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1	2024-10-09	ISSUED FOR SPA
No.	Date:	Issue/Revision
Drawing Issues/Revisions:		

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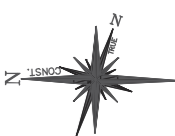
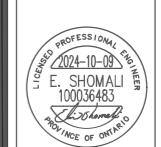
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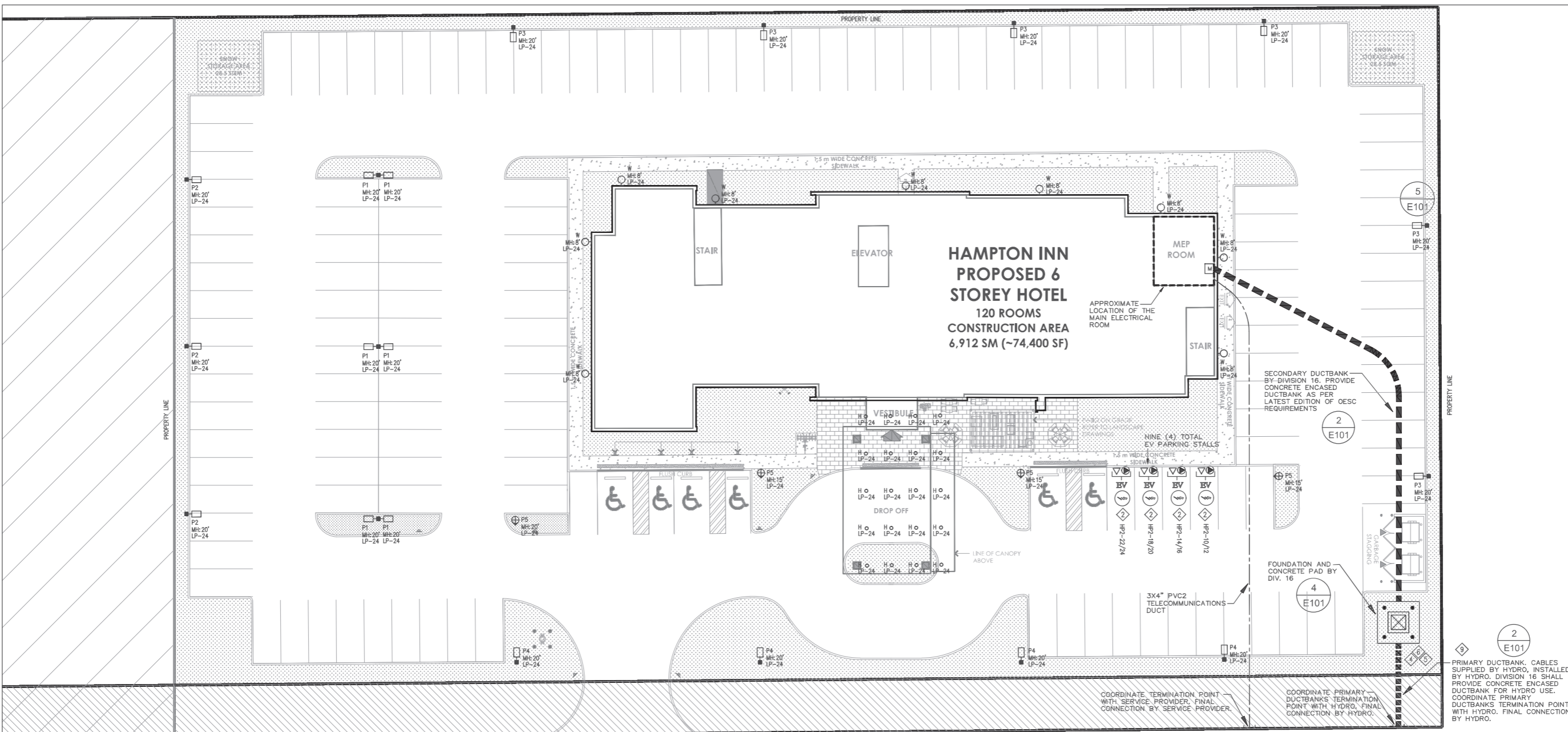
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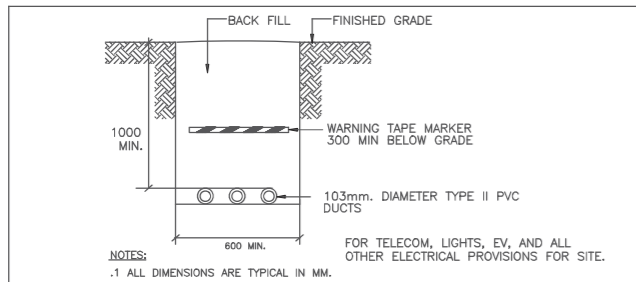
EJS ENGINEERING
810 NESSING ROAD, 212-214
L7T 4Z9, MILTON, Ontario
Tel: 647 945 8484 Fax: 905 216 0898
Email: ejs@ejsengineering.ca
Website: www.ejsengineering.ca



ENGINEER STAMP Project North: True North

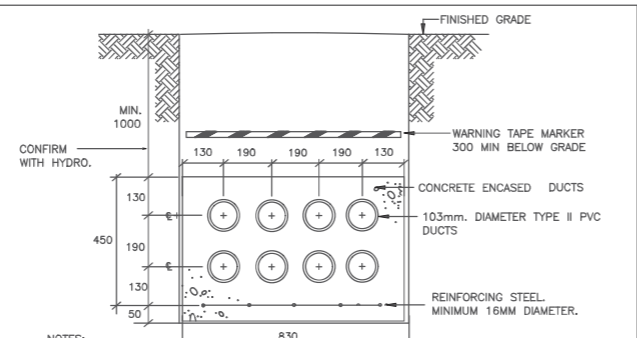


- DRAWING NOTES:**
- 1. RUN MINIMUM #8 AWG WIRING AND TYPE II PVC CONDUITS FOR ALL EXTERIOR LIGHTING POLE, BOLLARDS, WALL PACKS, AND FLAG POLE LIGHTING TO ENSURE NO VOLTAGE DROP EXCEEDS 2.5%.
 - 2. SUN COUNTRY HIGHWAY MODEL EV40. 40A-2P. LEVEL II EV CHARGER FROM SUNCOUNTRY
 - 3. DETAILS ON THIS DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY. ALL TRANSFORMER INSTALLATIONS, DUCTING, AND PERTAINING DEVICES TO BE INSTALLED AS PER HYDRO STANDARDS AND DETAILS. CONTRACTOR TO COORDINATE CLOSELY WITH HYDRO REPRESENTATIVE THROUGHOUT ALL INSTALLATIONS.
 - 4. PROVIDE 4 (FOUR) PROTECTIVE BOLLARDS FOR TRANSFORMER (TYPICAL FOR ALL).
 - 5. PADMOUNT TRANSFORMER BY HYDRO. SEE HYDRO REQUIREMENTS AND DETAILS.
 - 6. FOUNDATION, PAD, BOLLARDS AND GROUNDING BY ELECTRICAL CONTRACTOR PER HYDRO STANDARDS. SEE HYDRO REQUIREMENTS AND DETAILS.
 - 7. ALL SITE LIGHTING SHALL BE 120V.
 - 8. POTLIGHTS SHALL BE RECESSED INTO FINISHED CANOPY CEILING.
 - 9. ALL PRIMARY DUCTBANK INSTALLATION TO BE AS PER HYDRO STANDARDS. CABLES SUPPLIED BY HYDRO, INSTALLED BY CONTRACTOR. CONTRACTOR TO BE IN CONSTANT COORDINATION WITH HYDRO REPRESENTATIVE THROUGHOUT ALL INSTALLATIONS. 8 DUCT ARRANGEMENT PER HYDRO STANDARDS IS TO BE INSTALLED.



3 DIRECT BURIED CONDUIT DETAIL
E101 N.T.S.

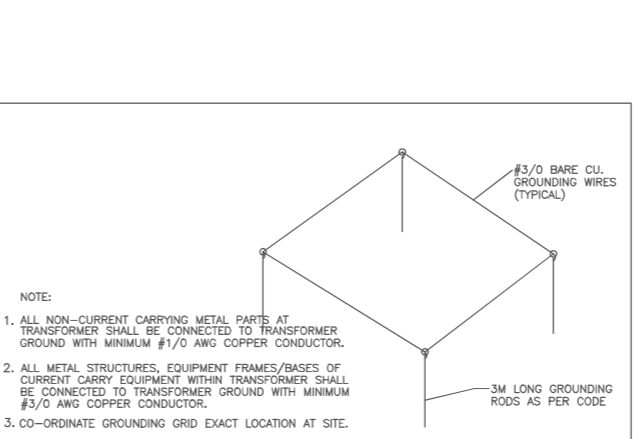
1 SITE PLAN - ELECTRICAL LAYOUT
E101 SCALE: 1:200



- NOTES:**
- 1. PROVIDE SECONDARY DUCTBANK TO CANADIAN ELECTRICAL CODE STANDARDS AND REQUIREMENTS. SECONDARY DUCTBANK & CABLES SUPPLIED AND INSTALLED BY DIVISION 16.
 - 2. PROVIDE BELL FITTINGS AT EACH END AND PLASTIC OR MASONRY SPACERS PER 3.0M OF DUCT AND 610mm ON BOTH SIDES OF EACH COUPLING.
 - 3. REFER TO SPECIFICATIONS FOR DETAILED DESCRIPTION.

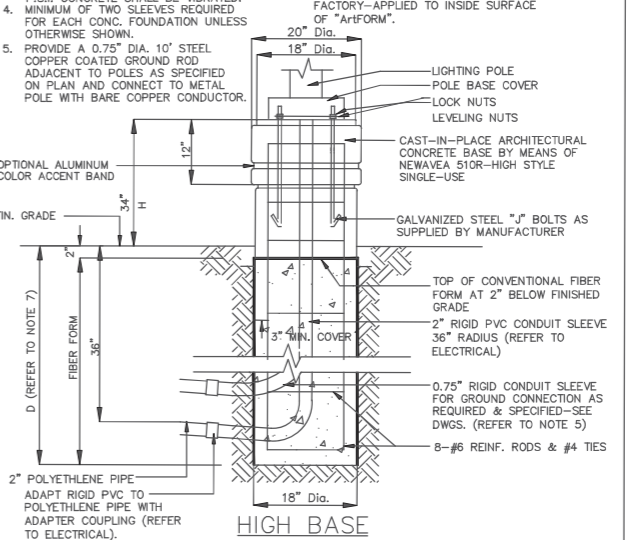
2 PRIMARY/SECONDARY DUCTBANK DETAIL
E101 N.T.S.

4 TRANSFORMER GROUNDING DETAIL
E101 N.T.S.



4 TRANSFORMER GROUNDING DETAIL
E101 N.T.S.

5 LIGHTING STANDARD BASE DETAIL
E101



5 LIGHTING STANDARD BASE DETAIL
E101

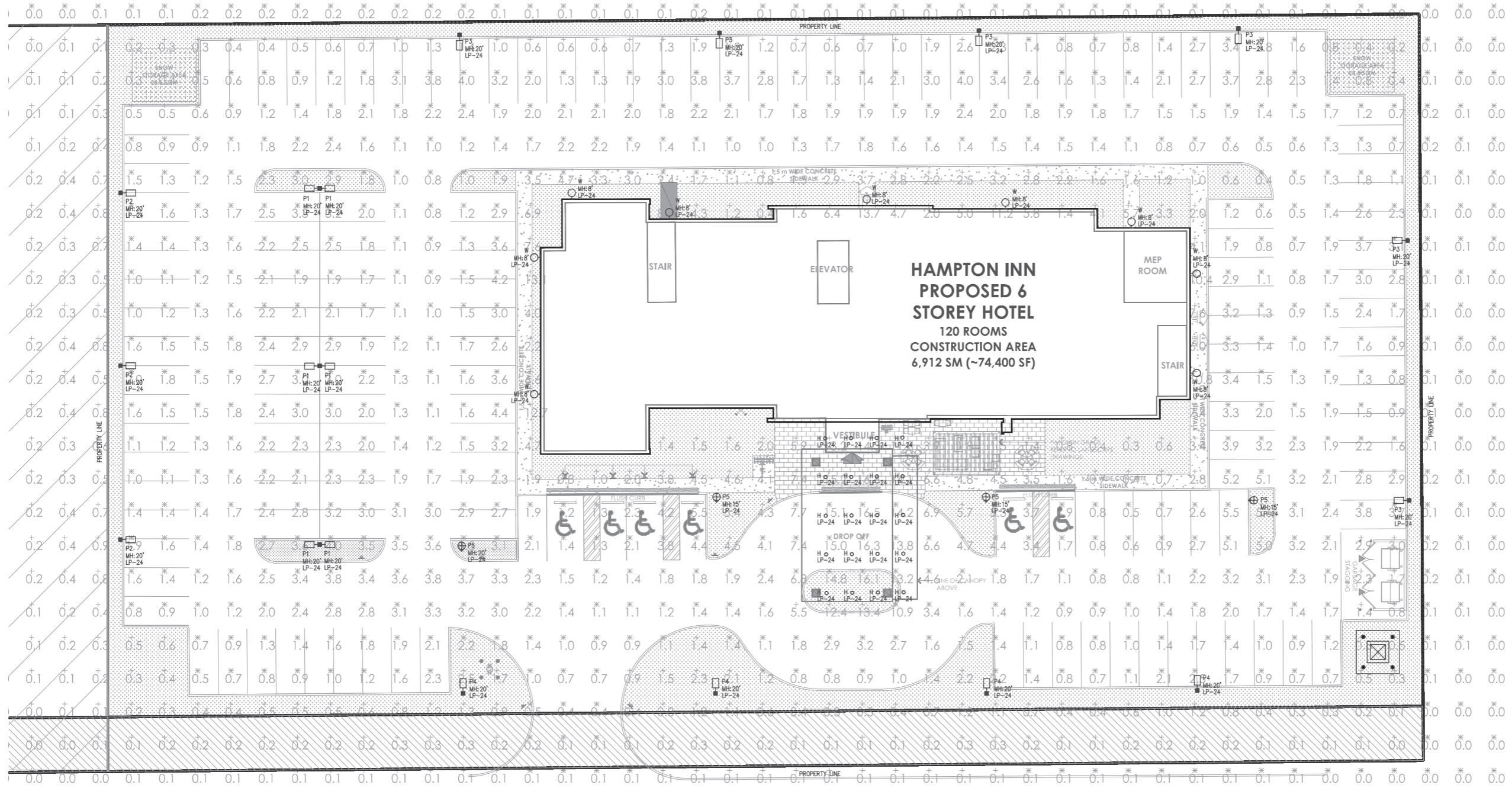
16TH AVENUE EAST

Project:
HAMPTON INN OWEN SOUND
1750 16TH AVE E. OWEN SOUND,
ON, N4K 5N3

SITE PLAN - ELECTRICAL LAYOUT

Design By:	Drawn By:	Approved By:
N.P.	N.P.	G.S.
Scale:	Date:	Project No.:
AS SHOWN		24-53

Drawing No.: **E101**
Drawing Series: ELECTRICAL



1 SITE PLAN – PHOTOMETRICS
E102 SCALE: 1:200

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DROP OFF	✕	10.9 fc	16.5 fc	2.4 fc	6.91	4.51
PARKING LOT	✕	1.9 fc	3.5 fc	0.1 fc	55.01	19.01
SPILL	✕	0.0 fc	0.2 fc	0.0 fc	N/A	N/A

NOTE:
ALL FIXTURES ARE FULL CUTOFF AND DARK SKY COMPLIANT.

Schedule								
Symbol	Label	QTY	Manufacturer	Catalog	LLF	Total Output	Input Power	Notes
○	C	20	Lotus LED Lights	DL254-6-30W-M-ASC5-HD	0.9	1820	15.0452	Mounted at 12ft
□	P1	3	Lunecon	LDS-SAL-30-DB-T3-1-30-MAS-X-X	0.9	7772	59.66	
□	P2	3	Lunecon	LDS-SAL-30-DB-T4-1-30-MAS-X-X	0.9	3603	29.83	
□	P3	6	Lunecon	LDS-SAL-80-DB-T3-1-30-MAS-BL	0.9	5113	80	
□	P4	4	Lunecon	LDS-SAL-80-DB-T4-1-30-MAS-BL	0.9	3691	80	
⊕	P5	4	RAB Design Lighting	SKY2S-LED80A40-H-VK-EV-BLK-DIM-PT2A-SP10 (80W 120V 3K)	0.9	10225	77.4821	
♀	W	9	WISCONSIN LIGHTING LAB	NF-WCS-45-30-xx-4M	0.9	5929	43.7	

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Email: ejs@ejsengineering.ca
Website: www.ejsengineering.ca

MATAJ ARCHITECTS INC.
418 Inoué Shore Road, Unit 205,
Oshawa, ON L6H 0X7
1.905.281.4444

Project:
HAMPTON INN OWEN SOUND

1750 16TH AVE E. OWEN SOUND,
ON, N4K 5N3

Sheet Title:
SITE PLAN - PHOTOMETRICS

Design By: N.P.	Drawn By: N.P.	Approved By: G.S.
Scale: AS SHOWN	Date:	Project No.: 24-53

Drawing No.: **E102** of
Drawing Series: **ELECTRICAL**

TYPE : P1, P2, P3, P4, P5



LDS - SAL
LED Small Area Light



Description
The sleek feature design of the LDS-SAL is a blend of modern sophistication and unmatched energy efficiency. The LDS-SAL small area light includes the benefits of superior thermal efficiency, an industry-leading ten-year, all-parts warranty, and custom optics ensuring beam-class performance results. Custom optics design with greater pole spacing, uniformity, and lower energy usage. The LDS-SAL includes luminaire upgrade to 30,000 lumens allowing one-to-one replacement of existing HID fixtures up to 1500 Watt and is a perfect one-to-one replacement for parking lots, walkways, tennis courts, and many other outdoor applications. Proudly Made in the USA.

Technical Specifications

Input Voltage: 120-277V or 347-480V
Housing: Die-cast aluminum housing with 60% glass polyester powder coat finishes for maximum durability. The base aluminum material is prepared using an environmentally friendly non-chrome 2-step surface cleaning and passivation process. The process results in a more durable conversion layer than traditional chrome conversion coatings and allows maximum adhesion of the powder coating to the aluminum substrate. Housing features an integrated heat sink and drive compartment built into the fixture design.
Mounting: Mounting arm designed for a square / round pole (standard). Additional mounting options include a pole mounting arm adaptor.
Light Output Options:
Efficacy: Projected Area (EPA): 0.83 ft²
Color Temperature: 2700K, 3000K, 4000K (standard), 5000K
LED Lifetime: All LEDs are tested for an average life of 100,000 hours of continuous operation at ambient outdoor temperatures from 40°F (-40°C) to 119°F (48°C).
Color Rendering Index (CRI): Minimum of 80 or higher CRI (90+ available upon request. CRI 90+ not available in 2700K.
Dimming: 0-10V standard dimming capability.
Custom Optics: Lumecon's multi-layered premium acrylic optical lenses to maximize the distribution and uniformity of light while minimizing cost. Our array distribute light at least 21% further and with 20% more uniformity than leading competitors. Lumecon custom lenses create a uniform, well-lit environment the "signature Lumecon" hot spot and use less wattage than typical LED area lights.
Wet Location: Our lens is also resistant to vandalism with a low contact design making the lens material dense and impact resistant. We built to withstand high abuse lighting environments.
Surge Protection: Thermally protected 25A 48V varistor type surge protection is included and meets ANSI C136.2-2015 Extreme Level. Also meets IEC 61653-1 Class II / EN61653-1 Type 2, and UL Dept of Energy MISPEC Model Spec for surge protection. The device is wired in series with the luminaire's total power in order to divert power to the luminaire when consumed, protecting the LED power supply and avoid burns from additional electrical surges.



Catalog Number:
Project:
Comments:
Prepared By: Date:

TYPE : W

NAFCO[®] PRODUCT FAMILY
Proudly engineered and manufactured in Wisconsin, USA - our NAFCO[®] family of LED lighting products combines 50 years of manufacturing expertise with premium components and top-notch Midwestern workmanship. From high-output outdoor applications to extreme indoor industrial environments - NAFCO[®] lighting products drastically reduce energy consumption and maintenance costs and come supported by WILL's unmatched design, engineering, and project support capabilities.

- High-grade aluminum enclosure for superior corrosion resistance, strength, and thermal management
- Highly reflective, black anodized heat sink for maximum thermal dissipation and low LED junction temperature
- True Amber and Phosphor Coated (PC) Amber premium LED chip options
- Wideband color control options including motion photo, wireless, remote, and 0-10V dimming
- Optimized lens LED photo and optics for extreme efficiency and high-quality color rendering for a broad range of applications
- Increased light engine design with zero uplight rating (L0)

I I NAFCO[®] WCX Wall Mount LED Lighting

WILL WISCONSIN LIGHTING LAB[®]

TYPE : P5

Project: Type: Date: Notes:

RAB[®] DESIGN SKY2S-LED LED Area light

Direct Pole Mount
Surface Mount
Post Top Mount

The SKY2S-LED series are performance area light with selectable features ideal for a wide range of applications, including commercial and retail parking lots, car dealerships, and roadway lighting.

IDEAL APPLICATIONS
Car Dealerships Parking Lots Courtyards

SPECIFICATIONS

	SKY2S-LED80A40	SKY2S-LED150A100	SKY2S-LED80A40	SKY2S-LED150A100
PERFORMANCE	10000/7500/5000 lumen (lumen Selectable)	18700/15000/12500 lumen (lumen Selectable)	HOUSING	Die-cast Aluminum
Light Output	10000/7500/5000 lumen (lumen Selectable)	18700/15000/12500 lumen (lumen Selectable)	Construction	Semi-frosted polycarbonate
Efficacy	125 lm/W		Lens	Weather and corrosion resistant polyester powder coat finish
Beam Distribution	4000/5000K (CCT Selectable), 3000K		Paint Finish	
Beam Distribution	Symmetrical* Wide Asymmetrical Elliptical Horizontal Elliptical Vertical		AMBIENT OPERATING TEMPERATURE	-40°C to 45°C
LED Lifetime (L70)	>100,000 Hrs		MOUNTING	Twin Arm (Post Top for 3" Tenon) Direct Pole Mount, Surface Mount (Canopy/Garage)
CR1	80		CERTIFICATIONS	eTLCus certified as per UL1598 & CSA C22.2 NO.250.021 DLC Premium
B-U-C	B4-UO-C3		CONTROLS	0-10V Dimming (Dim to Off) Twist lock PhotoCell, 3PIN, 7PIN, Microwave Motion Sensor PCLs (PhotoCell, CCT, Lumen Select)
Voltage	120-347V	150/200/200V		
Surge Protection	10kV External Standard as per UL1449			
Power Factor	0.95			
THD	6.8%			
Supply Cord	600V, STW (5x18 AWG)			

All reported values were tested at 277V and 4000K and shown for the highest lumen setting.
*Standard Configuration
Default Setting: Highest lumen, 4000K

RAB Design Lighting Inc., 1-4222 Islington Avenue, Toronto, ON, M8V 3W7 | 1-800-268-0381 | rabdesign.ca 04 | 2024

TYPE : C

Light Lotus DL254-6-30W-M-A5C5-HO
6" Round Commercial 5 CCT & 5 Wattage Selectable

Project:
Location: City:
Model:
Notes:

DESCRIPTION
All in one 0-10V dimmable 6" LED downlight for retrofit & new construction. Perfect for hospitality, healthcare, shopping mall & retail, office, exterior soffit, etc.

FEATURES & BENEFITS
Universal voltage 120-347V
0-10V Dimmable 5%-100%
5 CCT selectable 2700 - 3000 - 3500 - 4000 - 5000 K
5 Wattage Adjustable 12 - 18 - 22 - 28 - 30 W
Type C, Wet location & Air-tight
Regressed optics with low glare
White Trim with White or Silver (Alzak) reflector in stock

DIMENSIONS ID 6" OD 6 1/4" Depth 4 3/4" Regressed 2"
Cut Out 6" to 7" Ceiling Space needed 4 3/4"

ACCESSORIES - Sold Separately. Please note that junction box is not included.
Black trim cover model # LBL-6CRT-B
Silver trim cover model # LBL-6CRT-S
Goof Ring White OD 10 1/2" model # LBL-6GCR-W
New Construction Mounting Plate for Stud Ceiling model # LBL-MP-C6-30-STUD
New Construction Mounting Plate for T-Bar Ceiling model # LBL-MP-C6-30-TBAR
Emergency Driver SW 120-347V Input model # BL0-HM080-VVY

ORDERING GUIDE
DL254-6-30W-M-A5C5-HO White Trim White Reflector
DL254-6-30W-M-A5C5-HO-AZ White Trim Silver Reflector (Alzak)

Lexus LED Lights USA
250 H Street # 303, Blaine WA 98230 tel 360 200 1500
Hainesport NJ, Naples FL, Vancouver WA

www.LotusLEDlights.com
mailing addresses
warehouses

Lexus LED Lights CANADA
1080 Cliveden Ave # 6, Delta BC V3M 6G5 tel 604 538 3000
Delta BC & Mississauga ON

POLE LIGHTING

3000 Series Lighting Poles

POLE: (Not Welded) Extruded aluminum high strength alloy shaft with 35,000 PSI maximum yield. Multiple internal support structure designed to increase load capacity and greatly reduce pole movement and vibrations. All exposed fasteners are stainless-steel.

- Modular construction
- Light weight, ultra strong
- Low vibration
- Zero maintenance
- 20 Year structural warranty

Standard Base: 4 Bolt cast aluminum base high strength 713 alloy. 7.000" B.C.D.

Anchor Assembly (AA7): 4 - 5/8" x 18" J-bolts c/w hex nuts and washers 7" (178mm) B.C.D.

Series 3000
Shaft Height: 15 (15 ft), 12 (12 ft), 10 (10 ft), 8 (8 ft)Luminaire Mounting: Post top 3", Single (B1) (B2-180)
Color / Finish: Paint WHITE (WH), BLACK (MBK), BRONZE (BZS), SPECIAL (SPC)
Anchor Bolts: AA7

Height (ft): 3.000 (8 (2.4)), 3.000 (10 (3.0)), 3.000 (12 (3.7)), 3.000 (15 (4.5))
Velocity (MPH): 80, 90, 100
EPA Wind Velocity (MPH): 80, 90, 100
Weight (Lbs (Kgs)): 28 (12), 32 (14), 36 (16), 43 (19)

EPA calculations to AASHTO with 1.3 gust factor
Certified to Canadian and US electrical safety standards for "Wet Location"

X-Tron Poles / LED Lighting
Strongest Poles on the Planet
MISSISSAUGA, ONTARIO, CANADA, email: sales@xtronpoles.com web: www.xtronpoles.com

POLE LIGHTING

4000 Series Lighting Poles

POLE: (Not Welded) Extruded aluminum high strength alloy shaft with 35,000 PSI maximum yield. Multiple internal support structure designed to increase load capacity and greatly reduce pole movement and vibrations. All exposed fasteners are stainless-steel.

- Modular construction
- Light weight, ultra strong
- Low vibration
- Zero maintenance
- 20 Year structural warranty

Standard Base: 4 Bolt cast aluminum base high strength 713 alloy, full modular. 9.000" to 8.000" B.C.D.

Optional Multi base: 4 Bolt cast aluminum base high strength 713 alloy, full modular. 8.000" to 12.000" B.C.D.

Anchor Assembly (AAB): 4 - 5/8" x 18" J-bolts c/w Wood positioning template. 5.657" 144mm

Series 4000
Shaft Height: 24 (24 ft), 20 (20 ft), 16 (16 ft), 10 (10 ft)Luminaire Mounting: Single (B1), Twin (B2-90), Triple (B3), Quad (B4), Tenon (TN1), Tenon (TN2)
Color / Finish: Paint WHITE (WH), BLACK (MBK), BRONZE (BZS), SPECIAL (SPC)
Anchor Bolts: AAB
Options: Multi base (MBCCD), High Mount Wire Hand Hole (PHH)

Height (ft): 10 (3.7), 16 (4.7), 20 (6.1), 24 (7.3)
Velocity (MPH): 70, 80, 90, 100, 120, 150
EPA Wind Velocity (MPH): 70, 80, 90, 100, 120, 150
Weight (Lbs (Kgs)): 9.9 (7.6), 7.6 (6.0), 4.8 (3.1), 2.1 (1.3), 1.3 (4.4), 0.8 (3.2)

EPA calculations to AASHTO with 1.3 gust factor
Certified to Canadian and US electrical safety standards for "Wet Location"

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Email: ejs@ejsengineering.ca
Website: www.ejsengineering.ca

LICENSED PROFESSIONAL ENGINEER
E. SHOMALI
100036463
PROVINCE OF ONTARIO

ENGINEER STAMP Project North: True North

MATAJ ARCHITECTS INC.
418 Incoque Shore Road, Unit 206,
Chamblee, ON
L6H 0X7
1. 905.281.4444

Project:

HAMPTON INN OWEN SOUND

1750 16TH AVE E. OWEN SOUND,
ON, N4K 5N3

Site Title:
SITE PLAN - LIGHTING TYPES & CUTSHEETS

Design By: N.P. Drawn By: N.P. Approved By: G.S.
Scale: AS SHOWN Date: Project No.: 24-53

Drawing No.: **E103** OF:
Drawing Series: ELECTRICAL