



**UIL HOLDINGS CORPORATION**

157 Church Street, New Haven CT 06510-2100  
203-499-2000

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Via Hand Delivery and Electronic Mail

March 23, 2015

Robert Stein  
Chairman  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

Re: Petition No. 1120 – The United Illuminating Company Petition for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Modifications to the Hawthorne Substation at 180 Hawthorne Drive, Fairfield, Connecticut

Dear Chairman Stein:

Please find enclosed the original and fifteen (15) copies of The United Illuminating Company's ("UI") responses to Intervenor Arthur Tournas' Third Set of Interrogatories, dated March 16, 2015 in connection with the above-referenced Petition. Additionally, UI will electronically file all responses and attachments via [siting.council@ct.gov](mailto:siting.council@ct.gov).

Please do not hesitate to contact me at (203) 499-2422 if you have any questions regarding this filing.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Bruce L. McDermott', written over a horizontal line.

Bruce L. McDermott  
Managing Counsel – Operations  
UIL Holdings Corporation  
As Agent for The United Illuminating Company

cc: Service List

Enclosures

Interrogatory TOU-III-1

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

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Q-TOU-III-1: Regarding the six 70 foot high lightning mast protection, planned for the South/west side, please provide an accurate location of the lightning masts on UI's Photo and please provide the distance to the closest abutters property line. Indicate which address that would be. Please provide the study that indicates that six masts are needed and the need for the proposed height.

A-TOU-III-1: See UI response to Town of Fairfield interrogatory TOF-II-3 which indicates the engineering rationale for the height, location and number of lightning masts required. See Attachment TOU-III-1-A for the lightning protection design plan.



Interrogatory TOU-III-2

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

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Q-TOU-III-2: Regarding the 70 foot high Lightning Mast protection, planned for the east side, please provide an accurate location of the lightning masts on UI's Photo and Please provide the distance to the closest abutter property line. Indicate which address that would be. Please provide the study that indicates that this mast needs to be added on the existing substation and at the proposed height.

A-TOU-III-2: See UI response to Town of Fairfield interrogatory TOF-II-3 which indicates the engineering rationale for the height, location and number of lightning masts required. See Attachment TOU-III-1-A for the lightning protection design plan.

Interrogatory TOU-III-3

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

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Q-TOU-III-3: Please provide how many times that this substation has been hit by lightning and the number of blackouts in the past 7 years at this substation.

A-TOU-III-3: UI has no means of tracking the number of times the lightning protection systems at a substation are struck by lightning.

Interrogatory TOU-III-4

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-TOU-III-4: Are there other options for protecting the Substation from lightning?

A-TOU-III-4: UI is not aware of any other option that is as effective yet less visible than the proposed design.

Interrogatory TOU-III-5

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

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Q-TOU-III-5: Please indicate in detail the positioning of the lights and show on UI's Photo. Also how many light masts will be installed and how tall are the lighting masts? How high will the lights be positioned on the mast?

A-TOU-III-5: See Attachment TOU-III-5-A, Lighting Plan Overlay Drawing

PETITION 1120  
ATTACHMENT TOU-III-5-A  
HAWTHORNE – LIGHTING PLAN OVERLAY



Interrogatory TOU-III-6

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-TOU-III-6: What hours will the lights be on? Will any of the illumination from the lighting be intrusive onto any of the abutting property? If so what is that address(s)?

A-TOU-III-6: The lights that illuminate the substation yard under normal conditions are operated by a photocell, turning on when the sun sets and turning off when the sun rises. See UI's response to Town of Fairfield Interrogatory TOF-II-1.

Interrogatory TOU-III-7

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

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Q-TOU-III-7: Please provide lighting and illumination study. Please include study with all lights on at full running capacity.

A-TOU-III-7: See Attachment TOU-III-7-A, Lighting Calculation Plan. This plan drawing is produced to adhere to UI standards designating the necessary illumination level of 2 foot-candles of illumination at ground-level throughout the substation yard when all lights are illuminated.



Interrogatory TOU-III-8

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-TOU-III-8: Regarding the additional high wattage yard lighting, please provide the manufacturer's spec sheet. Please include actual manufacturer's detailed photos of the lighting to be used?

A-TOU-III-8: See Attachment TOU-III-8-A, Halothane Light Specification and Attachment TOU-III-8-B, LED Light Specification.

PETITION 1120  
 ATTACHMENT TOU-III-8-A  
 HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

**Type S & J**

20.43  
 Ø20.63

**Type R & L**

R = 26.63  
 L = 29.15  
 Ø20.75

Maximum Weight:  
 Type S = 76 lb. (34.5 Kg)  
 Type R = 88 lb. (39.9 Kg)  
 Type L = 92 lb. (41.7 Kg)  
 Type J = 79 lb. (35.8 Kg)  
 Effective Projected Area (EPA):  
 Type S & J = 1.34 ft.<sup>2</sup>  
 Type R = 1.72 ft.<sup>2</sup>  
 Type L = 1.78 ft.<sup>2</sup>

**HMAO™**  
 High Mast Advanced Optix

Functional  
 Outdoor

Customer Preferred: (Most Frequently Ordered Catalog Numbers)

HMAO	400HP	48	J	7
	C10HP	MT	L	9
			R	
			S	

Series	Source / Wattage	Voltage	Optic	Beam Angle
High Mast	400HP <sup>1</sup> 400W HPS	12 120V, C/U/L/S	J = Asymmetric Reflector	0 = NCO Optic L
Advanced	40RHP <sup>2</sup> 400W HPS Mag Reg	20 208V, UL	L = Asymmetric Reflector	1 = SGO Optic L
Optix Series	400MP <sup>3</sup> 400W MH Open Fixture Rated	24 240V, UL	R = Symmetric Reflector	2 = Low; FCO Optic S & I; CO Optic L & R
Luminaire	400PP <sup>4</sup> 400W Pulse MH Open Fixture Rated	27 277V, C/U/L/S	S = Symmetric Reflector	3 = High; FCO Optic S; CO Optic L & R
	750HP <sup>1</sup> 750W HPS	48 480V, UL		
	C10HP <sup>1</sup> 1000W HPS	MT Multivolt (120, 208, 240, 277V, UL)		
	CP1HP <sup>2</sup> 1000W HPS Compact Lamp	MA Multivolt, Wired to 120V, UL		
	C10MP <sup>2</sup> 1000W MH Open Fixture Rated	MB Multivolt, Wired to 208V, UL		
		MC Multivolt, Wired to 240V, UL		
		MD Multivolt, Wired to 277V, UL		
		08 208V, Isolated Secondary, C/UL		
		40 240V, Isolated Secondary, C/UL		

Cutoff Classification: FCO = Full Cutoff; CO = Cutoff; SGO = Semi-Cutoff; NCO = Non Cutoff

**ORDERING INFORMATION:**

LAMP (5-64769) HMAO400PP24S7

Options and Accessories

<p><b>OPTIONS</b></p> <p>R Twistlock Photocontrol Receptacle. Not Available with Voltage Code MT.</p> <p>PS Protective Starter for 400HP, 40RHP, C10HP and CP1HP units only. Not Available with 08 or 40 Voltage Codes.</p> <p>FD1 Single Fusible Disconnect (12, 24, 27, MA, MC, MD &amp; 34) Not Available for 750HP34.</p> <p>FD2 Double Fusible Disconnect (08 &amp; 24) Not Available for 750HP34.</p>	<p><b>ACCESSORIES</b></p> <p>Lamp</p> <p>F1 Single Fusing, Field Installed (12, 24, 27, MA, MC, MD &amp; 34)</p> <p>F2 Double Fusing, Field Installed (08, 24, MB, MC &amp; 48)</p> <p>SD-395-90 90° Shield</p> <p>SD-395-120 120° Shield</p> <p>SD-395-180 180° Shield</p> <p>PS-100 Replacement Protected Starter for 400HP and 40RHP</p> <p>PS-1000 Replacement Protected Starter for 1000 HPS</p>
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ORDER #: \_\_\_\_\_  
 TYPE: LJS  
 DRAWN: LJS  
 DATE: 5/20/09  
 DWG #: \_\_\_\_\_

PETITION 1120  
ATTACHMENT TOU-III-8-A  
HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

## Specifications

### GENERAL DESCRIPTION

The luminaire shall be Holophane catalog number \_\_\_\_\_. Its effective projected area (EPA) shall not exceed \_\_\_\_\_ square feet. Fixture shall be UL listed for wet locations, 40°C ambient temperatures and be CUL Certified.

### HOUSING

Shall be die cast aluminum, including a seven stage pre-treatment and finished with 2 to 4 mil of polyester powder paint. The bracket arm clamp shall attach to a 51mm (2") nominal schedule 40 pipe and allow for ±3° adjustment for leveling the luminaire. A stainless steel lamp clamp lined with woven glass cloth shall be attached to the reflector housing assembly for standard 1000 watt HID lamps. The fixture shall pass a vibration fatigue test per ANSI standards for Roadway Lighting Equipment - Luminaire Vibration.

### BALLAST

Shall be copper wound with power factor 90%. It shall have a published ballast factor of 1 to ensure full output of the lamp. All ballast components shall be completely removable as a unitized quick disconnect assembly for maintenance. A terminal block shall be provided to simplify wiring and provide positive electrical connections. A protected starter, if specified, shall sense an inoperative or missing HPS lamp and automatically shut down to prevent runaway operation, shortened life and damage to secondary ballast windings.

### OPTICAL ASSEMBLY

The optical assembly shall consist of highly specular enhanced aluminum hermetically sealed between a spun aluminum cover and an open ventilated borosilicate glass piece and/or prismatic refractor or an internal reflector system. The exposed smooth glass inner surface shall be continuously cleaned by the chimney effect of flow through air and subject to no permanent deterioration. The lamp shall be operated in the vertical position for maximum life and lumen maintenance. There shall be no glass bottom enclosure to scatter light above the horizon, to collect dirt or to reduce luminaire efficiency.

### PHOTOMETRIC PERFORMANCE

The luminaire can provide up to Full Cutoff, Cutoff, Semi-Cutoff and Non Cutoff distributions. Luminaire dirt depreciation shall be less than 5% (LDD 0.95).

### ELECTRICAL CHARACTERISTICS

For complete electrical data, see tables of electrical characteristics in Holophane Ballast Handbook, publication HL-301.

**HMAO™**  
High Mast Advanced Optix

Functional  
Outdoor



SEE DRAWING FOR DIMENSIONS. THIS DRAWING IS THE PROPERTY OF ACUITY BRANDS LIGHTING, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF ACUITY BRANDS LIGHTING, INC. ALL RIGHTS RESERVED.

ORDER #: \_\_\_\_\_  
TYPE: \_\_\_\_\_  
DRAWN: LJS  
DATE: 5/20/09  
DWG #:

PETITION 1120  
ATTACHMENT TOU-III-8-A  
HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

Product Information Bulletin

**SYLVANIA SUPER METALARC® PULSE START**

High Lumen Maintenance, Reduced Color Shift, Premium Metal Halide Lamps



SYLVANIA SUPER METALARC PULSE START 250, 320, 320/350, 350/400 and 400 watt lamps provide less color shift, good lumen maintenance, and long life. Their premium performance provides opportunities for higher maintained illuminance levels or substantial energy savings.

SYLVANIA SUPER METALARC Pulse Start lamps combine new metal halide lamp technology with proven ignitor technology. The result is a more transparent arc tube over life yielding less color shift and high lumen maintenance.

METALARC PULSE START Lamps

- Good lumen maintenance
- Quicker hot restrike\*
- Long average rated life

250 Watt Pulse Start

- 50% longer life than standard 250 watt

320 Watt Pulse Start

- 100 initial lumens per watt for clear lamps
- 20,000-hour average rated lamp life
- Compact BT28 size allows higher luminaire efficiency

320/350 Watt Pulse Start

- Incorporates PRO-TECH® design for open fixture use
- Lamp can be operated on 320 or 350 watt ballast

350/400 Watt Pulse Start

- Incorporates PRO-TECH design for open fixture use
- Lamp can be operated on 350 or 400 watt ballast

400 Watt Pulse Start

- 31% Higher mean lumens than the M400/U
- 19% Higher mean lumens than the MS400/BU-ONLY
- Less color shift over lamp life\*

\*compared to standard metal halide lamps

Product Availability

Product	Lamp Finish	Fixture Type
MS250/PS/BU-ONLY	Clear & Coated	Enclosed fixture only
MS320/PS/BU-ONLY	Clear & Coated	Enclosed fixture only
MP320/350/PS/BU-ONLY/BT28	Clear & Coated	Open or enclosed
MP350/400/PS/BU-ONLY	Clear & Coated	Open or enclosed
MS400/PS/BU-ONLY	Clear & Coated	Open or enclosed

Application Information

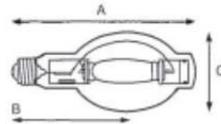
Applications	Application Notes	Ballast Information	Fixtures
Ambient lighting: industrial, commercial and retail Parking lots Canopy lighting Security lighting Flood lighting	Operating orientation: Base up only, within 15° of vertical  <b>Socket information</b> Lamps operate in standard mogul HID sockets rated to withstand 4000 volt pulses. Exclusionary mogul sockets are recommended for the METALARC PRO-TECH (MP) versions.	All lamps will operate on ANSI Pulse Start ballasts with ignitors for metal halide lamps as noted:  Lamp      ANSI Ballast 250 watt    M138 320 watt    M132 320/350 watt    M132 or M131 350/400 watt    M131 or M135 400 watt    M135	Consult your local fixture agent for available fixtures

HID021R2



# PETITION 1120 ATTACHMENT TOU-III-8-A HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

### Dimensions



Ordering Abbreviation	(A) MOL	(B) LCL	(C) Bulb Diameter
MS250/PS/BU-ONLY	8 5/16"	5"	3 1/2"
MS320/PS/BU-ONLY	8 5/16"	5"	3 1/2"
MP320/350/PS/BU-ONLY/BT-28	8 5/16"	5"	3 1/2"
MP350/400/PS/BU-ONLY	11 1/2"	7"	4 5/8"
MS400/PS/BU-ONLY	11 1/2"	7"	4 5/8"

### Ordering and Specification Information

Item Number	Ordering Abbreviation	Watts	Finish	Bulb	Base	ANSI Spec Number	Average Rated Life (hrs)	Initial Lumens	Mean Lumens	CRI	Color Temp
64578	MS250/PS/BU-ONLY*	250	Clear	BT28	Mogul	M138	15,000	23,500	17,000	65	4200K
64617	MS250/C/PS/BU-ONLY*	250	Coated	BT28	Mogul	M138	15,000	22,200 <sup>3</sup>	16,000 <sup>3</sup>	70	3600K
64507	MS320/PS/BU-ONLY*	320	Clear	BT28	Mogul	M132	20,000 <sup>3</sup>	32,000	21,000	65	4300K
64646	MS320/C/PS/BU-ONLY*	320	Coated	BT28	Mogul	M132	20,000 <sup>3</sup>	30,000	19,700	70	3900K
64391	MP320/350/PS/BU-ONLY/BT28	320	Clear	BT28	Mogul <sup>6</sup>	M132	20,000	29,500	21,000	65	4000K
		350				M131	20,000	33,500	24,000	65	3900K
64349	MP320/350/C/PS/BU-ONLY/BT28	320	Coated	BT28	Mogul <sup>6</sup>	M132	20,000	28,500	19,000 <sup>3</sup>	70	3900K
		350				M131	20,000	31,500	22,000 <sup>3</sup>	70	3800K
64769	MP350/400/PS/BU-ONLY*	350	Clear	BT37	Mogul <sup>6</sup>	M131	20,000	34,000 <sup>3</sup>	24,500 <sup>3</sup>	65	3700K
		400				M135	20,000	41,000 <sup>3</sup>	29,500 <sup>3</sup>	65	3500K
64770	MP350/400/C/PS/BU-ONLY*	350	Coated	BT37	Mogul <sup>6</sup>	M131	20,000	32,000 <sup>3</sup>	23,000 <sup>3</sup>	70	3500K
		400				M135	20,000	39,000 <sup>3</sup>	28,000 <sup>3</sup>	70	3300K
64525	MS400/PS/BU-ONLY*	400	Clear	BT37	Mogul	M135	20,000 <sup>3</sup>	42,000	32,800 <sup>3</sup>	65	4000K
64527	MS400/C/PS/BU-ONLY*	400	Coated	BT37	Mogul	M135	20,000 <sup>3</sup>	42,000	32,800 <sup>3</sup>	70	3600K

### Notes

- Lamps must be operated in a suitably enclosed fixture. A suitably enclosed fixture uses knifediffuser material able to contain hot lamp fragments (up to 1832°F, 1000°C). Enclosed fixtures which comply with UL1572 (revised 12/26/88 or later) and/or CSA Electrical Certification Notice 5360 (dated 6/27/88) should withstand an arc tube rupture. If you do not know whether your fixture can safely withstand an arc tube rupture, contact your fixture manufacturer.
- Operated vertically within 15°, may be operated in OPEN fixtures. Consult additional operating instructions and warning.
- Based on 10 hrs/start operating cycle. On 120 hrs/start, life rating increases to 30,000 hours and mean lumens will be 28,000.
- Preliminary engineering estimate.
- Exclusionary Mogul Base.
- Available April 2001.
- When operated on ballasts having a sustaining voltage less than 270V, lamp life may be significantly reduced.

### Ordering Code

MS	320	PS	BU-ONLY
S=Super	Wattage:	Finish:	Operating position:
METALARC	250, 320,	- Clear	Base up only
High Output	320/350, 350/400	C = Coated	
Metal Halide:	or 400 watts		
P=METALARC			
PRO-TECH open			
fixture rated			

### Ultraviolet Radiation Exposure

WARNING! THESE LAMPS CAN CAUSE SERIOUS SKIN BURN AND EYE INFLAMMATION FROM SHORT-WAVE ULTRAVIOLET RADIATION IF THE OUTER ENVELOPE (GLASS BULB) OF THE LAMP IS BROKEN OR PUNCTURED. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is punctured or broken are commercially available from OSRAM SYLVANIA Products Inc. THESE LAMPS CONFORM TO FEDERAL STANDARD 21 CFR 1040.10 IN THE U.S. AND SOR/80-381 IN Canada.

OSRAM SYLVANIA  
National Customer  
Support Center  
18725 N. Union Street  
Westfield, IN 46074  
**Industrial & Commercial**  
Phone 1-800-255-5042  
Fax 1-800-255-5043  
**National Accounts**  
Phone 1-800-562-4671  
Fax 1-800-562-4674  
**OEM & Special Markets**  
Phone 1-800-762-7191  
Fax 1-800-762-7192  
**Photo-Optic**  
Phone 1-888-677-2627  
Fax 1-800-762-7192

OSRAM SYLVANIA  
Ballast Division  
800 N. Church Street  
Lake Zurich, IL 60047  
Phone 1-800-654-0089  
Fax 1-847-726-6424

In Canada  
OSRAM SYLVANIA LTD  
Headquarters  
2001 Drew Road  
Mississauga, ON L5S 1S4

**Industrial & Commercial**  
Phone 1-800-263-2852  
Fax 1-800-667-6772  
**Special Markets**  
Phone 1-800-265-2852  
Fax 1-800-667-6772

Visit our website: [www.sylvania.com](http://www.sylvania.com)

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PETITION 1120  
ATTACHMENT TOU-III-8-A  
HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

**TYPE 05 LOWERING DEVICE**  
TOP LATCHING, CENTERING SYSTEM WITH INTERNAL WINCH

DEVICE SERIES	NUMBER OF CIRCUITS	QUANTITY OF FIXTURES	FIXTURE SERIES	WATTAGE & SOURCE OF FIXTURES
<b>05</b>	1 CIRCUIT	02 TWO (2)	HM HMAO	4H 400W HPS
	2 CIRCUITS	03 THREE (3)	HC HMSC	4M 400W MH
		04 FOUR (4)	HA HMSP ASYMMETRIC	4R 400W HPS MAGREG
	05 FIVE (5)	HS HMSP SYMMETRIC	7H 750W HPS	
	06 SIX (6)	HT HMST	7M 750W MH	
	07 SEVEN (7)	MY MA, MV, MC	1H 1000W HPS	
	08 EIGHT (8)	PB PB2	1M 1000W MH	
	09 NINE (9)	PF PF	5M 1500W MH	
	10 TEN (10)		6M 1650W MH	
	12 TWELVE (12)			

FREQUENCY, VOLTAGE & PHASING	POLE HEIGHT	CABLE TYPE
A 120V SINGLE PHASE	050 50 FEET	A GALVANIZED - 1/4" WINCH
B 120/208V 3 PHASE-4 WIRE	060 60 FEET	B GALVANIZED - 5/16" WINCH
C 208V SINGLE PHASE	070 70 FEET	C STAINLESS STEEL - 1/4" WINCH
D 208V 3 PHASE	080 80 FEET	D STAINLESS STEEL - 5/16" WINCH
E 240V SINGLE PHASE LL	090 90 FEET	
F 240V SINGLE PHASE LN	100 100 FEET	
G 277V SINGLE PHASE	110 110 FEET	
H 277/480V 3 PHASE-4 WIRE	120 120 FEET	
J 347/600V 3 PHASE-4 WIRE	130 130 FEET	
K 480V SINGLE PHASE	140 140 FEET	
L 480V 3 PHASE	150 150 FEET	
	15M 15 METERS	
	20M 20 METERS	
	25M 25 METERS	
	30M 30 METERS	
	35M 35 METERS	
	40M 40 METERS	
	45M 45 METERS	

OPTIONS	ACCESSORIES
1 LIGHTNING ARRESTOR - CB ENCLOSURE	LDM-W-X-Y-Z PORTABLE DRIVE MOTOR
2 LIGHTNING ARRESTOR - RING J-BOX	
3 TERMINAL BLOCKS, LIGHTNING ARRESTOR & ROD AVAILABILITY LIMITED TO SINGLE CIRCUIT TYPE K	SEE SHEET 5 FOR LETTER DESIGNATIONS
R PHOTOCONTROL RECEPTACLE - RING J-BOX	09249 LEVELING BLOCK ASSEMBLY
FAA1 SINGLE WARNING LIGHT	
FAA2 DOUBLE WARNING LIGHT	
FAA2TR DOUBLE WITH TRANSFER RELAY	
FWC FIXED WIREWAY COVER ON RING	
LR LIGHTNING ROD	

CATALOG NUMBER

**051 05 HM 4H E070 A2 LR**

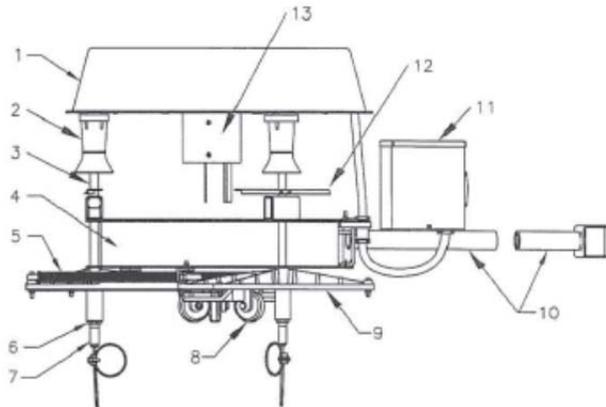


ORDER NO: \_\_\_\_\_  
TYPE: \_\_\_\_\_

DRAWING NO. \_\_\_\_\_  
CAD MODEL: LD05.DWG  
DATE: 12/09/09  
Sheet 1 of 5

PETITION 1120  
 ATTACHMENT TOU-III-8-A  
 HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

TYPE 05 HEADFRAME AND RING ASSEMBLY



EPA = 5.62 SQUARE FEET  
 WEIGHT = 250 POUNDS  
 DIAMETER OF ASSEMBLY WITH LUMINAIRES VARIES FROM 8 TO 11 FEET

1. SPUN COPPER FREE ALUMINUM COVER
2. CAST HIGH STRENGTH COPPER FREE ALUMINUM LATCH BARREL
3. STAINLESS STEEL LATCH PIN
4. GALVANIZED STEEL LUMINAIRE RING
5. STAINLESS STEEL CENTERING SPRING
6. STEEL ADJUSTMENT NUT
7. STRANVISE WIRE ROPE GRIP
8. NON MARKING GUIDE ARM ROLLER
9. CAST ALUMINUM IRIS GUIDE ARM
10. GALVANIZED LUMINAIRE MOUNTING ARMS, LUMINAIRE TYPE DEPENDENT
11. JUNCTION BOX
12. REFLECTING LATCH INDICATOR
13. GALVANIZED HEADFRAME, SLIPFITS A 4.63 TO 4.75 O.D. POLE TOP OR TENON

SCALE 1/16

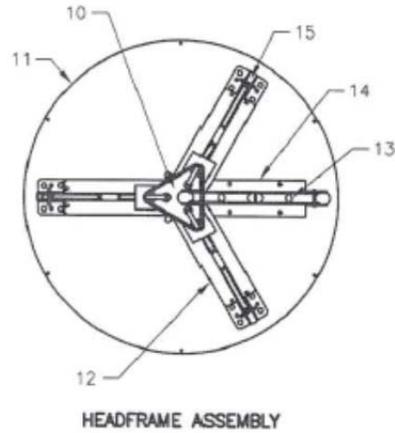
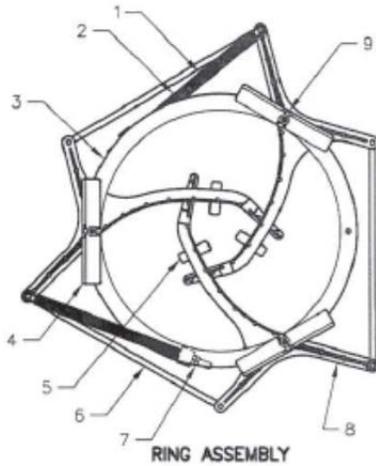


ORDER NO: \_\_\_\_\_  
 TYPE: \_\_\_\_\_

DRAWING NO. \_\_\_\_\_  
 CAD MODEL: LD05.DWG  
 DATE: 12/09/09  
 Sheet 2

PETITION 1120  
 ATTACHMENT TOU-III-8-A  
 HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

TYPE 05 HEADFRAME AND RING ASSEMBLY



1. STAINLESS STEEL CENTERING COMPRESSION SPRING
2. SOLID ALUMINUM GUIDE ROD
3. GALVANIZED STEEL LUMINAIRE RING
4. REFLECTING LATCH INDICATOR
5. NON MARKING GUIDE ARM ROLLER
6. ALUMINUM GUIDE ARM CONNECTING BRACKET
7. GUIDE ARM ADJUSTMENT NUT
8. CAST ALUMINUM IRIS GUIDE ARM
9. STAINLESS STEEL LATCH PIN
10. STEEL CABLE / CORD SEPARATOR WELDED IN SUFFITTER
11. STEEL HEADFRAME PLATE
12. STEEL HOIST CABLE BRACKET
13. ACETAL RESIN CORD ROLLERS
14. STEEL POWER CORD ROLLER BRACKET
15. STEEL HOIST CABLE SHEAVE

SCALE 1/16



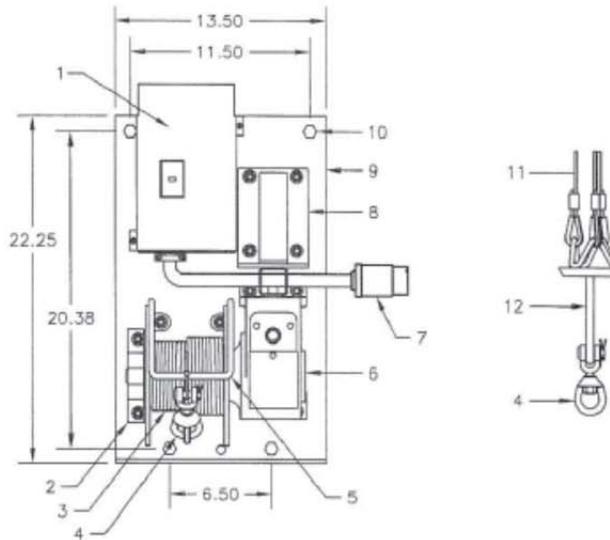
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ORDER NO: \_\_\_\_\_  
 TYPE: \_\_\_\_\_

DRAWING NO. \_\_\_\_\_  
 CAD MODEL: LD05.DWG  
 DATE: 12/09/09  
 Sheet 3

PETITION 1120  
 ATTACHMENT TOU-III-8-A  
 HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

TYPE 05 WINCH PLATE ASSEMBLY



1. CIRCUIT BREAKER OR BREAKERS AND ENCLOSURE
2. WINCH OUTBOARD SUPPORT
3. 1/4" OR 5/16" DIAMETER WINCH CABLE, GALVANIZED OR STAINLESS STEEL  
LENGTH EQUALS POLE HEIGHT PLUS 6 FEET
4. FORGED STEEL SWIVEL, 11,000 POUND ULTIMATE STRENGTH
5. WINCH CABLE GUARD
6. WINCH, 30:1 GEAR RATIO WITH INTERNAL DRAG BRAKE
7. POWER SUPPLY CORD AND CONNECTOR
8. STEEL POWER UNIT MOUNTING BRACKET
9. STEEL WINCH PLATE
10. 1/2-13 MOUNTING BOLT
11. 3/16" DIAMETER HOIST CABLES, GALVANIZED OR STAINLESS STEEL
12. STEEL CLEVIS TRANSITION ASSEMBLY

SCALE 1/16

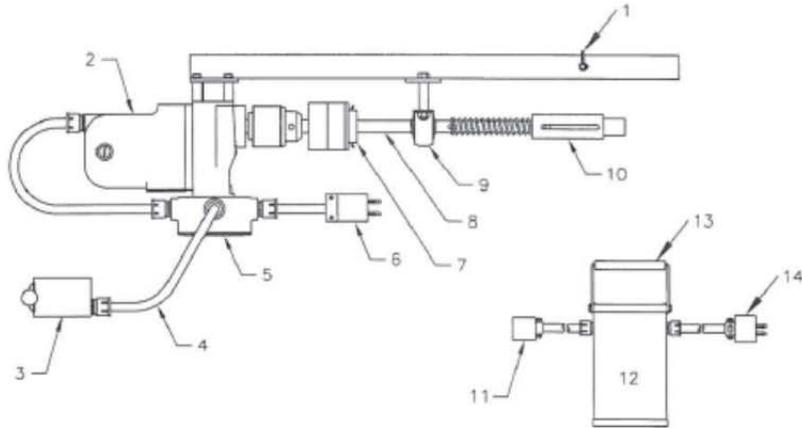


ORDER NO: \_\_\_\_\_  
 TYPE: \_\_\_\_\_

DRAWING NO. \_\_\_\_\_  
 CAD MODEL: LD05.DWG  
 DATE: 12/09/09  
 Sheet 4

PETITION 1120  
 ATTACHMENT TOU-III-8-A  
 HAWTHORNE – HALOPHANE LIGHT SPECIFICATIONS

TYPE 05 PORTABLE DRIVE MOTOR  
 LDM-W-X-Y-Z



1. HITCH PIN
2. 3/4" REVERSIBLE ELECTRIC MOTOR, 120 VOLTS, 11.5 AMP, 350 RPM
3. REVERSING DRUM SWITCH
4. CONTROL CORD, 20 FOOT LENGTH
5. WIRING HOUSING
6. PLUG TO MATE TO CONNECTOR IN POLE BASE OR TRANSFORMER SECONDARY
7. TORQUE LIMITER COUPLING
8. 3/4" STEEL SHAFT
9. PILLOWBLOCK
10. 5/8" HEX SOCKET CRANK SHAFT COUPLING
11. CONNECTOR TO MOTOR FROM 120V TRANSFORMER SECONDARY
12. STEPDOWN TRANSFORMER, 120V SECONDARY, 1.5 KVA FOR 240V, 277V AND 480V, 2.0 KVA FOR 208V
13. 1/2" CARRY HANDLE
14. PLUG TO CONNECTOR IN POLE BASE FROM TRANSFORMER PRIMARY

TYPICAL CATALOG NUMBER IS LDM-W-X-Y-Z WHERE:

- W = NUMBER OF CIRCUITS ( 1 OR 2)
- X = PHASE (1 FOR SINGLE PHASE, 3 FOR 3 PHASE OR 4 FOR 3 PHASE/4 WIRE)
- Y = VOLTAGE (120, 208, 240, 277, 480 OR 600)
- Z = AMPS (25, 30, 35, 45, 50, 60 OR 70)

CATALOG NUMBER LDM-1-1-240-30



ORDER NO: \_\_\_\_\_  
 TYPE: \_\_\_\_\_

DRAWING NO. \_\_\_\_\_  
 CAD MODEL: LD05.DWG  
 DATE: 12/09/09  
 Sheet 5

PETITION 1120  
ATTACHMENT TOU-III-8-B  
HAWTHORNE – LED LIGHT SPECIFICATIONS

**Cree Edge™ Series**

LED High Output Area/Flood Luminaire featuring Cree TrueWhite® Technology

**Product Description**

The Cree Edge™ High Output Area/Flood luminaire is designed to deliver high lumen packages with precise optical control. The unit features a slim, low profile design that minimizes wind load and a rugged die cast aluminum adjustable arm that mounts to a horizontal or vertical 2" (51mm) IP, 2.375-2.50" (60-64mm) O.D. steel tenon. Tenon length must be a minimum of 3.75" (95mm). The direct mount bracket accessory allows for further mounting flexibility. Available with Cree TrueWhite® Technology, the Cree Edge™ High Output helps to beautifully render true colors and deliver value beyond energy savings.

**Applications:** Auto dealerships, parking lots, campuses, facade lighting, high-mast and general site lighting applications

**Performance Summary**

- Utilizes BetaLED® Technology
- Utilizes Cree TrueWhite® Technology on 5000K Luminaires
- Patented NanoOptic® Product Technology
- Made in the U.S.A. of U.S. and imported parts
- CRI: Minimum 70 CRI (4000K & 5700K); 90 CRI (5000K)
- CCT: 4000K (+/- 300K), 5000K (+/- 300K), 5700K (+/- 500K) standard
- Limited Warranty\*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

**Accessories**

Field Installed	Backlight Control Shields	Direct Mount Bracket
8x4 Splice XA-800SPH00K12 - 120 LED XA-800SPH00K24 - 240 LED	XA-30BLS-4 - Four pack for 120 LED - Unpainted stainless steel  XA-30BLS-8 - Eight pack for 240 LED - Unpainted stainless steel	EHO-UMH+ - Mounts to minimum 4" (102mm) round or square, aluminum or steel pole or can be surface mounted directly to a vertical or horizontal surface - See Direct Mount Configuration table on page 15 - Poles must be field drilled for direct mount

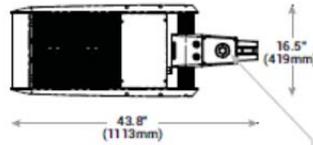
\* Must specify color



HV Mount (shown in horizontal position)

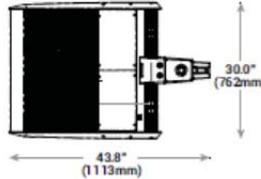


120 LED



NEMA® Photocell (Receptacle location) (ordered as an option)

240 LED



**Ordering Information**

Example: AREHO 2M HV 12 E UL SV 700 **FLD EHO-40-XX-12-E-UL-XX-1000-40K**

Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
AREHO	1S Type I Short 2M Type II Short 2MS Type II Medium 3M Type I Medium 3MS Type III Medium 4M Type IV Medium 4MS Type IV Medium w/RLS 5 Type I Short 5S Type III Medium 5MS Type V Short	HV Horizontal/ Vertical Tenon	12 24	E	UL Universal 120-277V UL Universal 347-480V	SV Silver BK Black BR Bronze PB Platinum BRN Bronze WH White	700 700mA 1000 1000mA	40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire 50K 5000K Color Temperature - Minimum 90 CRI - Utilizes Cree TrueWhite® Technology - Color temperature per luminaire DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current F Fuse - When code dictates fusing, use time delay fuse - Refer to ML spec sheet for availability with ML options - Not available with UL voltage
FLD EHO	1S 15° Flood 2S 25° Flood 25 Flood		40					ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications at 0° tilt NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Consult factory for vertical tenon application - Photocell by others - Refer to ML spec sheet for availability with ML options

\*See www.cree.com/lighting/products/warranty for warranty terms



Rev. Date: V3 12/09/2014



US: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

Interrogatory TOU-III-9

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-9: In order to reduce lighting can infrared cameras be used to reduce lighting without impacting security?

A-TOU-III-9: In UI's experience, infrared cameras are unsuitable for perimeter physical security applications because they only provide a narrow field of view.

Interrogatory TOU-III-10

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-10: Can motion detectors be used to turn on the lights only if there is a security breach?

A-TOU-III-10: UI designs a lighting system to properly illuminate the substation yard and perimeter for both physical security and safety concerns. The use of motion detectors to detect movement outside of the substation and subsequently trigger the lights would not effectively detect individuals screened by vegetation along the substation perimeter. Our experience with motion detection technology is that it's prone to nuisance triggering from a variety of sources including wild life.

Interrogatory TOU-III-11

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

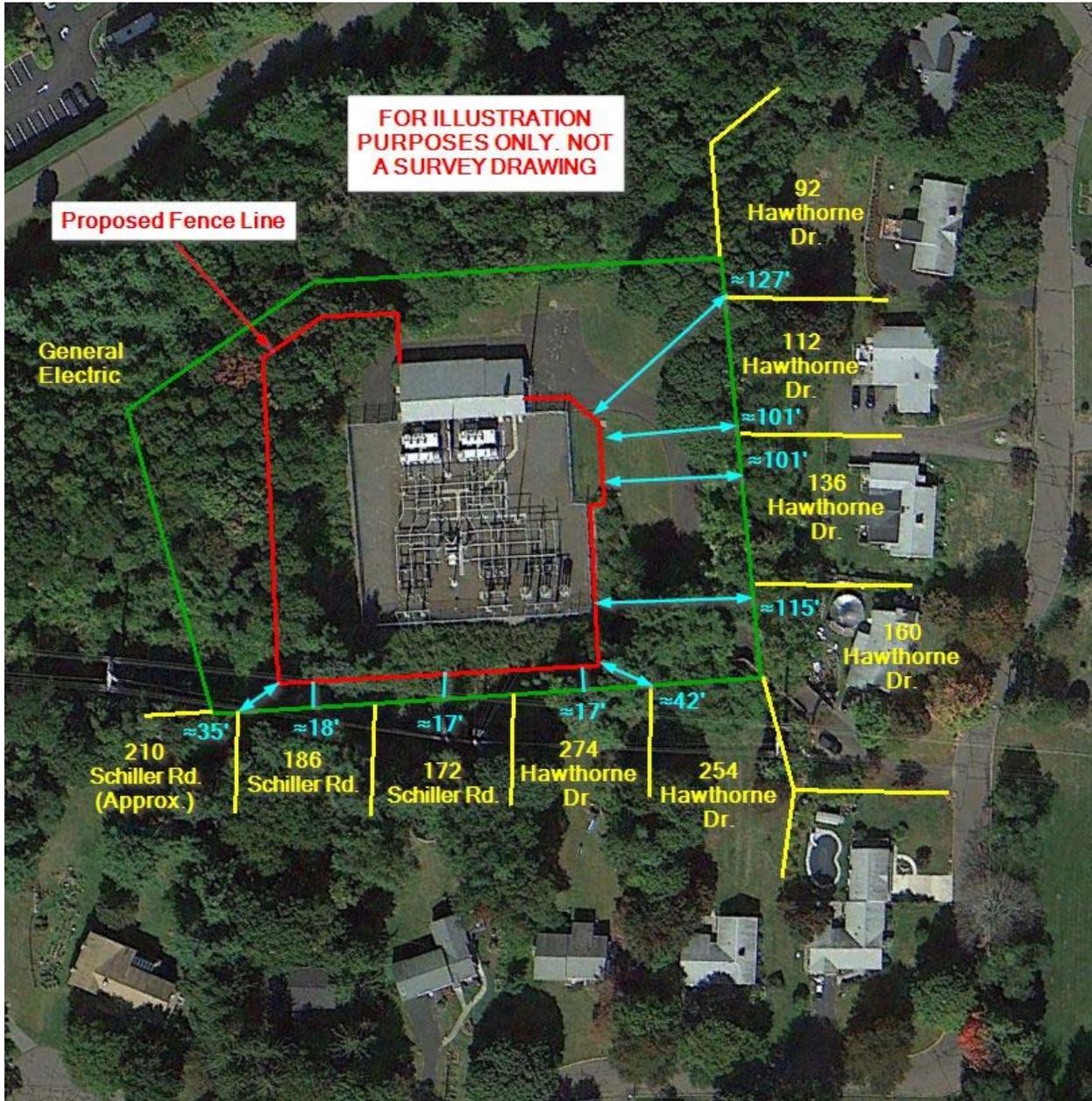
Petition 1120

Page 1 of 1

Q-TOU-III-11: Regarding the proposed fencing, please provide the exact location and placement of the fencing on UI's Photo with each abutter's property line. Please show addresses. Please provide the distance from each abutter's property line.

A-TOU-III-11: See Attachment TOU-III-11-A – Fence Line Distances.

PETITION 1120  
ATTACHMENT TOU-III-11-A  
HAWTHORNE – FENCE LINE DISTANCES



Interrogatory TOU-III-12

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-12: Besides the proposed fencing, is there any other construction material that can be used to safely secure the parameter of the substation?

A-TOU-III-12: Yes, there are alternate methodologies for securing the perimeter of the substation.

Interrogatory TOU-III-13

The United Illuminating Company

Petition 1120

Witness: Matthew Cloud  
Ron Rossetti

Page 1 of 1

Q-TOU-III-13: Will any part of the existing or proposed fencing be located on any property other than UI's property?

A-TOU-III-13: No, all existing and proposed fencing will be located on UI's property only.

Interrogatory TOU-III-14

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

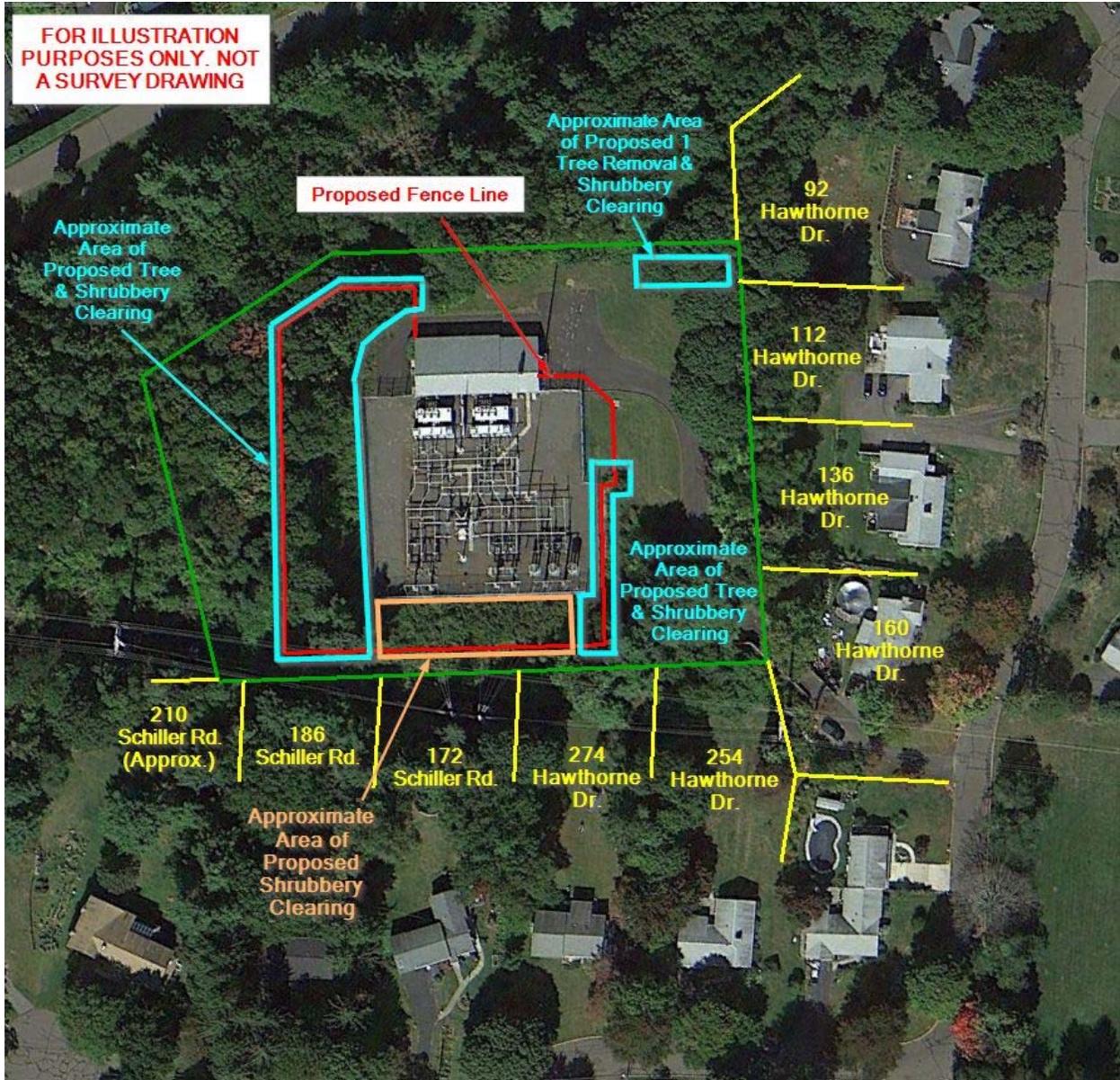
Petition 1120

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Q-TOU-III-14: Regarding the tree and shrubbery clearing amid Schiller Road and General Electric (3135 Easton Turnpike); what is the exact amount of trees and shrubbery being removed? Please indicate the location of the trees being removed on UI's Photo.

A-TOU-III-14: See Attachment TOU-III-14-A - Tree & Shrubby Clearing.

PETITION 1120  
ATTACHMENT TOU-III-14-A  
HAWTHORNE – TREE AND SHRUBBERY CLEARING



Interrogatory TOU-III-15

The United Illuminating Company

Petition 1120

Witness: Matthew Cloud  
Ron Rossetti

Page 1 of 1

Q-TOU-III-15: Regarding the tree and shrubbery clearing amid Hawthorne Drive and General Electric; what is the exact amount of trees and shrubbery being removed?  
Please indicate the location of the trees being removed on UI's Photo.

A-TOU-III-15: See UI's response to Interrogatory TOU-III-14

Interrogatory TOU-III-16

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-16: Regarding the large equipment access road, will the existing driveway need to be widened for the large mobile transformer and 24 foot double swing drive gate? If so, how much wider will the existing driveway be widened? Please provide details of additions on UI's Photo with each property line shown.

A-TOU-III-16: UI will expand the existing driveway next to the 24 foot double swing drive gate for the large mobile transformer as shown in the Figure 3 of the Petition.

Interrogatory TOU-III-17

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-17: Regarding the 90 foot mobile transformer mentioned; in the past seven years, how many times has the mobile transformer been used at this location?

A-TOU-III-17: The mobile transformer is only brought to the substation if one of the two transformers located on site is removed from service for an extended period of time. This has not been necessary in the last seven years.

Interrogatory TOU-III-18

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-18: The petition mentioned that the excavated soil will stay on property. Can you explain why and indicate on UI Photo where it will be stored?

A-TOU-III-18: UI will store and characterize any excess soil produced during construction prior to disposal. See Petition at 7.

Interrogatory TOU-III-19

The United Illuminating Company

Petition 1120

Witness: Matthew Cloud  
Ron Rossetti

Page 1 of 1

Q-TOU-III-19: Did UI do a study on how long-term exposure to continual nighttime light can affect health on humans?

A-TOU-III-19: No, UI did not perform an investigation of this kind.

Interrogatory TOU-III-20

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-20: Regarding the proposed standard video cameras, where will the cameras be located? Please show on UI Photo.

A-TOU-III-20: We are not able to supply this information as it is considered Critical Energy Infrastructure Information (CEII) as defined by the Federal Energy Regulatory Commission (FERC).

Interrogatory TOU-III-21

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-21: Will any of the new and existing cameras protrude on any of the abutters' property? If yes please provide address(s).

A-TOU-III-21: We are not able to supply this information as it is considered Critical Energy Infrastructure Information (CEII) as defined by the Federal Energy Regulatory Commission (FERC).

Interrogatory TOU-III-22

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-22: Regarding the fugitive dust exposure, please provide your safety plan for the health and protection of the surrounding neighborhood, especially the abutting neighbors with allergies, lung diseases and heart diseases.

A-TOU-III-22: When conditions are conducive to generating dust from construction activities fugitive dust control measures will be implemented (such as water dust suppression).

Interrogatory TOU-III-23

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-23: Regarding the aluminum cutting, please provide your safety plan for the health and protection of the surrounding neighborhood, especially the abutting neighbors with allergies, lung diseases and heart diseases.

A-TOU-III-23: Any aluminum particulate material from cutting operations will not migrate from the construction site.

Interrogatory TOU-III-24

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-24: Please provide any and all documentation of the environmental testing and soil testing done within the past seven years on the existing and the new property acquired from General Electric.

A-TOU-III-24: The Wetland Identification and Delineation Report, the Natural Diversity Database determination, and the Stormwater Pollution Control Plan Site Plan were submitted on December 30, 2014 in response to Siting Council Interrogatory CSC-005. In addition, the Phase I Environmental Site Assessment, the Phase II Environmental Site Assessment, and the Stormwater Pollution Control Plan were submitted on March 16, 2015 in response to Town of Fairfield Interrogatory TOF-3.

Interrogatory TOU-III-25

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-25: Please provide your dewatering activity plan.

A-TOU-III-25: Dewatering activities are not anticipated because significant excavation and trenching below the groundwater is not expected to occur during construction. However, if dewatering becomes necessary, the dewatering wastewaters will either be containerized and sampled before disposal or discharged with a valid CT DEEP permit.

Interrogatory TOU-III-26

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-26: Is there an increased risk of fire or explosion with the addition of the new capacitors? If yes, what is UI's plan to secure the fire and/or explosion and provide safety of the neighbors?

A-TOU-III-26: Please see UI's response to Town of Fairfield Interrogatory TOF-1.

Interrogatory TOU-III-27

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-27: Are there or will there be fire protection such as fire and smoke alarms. If so will these be monitored by the Fairfield Fire Department?

A-TOU-III-27: The existing building has fire and smoke detectors. These alarms are continuously monitored by UI, who would in turn notify the local fire department if necessary.

Interrogatory TOU-III-28

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-28: Please provide detailed plan on storm water control. How will you be moderating impact of storm water runoff?

A-TOU-III-28: A copy of the detailed Stormwater Pollution Control Plan was submitted on March 16, 2015 in response to Town of Fairfield Interrogatory. See attachment TOF-3-C.

Interrogatory TOU-III-29

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-29: What is UI's plan for erosion and sediment control during construction?

A-TOU-III-29: Please see UI's response to Council interrogatory CSC-005 Attachment C.

Interrogatory TOU-III-30

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-30: What are your plans on buffering the upland areas adjacent to wetlands, what maintenance and protection will UI provide?

A-TOU-III-30: Wetlands have been identified to the north of the UI-owned land on GE property. The proposed addition includes earth fill that will slope to the UI property line. UI will seed the sloped areas and install appropriate erosion control measures. See UI's response to Council Interrogatory CSC-005 Attachment C.

Interrogatory TOU-III-31

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-31: How will the aluminum particles and fugitive dust be removed from wetlands, streams, and turtle habitat?

A-TOU-III-31: Aluminum particles will not migrate from the construction site. There will be a temporary increase in fugitive dust within the confines of the construction site as is typical with civil construction activities. Measures are in place to keep any potential dust from leaving the confines of the construction zone and prevent any inadvertent intrusion into surrounding areas. To the extent practicable, these measures minimize the quantity of exposed/disturbed areas and also the length of exposure limit dust generation potential. UI will also minimize the vehicle tracking of sediments and the generation of dust by using dust control measures.

Interrogatory TOU-III-32

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-32: Does UI plan on filtering any suspended solids, nutrients, and harmful or toxic substances from the wetlands?

A-TOU-III-32: No. The identification of wetlands outside of the project site are made to ensure proper sediment and erosion controls are in place whenever construction activities occur within the property boundaries. The purpose of these controls is to prevent the introduction of any unwanted substances into the wetlands.

Interrogatory TOU-III-33

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-33: Regarding the forty plus trees and shrubbery being cleared on or near the wetlands, does UI plan on adding vegetated buffers to the wetland area to provide water quality protection? If so, where, how large will the buffers be, and how much buffer will be adding? Please provide detailed map with vegetated buffering shown.

A-TOU-III-33: The removal of approximately forty trees on the westerly side of the substation will occur within on the substation property and within the proposed fence line. Vegetative buffers are not necessary because the nearest inland wetland area was identified north of the substation and located outside of the property boundaries.

Interrogatory TOU-III-34

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-34: Please explain why, only until recently, existing vegetation between UI and abutters land is dying away, i.e.: Forsythia, White pines, generic shrubbery, etc.

A-TOU-III-34: UI is not aware of any degradation of existing vegetation between this site and the abutters' land and therefore cannot provide an explanation.

Interrogatory TOU-III-35

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-35: Please provide sound assessment study and any other studies regarding possible noise nuisance. Were the Assessment Studies conducted during various time periods, temperatures, humidities, wind speeds and sky covers? Please provide your most current sound study.

A-TOU-III-35: Please see UI's response to Council Interrogatory CSC-II-3.

Interrogatory TOU-III-36

The United Illuminating Company

Petition 1120

Witness: Matthew Cloud  
Ron Rossetti

Page 1 of 1

Q-TOU-III-36: Please provide the past seven years of Electro Magnetic Field (EMF) readings.

A-TOU-III-36: This information is not available as UI does not perform routine EMF surveys at the substation.

Interrogatory TOU-III-37

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-37: Do you plan on providing complete EMF studies to CSC and the neighborhood after the planned expansion? If so, when will these studies be done?

A-TOU-III-37: Please see UI's response to Council Interrogatory CSC-II-2.

Interrogatory TOU-III-38

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
Page 1 of 1

Q-TOU-III-38: Has the existing substation ever operated at full capacity in past seven year? If so, how many times in the past seven years?

A-TOU-III-38: UI substations are designed to provide reliable electric service under peak load conditions, which may occur during summer weather extremes. Although these summer weather extremes do not occur every year, the electrical system must be designed to accommodate them.

- Hawthorne Substation reached its full rated capacity one of the last seven summers (UI is a summer peaking utility)
- The average of the last seven years measured summer peak loading conditions at Hawthorne substation was approximately 90% (Loading/Rated Capacity x 100%).

Interrogatory TOU-III-39

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
Page 1 of 1

Q-TOU-III-39: What is the average capacity that the substation operated at within the past 7 years?

A-TOU-III-39: Please see the answer provided in TOU-III-38.

Interrogatory TOU-III-40

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
Page 1 of 1

Q-TOU-III-40: What Capacity will the expanded substation operate at with present conditions?

A-TOU-III-40: The proposed modification will ensure this substation operates below its rated capacity throughout the ten year planning horizon.

Interrogatory TOU-III-41

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
Page 1 of 1

Q-TOU-III-41: What is UI's 7 year plan for this substation?

A-TOU-III-41: Please see the answer provided in Council Interrogatory CSC-II-7.

Interrogatory TOU-III-42

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-42: Who is UI contracted with to supply the mechanical parts (Capacitors) for the new addition to the substation?

A-TOU-III-42: UI respectfully objects to this question. The requested information is immaterial to the Council's review of the project and the approval sought by UI.

Interrogatory TOU-III-43

The United Illuminating Company

Petition 1120

Witness: Matthew Cloud  
Ron Rossetti

Page 1 of 1

Q-TOU-III-43: Are there other manufacturers that can supply more environmentally friendly equipment for the substation?

A-TOU-III-43: The UI design is based on the utilization of industry standard capacitor units.

Interrogatory TOU-III-44

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-44: Does any of the old or future equipment contain PCB Polychlorinated biphenyls (PCBs)/dielectric fluid?

A-TOU-III-44: All existing and proposed equipment at the substation contains non-Polychlorinated Biphenyls (non-PCB).

Interrogatory TOU-III-45

The United Illuminating Company

Petition 1120

Witness: Matthew Cloud  
Ron Rossetti

Page 1 of 1

Q-TOU-III-45: What is the type of coolant used in the new capacitors?

A-TOU-III-45: The type of fluid within the capacitor units is a mineral oil.

Interrogatory TOU-III-46

The United Illuminating Company  
Petition 1120

Witness: Bohdan Katreczko  
Page 1 of 1

Q-TOU-III-46: Are you aware of any other property that has been purchased or given right of use to UI, for this project/expansion? If so please explain.

A-TOU-III-46: UI has not purchased or otherwise attained the rights to any additional property for the modification of Hawthorne Substation.

Interrogatory TOU-III-47

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
Page 1 of 1

Q-TOU-III-47: We have learning from an unidentified source that the only reason UI would have to expand the substation is if CL&P increases the capacity in the lines. It is our understanding that CL&P have no plans to do that. Can you please comment on this?

A-TOU-III-47: The proposed equipment is not being installed to alleviate loading on Eversource's (formerly CL&P) lines. This Hawthorne capacitor bank project is being proposed to provide voltage support to the transmission system in this area. This voltage support has the effect of increasing the load-serving capability of existing UI owned substations in this area.

Interrogatory TOU-III-48

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-48: We understand that there is a well located on 160 Hawthorne Drive (Joseph and Jill Alemdia), James Hinckley of UI or GE, is listed as an authorized agent for the Almedias. Can you go into more detail about this arrangement?

A-TOU-III-48: UI respectfully objects to this question. The requested information is immaterial to the Council's review of the project and the approval sought by UI. Notwithstanding the objection, the well in question is located on UI property.

Interrogatory TOU-III-49

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-49: Did UI publish a legal notice prior to the Petition being filed? If so in which publication and a date of insertion.

A-TOU-III-49: No publication of legal notice was required prior to Petition submittal.

Interrogatory TOU-III-50

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

Petition 1120

Page 1 of 1

Q-TOU-III-50: Did UI discuss this modification with any abutter prior to submitting the petition? If yes, please identify name and address.

A-TOU-III-50: UI respectfully objects to this question. The requested information is immaterial to the Council's review of the project and the approval sought by UI.

Interrogatory TOU-III-51

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
Page 1 of 1

Q-TOU-III-51: What other options and/or other locations has UI considered to meet their future load capacity needs?

A-TOU-III-51: Please see CSC-II-6.