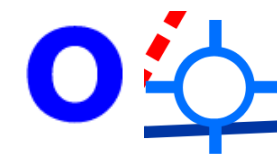
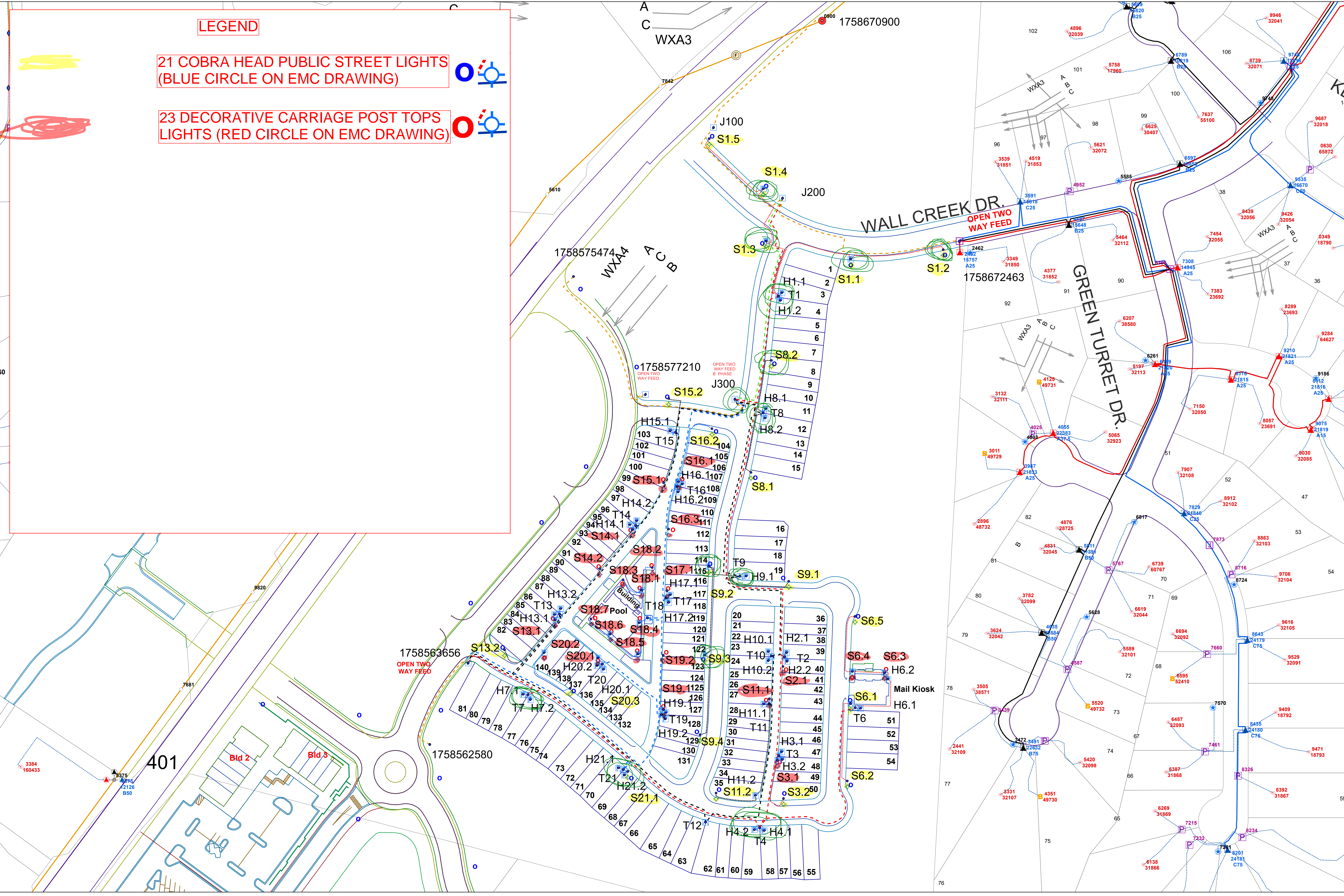
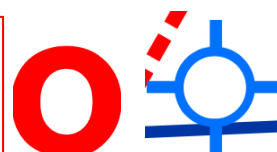


LEGEND

21 COBRA HEAD PUBLIC STREET LIGHTS
(BLUE CIRCLE ON EMC DRAWING)




23 DECORATIVE CARRIAGE POST TOPS LIGHTS
(RED CIRCLE ON EMC DRAWING)



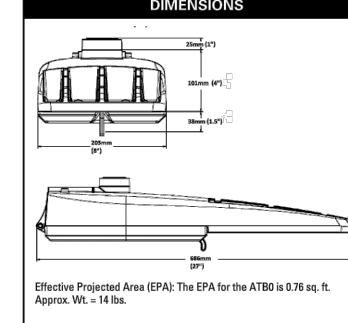
Autobahn Series ATB0 Roadway Lighting

PRODUCT OVERVIEW



Applications:
Roadways
DOT projects
Recreational areas
Parking lots

COMMISSIONS



STANDARDS

Features:

OPTICAL:
The Autobahn series road lighting fixture provides exceptional performance. Glass optics are superior to other polymer optics in the area of efficiency, thermal performance, and resistance to UV degradation. All optics can be custom designed and fabricated as well as optical distribution. Also, because glass optics are made of a single piece of glass, there is no risk of delamination. Also, because glass optics are made of a single piece of glass, there is no risk of delamination. Also, because glass optics are made of a single piece of glass, there is no risk of delamination.

ELECTRICAL:
Typical Life: LED light engines are rated at 100,000 hours at 25°C L70. Electronic driver has an expected life of 100,000 hours at 25°C L70.


MECHANICAL:
Innovative design allows for easy installation and removal. The fixture is designed for easy installation and removal. The fixture is designed for easy installation and removal. The fixture is designed for easy installation and removal.

CONTROL OPTIONS:
Adjust Output (AO) module - Onboard device that adjusts the light output and input voltage to meet the specific requirements. AO module is present at the factory by position number 8 (see chart).

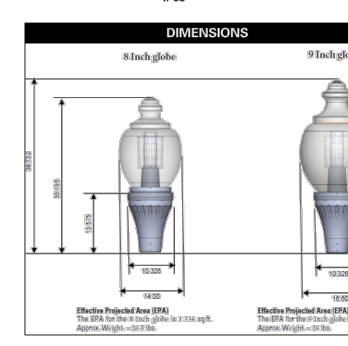
2 POLE MOUNT FIXTURE TYPE R1 SPECIFICATION SHEET

Hartsfield AcornLED Series HTFL

PRODUCT OVERVIEW



COMMISSIONS



FEATURES:

MECHANICAL:
Horn poles, 3.00" x 3.00" x 1.75" (3" x 3" x 1.75")
Optional internal or external LED with photometric output. Housing contains a tempered glass lens to allow light to travel in all directions.
Horn to pole flange that will accept 2" high by 2" x 3" x 1.75" pole bases.
Super durable polymer powder coat finish with rigorous pre-treatment process meets 5,000 hour salt spray testing per ASTM B117.
Luminaire is P10 rated.
Mounts to 2" x 3" pole top bases.
Base and optics replace separately.

ELECTRICAL:
All lamp protection meets ANSI/IES E22-13.2 IESNA 180-190
Standard SPD meets IESNA 180-190 per ANSI C136.2-2015
200V SPD meets IESNA 180-190 per ANSI C136.2-2015
Shock resistance conforms to IEEE 1000.10 and IEEE 1000.11
LED drivers meet maximum total harmonic distortion (THD) of 20% and are EMI compliant. Maximum operating temperature = 40°C. Overall life has minimum estimated life of 100,000 hours at 25°C ambient.
120-277V 50/60 Hz and 167-480V 60 Hz

OPTICAL:
Color temperature options of 2700K, 3000K, 4000K, and 5000K CCT with 70 CR minimum
Optical distribution: Non-Photopic Type III & Type II in both Polychromatic and Acrylic
IP and Glass Optics
LED at 100,000 hours at 40°C ambient

CONTROL OPTIONS:
Adjust Output (AO) module - Onboard device that adjusts the light output and input voltage to meet the specific requirements. AO module is present at the factory by position number 8 (see chart).
Long Life Photocell (LLP) - 20 Year Life
Long Life Photocell (LLP) - 20 Year Life
Long Life Photocell (LLP) - 20 Year Life

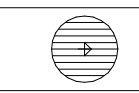
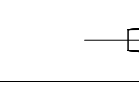
TESTING / COMPLIANCE:
UL 1598 - Wet Location Safety Listing
Suitable for ambient temperatures -40°C - 40°C
Design Light Concentration (DLC) qualified product. For all versions of this product the DLC qualified product must be DLC qualified. Please check the DLC Qualified Product List at www.dlc.com to verify which version are qualified.
DLC version: 2019/02/23

3 POLE MOUNT FIXTURE TYPE D1 SPECIFICATION SHEET

Calculation Summary

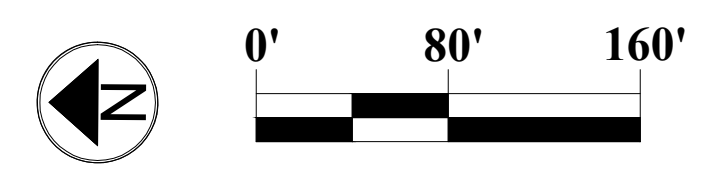
Label	CalcType	Units	Avg	Max	Min	Avg/Min	# Pts
All CALC Points Shown 20'x20'AFG	Illuminance	Fc	0.1	0.8	0.0	N.A.	1203
Chimney Drive	Illuminance	Fc	0.3	0.3	0.1	2.5	14
Deep Oak Drive	Illuminance	Fc	0.2	0.6	0.1	2.0	41
Lettie Lane	Illuminance	Fc	0.2	0.3	0.1	1.8	67
Mail Kiosk	Illuminance	Fc	0.2	0.4	0.1	1.7	10
Randy Drive	Illuminance	Fc	0.2	0.6	0.1	1.9	11
Roles Way	Illuminance	Fc	0.3	0.7	0.1	2.8	47
Wall Creek Drive	Illuminance	Fc	0.2	0.3	0.1	2.0	54
Wallstone Way	Illuminance	Fc	0.2	0.4	0.1	2.0	101
Ziggy Lane	Illuminance	Fc	0.2	0.5	0.1	1.7	20

Luminaire Schedule

Symbol	Label	Qty	Arrangement	LLF	Description	Lum. Watts	Lum. Lumens	BUG Rating
	D1	23	SINGLE	0.950	AEL HTFL P10 XX 40K R3VC AP 8R Post Top Decorative Fixture / Pole - 14'-0" Pole	25.3	3221	B1-U5-G2
	R1	21	SINGLE	0.950	AEL ATBM 247L P25 XX 40K R3 AY LED Street Light / Pole - 35'-0" Mounting Height	34	3335	B1-U3-G2



1 SITE LIGHTING PLAN
SCALE: 1" = 80'-0"



BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THE LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER THE CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.

FOR ADDITIONAL LIGHTING INFORMATION CONTACT:
On-Site Lighting & Survey, LLC
PH: 763.684.1548

On-Site Lighting & Survey, LLC

1111 HIGHWAY 25 NORTH
SUITE 201
BUFFALO MN 55313
PH: 763.684.1548
FAX: 763.682.9048

ENGINEER
McADAMS
The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713
phone 919.361.5000
fax 919.361.2269
license number: C-0293, C-187
www.mcadamsco.com

PROPERTY OWNER
WALLBROOK
LANDCO, LLC
4700 SIX FLAGS RD
RALEIGH, NC 27609

PROJECT INFO
WALLBROOK
PROJECT
ROLESVILLE, NC

REVISIONS	DESCRIPTION	INIT	DATE
1	ADD STREET LABELS	WRT	03/31/22
2	ADJUSTED LIGHT LOCATIONS DUE TO UTILITY CONFLICTS	WRT	04/20/22
3	ADDED & REVISED LIGHTING AT NEW AMENITY AREA	WRT	08/24/22
4	MOVED POLES #11 & #44 AT NEW AMENITY AREA	CDH	02/28/2023
5	MOVED POLES TO OTHER SIDE OF SIDEWALK	CDH	02/29/2023
6		CDH	10/12/2023

SHEET DESCRIPTION
SITE LIGHTING & SPECIFICATIONS

PROJECT #
03.25.2022

ISSUE DATE
N.A.

AGI
W.TOKKESDAL

CAO
C.D.HEANER

SHEET #
SL2.0

REV #
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