

1 ELECTRICAL SITE PLAN
ES01 1:400

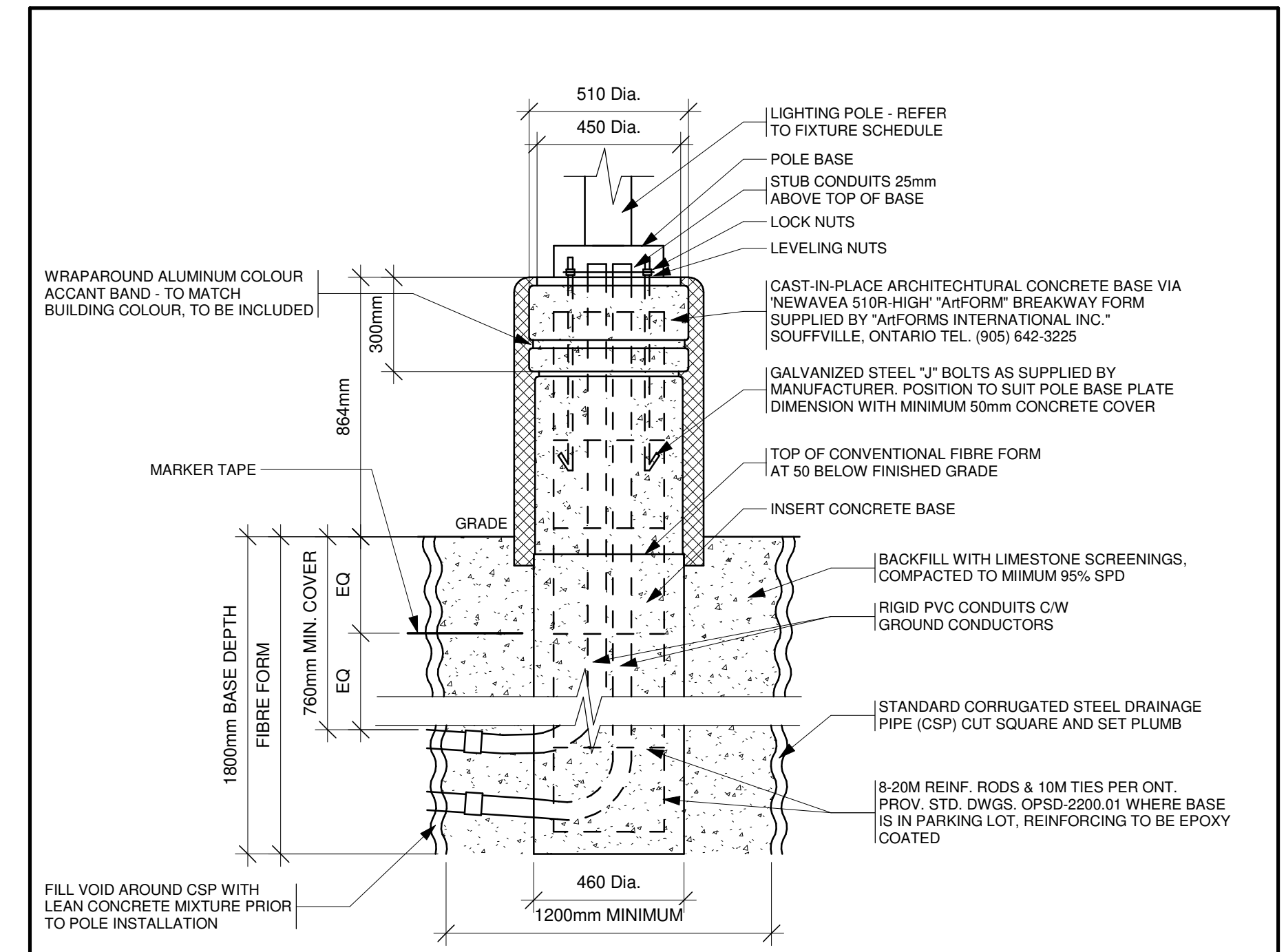
ELECTRICAL LEGEND	
LIGHTING	
○	WALL MOUNTED FIXTURE (LETTER DENOTES TYPE)
◻	POLE MOUNTED FIXTURE (LETTER DENOTES TYPE)

ELECTRICAL DRAWING LIST	
DRAWING NUMBER	DRAWING NAME
ES01	ELECTRICAL SITE PLAN - NORTH, LEGEND, FIXTURE SCHEDULE, LIGHTING LEVELS
ES02	ELECTRICAL SITE PLAN - SOUTH
ES03	LIGHTING FIXTURE CUTSHEETS

LIGHTING FIXTURE SCHEDULE									
TYPE	MANUFACTURER	MODEL	CATALOGUE NUMBER	VOLTAGE	WATTAGE	LUMENS & COLOUR TEMPERATURE	MOUNTING	MOUNTING HEIGHT	REMARKS
SA1	McGRAW-EDISON	GLEON GALLEON	GLEON SA4-C-830-U-14W-BZ	120 V	225 W	28,000 LUMENS, 3000K	POLE	20' POLE WITH 2'-10" BASE	IDA/DARK SKY APPROVED. PROVIDE 4" SSS POLE. SEE DETAIL 2 FOR POLE BASE DETAIL.
SA2	McGRAW-EDISON	GLEON GALLEON	GLEON SA0-D-830-U-14FT-BZ	120 V	640 W	77,000 LUMENS, 3000K	POLE	20' POLE WITH 2'-10" BASE	IDA/DARK SKY APPROVED. PROVIDE 4" SSS POLE. SEE DETAIL 2 FOR POLE BASE DETAIL.
SA4	McGRAW-EDISON	GLEON GALLEON	GLEON SA0-D-830-U-SL4-BZ-HSS	120 V	640 W	73,000 LUMENS, 3000K	POLE	20' POLE WITH 2'-10" BASE	IDA/DARK SKY APPROVED. PROVIDE 4" SSS POLE. SEE DETAIL 2 FOR POLE BASE DETAIL.
SA5	McGRAW-EDISON	GLEON GALLEON	GLEON SA0-D-830-U-14FT-WM-BZ	120 V	640 W	77,000 LUMENS, 3000K	WALL	25'-0"	IDA/DARK SKY APPROVED.
SB1	STREETWORKS	GAW GALLEON	GAW SA2-C-830-U-14W-BZ	120 V	113 W	14,700 LUMENS, 3000K	WALL	15'-0"	IDA/DARK SKY APPROVED.
SC1	NEMALUX	XR-HZ	XR10-30-WC-GY-HZ-AC	120 V	55 W	8300 LUMENS, 3000K	WALL	19'-8"	IDA/DARK SKY APPROVED. TANK LIGHTING - HAZARDOUS LOCATION.
SD1	PRESCOLITE	LFR-6RD	LFR-6RD-M-10L-30K-8-XW-DM1-120	120 V	7 W	1000 LUMENS, 3000K	CEILING	CANOPY	CW 6" TRIM ASSEMBLY LFR-6RD-T-XW-S-WT-CL

ILLUMINATION LEVELS IN LUX					
AREA	AVG	MAX	MIN	MAX:MIN	AVG:MIN
NORTH LOT	41.3	140.4	2.2	63.8:1	18.8:1
SOUTH TANK AREA	25.0	109.1	2.2	49.6:1	11.4:1
PROPERTY LINE	2.1	18.0	0.0	N/A	N/A

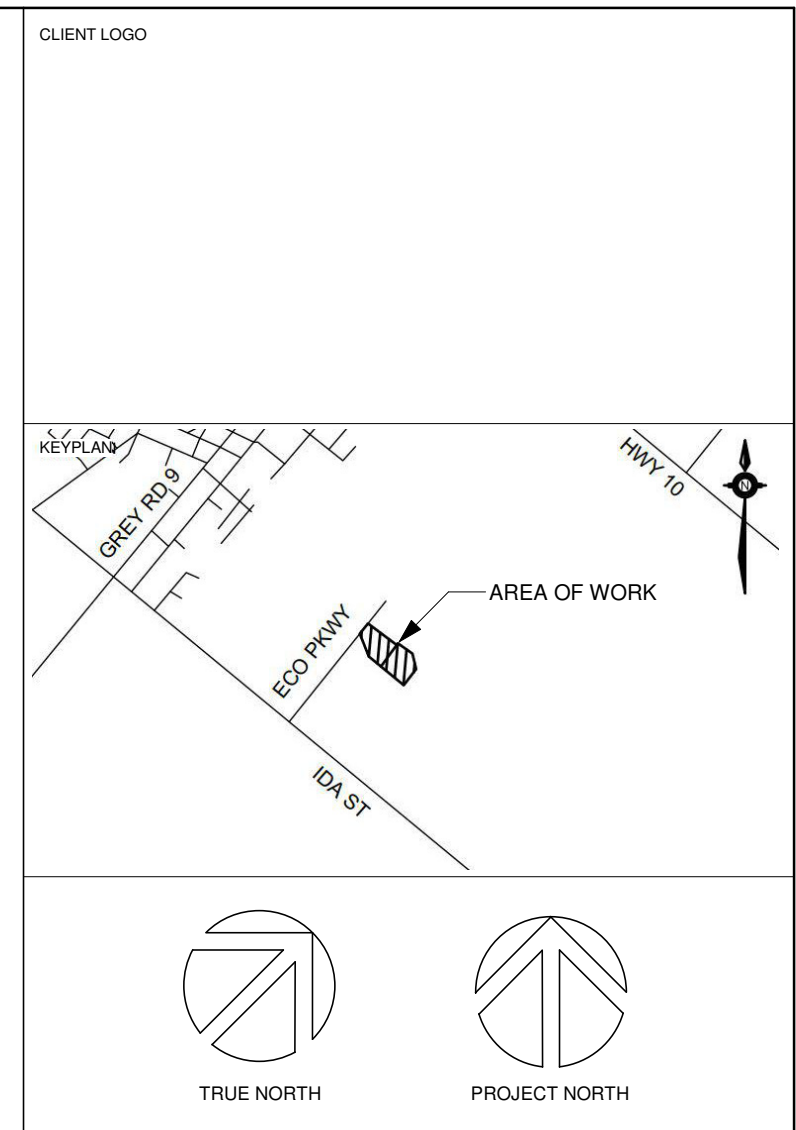
SOFTWARE USED: VISUAL LIGHTING 2020 BUILD 2.11.0062



- POLE BASE DETAIL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE.
 - TOP OF FOUNDATION SHALL BE TROWELLED SMOOTH AND LEVEL.
 - CONCRETE 28 DAY COMPRESSIVE STRENGTH 30MPa, AIR CONTENT 5 TO 8%, WATER CONTENT RATIO 0.45. CONCRETE SHALL BE VIBRATED.
 - MINIMUM OF TWO SLEEVES REQUIRED FOR EACH CONC. FOUNDATION UNLESS OTHERWISE SHOWN.
 - CONTRACTOR TO VERIFY OPENING SIZE IN POLE BASE PLATE PRIOR TO SETTING CONDUITS.
 - FORM RELEASE AGENT HAS BEEN FACTORY-APPLIED TO INSIDE SURFACE OF "ArtFORM".
 - SUBJECT TO SOIL CONDITIONS, REFER TO SOIL REPORT.
 - POLE BASE SHALL BE DESIGNED AND APPROVED BY STRUCTURAL ENGINEER.

2 POLE BASE DETAIL
ES01 N.T.S.

- DRAWING NOTES:**
- ENSURE POLE IS MOUNTED NOT CLOSER THAN 10' TO ENBRIDGE FUELING EQUIPMENT.
 - HAZARD RATED FIXTURE PROVIDED BY OTHERS.
 - TRANSFORMER SUPPLIED AND INSTALLED BY HYDRO ONE.



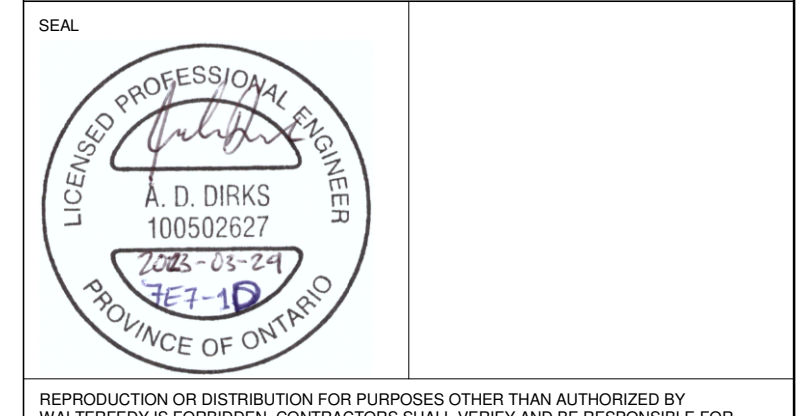
No.	ISSUANCE	DATE
1	ISSUED FOR OWNER'S REVIEW	2023.03.07
2	ISSUED FOR OWNER'S REVIEW	2023.03.08
3	ISSUED FOR SPA	2023.03.29

CLIENT
ENVEST CORP.
 77 KING ST WEST, SUITE 3000 TORONTO, ON M5K 1G8

PROJECT
SOUTHGATE RENEWABLES RECYCLING PROJECT
 100 ECO PARKWAY, SOUTHGATE, ON

TITLE
ELECTRICAL SITE PLAN - NORTH, LEGEND, FIXTURE SCHEDULE, LIGHTING LEVELS

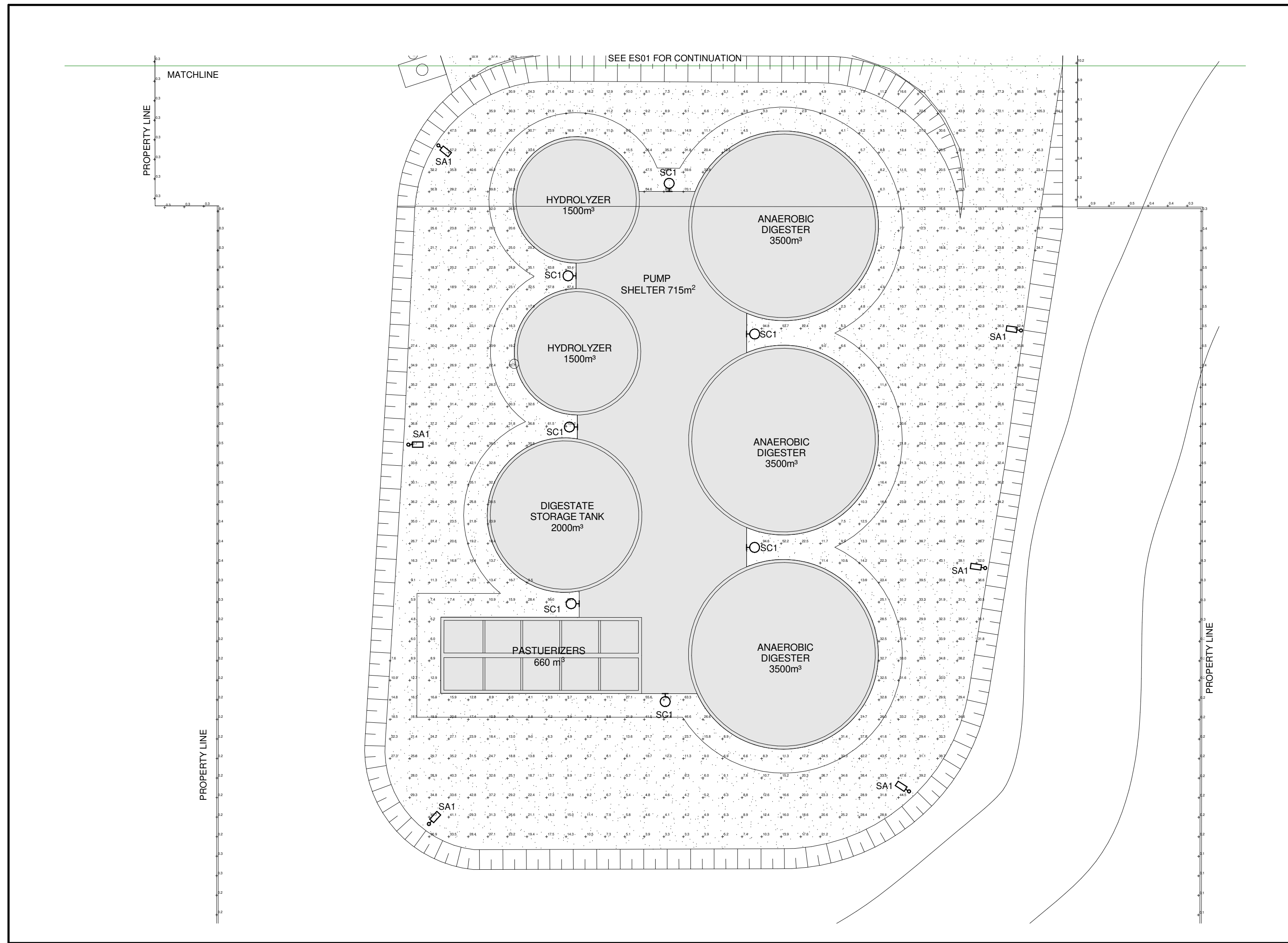
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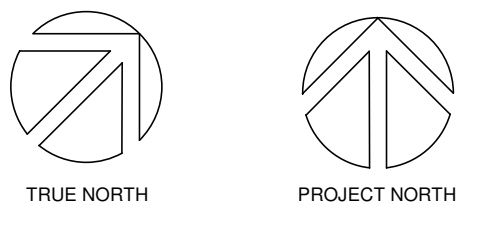
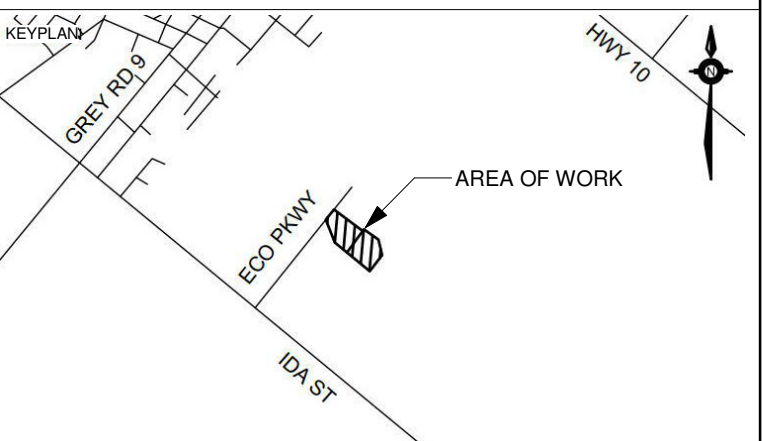
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SCALE:	As Indicated	SHEET NO.:	ES01
DATE:	09/24/20		
PROJECT NO.:	2021-0713-10		
FILE:			
DRAWN BY:	SR		
CHECKED BY:			



1 ELECTRICAL SITE PLAN - SOUTH
ES02 1 : 400

CLIENT LOGO



No.	ISSUANCE	DATE
1	ISSUED FOR OWNER'S REVIEW	2023.03.07
2	ISSUED FOR OWNER'S REVIEW	2023.03.08
3	ISSUED FOR SPA	2023.03.29

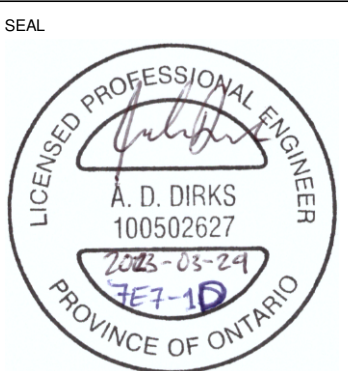
CLIENT
INVEST CORP.

77 KING ST WEST, SUITE 3000 TORONTO, ON M5K 1G8

PROJECT
**SOUTHGATE RENEWABLES
 RECYCLING PROJECT**
 100 ECO PARKWAY, SOUTHGATE, ON

TITLE
**ELECTRICAL SITE PLAN -
 SOUTH**

WALTERFEDY
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SCALE:	As indicated	SHEET NO.:	ES02
DATE:	09/24/20		
PROJECT NO.:	2021-0713-10		
FILE:			
DRAWN BY:	SR		
CHECKED BY:			

Project	Catalog #	Type
Prepared by	Notes	Date



McGraw-Edison

GLEON Galleon

Area / Site Luminaire

Product Features

- LightSense™
- Light-Adapt™
- BAA

Product Certifications

- UL LISTED
- DLC QUALIFIED
- 36 VIB
- IP66
- 5 YEAR WARRANTY

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 9

Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt
- Options to meet Bay American and other domestic preference requirements

Dimensional Details

Number of Light Sources	Width	Standard Arm Length	Extended Arm Length	Quick Mount Arm Length	Quick Mount Extended Arm Length
1-4	15-1/2"	7"	10"	10-5/8"	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	16-9/16"
7-8	27-5/8"	7"	13"	10-5/8"	--
9-10	33-3/4"	7"	16"	--	--

Connected Systems

- WaveLinx
- Enlighted

PS500205N page 1
November 26, 2022 5:25 PM

1
ES03
FIXTURE TYPE SA1, SA2, SA4, SA5
N.T.S.

Project	Catalog #	Type
Prepared by	Notes	Date



Streetworks

GAW Galleon Wall

Wall Mount Luminaire

Product Features

- Light-Adapt™
- BAA

Product Certifications

- DLC QUALIFIED
- 36 VIB
- IP66
- 5 YEAR WARRANTY

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Distributions page 3
- Energy and Performance Data page 4
- Control Options page 6

Quick Facts

- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Dimensional Details




Connected Systems

- WaveLinx
- Enlighted

PS500455N page 1
December 5, 2022 5:25 PM

2
ES03
FIXTURE TYPE SB1
N.T.S.



Nemalux

XR-HZ

rev. A-33

KEY FEATURES

- Certified for hazardous locations
- Configurable total light output from 8000 to 20000 lumens
- Available with 11 possible optical beam profiles
- Suitable for Marine locations: certified to UL 1598A, Marine-grade copper-free aluminum construction with stainless steel mounting hardware
- Two-layer TIGER-Shield® coatings for excellent corrosion resistance in Marine environments; corrosion protective primer and AAMA 2604 compliant top-coat
- Approved for through-wiring of multiple luminaires on a single circuit
- IDA Dark Sky Approved for low glare and full cut-off to minimize light pollution and reduce environmental impacts of lighting on wildlife and local ecosystems
- 0-10V Dimming

TECHNICAL SPECIFICATIONS / MAXIMUM RATINGS

HOUSING	Copper-free Aluminium, PC Optics
MOUNTING	SEE PAGES 2-3 FOR OPTIONS
INPUT VOLTAGE	AC: 120-277 VAC HV: 347-480VAC (50/60Hz)
POWER (TYP)	XR8: WC Flood 47W Optic 60W XR10: WC Flood 55W Optic 75W XR15: WC Flood 84W Optic 103W XR20: WC Flood 141W Optic 150W
CONNECTIONS	3x 3/4" NPT
TEMPERATURE RANGE	Class I Division 2 Class 1 Zone 2 XR8: -50°C to +75°C T3C XR10: -50°C to +74°C T3C XR15: -50°C to +74°C T3C XR20: -50°C to +67°C T3 (Case -30°C above ambient) Class II Division 2 Zone 22 All models: -50°C to +50°C T3C <i>*Orientation restricted to straight down only.</i>
CERTIFICATIONS	Certified to UL 1598 / CSA C22.2 No. 250.0-08, UL 1598A, UL 8750 / CSA C22.2 No. 250.13-17 Certified to UL 844 and CSA C22.2 No. 137-18 Class I, Division 2 Groups A, B, C / Class I, Zone 2, Groups IIB, IIC, Class II, Division 2 Groups FG / Class I, Zone 2, Groups IIB, IIC, Class III
INGRESS PROTECTION	IP66 Suitable for wet locations. Marine Outside type (Salt water).
COLOUR TEMP RANGE	50-5000K Special Order: 2700-6500K
CRI VALUE (MIN)	50-70
TOTAL LUMENS	SEE CHART ON PAGE 2
LUMEN MAINTENANCE	LM-80 > 100,000 hrs (Based on CREE long term testing)
WEIGHT	8.1 kg 17.8 lbs

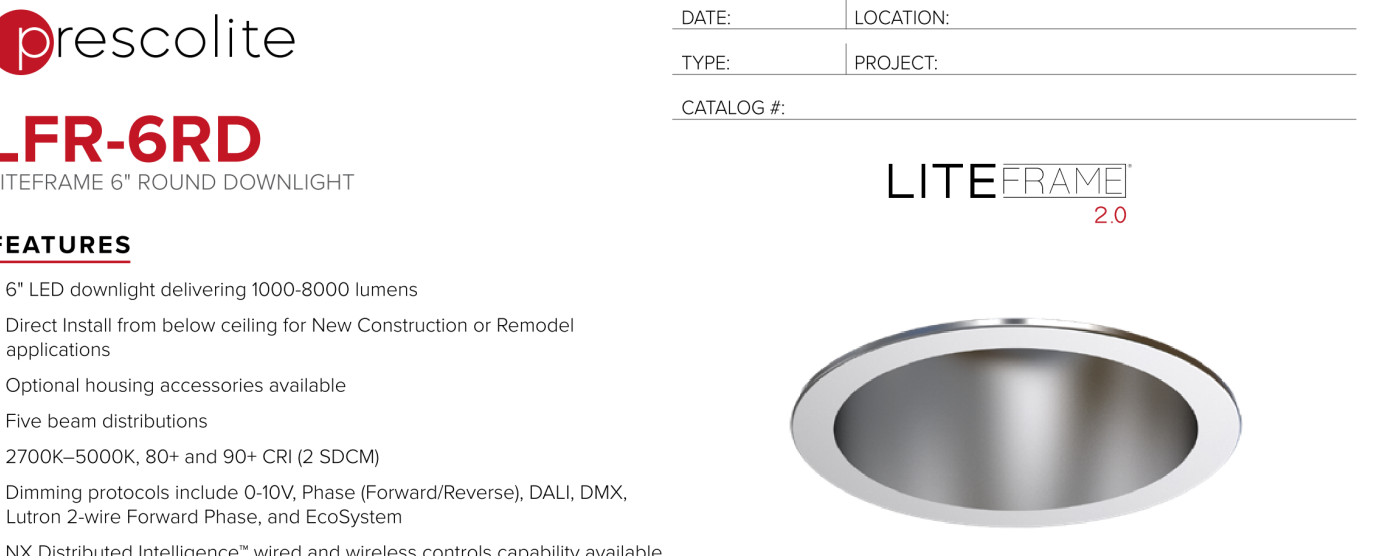
WARRANTY

Five (5) year limited warranty to the original purchaser. The warranty covers defects in materials and workmanship under normal use and service.

For additional information see:
<https://www.nemalux.com/company/warranty-policy/>

MADE IN CANADA | www.nemalux.com | sales@nemalux.com | Tel: 403-243-7475 | Fax: 403-243-6190
SUBJECT TO CHANGE WITHOUT NOTICE

3
ES03
FIXTURE TYPE SC1
N.T.S.



DATE: _____ LOCATION: _____
TYPE: _____ PROJECT: _____
CATALOG #: _____

LFR-6RD

LITEFRAME 6" ROUND DOWNLIGHT

FEATURES

- 6" LED downlight delivering 1000-8000 lumens
- Direct install from below ceiling for New Construction or Remodel applications
- Optional housing accessories available
- Five beam distributions
- 2700K-5000K, 80+ and 90+ CRI (2 SDCM)
- Dimming protocols include 0-10V, Phase (Forward/Reverse), DALI DMX, Lutron 2-wire Forward Phase, and EcoSystem
- NX Distributed Intelligence™ wired and wireless controls capability available

RELATED PRODUCTS

- LFR-6RDS Shallow
- LFR-6RA
- LFR-6RW
- LiteFrame Family

CONTROL TECHNOLOGY

NX DISTRIBUTED INTELLIGENCE™

SPECIFICATIONS

CONSTRUCTION

- Standard Fixture Module designed for Non-IC, Direct Install construction
- Optional Non-IC frame or IC housing available with pre-installed bar hangers
- Die cast aluminum fixture module support ring with spring steel clips for secure mounting to ceiling
- Driver J-Box can be installed and accessed from below the ceiling as direct install or easily snap on to optional housing frame/enclosure
- Light Engine connections use plenum rated (CMP) cable

OPTICS

- High purity spun aluminum reflector, self-flanged
- 57° visual cutoff to source image and 31° cutoff to source
- Specular or Semi-Specular anodized or White painted cone reflector finish/colors
- Painted flange options in White or Black
- Optional clear lens trim for wet location applications
- Wide Angle and Soft Focus lens filter/clip accessories available

ELECTRICAL

- Chip-on-board LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >50,000 hours (TM-21)
- Universal voltage 120-277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection, RoHS compliant
- Flicker-free dimming options in a wide range of protocols from 1% to <0.1% performance
- 0-10V, Phase (Forward/Reverse), DALI, DMX, Lutron 2-wire Forward Phase, and EcoSystem options
- Integral and remote emergency battery options available

CERTIFICATIONS

- eCSAus certified to UL 1598
- For >60L: Marked spacing required 36" fixture center to center, 18" fixture center to building member, 0.5' above fixture
- Suitable for wet locations, covered ceiling when used with CL lens trim; all other configurations, suitable for damp locations
- EMERGENCY: Certified under UL 924 standard for emergency lighting and power equipment
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring

WARRANTY

- 5 year warranty
- See HJ Standard Warranty for additional information

INSTALLATION

- Accommodates ceiling thickness from 0.50" to 2.50"
- Fixture Module including driver fully accessible from above or below the ceiling
- 10L-15L Fixture Modules are inherently protected IC without the use of IC housing enclosure. IC housing is still recommended when using loose-fill or spray foam insulation types.)

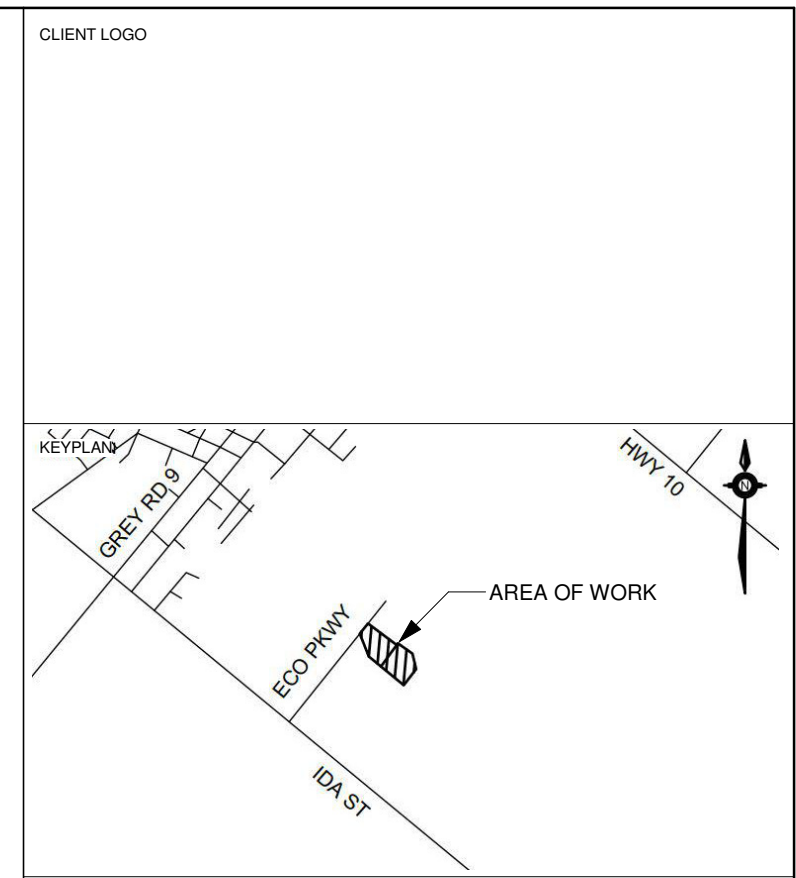
KEY DATA	
Lumen Range	1000-8000
Wattage Range	8-71
Efficacy Range (LPW)	118-139
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	66-592 (20V)

Page 110 Rev. 11/08/21
LFR-6RD, PRELIM

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HUBBELL LIGHTING

4
ES03
FIXTURE TYPE SD1
N.T.S.



No.	ISSUANCE	DATE
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77 KING ST WEST, SUITE 3000 TORONTO, ON M5K 1G8

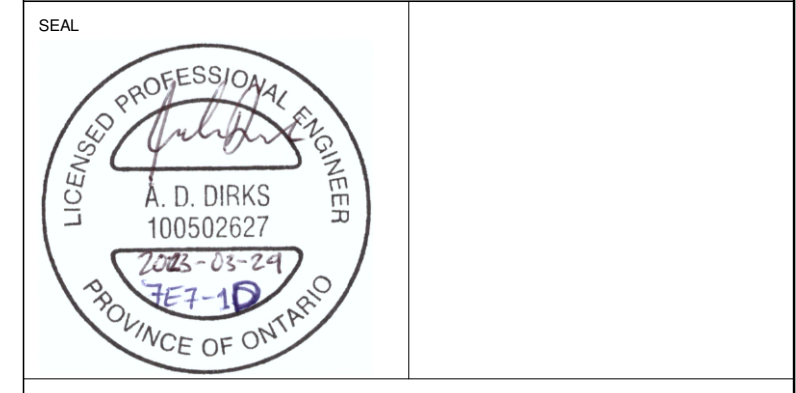
PROJECT
SOUTHGATE RENEWABLES RECYCLING PROJECT

100 ECO PARKWAY, SOUTHGATE, ON

TITLE
LIGHTING FIXTURE CUTSHEETS

WALTERFEDY

KITCHENER HAMILTON 800.685.1378 walterfedy.com



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