarded sensor when used with Terminal Block (TB) Option.
- Contact factory for lead times on warm white.
- LLC2/LLC3/LLC4 Wireless Controls are not configurable with PC/PCB/PCR5/PCR7 Options. See page 7-8 for more info.
- Not configurable with Type 5 (5) Optics.
- Not configurable with 120-277V (UNV) Voltage. Voltage must be specified.
- Not configurable with 480V (480) Voltage.
- Not configurable with 3@120 (3@120) Mounting.
- No adaptor required for 4" round poles. RPAs provided with Black Paint standard.
- Works with 3-pin or 5-pin NEMA photocell/dimming device.
- Works with 3-pin or 5-pin NEMA photocell/dimming device and auxiliary connections are not connected (for future use only).
- If ordered with DIM, APD, MRI, MR50, APD-MRI, APD-MRO, dimming will not be connected to NEMA receptacle.

ECF EcoForm

Site & Area

EcoForm Accessories (order separately)

FS1R-100

MR hand held programmer

For use with 'MRI' motion response when field programming is required. If desired, only one is needed per job.

MS-A-120V

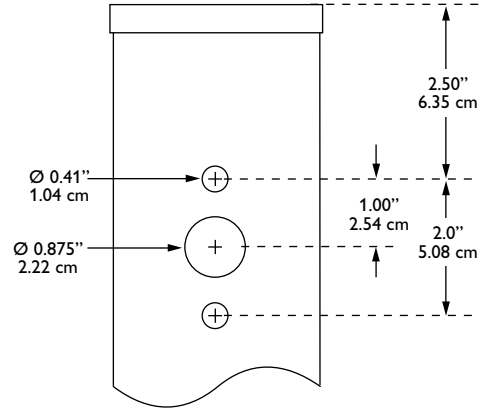
120V Input Area Motion Sensor
For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

MS-A-277V

277V Input Area Motion Sensor
For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

Note: Motion Sensors are ordered separately, with one (1) motion sensor required per pole location for MR50 or APD-MRO luminaires. See Luminaire Configuration Information on page 5 for more details. Area motion sensor color is Arctic White. MRI and APD-MRI luminaires include an integral motion sensor.

EcoForm Drill Template (standard arm mount)



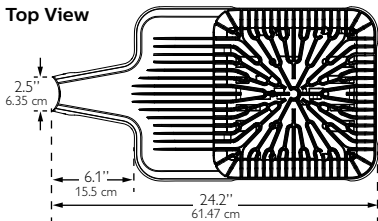
LED Wattage and Lumen Values (standard EcoForm luminaire)

Order Code (standard units)	Array Quantity	Total LEDs	LED Current (mA)	Average System Watts ¹	LED Selection	Initial Lumens ²			
						2 Type 2	3 Type 3	4 Type 4	5 Type 5
55LA-3253	2	32	530	52	NW	5,994 (s)	5,895 (s)	5,823 (s)	5,588 (s)
75LA-4853	3	48	530	77	NW	8,899 (s)	8,753 (s)	8,646 (s)	8,297 (s)
100LA-6453	4	64	530	103	NW	11,896 (s)	11,700	11,558	11,091
70LA-3270	2	32	700	69	NW	7,385 (s)	7,576 (s)	7,293 (s)	7,068 (s)
105LA-4870	3	48	700	104	NW	10,965 (s)	11,249 (s)	10,828 (s)	10,494 (s)
135LA-6470	4	64	700	139	NW	14,657 (s)	15,037	14,475 (s)	14,028
105LA-321A	2	32	1050	107	NW	10,199 (s)	10,458	10,072 (s)	9,767
160LA-481A	3	48	1050	158	NW	15,144 (s)	15,565	14,955 (s)	14,465
215LA-641A	4	64	1050	211	NW	20,243	20,252	19,991	19,880

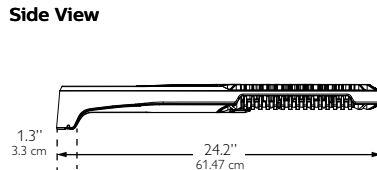
- System input wattage may vary based on input voltage, by up to +/- 10% , and based on manufacturer forward voltage, by up to +/- 8%.
 - Lumen values based on photometric tests performed in compliance with IESNA LM-79.
- (s). Data is scaled based on tests of similar, but not identical, luminaires.

Dimensions – Standard EcoForm luminaire

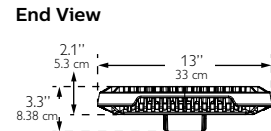
Top View



Side View



End View



EPA (ft²/m²)

Single	Twin (2@180)	3/4@90
0.2 / 0.019	0.5 / 0.046	0.5 / 0.046

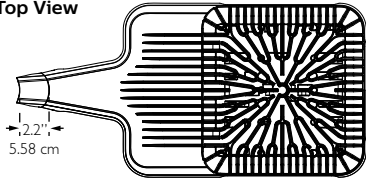
Approximate Luminaire Weight:
20 Lbs (9.07 Kg)

ECF EcoForm

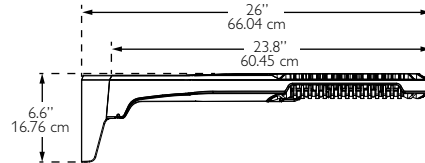
Site & Area

Dimensions – EcoForm with Retrofit Arm Mount (RAM)

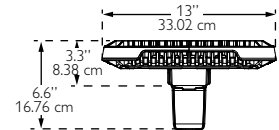
Top View



Side View



End View



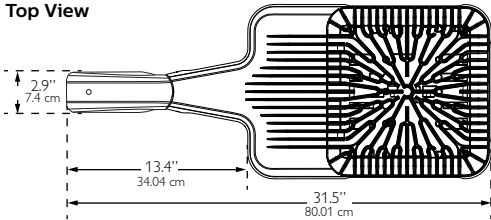
EPA (ft²/m²)

Single	Twin (2@180)	3/4@90
0.3 / 0.028	0.6 / 0.056	0.7 / 0.065

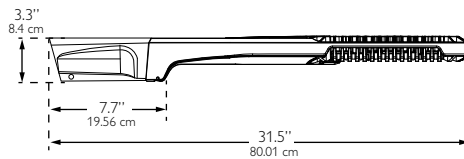
Approximate Luminaire Weight:
21 Lbs (9.53 Kg)

Dimensions – EcoForm with Mast Arm Fitter (MA)

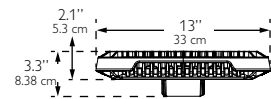
Top View



Side View



End View



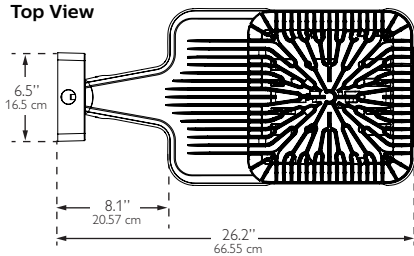
EPA (ft²/m²)

Single
0.51 / 0.047

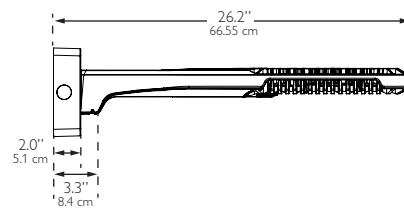
Approximate Luminaire Weight:
21.5 Lbs (9.77 Kg)

Dimensions – EcoForm with Wall Mount (WS)

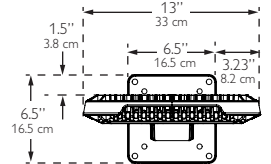
Top View



Side View



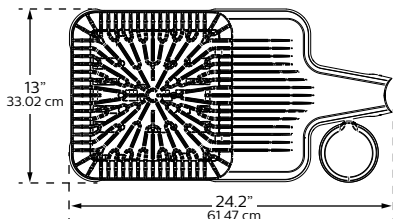
End View



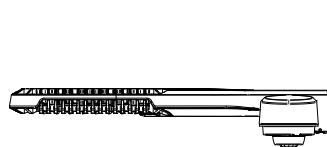
Approximate Luminaire Weight:
23.36 Lbs (10.6 Kg)

Dimensions – EcoForm with LimeLight Luminaire mounted controller

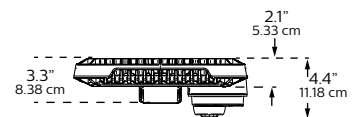
Top View



Side View



End View



ECF EcoForm

Site & Area

Luminaire Configuration Information

ECF

Philips Gardco EcoForm LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

ECF-DIM

Philips Gardco EcoForm LED luminaire provided with 0-10V dimming for connection to a control system provided by others.

ECF-APD

Philips Gardco EcoForm LED luminaire with Automatic Profile Dimming. Luminaire is provided with a Philips DynaDimmer module, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the Philips DynaDimmer module based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

ECF-APD is available in 120V–277V input only.

ECF-APD Dimming Profile:

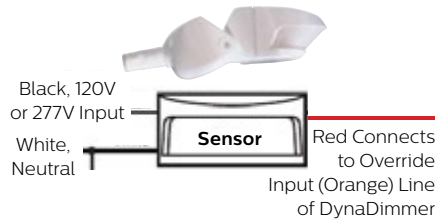
100%	2 hours 50%	6 hours 50%	100%
Power On	Mid Point	Power Off	

ECF-MR50

Philips Gardco EcoForm LED luminaire with motion response, providing a 50% power reduction on low and a commensurate reduction in light output. The power and light output reduction is accomplished utilizing the Philips DynaDimmer module, programmed for a constant 50% power. Power supplied by the motion sensor connected to the override line on the DynaDimmer takes the luminaire to high setting, 100% power and light output, when motion is detected. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

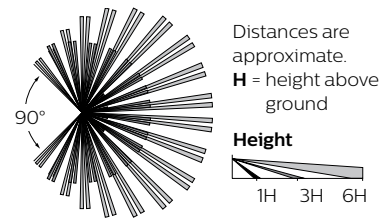
ECF-MR50 is available in 120V–277V input only to the luminaire. Motion sensors require single voltage 120V or 277V input.

The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input – MSA-120V) or the WattStopper EW-200-277-W (277V Input – MSA-277V.) One motion sensor per pole is required and is ordered separately. Area sensors require single voltage 120V or 277V input.



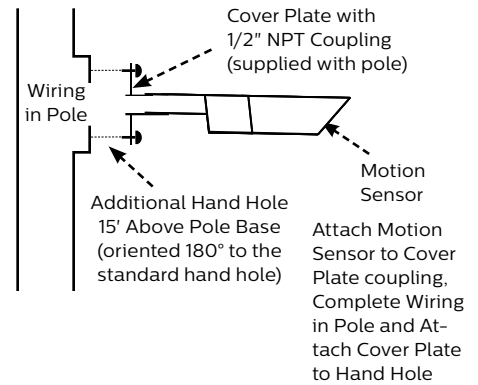
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.

Mounting to a Philips Gardco Pole:



ECF-APD-MRO

Philips Gardco EcoForm LED luminaire with Automatic Profile Dimming, with Motion Response Override. The ECF-APD-MRO combines the benefits of both automatic profile dimming and motion response, using the Philips DynaDimmer module. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the ECF-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

Notes:

ECF-APD-MRO is available in 120V through 277V input only to luminaire. The motion sensor requires either 120V or 277V input to the motion sensor.

The ECF-APD-MRO has the same pole requirements and utilizes the same motion sensors as the ECF-MR50. The motion sensor mounts and wires identically as well. The ECF-APD-MRO utilizes the identical dimming profile as shown for the ECF-APD.

By combining the benefits of automatic profile dimming and motion response, the ECF-APD-MRO assures maximum energy savings, and insures that adequate light is present if motion is detected.

All motion sensors utilized consume 0.0 watts in the off state.

ECF EcoForm

Site & Area

Luminaire Configuration Information (Continued)

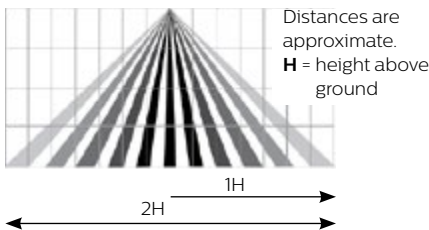
ECF-MRI

Luminaires with Motion Response include a LED driver and an integral programmable motion sensor. The motion sensor is set to a constant 50%. When motion is detected, the luminaire goes to 100%. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes. Available with 120V or 277V only.

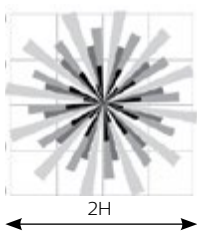
Luminaires include a passive infrared (PIR) motion sensor, WattStopper® FSP-211 equipped with an FSP-L3 lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, or mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

The approximate motion sensor coverage pattern is as shown below.

Side Coverage Pattern



Top Coverage Pattern



ECF-APD-MRI



Luminaires with Automatic Profile Dimming and Motion Response Override combine the benefits of both automatic profile dimming and motion response. APD-MRI luminaires utilize Philips DynaDimmer. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for APD luminaires (see page 4). If motion is detected during the time that the luminaire is operating at 50%, the luminaire goes to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes.

APD-MRI luminaires are available with 120V or 277V input voltages only.

APD-MRI luminaires use the identical motion sensor as MRI luminaires. See motion sensor details for ECF-MRI.

FS1R-100 Wireless Remote Programming Tool

The FS1R-100 Remote Programming Tool accessory permits adjustment of ECF-MRI and ECF-APD-MRI sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

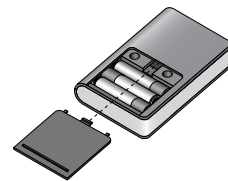
The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

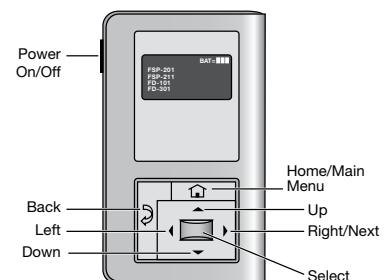
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than/greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost. More information on the FS1R-100 Remote Programming Tool is available at wattstopper.com.



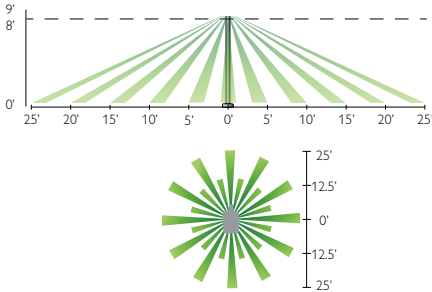
ECF EcoForm

Site & Area

Luminaire Configuration Information – EcoForm with LimeLight

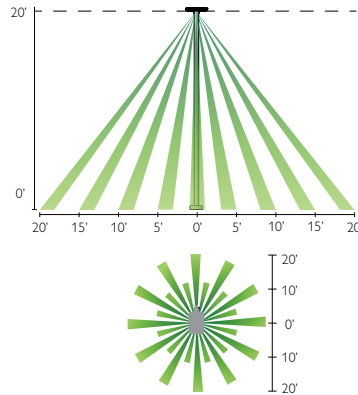
ECF-LLC2

EcoForm with LimeLight wireless technology
Controller pod attached to luminaire arm and includes radio, photocell and motion sensor with #2 lens for 8-15' mounting heights.



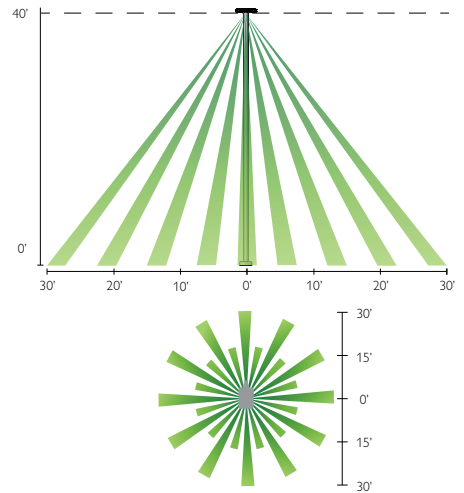
ECF-LLC3

EcoForm with LimeLight wireless technology
Controller pod attached to luminaire arm and includes radio, photocell and motion sensor with #3 lens for 15-25' mounting heights.



ECF-LLC4

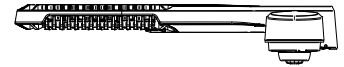
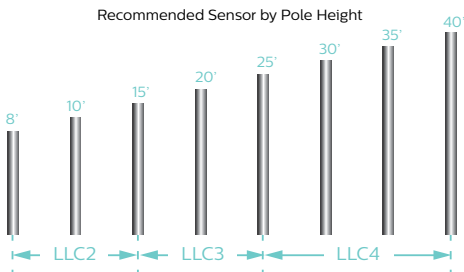
EcoForm with LimeLight wireless technology
Controller pod attached to luminaire arm and includes radio, photocell and motion sensor with #4 lens for 25-40' mounting heights.



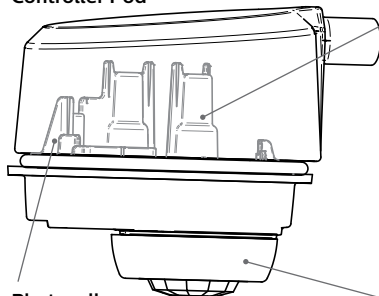
Luminaire Configuration Information – EcoForm with LimeLight

ECF-LLC(#)

With this configuration, the controller pod is mounted to the luminaire arm. One controller is required per luminaire. There are three different motion sensor configurations available. Each one corresponds to the desired mounting height that for your specific application. See motion response detection ranges below.



Controller Pod



Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 102-277V RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from gateway
- Reports internal PCB temperature
- Transmission Systems Operating within the band 2400-2483.5Mhz. IEEE 802.15.4
- ROHS Compliant

Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Motion Response

- Three different lens configurations
- Detects motion through passive InfraRed sensing technology
- Connects directly to radio through modular jack
- Three different mounting heights and detection ranges available

ECF EcoForm

Site & Area

Luminaire Configuration Information – EcoForm with LimeLight (Continued)

Gateway

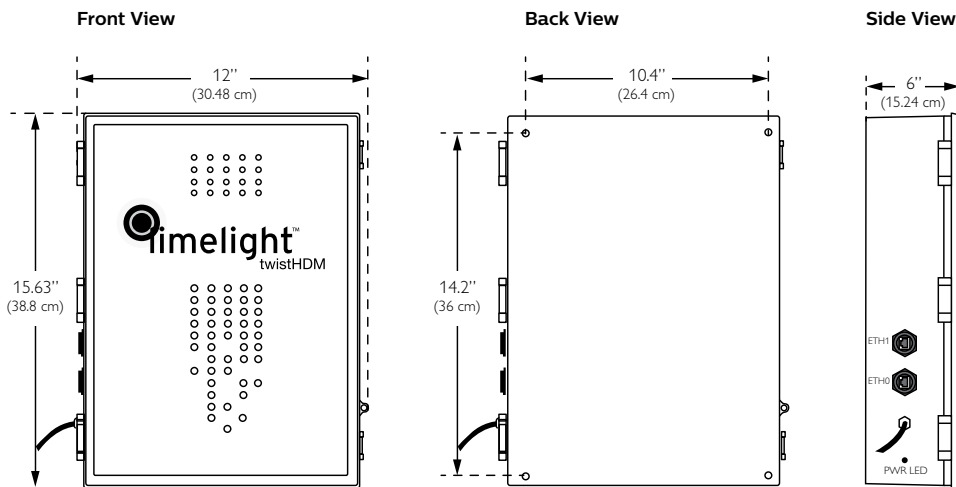
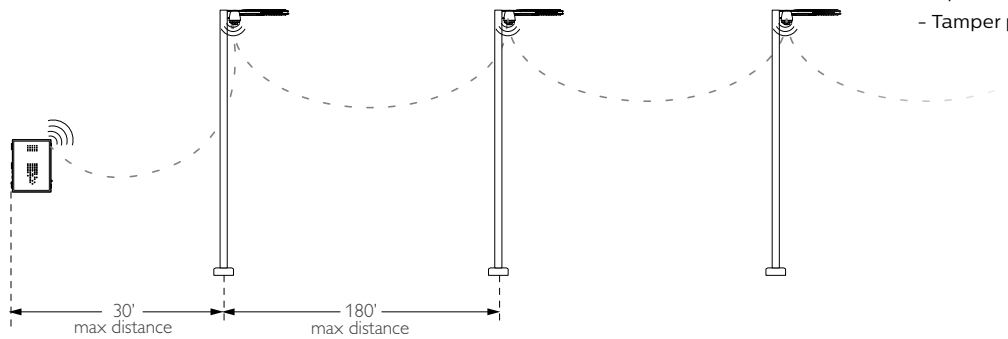
Overview: One gateway is included with the wireless controls system. The gateway opens up communication with the wireless radios installed with the EcoForm luminaires (or pole), allowing you to control your fixtures straight from the web. One LimeLight gateway can communicate with up to 800 fixtures. Typically one unit is required per parking lot.

Installation: Gateway has 4 blind threaded holes on the back side that accept 10-32 screws. Mount spacing is 10.41" across and 14.19" vertical.

Requirements: The gateway must be mounted in a secure on-site location. The gateway requires 120V. Distance of gateway to the first radio varies upon application; contact factory. Strong internet connection required.

Specifications:

- High density RF Mesh coordinator
- Ethernet or wireless internet connection to LimeLight server
- Proprietor of software "rules of operation"
- Watertight Ethernet connections
- Highly protected, long life ac/dc power supply
- Single board, ARM compliant 520Mhz Intel computer.
- Operating Temperature -20°C to 55°C
- Tamper proof housing



Specifications

Housing

One piece die cast aluminum housing with integral arm and separate, self retained hinged, one piece die cast door frame.

IP Rating

LED light engine rated IP66.

Vibration Resistance

EcoForm with Standard Arm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

LED Board and Array

32, 48, or 64 LEDs. Color temperatures: 3000K, 4000K, 5700K +/- 250K. Minimum CRI of 70. Aluminum metal clad board. RoHS compliant.

LED Thermal Management

The housing design allows the one piece housing to provide excellent thermal management critical to long LED system life.

Energy Saving Benefits

System efficacy up to 95 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

LED Performance

Predicted Lumen Depreciation Data¹

Ambient Temperature °C	Driver (mA)	Calculated L ₇₀ Hours ^{1,2}	L ₇₀ Per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
Up to 40 °C	Up to 1050 mA	> 350,000 hours	> 60,000 hours	97%

1. Predicted 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.
2. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Wireless Controls

The LimeLight wireless Controls System includes: gateway, controller pod (with wireless radio, motion response, and photocell), and commissioning/training. LimeLight is an intelligent web-based system that operates through a high density mesh (HDM) wireless technology. Wireless radios with motion response and photocell sensors are integrated with PureForm luminaires, and enable the fixtures to communicate via the ZigBee protocol. The gateway is a mini computer that connects to the internet, and is located in a secure location. The central LimeLight database channels communication to and from the gateway, allowing data to be viewed or managed through the web-based graphical user interface (GUI). See pages 8-10 for details and technical information.

Motion Sensors

ECF-MR50, ECF-APD-MRO, ECF-MRI, ECF-APD-MRI luminaires may be specified for additional energy savings during unoccupied periods. See pages 4-6 for complete details.

Optical Systems

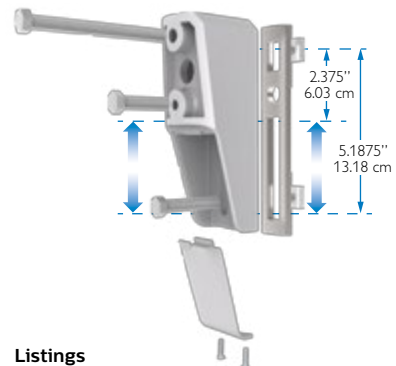
Type 2, 3, 4, and 5 distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, and 4 distributions to control backlight.

Mounting

Standard luminaire arm mounts to 4" round poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles.

Retrofit Arm Mount

EcoForm features an innovative retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately.



Listings

ETL/cETL listed to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. All EcoForm luminaires equipped with NW and CW are DesignLights Consortium® qualified.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

Warranty

EcoForm luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer.



Job:
Type:
Notes:

TYPE SA
POLE

Poles

Page 1 of 4

4" Straight Square Steel

The Philips Gardco SSS straight steel pole consists of a one-piece square fabricated steel lighting standard. The carbon steel base plate is secured to the shaft with a continuous circumferential weld providing excellent strength and integrity. The poles are finished with an electrostatically applied, thermally cured TGIC polyester powdercoat. All poles include anchor bolts, full base cover, hand hole, ground lug and top cap.



PREFIX	HEIGHT	SIZE	GAUGE	DRILLING	FINISH	OPTIONS
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX	HEIGHT	SIZE	GAUGE	DRILLING
SSS4	10'	4"	7	D1 1 Way
	12'			D2 2 Way
	14'			D2@90 2 Way at 90°
	15'			D3 3 Way
	18'			D4 4 Way
	20'			T2 2 3/8" OD Tenon
	24'			T4 4" OD Tenon
	25'			
	30'			

FINISH

PP	Prime Painted
BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
GV	Galvanized (No Paint)
FPGV	Finished Paint over Galvanized (specify color)
OC	Optional Color Paint Specify RAL designation ex: OC-RAL7024.
SC	Special Color Paint Specify. Must supply color chip.

OPTIONS

FES	Festoon Outlet
AHH	Additional Hand Hole

For Festoon Outlets and Additional Hand Holes, indicate height above base and orientation to original hand hole. See Pole Orientation Information on Page 4.

Couplings

Indicate size (1/2", 3/4", 1", 1 1/4", 1 1/2".) Indicate height above base and orientation to hand hole. See Pole Orientation Information on Page 4.

CL	Coupling - Internal thread
----	----------------------------

Single Mount Bullhorn Brackets

Indicate height above base and orientation to hand hole. See Pole Orientation Information on Page 4.

GM-080-19	Single - 1.9" OD
GM-080-24	Single - 2.4" OD

Motion Response Provisions

GMR	Provision for Gardco HID Motion Response System
-----	---

Minimum Pole Height is 18'. Includes a 1/2" coupling placed 180° to the hand hole, 12' above the pole base.

MSM	Motion Sensor Mounting Provision for LED Luminaires available with Motion Response
-----	--

Minimum Pole Height is 18'. Includes a special hand hole with 1/2" coupling placed in the cover plate, 180° to the hand hole, 15' above the pole base.

Refer to Steel Pole Accessories sheet 79415-26 for additional accessories.

1611 Clovis Barker Road, San Marcos, TX 78666

(800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 sitelighting.com

© 2011 Koninklijke Philips Electronics N.V. All Rights Reserved.

Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

79415-17/0611

PHILIPS

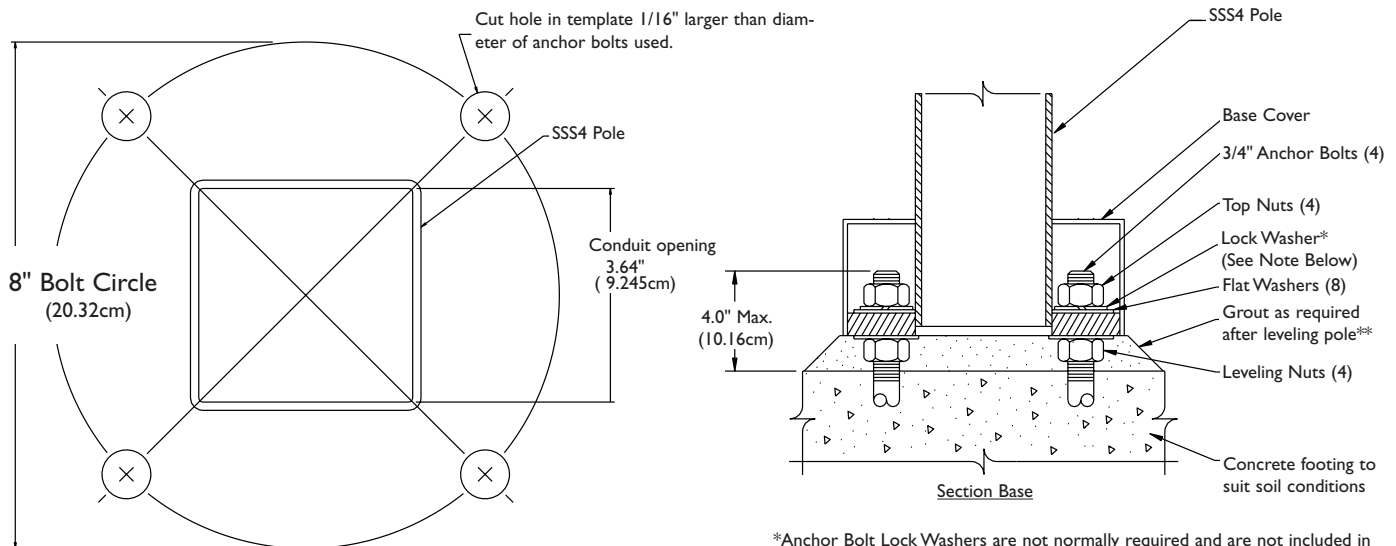


POLE DATA

CATALOG NUMBER		POLE SIZE		MAXIMUM LUMINAIRE LOADING ¹									ANCHOR BOLT DATA ²		
				HIGH WIND CONDITIONS						NORMAL WIND CONDITIONS					
				130 MPH		120 MPH		110 MPH		100 MPH	90 MPH	80 MPH			
PREFIX	HEIGHT (FT.)	POLE SIZE (inches)	GAUGE	EPA FT ²	Max Weight (lbs)	EPA FT ²	Max Weight (lbs)	EPA FT ²	Max Weight (lbs)	EPA FT ²	EPA FT ²	EPA FT ²	BOLT CIRCLE (inches)	BOLT SIZE (inches)	MAX PROJ. (inches)
SSS	10	4	11	9.9	248	12.0	300	14.5	363	18.9	23.9	30.6	8.0"	3/4 x 17 x 3	4.0"
SSS	12	4	11	7.4	185	9.2	230	11.3	283	14.8	18.8	24.4	8.0"	3/4 x 17 x 3	4.0"
SSS	14	4	11	5.5	138	7.0	175	8.8	220	11.7	15.1	19.9	8.0"	3/4 x 17 x 3	4.0"
SSS	15	4	11	3.8	95	5.0	125	6.7	168	8.9	11.8	15.9	8.0"	3/4 x 17 x 3	4.0"
SSS	18	4	11	2.3	58	3.5	88	4.8	120	6.7	9.2	12.6	8.0"	3/4 x 17 x 3	4.0"
SSS	20	4	11	-	-	1.9	48	3.3	83	4.5	6.7	9.6	8.0"	3/4 x 17 x 3	4.0"
SSS	20	4	7	4.3	108	5.6	140	7.4	185	8.8	11.8	16.0	8.0"	3/4 x 17 x 3	4.0"
SSS	25	4	11	-	-	-	-	-	-	1.0	2.6	4.8	8.0"	3/4 x 17 x 3	4.0"
SSS	25	4	7	1.6	40	2.6	65	3.8	95	5.4	7.7	10.8	8.0"	3/4 x 17 x 3	4.0"
SSS	30	4	7	-	-	-	-	1.2	50	2.6	4.4	6.7	8.0"	3/4 x 17 x 3	4.0"

- Warning:** Additional wind loading, in terms of EPA, from banners, cameras, floodlights and other accessories attached to the pole, must be added to the luminaire(s) EPA before selecting the pole with the appropriate wind load capability.
- Factory supplied template must be used when setting anchor bolts. Philips Gardco will not honor any claim for incorrect anchorage placement resulting from failure to use factory supplied templates.

DIMENSIONS



NOTE: Factory supplied template must be used when setting anchor bolts. Philips Gardco will not honor any claim for incorrect anchorage placement from failure to use factory supplied templates.

*Anchor Bolt Lock Washers are not normally required and are not included in standard anchor bolt sets. They are available upon request at additional cost.
 ** Grouting should include a drainage slot or tube (by others) to permit water to drain from the base of the pole. Failure to provide drainage may weaken the pole base structure over time and may result in pole base failure, for which Philips Gardco is not responsible.

SPECIFICATIONS

POLE SHAFT: The pole shaft is fabricated from a single-piece of 11 ga (.1196") or 7 ga (.1793") commercial carbon steel. The formed steel plate is longitudinally welded providing minimum yield strength of 46 KSI.

ANCHOR BASE: The pole anchor base is fabricated from A-36 structural quality carbon steel with a minimum yield strength of 36 KSI. The base plate telescopes the pole shaft and is circumferentially welded on both top and bottom.

ANCHOR BOLTS: Anchor bolts are fabricated from a commercial quality hot rolled carbon steel bar that meets or exceeds a minimum guaranteed yield strength of 50,000 psi. Bolts have an "L" bend on one end and threaded on the opposite end. Anchor bolts are galvanized a minimum of 12" on the threaded end. Four (4) properly sized bolts, each furnished with two (2) regular hex nuts and two (2) flat washers, are provided per pole, unless otherwise specified.

BASE COVER: A two-piece base cover completely conceals the entire base plate and anchorage.

HAND HOLE: The reinforced hand hole has a nominal rectangular 2" X 4" inside opening in the pole shaft. Included is a cover plate with attachment screws. The hand hole is located 18" above the base and 180° clockwise with respect to the luminaire arm when viewed from the top of the pole for one arm. For two arms the hand hole is located directly under one arm.

POLE TOP CAP: Each pole assembly is provided with a removable pole top cap.

FINISH: Poles are available with a bronze, natural, white or black electrostatically applied, thermally cured TGIC polyester powdercoat finish.

STOCK POLES: Poles provided from stock under the Quick Ship program are drilled for four (4) luminaires at 90° with three (3) hole sets plugged.

GENERAL POLE INFORMATION

DESIGN: The poles as charted are designed to withstand dead loads and predicted dynamic loads developed by variable wind speeds with an additional 30% gust factor under the following conditions:

The charted weights include luminaire(s) and/or mounting bracket(s).

The wind velocities are based on 10 mph increments from 80 mph through 100 mph. Poles to be located in areas of known abnormal conditions may require special consideration. For example: coastal areas, airports and areas of special winds.

Poles are designed for ground mounted applications. Poles mounted on structures (such as buildings and bridges) may also necessitate special consideration requiring Philips Gardco's recommendation.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the pole.

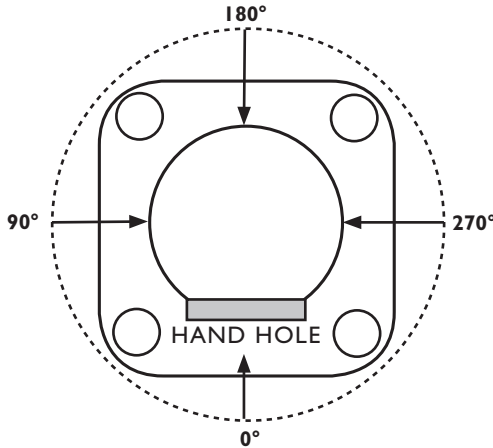
WARNING: This design information is intended as a general guideline only. The customer is solely responsible for proper selection of pole, luminaire, accessory and foundation under the given site conditions and intended usage. The addition of any items to the pole, in addition to the luminaire, will dramatically impact the EPA load on that pole. It is strongly recommended that a qualified professional be consulted to analyze the loads given the user's specific needs to ensure proper selection of the pole, luminaire, accessories, and foundation. Philips Gardco assumes no responsibility for such proper analysis or product selections. **Failure to insure proper site analysis, pole selection, loads and installation can result in pole failure, leading to serious injury or property damage.**

GENERAL INFORMATION: Mounting height is the vertical distance from the base of the lighting pole to the center of the luminaire arm at the point of luminaire attachment. Twin arms as charted are oriented at 180° with respect to each other. For applications of two (2) arms at 90° or other multiple arm applications, consult the factory.

WARRANTY: Philips Gardco poles feature a 1 year limited warranty. See Warranty Information on www.sitelighting.com for complete details and exclusions.

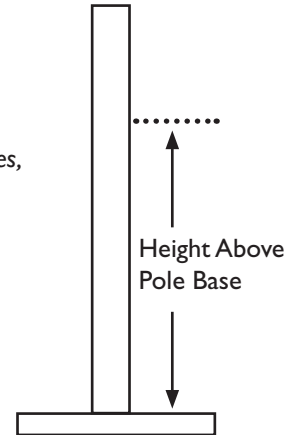
ORIENTATION INFORMATION

FACTORY INSTALLED OPTIONS AND ACCESSORIES



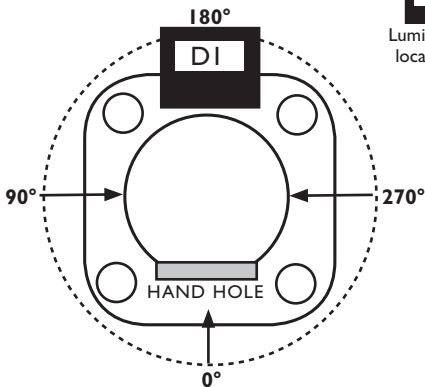
Orientation is measured clockwise from the Hand Hole Center.

For Factory Installed Options and Accessories, Specify Orientation from Hand Hole and Height Above Pole Base Where Required.

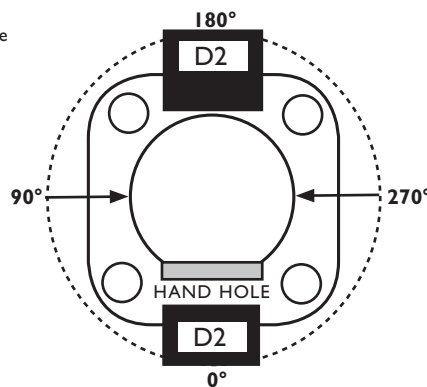


STANDARD ARM MOUNT LUMINAIRE ORIENTATION

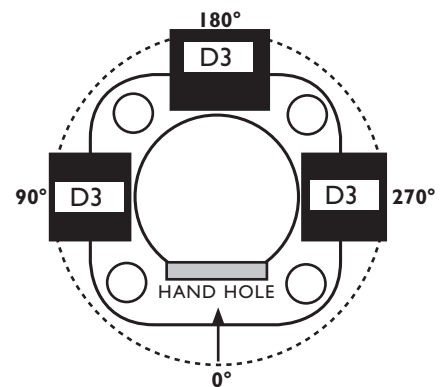
D1 Drilled for Single Luminaire



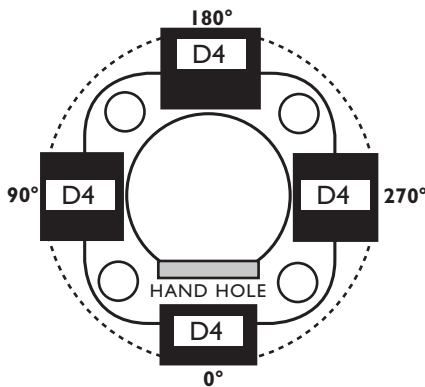
D2 Drilled for 2 Luminaires at 180°



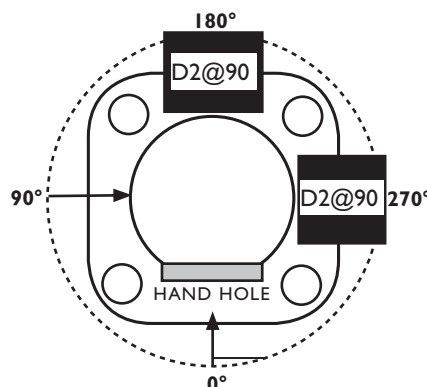
D3 Drilled for 3 Luminaires @ 90°



D4 Drilled for 4 Luminaires at 90°



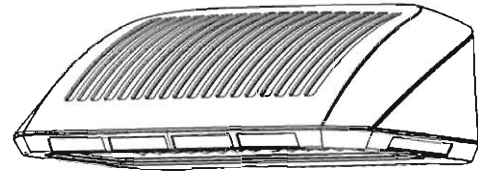
D2@90 Drilled for 2 Luminaires at 90°



High performance and integrated style, all in one luminaire

LED Wall Sconce 161

TYPE SB



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

PHILIPS GARDCO, LED WALL SCONCE 161

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

Ordering guide

example: 161-CWL-2-70LA-6435-CW-UNIV-BRP

Prefix		Distribution	Wattage	LED Type	Voltage	Finish	Options
161-CWL	Sconce 161 LED	2 IES Type 2 distribution	350mA 70LA-6435 2 LED arrays, 70W	CW 5700°K 70 CRI	120 208	BRP Bronze	F ² Fusing
161-MR	161 with motion response (120V or 277V only)	3 IES Type 3 distribution	110LA-9635 2 LED arrays, 110W	NW 4000°K 70 CRI	240 277	BLP Black	PCB ¹ Button
161-DCC ¹	161 with dual circuit control	4 IES Type 4 distribution	530mA 110LA-6453 2 LED arrays, 110W	WW 3000°K 70 CRI	347 480	NP Natural	DL Diffusing lens
161-DIM	161 with 0-10V dimming controlled by others		700mA 170LA-9653 2 LED arrays, 170W		UNIV 120-277V AC	WP White	WS Surface mount
161-APD	161 with automatic profile dimming (120V thru 277V ONLY)		700mA 150LA-6470 2 LED arrays, 150W		HVU 347-480V AC	OC Optional color (specify optional color or RAL ex: OC-LGP or RAL7024)	DL Diffusing lens
161-APD-MRI	161 with automatic profile dimming and motion response override – integrated motion sensor (120V or 277V ONLY)		220LA-9670 2 LED arrays, 220W			SC Special color (specify, must supply color chip)	WS Surface mount

Footnotes:

- ¹ For luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.
² Available 120-277V only. Provide specific input voltage.

Accessories (order separately)

- **FS1R-100** – MR hand held programmer (For use with 'MR' motion response when field programming is required). If desired, only one is needed per job.

Features

- Complements the 121 wall sconce
- Perfect companion to Philips Gardco PureForm site and area luminaires
- Type 2, 3, and 4 optical distributions available
- Full cutoff performance minimizes glare and light trespass
- 10kA surge protection provided standard, meeting ANSI C62.41.2

Benefits

- Exceptional performance can reduce pole requirements on a site
- Motion response and control options available for additional energy savings
- Performance equivalent to 400W HID while utilizing less energy

Description

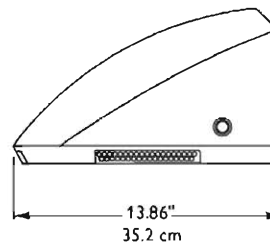
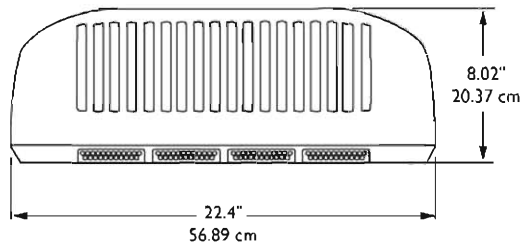
- **Housing:** Die cast housing
- **Finish:** Painted finish only
- **Lens:** Light engines will be sealed IP66 (in downlight application only). Tempered flat glass and diffuse glass lens option
- **Mounting:** Wall mounted only
- **Supply connection:** 90°C supply wire minimum (supplied by others)
- **Driver:** 120-277VAC and 347-480VAC non-class 2, constant current driver 350mA and 530mA, 700mA 0-10VDC dimming
- **Light engine:** LEDgine 32, 48 LEDs. LEDgine optics - acrylic. IES distributions - 2, 3, and 4, 0% uplight (full cut-off).
- **Agency approvals:** UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium[®] qualified.



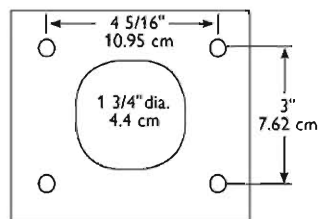
LED Wattage and Lumen Values

Ordering Code	Average System Watts ¹	LED Current (mA)	LED Quantity - Dual LED Arrays		LED Selection	Luminaire Initial Absolute Lumens		
			Per LED Array	Total LEDs		TYPE 2	TYPE 3	TYPE 4
70LA-6435	74.4	350	32	64	NW	6,815	7,105	6,890
110LA-9635	110.0	350	48	96	NW	10,029	10,469	10,171
110LA-6453	106.8	530	32	64	NW	9,565	9,972	9,670
170LA-9653	158.0	530	48	96	NW	14,061	14,532	14,181
150LA-6470	142.0	700	32	64	NW	11,957	12,466	12,087
220LA-9670	210.0	700	48	96	NW	17,509	18,103	17,822

Dimensions



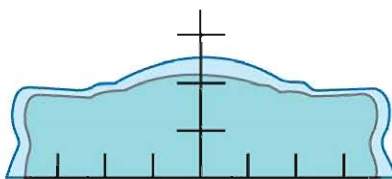
Approximate luminaire weight – 40lbs (18.15kg)



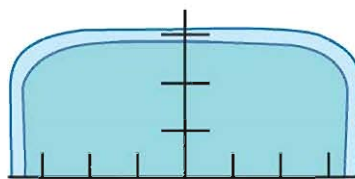
Mounting plate and bolt pattern

Note: Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

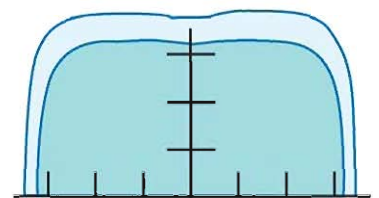
Distribution Options



Type 2



Type 3



Type 4

LED Performance

Predicted Lumen Depreciation Data ⁴		
Ambient Temperature °C	Driver mA	L ₇₀ Hours ⁵
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

Footnotes:

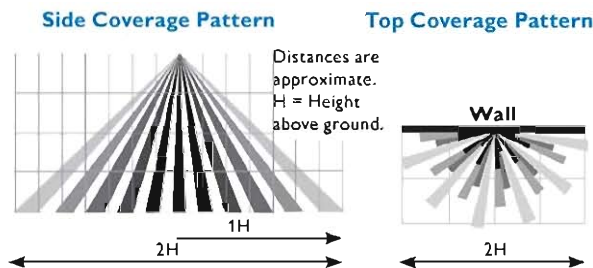
- Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Predicted performance derived from LED manufacturer's data and engineering design estimates.
- L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

Luminaire Configuration Information

- **161-CWL:** 161 LED sconce providing constant wattage and constant light output when power to the luminaire is energized.
- **161-MR:** Luminaires include a passive infrared (PIR) motion sensor. WattStopper[®] FSP-211 equipped with an FS-L3V lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, and mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

In Motion Response (MR) luminaires, when no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 90%, to 10% of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Dimming on low is factory set to 10% with duration set at 10 minutes.

The approximate motion sensor coverage pattern is as shown below.



- **FS1R-100 Wireless Remote Programming Tool:** The FS1R-100 Remote Programming Tool accessory permits adjustment of 161-MR sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

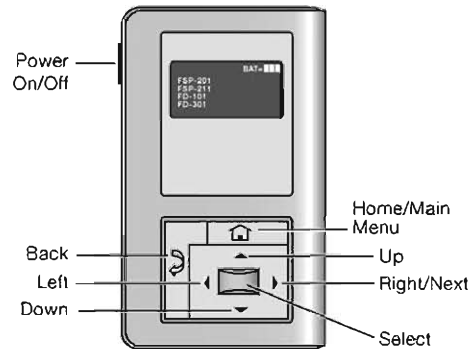
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background).

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost.



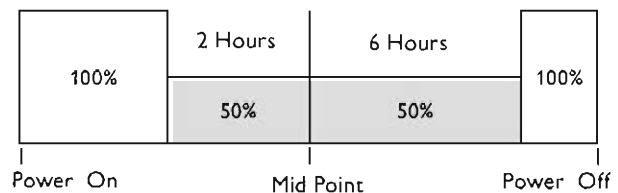
More information on the FS1R-100 Remote Programming Tool is available at wattstopper.com.

The FS1R-100 Wireless Remote Programming Tool can be used to adjust sensor settings on 161-MR luminaires ONLY. It cannot be used to adjust sensor settings on the 161-APD-MRI.

- **161-DCC:** 161 LED sconce provided with dual circuiting, permitting separate switching of each LED array. Note, for luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.
- **161-DIM:** 161 LED sconce provided with 0-10V dimming for connection to a control system provided by others.
- **161-APD:** 161 LED sconces with Automatic Profile Dimming, are provided with a programmable driver, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the programmable driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

161-APD is available in 120V through 277V input only.

APD Dimming Profile:



Luminaire Configuration Information

- **161 - APD- MRI:** 161 wall sconce with Automatic Profile Dimming and Motion Response Override (with integral motion sensor) combines the benefits of both automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the 161-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 10 minutes.

APD-MRI luminaires are available with 120V or 277V input voltages only.

APD-MRI luminaires use the identical motion sensor as MR luminaires.

Additional Specifications

General Description

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

Housing

Housing constructed of die-cast aluminum.

IP Rating

LED light engine rated IP66 (in downlight application only).

Optical Systems

IES Type 2, 3 and 4 distributions available. 0% uplight (full cut-off).

Listings

UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NVV or CW are DesignLights Consortium® qualified.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors are as listed. Consult factory for specs on custom colors.

Warranty

161 Luminaires feature a 5 year limited warranty. LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer.



PHILIPS
Stonco

Wall mount

LytePro LED Sconce

LPW7



Project: _____

Location: _____

Cat.No: _____

Type: _____

Quantity: _____

Notes: _____

The Philips Stonco LytePro LED Small Wall Sconce LPW7 features outstanding value in a compact, architectural design. This wall sconce offers chip-on-board (COB) LED technology for outstanding energy savings with good photometric performance. LPW7 is ideal for entryways, corridors, facade and other wall/surface lighting applications.

Stocked luminaires – Ordering guide¹

Catalog Number	Description	Master Pack, Qty	UPC Code
LPW7-8BZ	LPW7, 14W COB LED, 350mA, 4000K, 120-277V, Bronze textured paint	6	786034960441
LPW7-8DGY	LPW7, 14W COB LED, 350mA, 4000K, 120-277V, Dark gray textured paint	6	786034960458
LPW7-1BZPCB	LPW7, 14W COB LED, 350mA, 4000K, 120V, Bronze textured paint, w/button photocell	6	786034960472

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

Description of catalog codes

Family	Drive current	Voltage	Finish	Options
LPW7 = LytePro 7 LED Small Wall Sconce	(Blank - standard 350mA drive current)	8 = 120-277V 1 = 120V	BZ = Bronze textured paint DGY = Dark gray textured paint	PCB = Button photocontrol

1. Color availability and options vary by model; consult stock luminaires ordering guide above.

LPW7 LytePro LED Small Wall Sconce

Features

- LPW7 wall sconce delivers 1,154 lumens at 14W, with an efficacy of 82 lumens per watt.
- 14W LED may effectively replace 60-200W incandescent, 26-42W compact fluorescent and 35-39W HID luminaires.²
- 4000K neutral white at 70 CRI (minimum) is standard.
- Offers two in-stock colors on standard units.*
- 5-year limited warranty; see philips.com/warranties for specific details.

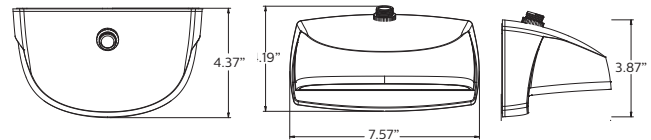
Performance/Specifications

Distribution	Type 2
Initial Lumens (4000K)*	1,154
Average Wattage*	14
Lumens/Watt	82
BUG Rating*	B1/U0/G1
Luminaire Weight	~4lbs (1.8Kg)

Ratings/Approbations/Certifications

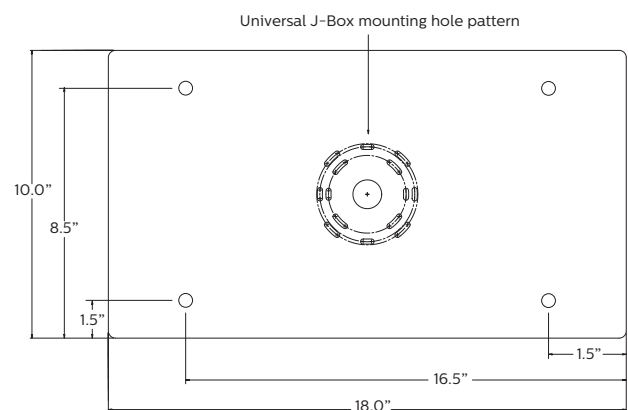
Ingress Protection	IP65 Optical
DLC Listed	DLC QPL
cETLus	Certified for use in wet locations
Rated Ambient Temperature	-30°C (-22°F) to 40°C (104°F)

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.



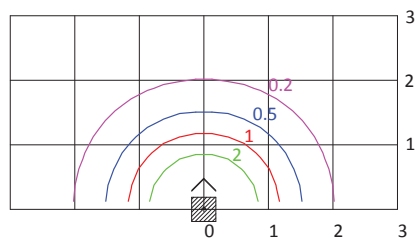
2. Comparable equivalency to HID and other lamp sources depends on multiple criteria including mounting height, fixture spacing, efficiency, performance and classification of the luminaire being replaced and application lighting criteria required for the given project.
3. PCB shown for placement only,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

Distribution Pattern

LPW7 - 8' MOUNTING HEIGHT

MOUNTING HEIGHT	6'	8'	10'
MULTIPLIER	1.78	1.0	0.64

- 4. Isolines shown at 2.0, 1.0, 0.5, & 0.2 FC.
- 5. Choose mounting height. Use MULTIPLIER (X) EXISTING FC VALUE = NEW FC VALUE.
- 6. FC values are based on initial lumen output.
- 7. Gridline spacing is in units of chosen mounting height.



LPW7 LytePro LED Small Wall Sconce

General Description

The Philips Stonco LytePro LED Small Wall Sconce LPW7 combines excellent performance, design and value to meet the needs of the energy and budget conscious. The LPW7 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. Three SKU's are available as in-stock configurations (2-day quick ship). Two standard finishes. 120V button photocell is available in bronze only.

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 (mounted horizontally) 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 82 lm/W at the system level. Standard color temp is 4000K +/- 250K, minimum 70 CRI.

Electrical

Driver efficiency (>90% standard). 120-277V. Temp range: -30°C (-22°F) to 40°C (104°F). Open/short circuit protection. RoHS compliant.

Listings

Product is cETLus listed suitable for Wet Locations. Suitable for use in ambients from -30°C to 40°C (-22°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. Two standard colors are available: Dark Grey, and Bronze. Specific options are only available in bronze.

Warranty

LPW7 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 ^{5,6}	Calculated Lumen Maint. % @60,000 hrs
up to 40°C	>200,000 hrs	>36,000 hrs	97%

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.



© 2014 Koninklijke Philips N.V. All rights reserved. Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication. 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

UCM/UCL

Universe Collection® – Medium/Large Scale

STREET LIGHT

CONTEMPORARY



- MicroCore™ technology
- First decorative, modular system with precise LED aiming capabilities
- Surge protection included
- 0-10v dimming ready
- IP66 optics
- DLC listed
- Powder coat finish in 13 standard colors with a polymer primer sealer

ORDERING INFORMATION

UCM/UCL		HOOD		COLOR TEMPERATURE		COLORS		OPTIONS	
UCM	Universe Medium	ANG	Angled hood	UCM		AWT	Arctic White	OPTIONS - HOOD	
UCL	Universe Large	BEL	Bell hood	32LED-3K	Warm White, 3000K output	BLK	Black	COP	Copper
UCM Upgrade Kit – UCM-LK		FLR	Flared hood	32LED-4K	Neutral White, 4200K output	MTB	Matte Black	STS	Stainless Steel
UPLT	For internal illumination. Add 4 watts	STR	Straight hood	32LED-5K	Bright White, 5100K output	DGN	Dark Green	OPTIONS	
Distribution	T2, T3, T4, T5, TL, TR	SKB	Skirted bell hood	UCL		DBZ	Dark Bronze	WIH	Integral HBA wiHUBB IFM transceiver and antenna
Color	32LED-3K, 32LED-4K, 32LED-5K	LUMINOUS ELEMENTS		56LED-3K	Warm White, 3000K output	WRZ	Weathered Bronze	SLC	Luminous element remains unlit during normal operation
Driver	700 (700mA, 75 watts)	WND	4 luminous windows	56LED-4K	Neutral White, 4200K output	BRM	Metallic Bronze	FTG	Flat glass lens.
Bezel Fishes	Available in 13 standard finishes and premium finishes	SR	Solid rings	56LED-5K	Bright White, 5100K output	VBL	Verde Blue	FLD	Lightly diffused finish on flat glass lens
UCL Upgrade Kit – UCL-LK		VSL	Vertical slots	DRIVER		CRT	Corten	SAG	Clear sag glass lens. UCM MicroCore only.
UPLT	For internal illumination. Add 4 watts	LUM	Luminous rings	120 thru 277 volt		MAL	Matte Aluminum	RCK	Rock guard painted black. UCM only.
Distribution	T2, T3, T4, T5, TL, TR	LUMINOUS RINGS COLOR OPTION		UCM		MDG	Medium Grey	LDL	Lightly diffused lens
Color	56LED-3K, 56LED-4K, 56LED-5K	BL	Blue inner lens	700	700mA drive current, 75 watts	ATG	Antique Green	PCA-C	Rotatable photocell housing-contemporary
Driver	700 (700mA, 132 watts) 450 (450mA, 85 watts)	RD	Red inner lens	UCL		LGY	Light Grey	SCP	Programmable motion control, factory default is 50%, requires pole.
Bezel Fishes	Available in 13 standard finishes and premium finishes	GRN	Green inner lens	700	700mA drive current, 132 watts	RAL/PREMIUM COLOR	Provide a RAL 4 digit color number		
		DISTRIBUTION		450	450mA drive current, 85 watts	CUSTOM COLOR	Please provide a color chip for matching		
		T2	Type 2						
		T3	Type 3						
		T4	Type 4						
		T5	Type 5						
		TL	45° Left						
		TR	45° Right						

Please visit www.aal.net for mounting, dimensions, weight and EPA.

ABBREVIATIONS

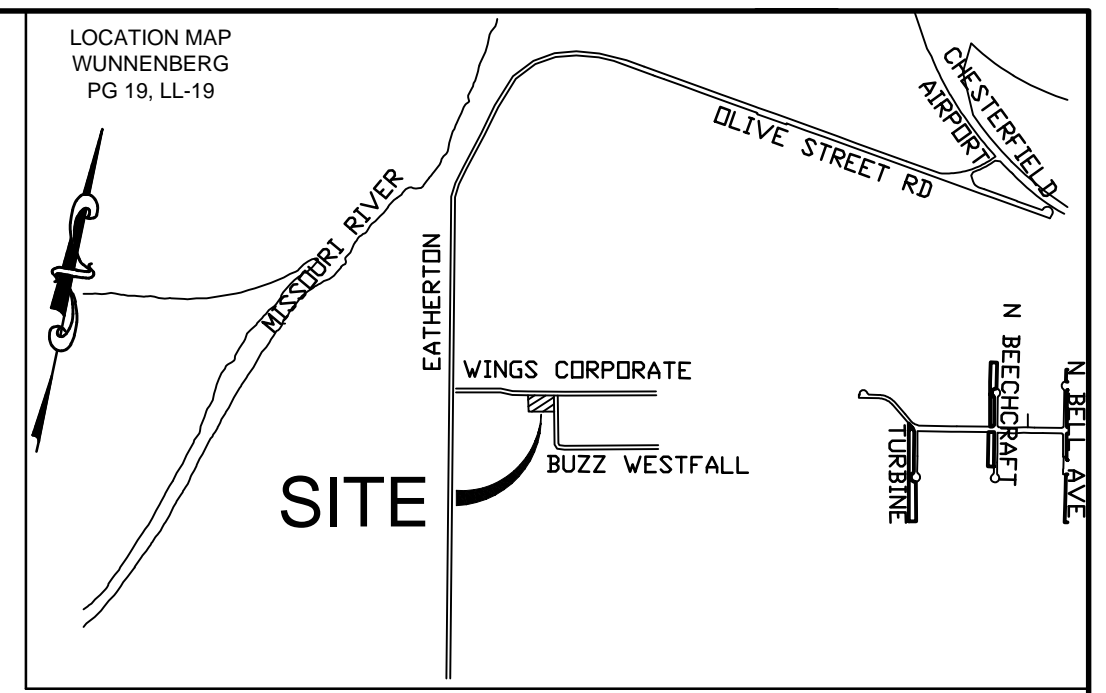
- ATG - Adjust To Grade
- B/B - Back to Back
- BW - Bottom of Wall
- CC - Canopy Clearance
- CL - Centerline
- DB - Deed Book
- EP - Edge of Pavement
- FG - Finished Grade
- FF - Face to Face
- FL - Flow Line
- HDCP - Handicap
- NTS - Not To Scale
- OC - On Center
- PB - Plat Book
- R - Radius
- R/W - Right of Way
- TB - Top of Bank
- TBR - To Be Removed
- TBRR - To Be Removed & Replaced
- TC - Top of Curb
- TP - Top of Pavement
- TS - Toe of Slope
- TW - Top of Wall
- WK - Use In Place
- UIP - Utility Pole w/ Guy Wires
- AI - Area Inlet
- CB - Curb Inlet / Catch Basin
- CO - Clean Out
- DS - Down Spout
- FES - Flared End Section
- GI - Grated Inlet
- MH - Manhole
- CMP - Corrugated Metal Pipe
- CP - Non-reinforced Concrete Pipe
- DIP - Ductile Iron Pipe
- PVC - Polyvinyl Chloride Pipe
- RCP - Reinforced Concrete Pipe
- VCP - Vitrified Clay Pipe

LEGEND

- - Area Light
- - Area Light w/110v. Recept.
- - Connection (Proposed)
- - Existing Contour
- - Proposed Contour
- - Existing Elevation
- - Proposed Elevation
- - Fire Hydrant
- - Concrete
- - Doorway Entrance
- - Drainage Flow
- - Swale
- - Water Meter Or Valve
- - Gas Meter Or Valve
- - Cable TV
- - Electric Service
- - Underground Electric Service
- - Gas Service
- - Telephone Service
- - Underground Tele. Service
- - Water Service
- - Exist. Sanitary Sewer
- - Exist. Storm Sewer
- - Proposed Sanitary Sewer
- - Proposed Storm Sewer
- - Utility Pole w/ Guy Wires
- - Right Angle
- - Handicap Parking Space
- - Direction Of Traffic

WINGS CORPORATE ESTATES LOT 14

CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI



SITE ADDRESS: 18350 WINGS CORPORATE DRIVE
 LOCATOR NUMBER: 18W440122
 PROPERTY ZONED: P1 - PLANNED INDUSTRIAL
 PROPOSED USE: OFFICE WAREHOUSE

SITE AREA = 70,306 S.F. (1.61 AC.)
 BUILDING AREA = 16,640 S.F. (23.7%)
 PAVEMENT AREA = 31,423 S.F. (44.7%)
 OPEN SPACE = 22,243 S.F. (31.6%)

TOTAL PARKING REQUIRED = PER CITY OF CHESTERFIELD CODE
 % OFFICE SPACE = $\frac{16640}{100000} = 27.9\%$
 % WAREHOUSE SPACE = $\frac{16640}{22243} = 72.1\%$

OFFICE = 3.3 SPACES PER 1,000 S.F. GROSS FLOOR AREA (Minimum)
 $\frac{16640}{1000} \times 3.3 = 15$ SPACES
 OFFICE = 4.5 SPACES PER 1,000 S.F. GROSS FLOOR AREA (Maximum)
 $\frac{16640}{1000} \times 4.5 = 20$ SPACES

WAREHOUSE = 2 SPACES PER 3 EMPLOYEES ON MAX. SHIFT (Minimum), PLUS 1 SPACE SPACE PER BUSINESS VEHICLE
 $15 \times \frac{1}{3} + 0 = 10$ SPACES
 WAREHOUSE = 1.2 SPACES PER EMPLOYEES ON MAX. SHIFT (Maximum), PLUS 1 SPACE SPACE PER BUSINESS VEHICLE
 $15 \times 1.2 + 0 = 18$ SPACES

TOTAL PARKING REQUIRED = 25 SPACES (Minimum)
 TOTAL PARKING REQUIRED = 38 SPACES (Maximum)

TOTAL PARKING PROVIDED = 37 SPACES (INCLUDING 2 HANDICAP SPACES)

10'x40' LOADING SPACES REQUIRED = 2
 10'x40' LOADING SPACES PROVIDED = 2

FEMA MAP NUMBER = 29189C0145 K
 EFFECTIVE MAP DATE - FEB. 4, 2015

MAX. BUILDING HEIGHT = 40 FEET
 BUILDING HEIGHT = 36.5 FEET

MAX. FLOOR AREA RATIO (FAR) = 55%
 FAR = 23.7%

MIN. OPEN SPACE = 30%

TREE PRESERVATION PLAN: THERE ARE NO EXISTING TREES ON THE SITE, SO NO SEPARATE TREE PRESERVATION PLAN WILL BE PROVIDED.

THE LOCATION AND HEIGHT OF ANY LIGHT STANDARDS ON SITE SHALL BE IN CONFORMANCE WITH THE CITY OF CHESTERFIELD REGULATIONS.

ALL TRASH ENCLOSURES SHALL BE ENCLOSED BY A SIX FOOT HIGH SIGHT PROOF FENCE AND CONSTRUCTED OF A SIMILAR MATERIAL AS THE MAIN BUILDINGS.

THERE WILL BE NO MONUMENT SIGN FOR THIS SITE.

ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.

THE DEVELOPER SHALL BE REQUIRED TO PROVIDE ADEQUATE TEMPORARY OFF-STREET PARKING FOR CONSTRUCTION EMPLOYEES. PARKING ON NON-SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEE VEHICLES IS TRACKED ONTO THE PAVEMENT CAUSING HAZARDOUS ROADWAY AND DRIVING CONDITIONS.

THE STREETS SURROUNDING THIS DEVELOPMENT AND ANY STREET USED FOR CONSTRUCTION ACCESS THERETO SHALL BE CLEANED PRIOR TO THE END OF EACH WORK DAY.

EROSION AND SILTATION CONTROL SHALL BE INSTALLED PRIOR TO ANY GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR CONTROLLING REGULATORY AGENCY AND ADEQUATE VEGETATIVE GROWTH INSURES NO FUTURE EROSION OF THE SOIL.

PROPERTY DESCRIPTION

Lot 14 of WINGS CORPORATE ESTATES, per the plat thereof recorded in Plat Book 356, Pages 79-81 of the St. Louis County records.

D. F. Adams & Associates, Inc., the owner of the property shown on this plan, for and in consideration of being granted a permit to develop property under the provisions of Section 03-04.E, "P1" Planned Industrial District of the City of Chesterfield Unified Development Code, does hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of the City of Chesterfield Council.

D. F. Adams & Associates, Inc.

By: Douglas F. Adams, President

State of Missouri)
) ss.
 County of St. Louis)

On this _____ day of _____, 2015, before me personally appeared Douglas F. Adams to me known, who, being by me duly sworn in, did say that he is President of D. F. Adams & Associates, Inc., and that the foregoing instrument was signed on behalf of said company and acknowledged said instrument to be the free act and deed of said company.

IN WITNESS WHEREOF, I have signed and sealed the foregoing the day and year first above written.

my commission expires: _____

 notary public

This Site Development Section Plan was approved by the City of Chesterfield Planning Commission and duly verified on the _____ day of _____, 2015, by the Chairperson of said Commission, authorizing the recording of this Site Development Section Plan pursuant to Chesterfield Ordinance number 200, as attested to by the Planning and Development Services Director and the City Clerk.

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

 Vickie Hass, City Clerk

SITE IS SERVED BY:

CHESTERFIELD MONARCH
 FIRE PROTECTION DISTRICT
 155 LONG ROAD
 CHESTERFIELD, MO. 63005

ROCKWOOD R-6 SCHOOL DISTRICT
 111 EAST NORTH STREET
 EUREKA, MO. 63025

AMEREN UE
 1901 CHOUTEAU
 P.O. BOX. 66149 MAIL CODE 200
 ST. LOUIS, MO. 63166-6149

SBC
 14780 MANCHESTER ROAD
 BALLWIN, MO. 63011
 TERRY DONAUBAUER (636) 256-1536

LACLEDE GAS
 720 OLIVE ST., ROOM 1408
 ST. LOUIS, MO. 63101
 KELI KRAMER (314) 342-0678

MISSOURI AMERICAN WATER CO.
 727 CRAIG ROAD
 ST. LOUIS, MO. 63141
 SUE MOYNIHAN (314) 991-3404, x2306

METROPOLITAN ST. LOUIS SEWER DISTRICT
 2350 MARKET ST.
 ST. LOUIS, MO. 63103

CHARTER COMMUNICATIONS
 2275 CASSENS DR. SUITE 138
 FENTON, MO. 63026
 (800) 314-7195

CHESTERFIELD MONARCH LEVEE DISTRICT
 C/O FULLER, MOSSBARGER, SCOTT & MAY ENGINEERS, INC.
 1856 CRAIG PARK COURT
 ST. LOUIS, MO. 63146
 (314) 878-8800



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

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

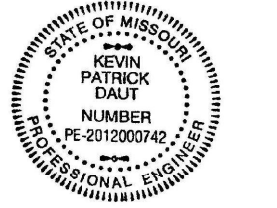
The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

GEOTECHNICAL STATEMENT

Midwest Testing at the request of Dial Architects, has provided geotechnical services for the project proposed hereon. A geotechnical exploration was conducted during February, 2015. Our preliminary findings indicate that the earth related aspects are suitable for the development proposed pursuant to the geotechnical recommendations set forth in our March 4, 2015 report titled, *Geotechnical Exploration MT Job No. 13810 Wings Lot 14 Chesterfield, Missouri.*

MIDWEST TESTING

Kevin P. Daut
 Kevin P. Daut
 MO PE-2012000742



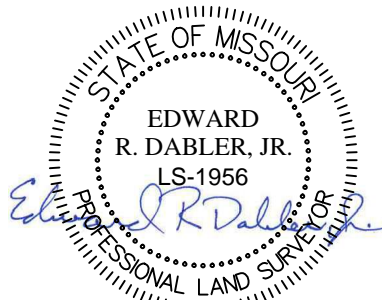
NOTES:

1. ALL SIDEWALKS TO BE CONSTRUCTED TO ST. LOUIS COUNTY ADA AND CITY OF CHESTERFIELD STANDARDS.
2. ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY, CITY OF CHESTERFIELD AND MSD STANDARDS.
3. ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH ST. LOUIS COUNTY, CITY OF CHESTERFIELD AND MSD STANDARDS.
4. NO SLOPES SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).
5. STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
6. NO STEPS AT HANDICAPPED ACCESSIBLE DOORS.
7. ALL DIMENSIONS ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.

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

THE CLAYTON ENGINEERING COMPANY

Edward R. Dabler, Jr.
 Edward R. Dabler, Jr.
 MO LS-1956



SHEET INDEX:

1. COVER SHEET
2. SITE DEVELOPMENT SECTION PLAN
3. LANDSCAPE PLAN

4	10-16-15	erd	revisions per Chesterfield comments
3	08-12-15	erd	revisions per Chesterfield comments
2	07-24-15	erd	revisions per Chesterfield comments
1	06-19-15	erd	revisions per Chesterfield comments

REVISIONS

**SITE DEVELOPMENT SECTION PLAN
SITE PLAN**

18350 Wings Corporate Drive Chesterfield, MO 63005

Prepared for:

D. F. ADAMS & ASSOCIATES, INC.
 16441 Walnut Rail Road
 Chesterfield, MO 63005
 (314) 434-2888

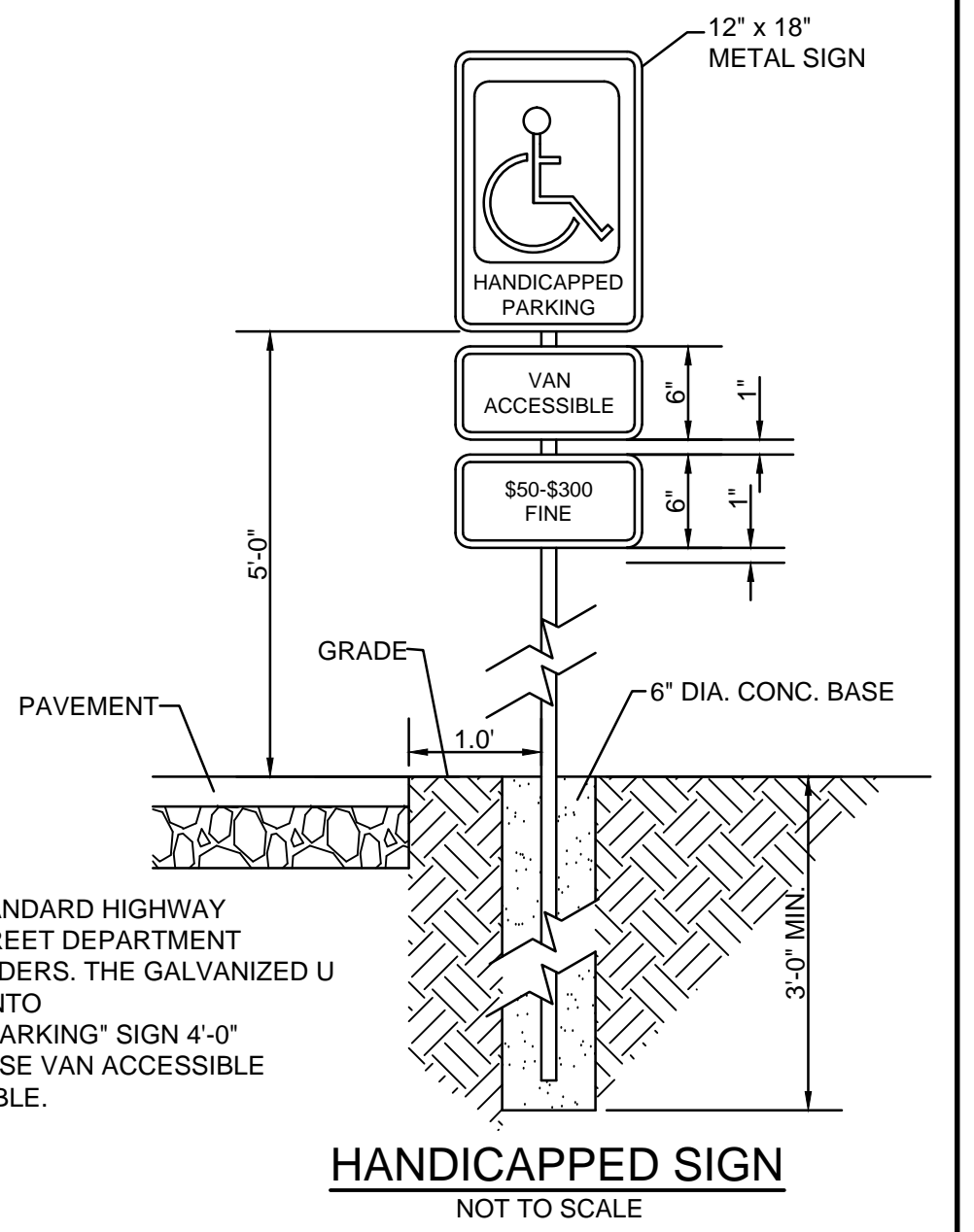
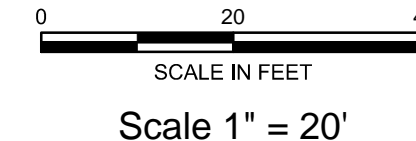
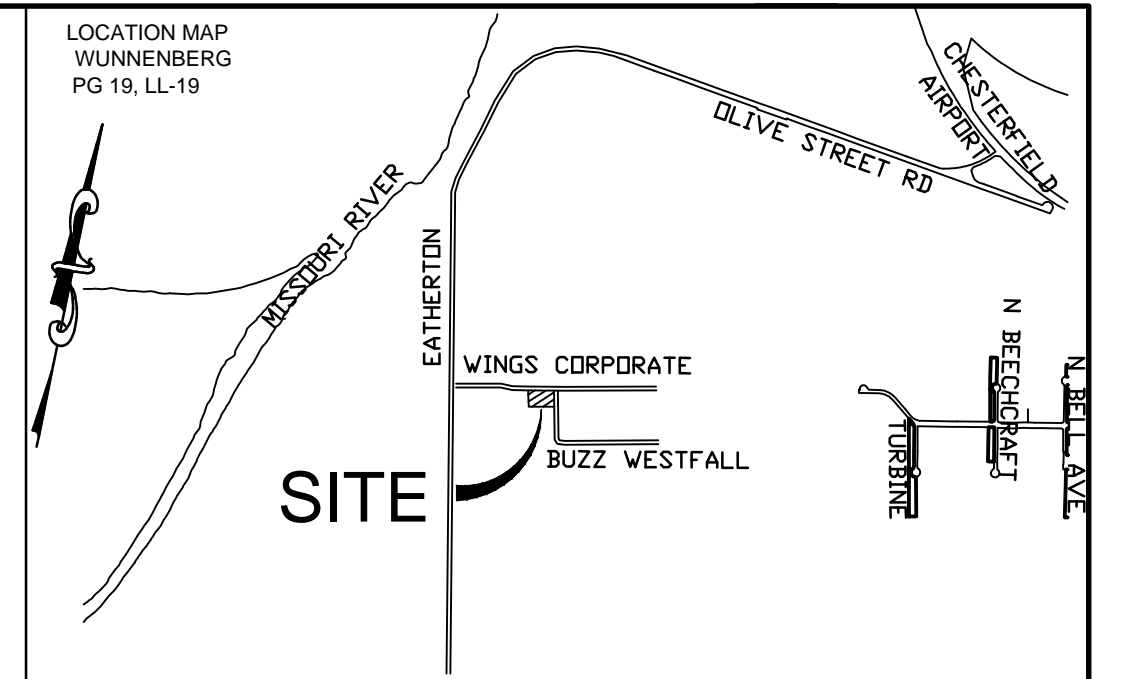
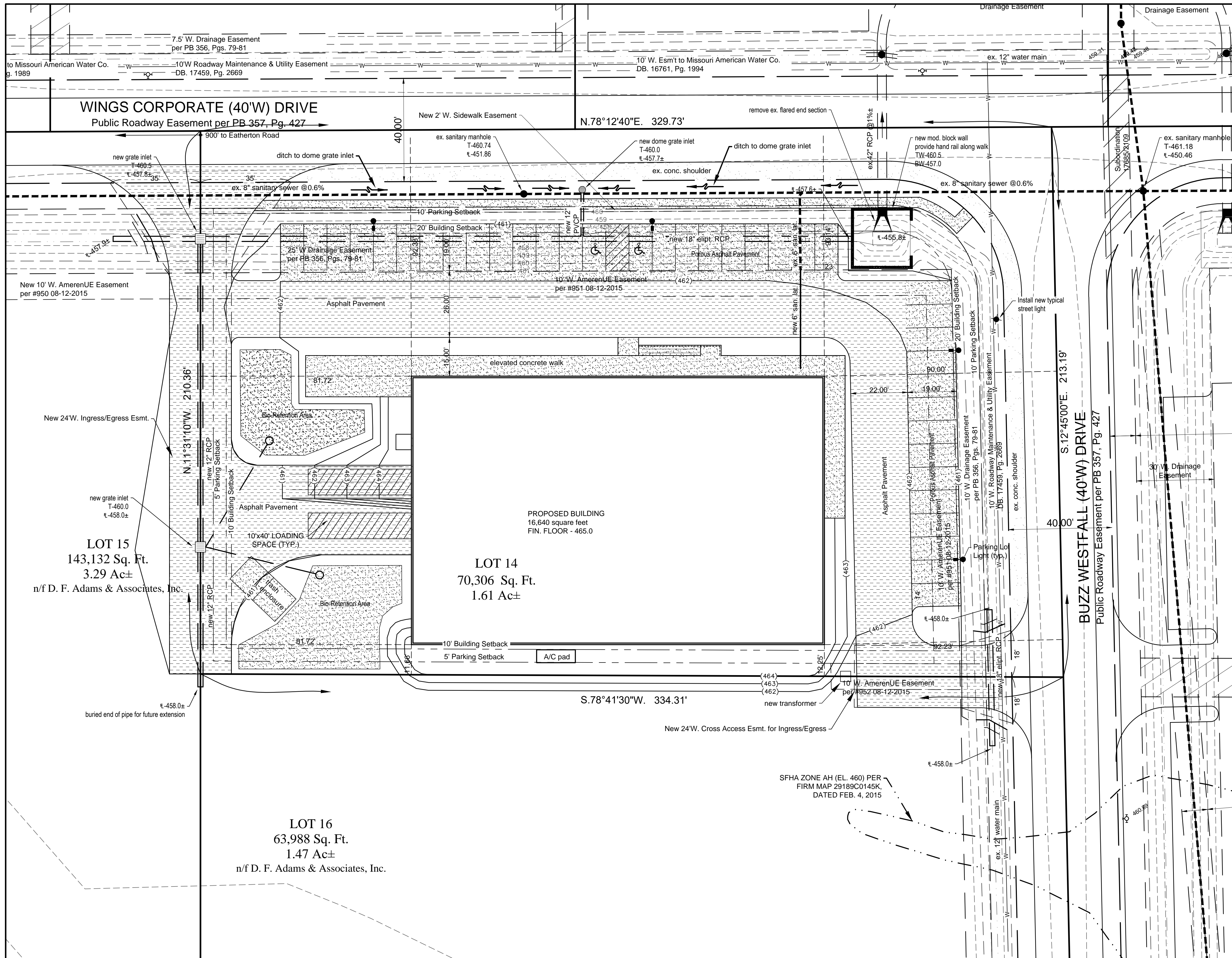
Copyright 2015
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, inc.
 ENGINEERS • SURVEYORS • PLANNERS
 11920 WESTLINE INDUSTRIAL DRIVE
 ST. LOUIS, MISSOURI 63146
 (314) 692-8888 FAX: (314) 692-8688 claytoneng.pro
Mo. Cert of Authority - Prof. Engineering #000067 & Prof. Surveying #000014

Designed _____
 Drawn _____
 Checked _____
 Date _____
 Project Number
15006
 Sheet Number
1 of _____

Mo. Cert of Authority - Prof. Engineering #000067 & Prof. Surveying #000014
 FILE: G:\155000\15006_WINGS_14PRELIM\SDSP.DWG PLOTTED: 03/27/15 11:29 BY: ERD

**SLC H&T No.
MSD P-
BASE MAP 18W**



STANDARD SIGN FACE, STANDARD HIGHWAY DEPARTMENT, OR CITY STREET DEPARTMENT GAUGE, LETTERS AND BORDERS. THE GALVANIZED U CHANNEL POST, SET 3'-0" INTO GRADE. SET BOTTOM OF "PARKING" SIGN 4'-0" ABOVE FINISHED GRADE. USE VAN ACCESSIBLE SIGN ONLY WHEN APPLICABLE.

NOTES:

- The adjacent property owner is the same as the owner of the proposed development. Per city comment, as long as this does not change, an off-site grading letter/agreement will not be required.
- New cross access easements for ingress and egress within the area of the shared driveways and approach aprons shall be signed by the respective property owners and recorded in the St. Louis County records.
- AmerenUE has not installed underground electric service to the development site. The easement granted to AmerenUE for the installation of underground electric service will be vacated. A new easement is depicted on this plan.
- A Floodplain Development Permit will be required as part of the improvement plan submittal and an elevation certificate will be required prior to occupancy.
- The required new subdivision street light shall be incorporated as part of the existing subdivision street light agreement.
- Storm water runoff from the pavement of Wings Corporate Drive shall be collected in some manner prior to running over the proposed concrete sidewalk and discharged to an appropriate drainage facility to prevent the possibility of runoff collecting on the walk and creating a slip possibility.
- Note that in contrast to the roadway cross section designed for this development, drainage from Wings Corporate Drive shall be collected between the edge of the pavement and the sidewalk by means of a dome grate inlet which will be piped to an appropriate point of discharge. The cross slope of the sidewalk will be toward this inlet.

St. Louis County Department of Transportation Notes:

- All proposed access to St. Louis County roads for new development shall meet minimum St. Louis County sight distance requirements.
- Any entity that performs work on St. Louis County maintained property shall provide the County with a Certificate of Insurance evidencing general liability coverage (bodily injury and property damage) in the amounts specified as the limits of liability set by the State for public entities. Such certificate shall include "St. Louis County" as an additional insured and shall be provided prior to the issuance of any permit. Certificate shall provide for a 30 day policy cancellation notice to St. Louis County. Upon request, the County will provide the specific amounts for both per person and per occurrence limits.
- All hydrants, power poles or other potential obstructions within the St. Louis County right-of-way and/or road easement, shall have a minimum two (2) foot setback from the face of curb, as directed by the St. Louis County Department of Transportation.
- St. Louis County maintenance does not extend beyond the right-of-way and/or road easement.

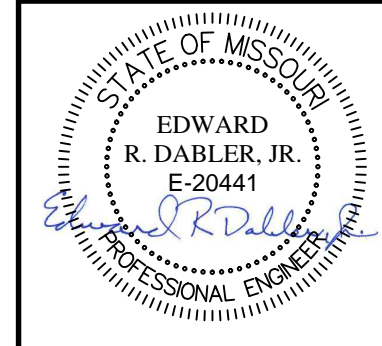
Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

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

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

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

Copyright 2015
Clayton Engineering Co.
All Rights Reserved



SLC H&T No.
MSD P-
BASE MAP 18W

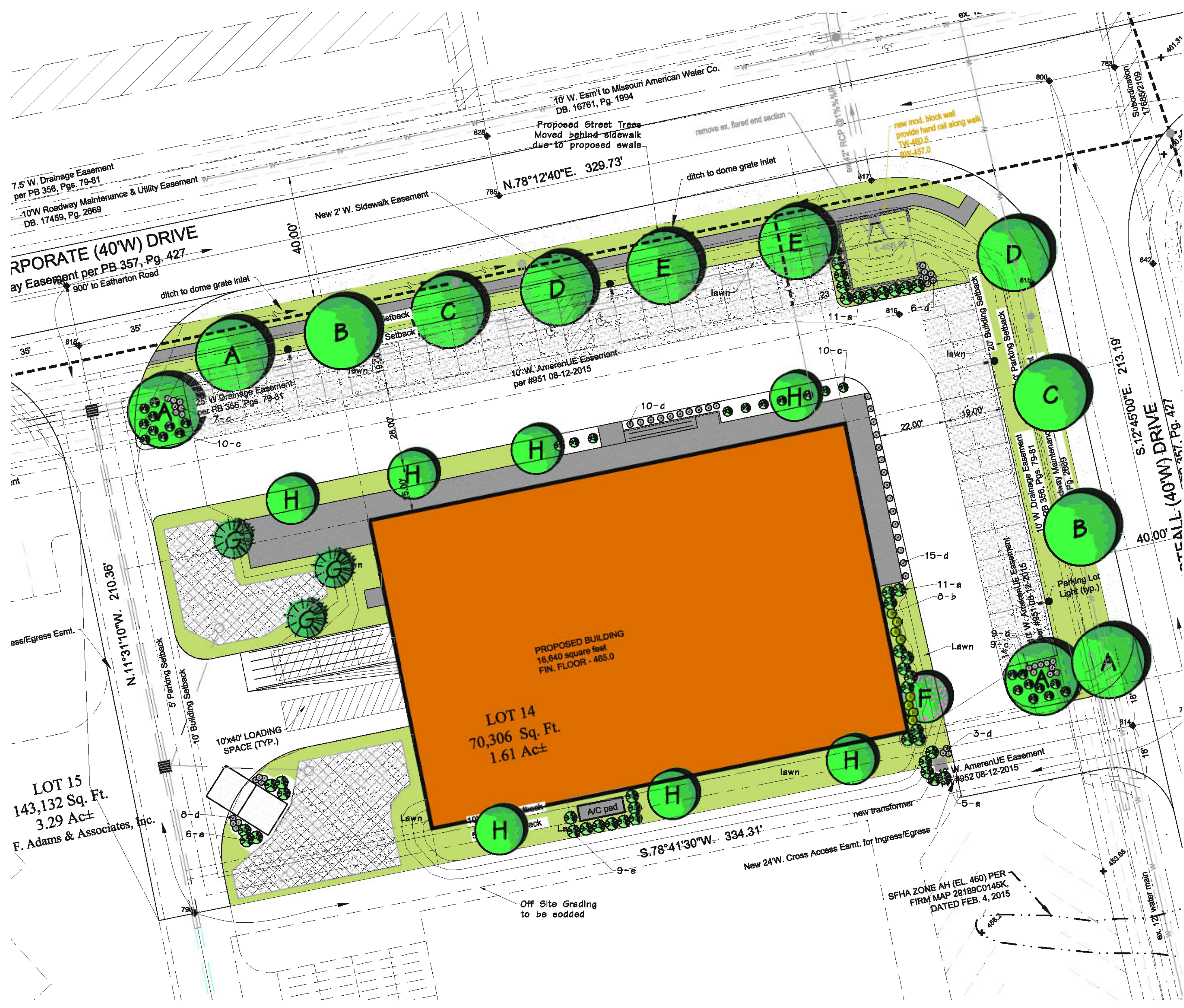
NO.	DATE	BY	DESCRIPTION
3	08-12-15	erd	revisions per Chesterfield comments
2	07-24-15	erd	revisions per Chesterfield and Monarch FPD comments
1	06-19-15	erd	revisions per Chesterfield comments

REVISIONS

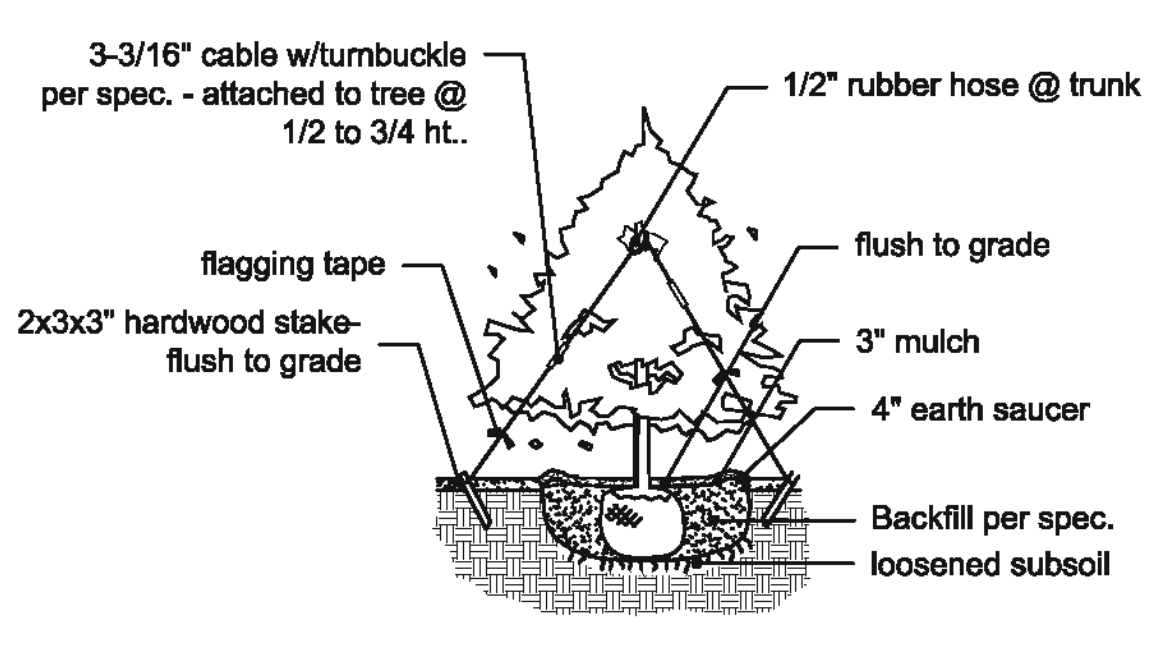
SITE DEVELOPMENT SECTION PLAN
SITE PLAN

18350 Wings Corporate Drive
Prepared for:
D. F. ADAMS & ASSOCIATES, INC.
16441 Walnut Rail Road
Chesterfield, MO 63005
(314) 434-2888

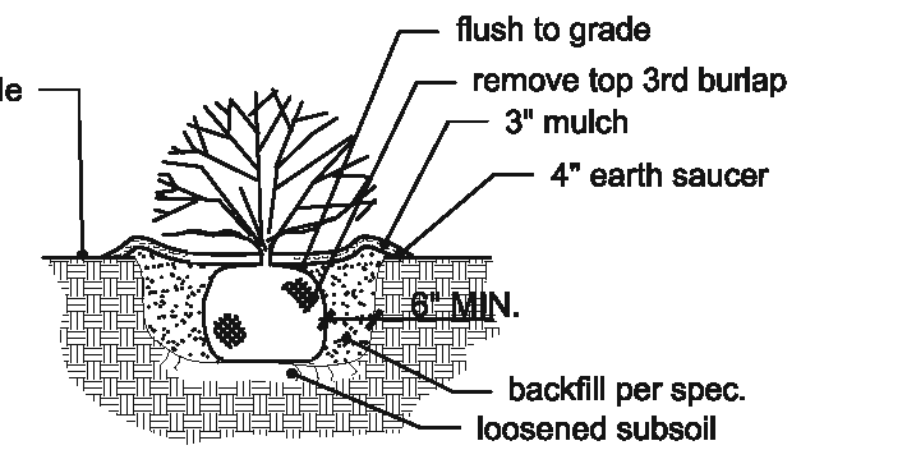
Designed	_____
Drawn	_____
Checked	_____
Date	_____
Project Number	15006
Sheet Number	2 of _____



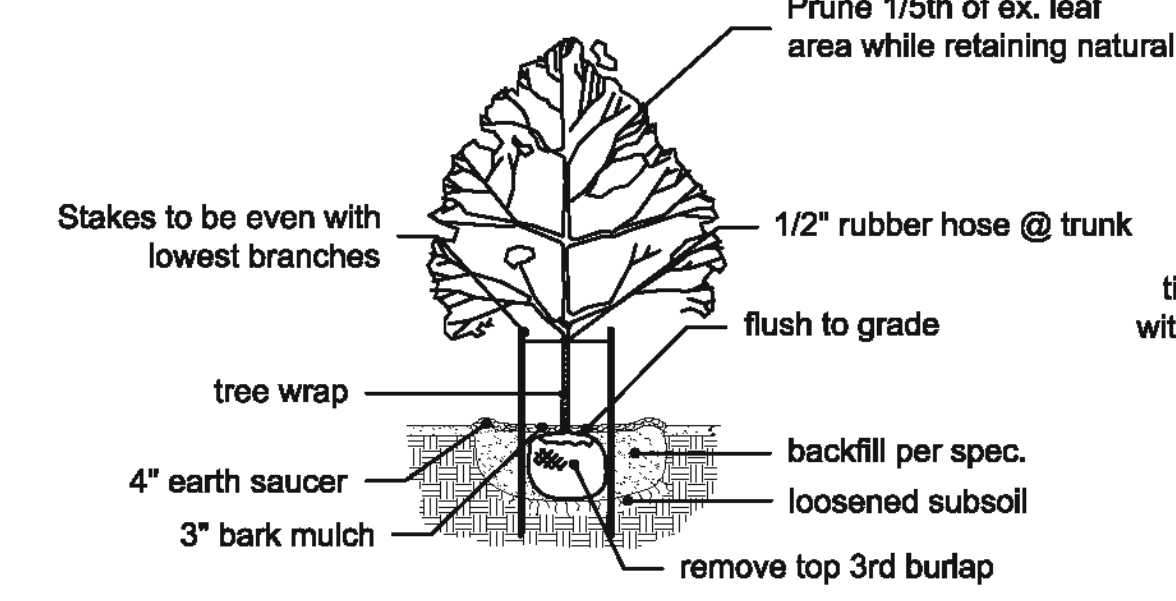
Landscape Plan
SCALE 1"=20'



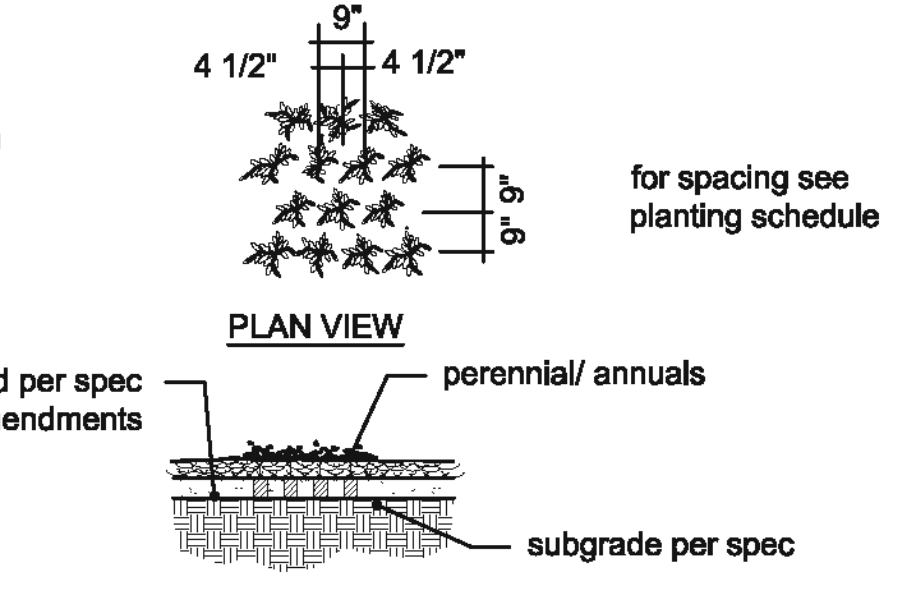
TYPICAL EVERGREEN PLANTING



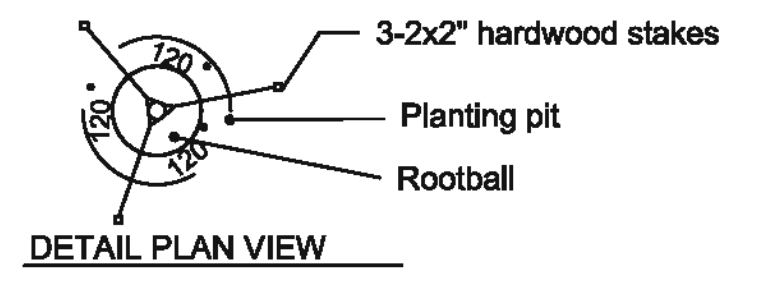
TYPICAL SHRUB PLANTING



CANOPY TREE PLANTING



TYPICAL PERENNIAL PLANTING

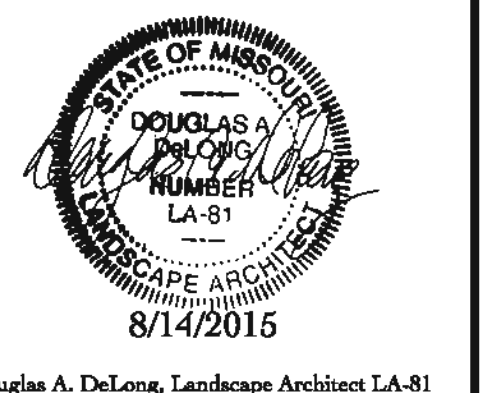


DETAIL PLAN VIEW

PLANTING SCHEDULE						
#/SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	TYPE
A	4	Platanus x acerifolia	London Planetree	2 1/2"	45'+	Fast Growing
B	2	Tilia americana	American Linden	2 1/2"	45'+	Medium Growing
C	2	Quercus bicolor	Swamp White Oak	2 1/2"	45'+	Medium Growing
D	2	Quercus imbricaria	Shingle Oak	2 1/2"	45'+	Medium Growing
E	2	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2 1/2"	45'+	Fast Growing
F	1	Cercis canadensis	Red Bud	2 1/2"	25'+	Fast Growing
G	3	Taxodium distichum	Bald Cypress	6'	45'+	Medium Growing
H	7	Carpinus betulus 'Fastigiata'	Upright European Hornbeam	2 1/2"	35'+	Slow Growing
a	33	Ilex glabra 'Shamrock'	Shamrock Inkberry	2-3'		3' O.C.
b	8	Itea virginica	Sweetgale	18-24"		2.5' O.C.
c	29	Juniperus horizontalis 'Plumosa'	Compact Andorra Juniper	18-24"		3' O.C.
d	64	Calamagrostis a. 'Karl Foerster'	Karl Foerster Grass	1 gal		2' O.C.
e	9	Thuja occidentalis 'Emerald'	Emerald Arborvitae	4-6'		4' O.C.
Water quality plantings to be selected						

GENERAL NOTES:

- 1) Openpace ratio is 31.6% Total Site 70,306 SF/Open Space 22,243 SF
- 2) Street trees Req. - 485 lf/50 ft = 9.7 or 10 street trees
- 3) All street trees will be located at least 3' from proposed curb.
- 4) All street trees will be located at least 10' from all storm sewer structures.
- 5) All street trees will be located at least 25' from all street lights, signs, and intersections.
- 6) All turf areas will be sodded.
- 7) An in-ground irrigation system will be provided.



Douglas A. DeLong, Landscape Architect LA-81

Consultants:

Wings Corporate Estates-Lot 14
Chesterfield, Mo

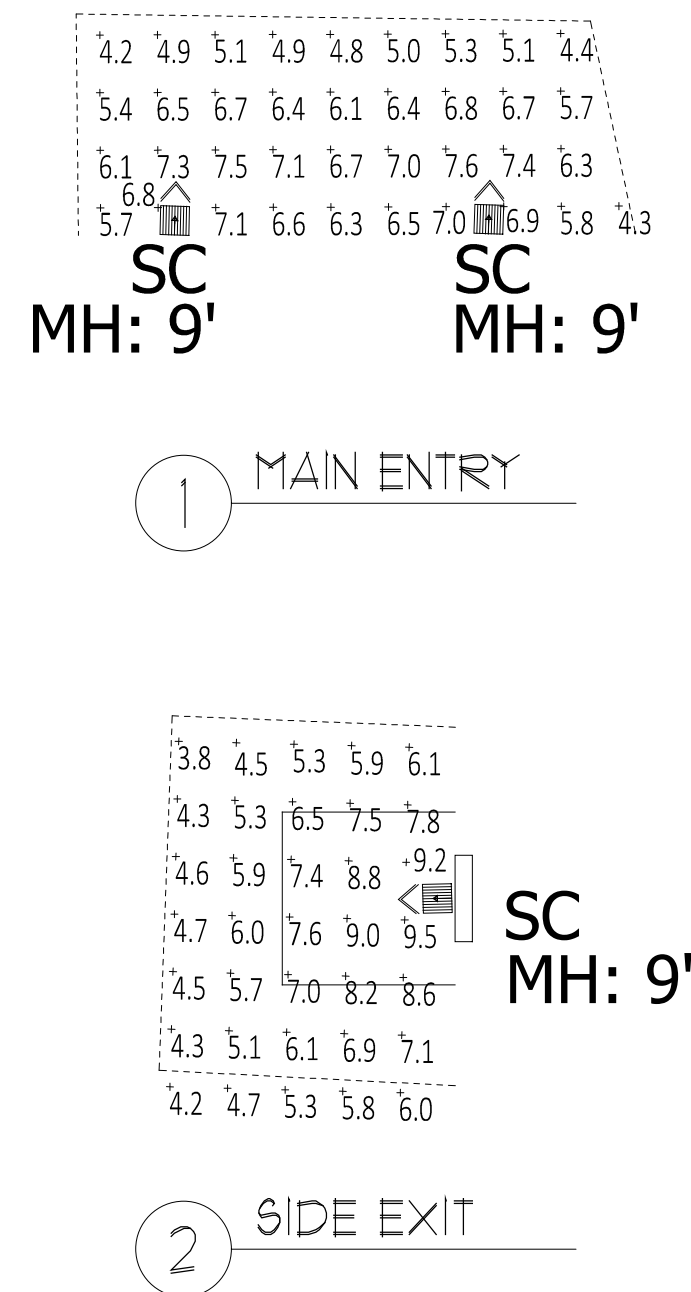
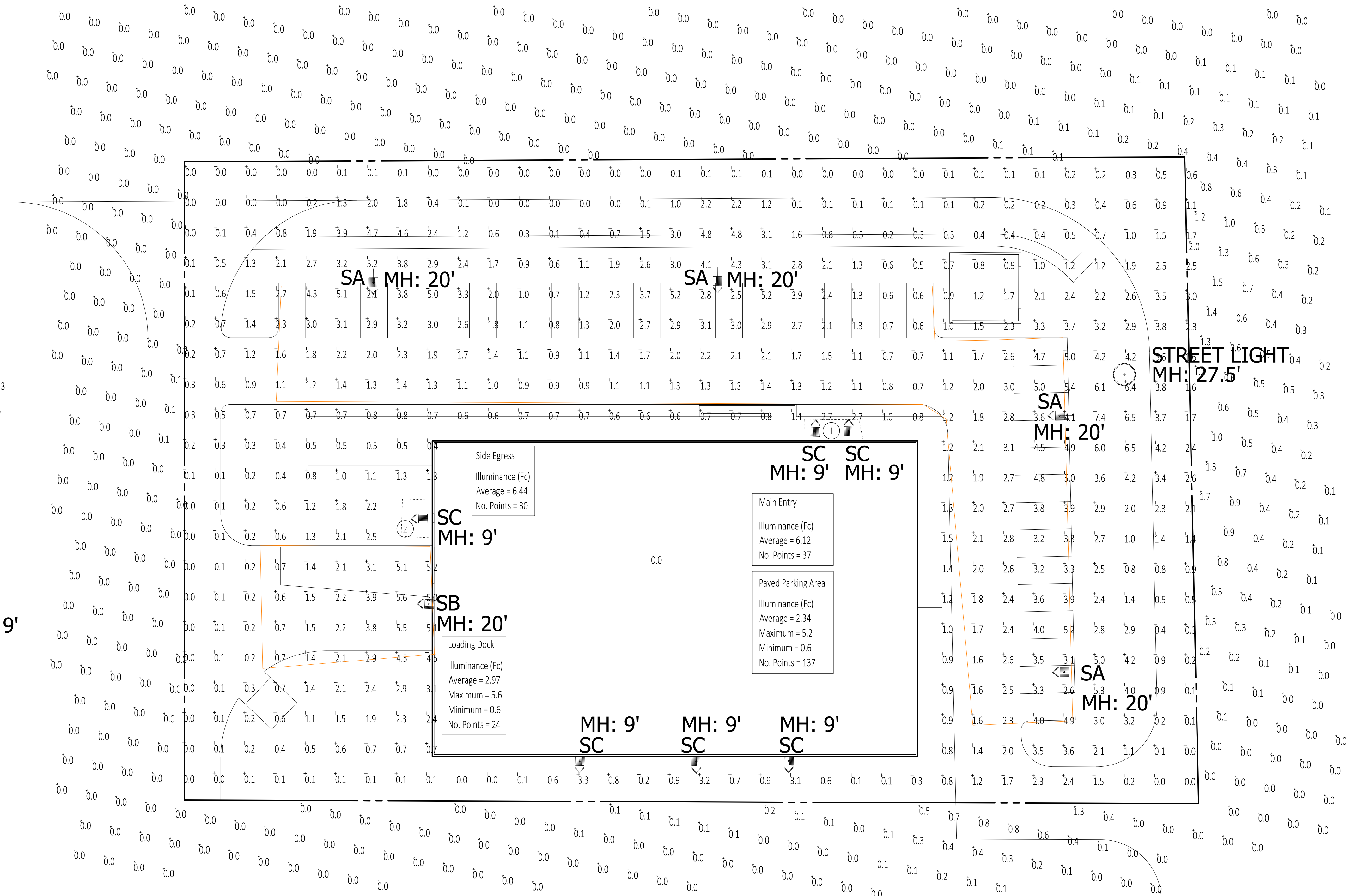
Dial Architects

Revisions:		
Date	Description	No.
6/18/15	City Comments	1
7/24/15	Site Revisions	2
8/14/15	Site Revisions	3

Drawn: BAD
Checked: DAD

DeLong Landscape Architecture, LLC
7620 West Bruno Ave
St. Louis, MO. 63117
(314) 346-4856
delong.la@gmail.com

Sheet Title: Landscape Plan
Sheet No: **L-1**
Date: 4/27/2015
Job #: 105.014



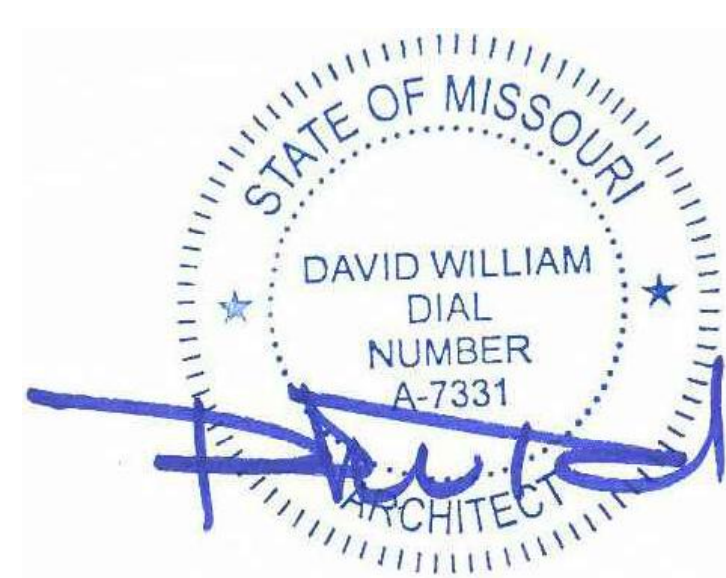
Designed By: SA
 Job Name: Wings - Lot 14 Chesterfield MO
 Drawing #: 152585
 Date: 6/16/2015

Calculation Points: 10' x 10' Spacing

DISCLAIMER:
 The lighting calculations contained herein are for estimation purposes only and are based upon information provided at the time of calculation. Actual results may differ due to variances in surface finishes and reflectance, supply voltage, and final fixture placement. Ward and Burton, Inc. will not be held responsible for light level differences encountered as a result of these variances.

Luminaire Schedule									
Project: Wings Corporate Estates - Lot 14									
Symbol	Qty	Label	Arrangement	Manufacturer	Description	Lum. Watts	Lum. Lumens	LLF	BUG Rating
➡	4	SA	SINGLE	PHILIPS GARDCO	GARDCO ECF-1-3-160LA-481A-NW-UNIV-STD FINISH/SSS-18-4-11-D1-STD FINISH	158.3	15565	1.000	B3-U0-G2
➡	1	SB	SINGLE	PHILIPS GARDCO	161-4-220LA-9670-NW-UNIV-STD FINISH @ 20'	210	17822	1.000	B3-U0-G3
➡	6	SC	SINGLE	PHILIPS STONCO	LPW7 @ 8'	14	1154	1.000	B1-U0-G0
⊙	1	STREET LIGHT	SINGLE	ARCHITECTURAL AREA LIGHTING	UCL-H2-250PSMH ON 25 FT POLE AND 2.5 FT PEDESTAL	298	17083	1.000	B3-U0-G3

Calculation Summary								
Label	Avg	Min	Max	CalcType	Units	Grid Size (Ft.)	Grid Height (Ft.)	# Pts
Main Entry	6.12	N.A.	N.A.	Illuminance	Fc	2	0	37
Side Entry	6.26	N.A.	N.A.	Illuminance	Fc	2	0	35
Spill Light	0.09	0.0	2.0	Illuminance	Fc	10	0	546
Within PL	1.62	0.0	7.4	Illuminance	Fc	10	0	534
Loading Dock	2.97	0.6	5.6	Illuminance	Fc			24
Main Entry	6.12	4.2	7.6	Illuminance	Fc			37
Paved Parking Area	2.34	0.6	5.2	Illuminance	Fc			137
Side Egress	6.44	3.8	9.5	Illuminance	Fc			30



Structural Engineer:

 Civil Engineer:

 Mechanical/Electrical/Plumbing &
 Fire Protection Engineers:

New Building for:
**Wings Corporate
 Estates - Lot 14**
 Chesterfield, MO 63005

ISSUE DATES:
 PRELIMINARY DESIGN: 03-06-2015
 PRELIMINARY DESIGN: 03-13-2015
 PHOTOMETRIC: 06-16-2015

COPYRIGHT © 2014 DAVID W. DIAL ARCHITECTS, P.C.

STATE OF MISSOURI REGISTERED ARCHITECT:
 DAVID WILLIAM DIAL - LICENSE NUMBER A-7331
 DAVID W. DIAL ARCHITECTS, P.C.
 ARCHITECTURAL CORPORATION #2000149091

THE ARCHITECT'S SEAL AFFIXED TO THIS SHEET INDICATES THAT THE NAMED ARCHITECT HAS PREPARED OR DIRECTED THE PREPARATION OF THE MATERIAL SHOWN ONLY ON THIS SHEET. OTHER DRAWINGS AND DOCUMENTS, NOT EXHIBITING THIS SEAL, SHALL NOT BE CONSIDERED PREPARED BY OR THE RESPONSIBILITY OF THE UNDERSIGNED.

dial architects
 14364 Manchester Road • Manchester Missouri 63011
 636 230 0400 www.dialarchitects.com

SHEET NUMBER:

PHOTOMETRIC PLAN

PROJECT NUMBER: 15020 DATE: 04-08-2015