SQUAMISH

District of Squamish

Street Lighting Design Criteria

Approved March 23, 2021 (Amendment Bylaw No. 2821, 2021)
Amended March 3, 2025

CONTENTS

6.1 GENERAL

This document provides lighting and electrical design criteria to aid in the design of street lighting within the District of Squamish. Street lighting generally refers to lighting of public roadways, parking lots, walkways, and trails near roadways. All new street lighting shall be Light Emitting Diodes (LED). The designer must comply with all requirements included in this reference document and described herein, unless specifically pre-approved by a District Engineer. Designers may reference MMCD for any items not covered or addressed in this document. In the case of conflicting information, the Design Criteria document shall take precedent.

These design guidelines are not intended to be a substitute for sound engineering knowledge and experience in street lighting design and the Canadian Electrical Code. Roadway lighting designs should be prepared under the direction of a design professional registered with Engineers and Geoscientists of British Columbia (EGBC).

6.2 CODES, RULES, STANDARDS, AND PERMITS

6.2.1 A survey is required to identify existing utility locations, sensitive tree root zones, and other potential conflicts and shall be identified on the drawings for review by the District.

6.2.2 The lighting installer shall obtain all necessary permits including an electrical permit from the nearest BC Safety Authority (BCSA) office, prior to the start of construction.

6.3 ROADWAY AND PEDESTRIAN CRITERIA

Street lighting levels are defined by the roadway classification and the pedestrian activity level on the sidewalks adjacent to the roadway which is applied to the lighting tables in this document.

Street classifications defined as follows:

- **Major/Arterial:** Serves continuous route primarily for through traffic.
- **Major Collector:** Performs the function of movement between major/arterial roadways and minor collectors or local roadways.
- **Minor Collector:** Provides the dual function for additional land access and movement between major collector and local roadways.
- **Local:** Primary function to serve vehicle trip ends, not intended to carry through traffic.

For lighting design, the terms arterial and major will be used interchangeably moving forward in the description of roadways.

Peak-time pedestrian activity levels on sidewalks and in crosswalks are defined as follows.

- **High:** Areas of significant numbers of pedestrians expected to be on the sidewalk crossing the streets. Examples are downtown retail areas, areas near breweries, cideries or distilleries, event plaza space, and major transit terminals.
- **Medium:** Areas where lesser numbers of pedestrians utilize the streets. Typical are downtown office areas, blocks with libraries, apartments, neighborhood shopping, industrial parks, and streets with bus routes.
- **Low:** Areas with very low volume of pedestrian usage. These can occur in any of the cited roadway classifications but may be typical of low density residential developments, and rural or semi-rural areas.

During peak hours, the choice of the appropriate pedestrian activity level for a street should be based on engineering judgment. If needed, one hour pedestrian counts can be taken during the peak hour throughout the day or nighttime. on some selected days to establish the estimated average pedestrian traffic counts. A section of typical land use can be sampled by counting one or two adjacent blocks or a single block that has unusual characteristics, such as discharge from a major event. Recommended pedestrian activity levels are as follows:

- **High** – over 100 pedestrians/hour
- **Medium** – 11 to 100 pedestrians/hour
- **Low** – 10 or fewer pedestrians/hour

These volumes represent the total number of pedestrians walking in both directions in a typical block or 200-meter section during anytime of day that is measured to be the peak hour.

6.4 LIGHTING MEASUREMENTS

Acceptable design methods and criteria are indicated below.

6.4.1 Illuminance

When light hits a surface, it creates "illuminance" on that surface. Illuminance is a measure of the light landing on a defined area. The more lumens on a given surface area, the greater the level of illuminance. The illuminance method of design is used for lighting sidewalks, crosswalks, intersections, roundabouts, and curved streets. The illuminance method will be utilized for all local and collector roadway throughout Squamish.

6.4.2 Luminance

Luminance is the concentration of light (intensity) reflected towards the eyes per unit area of the surface. As road surfaces do not reflect light uniformly, reflectance varies depending on the angle of the incident light in both the vertical and horizontal planes, as well as on the angle that the driver views the pavement. For a luminance calculation the driver's viewing angle is fixed at one degree below the horizontal and an observer distance of approximately 83m. The luminance method will only be use on straight sections of major roadways throughout Squamish.

6.4.3 Uniformity

Uniformity is the evenness of light over a given area. A perfect uniformity ratio would be 1:1 resulting in a minimum uniformity value of 1. A high degree of uniformity for roadway lighting is desirable. As lighting calculations consist of a series of grid points with calculated luminance or illuminance levels, uniformity is expressed as the ratio of the average to minimum levels and/or the maximum to minimum levels.

6.4.4 Veiling Luminance

Veiling luminance (also referred to as a disability glare) may be numerically evaluated. Because of contrast reduction by disability glare, visibility is decreased. Increasing the luminance level will counteract this effect by reducing the eye's contrast sensitivity. As glare limits our visibility, veiling luminance is an important consideration. Veiling luminance criteria shall be maintained on all major roadways throughout Squamish.

6.4.5 Vertical Illuminance

Vertical illuminance is the amount of light falling on a vertical surface. Namely used in crosswalk lighting design, it is measured at a point 1.5m from the walking surface. The intention of vertical illuminance in pedestrian safety is to provide positive contrast, increasing the visibility of the pedestrian to the driver. This is achieved by placing the luminaire in front of where the pedestrian will be crossing.

6.4.6 Light Loss Factor (LLF)

The Light Loss Factor (LLF) is a combination of several factors representing deterioration of the lamp and luminaire over their life-spans and is applied to the lighting design.

A Total Light Loss Factor (TLLF) of 0.81 shall be used in all lighting design calculations. Light loss factor is based off of a 20-year maintenance cycle per the manufacturer's recommendations.

6.5 VARIABLE LIGHTING CRITERIA

6.5.1 Designs shall meet the lighting requirements of the current edition of the applicable Illuminating Engineering Society of North America (IESNA) standards as the primary source and the Transportation Association of Canada (TAC) Guide for the Design of Roadway Lighting as the secondary reference source. All measurements should be in LUX, and footcandles will not be accepted.

6.5.2 Where environmentally sensitive areas exist, such as within or directly adjacent to riparian areas and areas classified as Environmental Sensitivity High and Medium in the Official Community Plan Bylaw 2500, 2017, variations to these regulations may be considered to reduce the impacts to the ecosystems and may be requested and approved by District Staff.

6.5.3 Designs shall meet the requirements within the Master Municipal Construction Documents Association (MMCD), and the District's Subdivision and Development Control Bylaw. If a conflict arises, the District documents supersede the MMCD.

6.5.4 Minimum maintained vertical sidewalk illuminance levels are not mandatory.
Where parking lanes exist or are proposed, they shall be calculated as full-time general-purpose lanes.

6.5.5 The designer shall minimize light pollution and avoid over lighting. The lighting shall not exceed the recommended average illuminance levels by more than 15% unless previously approved by a District Engineer.

6.5.6 Uniformity shall not exceed values presented herein, unless approved by District Engineer. Deviation from max uniformity may be accepted on pathways with a high degree of curvature through environmentally sensitive areas.

6.5.7 Veiling Luminance shall comply with the tables below for major roadways and may vary for collector and local roadways as needed.

6.5.8 All luminaires utilized shall be Dark Sky Compliant and the designer shall use the lowest possible BUG (Backlight, Upplight, & Glare) rating – no worse than B2-U0-G1 unless pre-approved by the District Engineer.

6.6 STREET LIGHTING

6.6.1 Designs shall meet the lighting requirements of the current edition of this guideline as a primary source. The Transportation Association of Canada (TAC) Guide for the Design of Roadway Lighting as the secondary reference source, and the Illuminating Engineering Society of North America (IESNA) standard as the tertiary source.

6.6.2 All roadway lighting shall comply with the pole and fixtures for each street type in accordance with the District's "Street Light Pole Assembly Standard Details" and "Downtown Lighting Map" attached to this document.

6.6.3 All roadways within the District shall be designed using the illuminance method and the recommended lighting levels are as follows:

Table 1: Illuminance for Roadways

Road Lighting Classification	Pedestrian Activity	Illumination Level Required (avg. lux)	Uniformity Ratio (Maximum)	Veiling Luminance Ratio (Maximum)
Arterial	High	17.0	3.1	0.3
	Medium	13.0	3.1	0.3
	Low	9.0	3.1	0.3
Major/Minor Collector	High	12.0	3.1	0.4
	Medium	9.0	3.1	0.4
	Low	6.0	3.1	0.4
Local	High	9.0	3.1	0.4
	Medium	7.0	3.1	0.4
	Low	4.0	3.1	0.4

6.6.4 Where on-street bike lanes are present, they shall be calculated as part of the roadway and designed using roadway fixtures.

6.6.5 Where a bike lane is separated by a concrete median or another form of physical separation, it shall be calculated separately but lit to a roadway standard based on pedestrian conflict. Additional pedestrian scale poles may be required as a result to meet recommended lighting levels.

6.6.6 Separated bikeways Downtown will be designed utilizing a combination of Type 3 Downtown streetlight combination pole assembly and a pedestrian pole in accordance with the District's "Street Light Pole Assembly Standard Details" and "Downtown Lighting Map" attached to this document.

6.7 SIDEWALK LIGHTING

6.7.1 Sidewalks shall be designed using the illuminance method for horizontal illuminance only and the recommended lighting levels are as follows:

Table 2: Illuminance for Sidewalks

Pedestrian Activity	Maintained Average Horizontal illuminance (lux)	Average-Minimum Horizontal Uniformity Ratio
High	≥ 20.0	≤ 4.0
Medium	≥ 5.0	≤ 4.0
Low	3.0	≤ 6.0

6.8 INTERSECTION LIGHTING

6.8.1 Intersections shall be designed using the illuminance method and the recommended lighting levels are as follows:

Table 3: Illuminance for Intersections

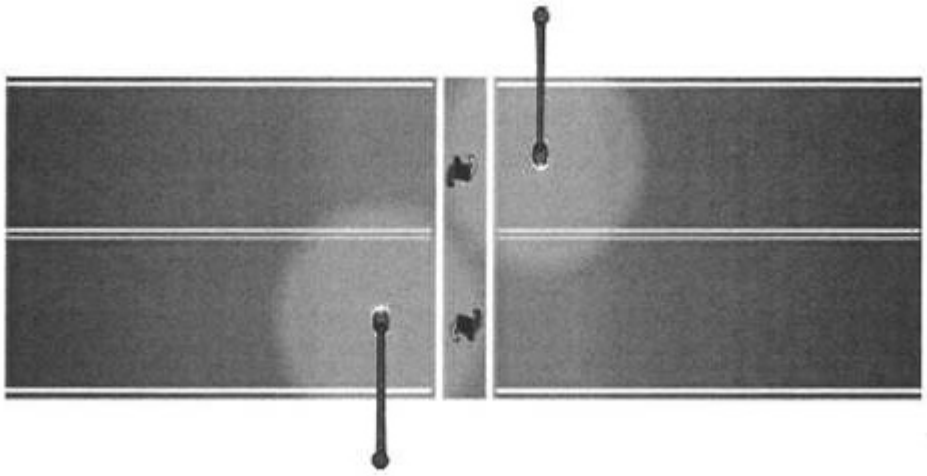
Road Lighting Classification	Average Maintained Illumination at Pavement by Pedestrian Areas Lux			Uniformity Ratio
	High	Medium	Low	
Arterial/Collector	29.0	22.0	15.0	3.1
Collector/Collector	24.0	18.0	12.0	4.1
Collector/Local	21.0	16.0	10.0	4.1
Local/Local	18.0	14.0	8.0	6.1

6.9 CROSSWALK LIGHTING

6.9.1 Crosswalks to be designed in accordance with the current edition of the Province of British Columbia Ministry of Transportation and Infrastructure – Pedestrian Crossing Control Manual.

6.9.2 An average vertical illuminance of not less than 20 lux measured at 1.5m above the road surface with the meter oriented towards the approaching vehicle is required at midblock crosswalks.

6.9.3 When installing new pedestrian crosswalk signals for crosswalks the lighting designer shall ensure that the signal lighting complies with Section 5.8c in the District Subdivision Development Control Bylaw.



Pedestrian Activity	Vertical illuminance Recommendation (lux)
High	20
Medium	30
Low	40

6.10 WALKWAY LIGHTING (TRAIL LIGHTING)

Walkways and pathways (trails) which are remote from the street (greater than 5m away) shall be illuminated as follows:

6.10.1 Trail lighting within riparian environmentally sensitive areas shall be lit using a colour temperature of 2200K.

6.10.2 Trails separated from the roadway may be designed using the illuminance method with an average Lux and maximum uniformity as described below.

Table 4: Illuminance for Trails

Classification	Pedestrian Activity	Illumination Level Required (avg Lux)	Uniformity Ratio (Maximum)	Spacing (m) (Range)
Trails	Any	2.0	10	40 – 50 *

40-50 For District Type 2 trail light only.*

6.10.3 District Engineer may approve a uniformity higher than 10 in special circumstances due to environmental considerations or challenging trail alignment. Deviation from max uniformity may be accepted on pathways with a high degree of curvature through environmentally sensitive areas.

6.10.4 Shields may be used to further protect environmentally sensitive adjacent areas.

6.10.5 Trail lighting shall be designed using "Trail Light" standards in accordance with the District's "Street Light Pole Assembly Standard Details", attached to this document. No other pole should be used unless otherwise approved by a District Engineer for neighborhood consistency or environmental considerations.

6.10.6 The distances between poles may vary between 40m-50m depending on the trail design. This is a guideline, which can vary at District Engineer's discretion.

6.11 ROUNDABOUT LIGHTING

6.11.1 The design shall follow the MMCD methodology.

6.12 TUNNEL LIGHTING

6.12.1 The design shall follow the MMCD methodology.

6.13 POLES

6.13.1 Street lights shall meet minimum clearances to overhead and underground utilities set out by BC Hydro, Telus, Shaw, Fortis, and any other utilities which may conflict.

6.13.2 Where possible, streetlights shall be placed at the boundary between two properties.

6.13.3 Street Lights and poles shall be in accordance with the District's "Street Light Pole Assembly Standard Details" and "Downtown Lighting Map" attached to this document.

6.13.4 Decorative Street Lighting will not be permitted unless in accordance with the pole types provided in the District's "Street Light Pole Assembly Standard Details".

6.13.5 Street lights shall have a minimum clearance as shown in Table 5 and displayed in figures 1-3:

Table 5: Street Light Pole Clearances

Street Furnishing	Distance from Pole
Trees	4.0 m*
Driveways	Industrial/Large Commercial – 3.0 m
	Multifamily/Residential/Downtown – 1.0 m
Hydrants	3.0 m
Junction Boxes	2.0 m
Kiosks	2.0 m
Power Lines	3.0 m

*District Engineer to use discretion for Downtown Streetscapes, to a minimum of 2m.

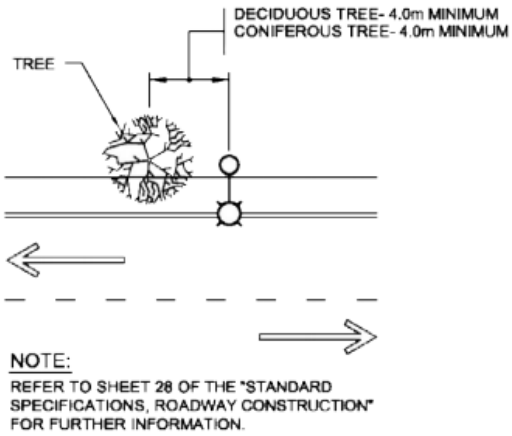


Figure 3: Minimum Tree Clearance

6.13 POLES (continued)

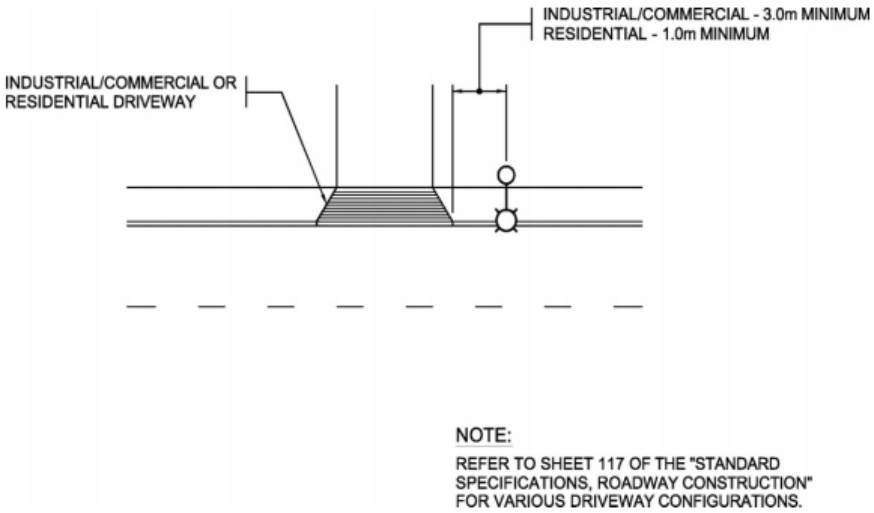


Figure 4: Minimum Driveway Clearance

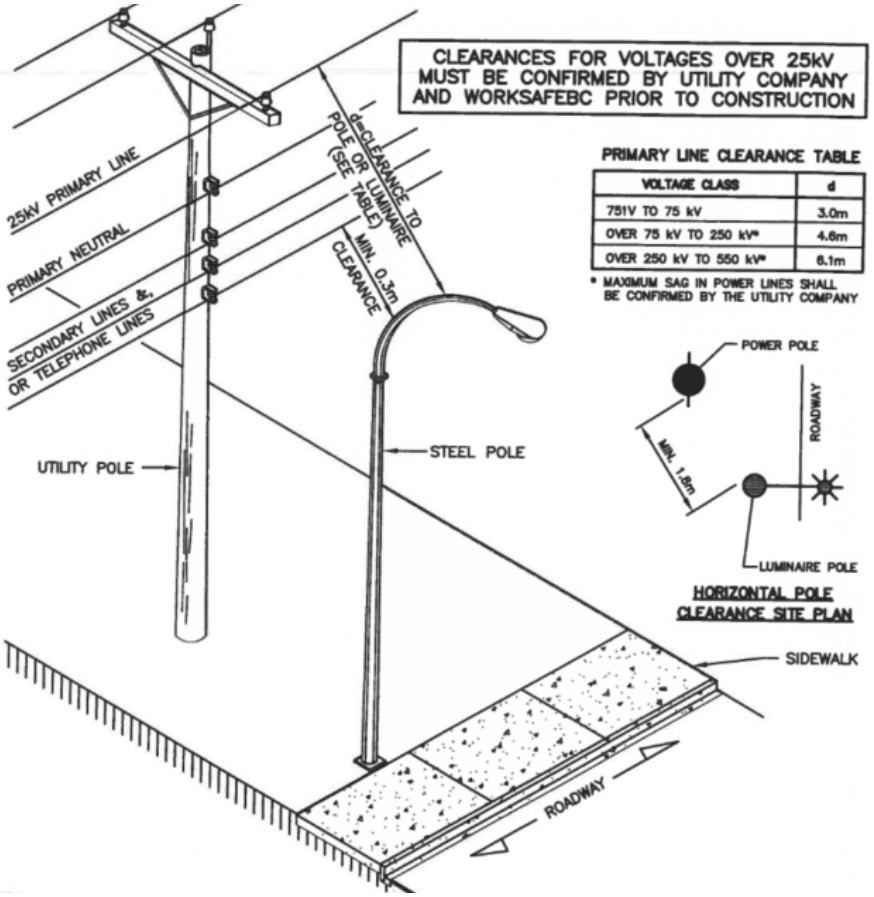


Figure 5: Minimum Hydro Pole Clearance

6.13 POLES (continued)

6.13.6 Street light poles shall be arranged in the pattern provided in Table 4.4:

Table 6: Street Light Pole Pattern

Roadway Classification	Pole Arrangement
Major/Arterial	Staggered/Median/Opposite
Major Collector	Staggered
Minor Collector	Staggered/One –Sided
Local	One-Sided
Trails, Walkways, & Bikeways	One-Sided

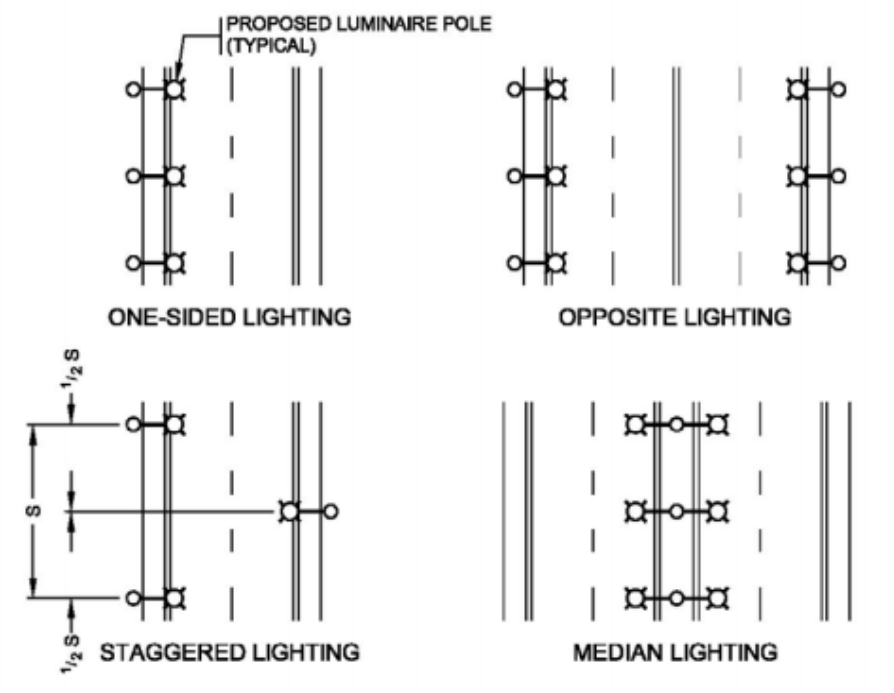


Figure 6: Street Light Pole Pattern

6.13 POLES (continued)

6.13.7 Street lights shall be offset from the curb face or edge of travelled way in accordance with the standard roadway cross sections provided in the "Street Light Pole Assembly Standard Details".

6.13.8 Street lights shall not be proposed in a location that impedes pedestrian or cycling movement on sidewalks or bikeway. If the location of the pole must be within the required sidewalk width or bikeway, the pole shall be placed at back of curb and additional sidewalk width shall be provided.

6.13.9 Double davit poles are not acceptable, unless pre-approved by a District Engineer.

6.13.10 Mounting heights for luminaries and pole types will be in accordance with the District's "Street Light Pole Assembly Standard Details" for all pole types and in general, following Table 7:

Table 7: Mounting Heights

Roadway Classification	Mounting Height
Major	9.0 m
Collector	9.0 m
Local/ Downtown/ Gateway	7.5 m
Trails/ Walkways /Bikeways	5.0 m

6.14 POLE FOUNDATIONS

6.14.1 Concrete Bases shall be in accordance with the District's "Street Light Pole Assembly Standard Details", as well as the MMCD Standard Detail Drawings.

6.14.2 Where a customized base is required, the design shall be prepared by an engineer and must be approved by a District Engineer.

6.14.3 Only precast concrete shall be approved. Poured in place bases will not be approved.

6.15 LUMINAIRES

6.15.1 The Luminaires utilized shall be in accordance with the District's "Street Light Pole Assembly Standard Details" for the various roadway types provided.

6.15.2 Colour temperature for luminaries shall be in accordance with "Street Light Pole Assembly Standard Details" for all pole types and in general, following Table 8:

Table 8: Colour Temperature

Roadway Classification	Colour Temperature
Major	3000 K
Collector	2700 K
Local	2700 K
Trails, Walkways, & Bikeways	2700 K
*Environmentally Sensitive Areas trails	Amber preferred or 2200 K

6.15.3 All luminaires on a single pole or street will be of the same colour temperature.

6.16 POWER SUPPLY AND DISTRIBUTION

6.16.1 There shall be a maximum of four (4) 90-degree bends in a conduit run. Where this cannot be avoided, a junction box will be used.

6.16.2 All empty conduits shall have a 6 mm nylon pull string installed with capped ends.

6.16.3 Street lighting conduits shall be a minimum of 35mm diameter Rigid Polyvinyl Chloride (RPVC).

6.16.4 The preferred operating voltage for the new street lighting system is 120V/240V.

6.16.5 347/600V power system shall not be acceptable.

6.16.6 Street lighting systems shall be controlled with a lighting contactor and photocell. The photocell shall be located on the luminaire nearest the service panel.

6.16.7 The designer shall contact BC Hydro to confirm service locations and whether specific BC Hydro designs are required.

6.16.8 Existing BC Hydro service bases shall be used for new street lighting unless approved by a District representative.

6.17 DESIGN

6.17.1 Lighting designs shall be prepared under the direction of a design professional registered with the Engineers and Geoscientists BC (EGBC).

6.17.2 Luminaire wattage, distribution type, and voltage shall be noted on the engineering drawings.

6.17.3 The roadway classification, illuminance levels, ratios, and pedestrian conflict level shall be listed in table format on the design drawings.

6.17.4 Construction shall not proceed until the District Representative signs off on approval drawings and calculation submissions from the Designer.

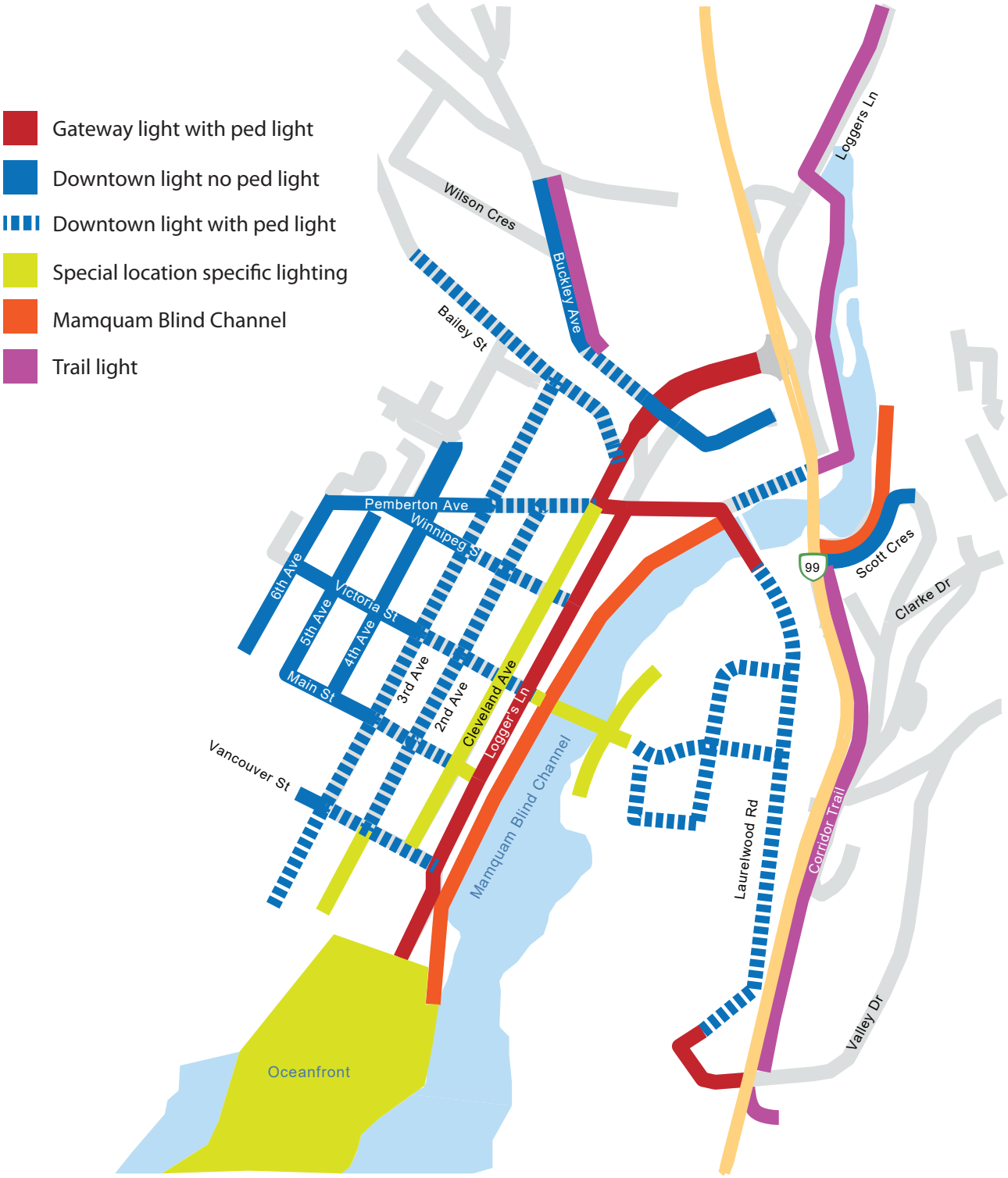
6.17.5 The Designer shall be responsible for provision of close-out submittals, including the lighting installation acceptance certificate and record drawings.

6.17.6 The Designer is required to submit the following pole and luminaire information as part of the lighting design package:

a) Shop drawings (in digital format) of the light poles proposed, complete with pole design criteria, and sealed by a qualified engineer.

b) Lighting Design Criteria Table – list of specified products, such as luminaires by manufacturer, make, and model. The designer shall refer to the District's "Street Light Pole Assembly Standard Details" and "Downtown Lighting Map" attached to this document.

SQUAMISH LIGHTING MAP

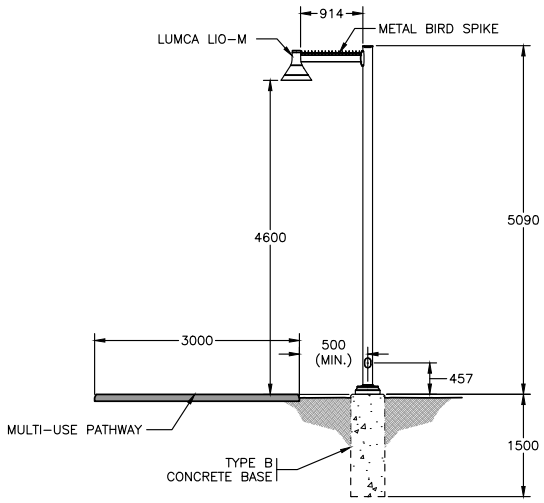


STREET LIGHT POLE ASSEMBLY STANDARD DETAILS

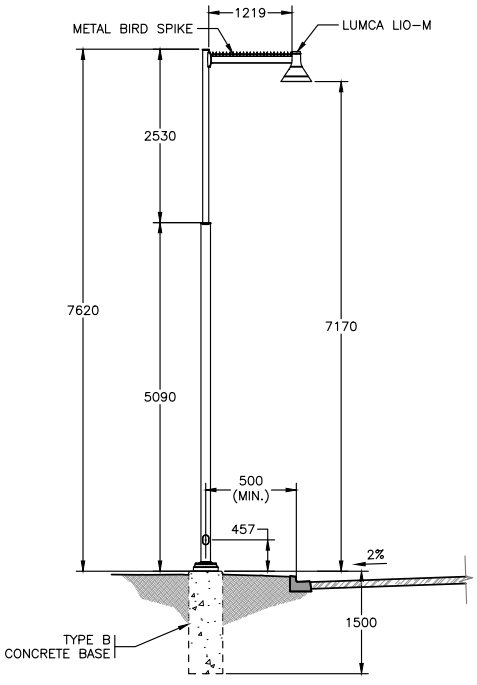
NOTES:

1. ALL POLES SHALL BE GALVANIZED STEEL WITH POWDER–COATED TEXTURED BLACK FINISH
2. ALL LUMINAIRES SHALL BE 2700K COLOR TEMPERATURE
3. ALL BANNERS TO BE PREVIOUSLY APPROVED BY DoS REPRESENTATIVE
4. ALL CONDUCTORS SHALL BE RW90 STRANDED COPPER, INSULATED AND COLOUR CODED
5. ALL COMMON CIRCUIT WIRING SHALL BE GROUPED, TAGGED, TY–WRAPPED, AND STORED IN THE HANDOLE IN A TIDY MANNER
6. WIRE SENTRY ANTI–THEFT GUARDS SHALL BE INSTALLED IN ALL POLES
7. ALL CONCRETE BASES SHALL BE PRECAST

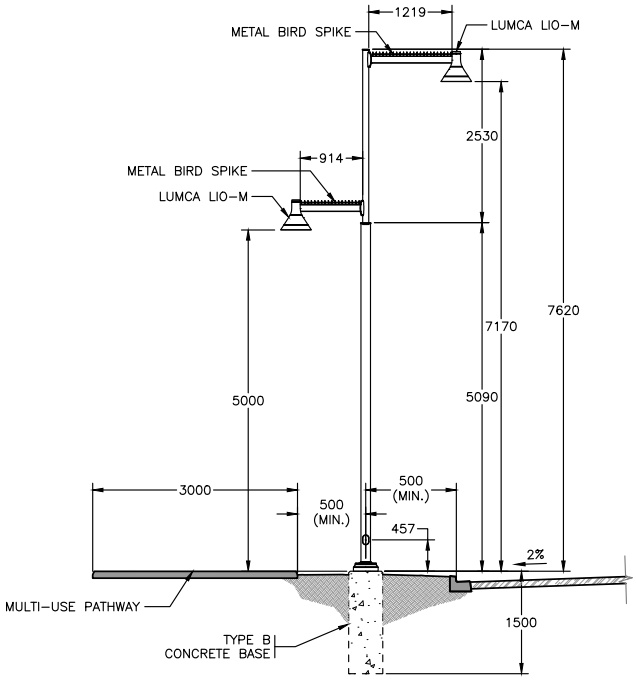
APPROVED LUMCA LIO WATTAGES		
WATTAGE	ROAD CLASS	MODEL NUMBER
12	MUP	LIO–M–SM–A–05–01–12LED03 12W–120–L2B–27K
20	MUP	LIO–M–SM–A–05–01–18LED03 20W–120–L2B–27K
40	ROADWAY	LIO–M–SM–A–05–01–36LED03 40W–120–L3FL–27K
60	ROADWAY	LIO–M–SM–A–05–01–36LED05 60W–120–L3FL–27K



PEDESTRIAN LIGHT POLE



STREET LIGHT POLE



COMBINATION LIGHT POLE

SQUAMISH	TITLE: LOCAL ROADWAY POLE ASSEMBLY	DISTRICT OF SQUAMISH STANDARD DETAIL APPR.: AH | DATE: 2024 SCALE: 1:100 | DWG. No.: ESK001

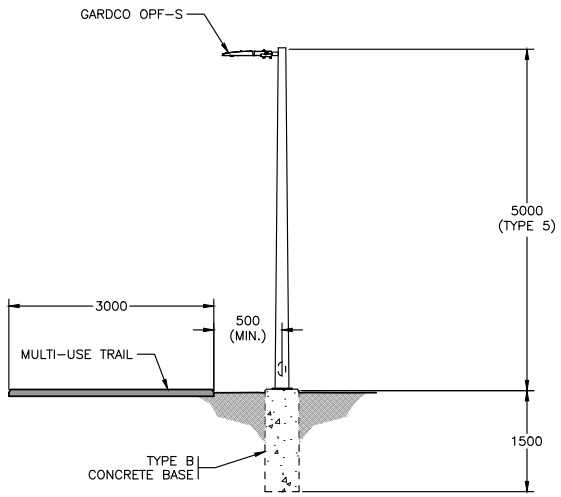
NOTES:

1. ALL POLES SHALL BE GALVANIZED STEEL WITH POWDER-COATED TEXTURED BLACK FINISH
2. ALL LUMINAIRES SHALL BE 3000K COLOR TEMPERATURE
3. ALL BANNERS TO BE PREVIOUSLY APPROVED BY DoS REPRESENTATIVE
4. ALL CONDUCTORS SHALL BE RW90 STRANDED COPPER, INSULATED AND COLOUR CODED
5. ALL COMMON CIRCUIT WIRING SHALL BE GROUPED, TAGGED, TY-WRAPPED, AND STORED IN THE HANDOLE IN A TIDY MANNER
6. WIRE SENTRY ANTI-THEFT GUARDS SHALL BE INSTALLED IN ALL POLES
7. ALL CONCRETE BASES SHALL BE PRECAST

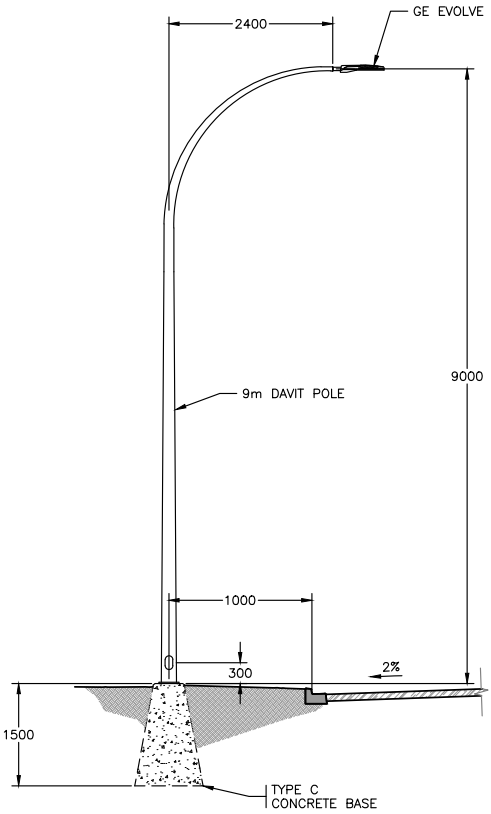
APPROVED GE EVOLVE WATTAGES		
WATTAGE	ROAD CLASS	MODEL NUMBER
31	COLLECTOR	ERL1-0-04-B3-30-A-GRAY-V1
58	COLLECTOR	ERL1-0-07-B3-30-A-GRAY-V1
82	ARTERIAL	ERLH-0-10-B3-30-A-GRAY-V1
120	ARTERIAL	ERL2-0-16-B3-30-A-GRAY-V1

*GE EVOLVE FIXTURES SHALL HAVE FIELD ADJUSTABLE WATTAGE SELECTORS

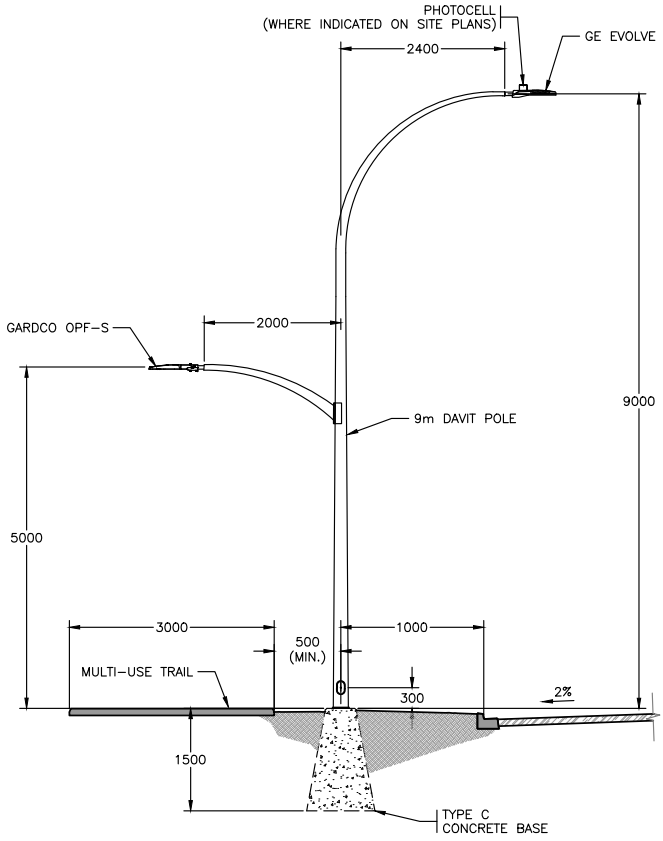
APPROVED GARDCO WATTAGES		
WATTAGE	ROAD CLASS	MODEL NUMBER
15	MUP	OPF-S-P01-727-T2M-AR
23	MUP	OPF-S-P02-727-T2M-AR



PEDESTRIAN LIGHT POLE AND TRAIL



STREET LIGHT POLE



COMBINATION LIGHT POLE

SQUAMISH

TITLE:

COLLECTOR AND ARTERIAL ROADWAY STREET LIGHT POLE ASSEMBLY

DISTRICT OF SQUAMISH

STANDARD DETAIL

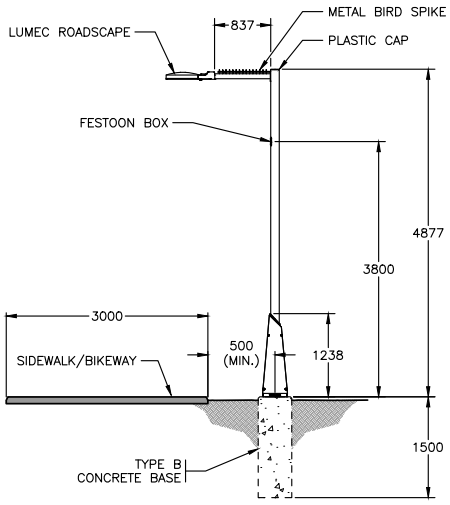
APPR.: AH	DATE: 2024
SCALE: 1:100	DWG. No.: ESK002

NOTES:

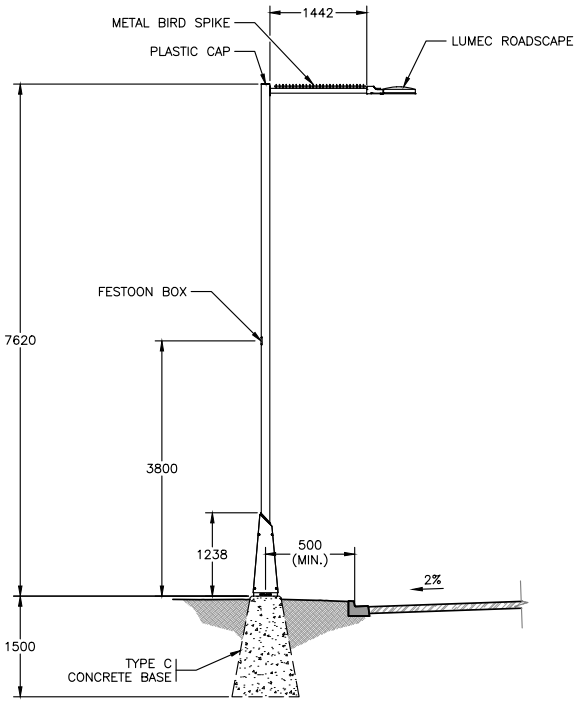
1. ALL POLES SHALL BE GALVANIZED STEEL WITH POWDER–COATED TEXTURED BLACK FINISH
2. ALL LUMINAIRES SHALL BE 2700K COLOR TEMPERATURE
3. ALL BANNERS TO BE PREVIOUSLY APPROVED BY DoS REPRESENTATIVE
4. ALL CONDUCTORS SHALL BE RW90 STRANDED COPPER, INSULATED AND COLOUR CODED
5. ALL COMMON CIRCUIT WIRING SHALL BE GROUPED, TAGGED, TY–WRAPPED, AND STORED IN THE HANDOLE IN A TIDY MANNER
6. WIRE SENTRY ANTI–THEFT GUARDS SHALL BE INSTALLED IN ALL POLES
7. ALL CONCRETE BASES SHALL BE PRECAST

APPROVED LUMEC ROADSCAPE WATTAGES

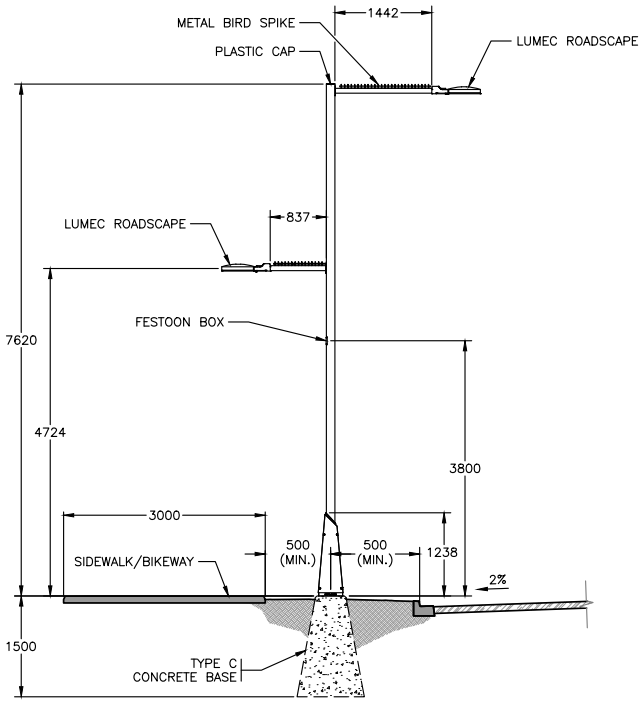
WATTAGE	ROAD CLASS	MODEL NUMBER
15	MUP	S–RSCF–15W40LED–727–G1–2–UNV–DMG–API–PH9–BK
25	MUP	S–RSCF–20W40LED–727–G1–2–UNV–DMG–API–PH9–BK
60	ROADWAY	S–RSCF–60W40LED–727–G1–2–UNV–DMG–API–PH9–BK
75	ROADWAY	S–RSCF–80W40LED–727–G1–2–UNV–DMG–API–PH9–BK
105	ROADWAY	S–RSCF–105W40LED–727–G1–2–UNV–DMG–API–PH9–BK



PEDESTRIAN LIGHT POLE



STREET LIGHT POLE



COMBINATION LIGHT POLE

SQUAMISH

TITLE:

DOWNTOWN STREET LIGHT POLE ASSEMBLY

DISTRICT OF SQUAMISH

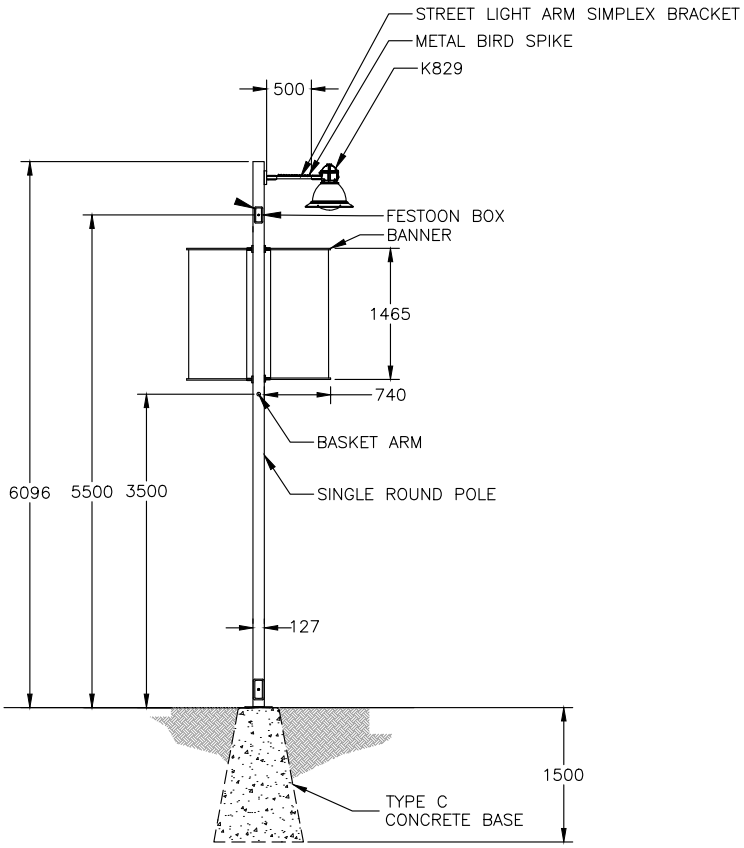
STANDARD DETAIL

APPR.: AH	DATE: 2024
SCALE: 1:100	DWG. No.: ESK003

NOTES:

1. ALL POLES SHALL BE GALVANIZED STEEL WITH POWDER–COATED SEMI GLOSS BLACK FINISH
2. ALL LUMINARIES SHALL BE 2700K COLOR TEMPERATURE
3. ALL BANNER TO BE PREVIOUSLY APPROVED BY DoS REPRESENTATIVE
4. ALL CONDUCTORS SHALL BE RW90 STRANDED COPPER, INSULATED AND COLOUR CODED UNLESS SHOWN OTHERWISE
5. ALL COMMONN CIRCUIT WIRING SHALL BE GROUPED, TAGGED AND TY–WRAPPED AND STORED IN THE HANDHOLD IN A TIDY MANNER
6. WIRE SENTRY ANTI–THEFT GUARDS SHALL BE INSTALED IN ALL POLES
7. ALL CONCRETE BASES SHALL BE PRECAST

APPROVED K829 WATTAGES	
MODEL#	WATTAGE
K829	23



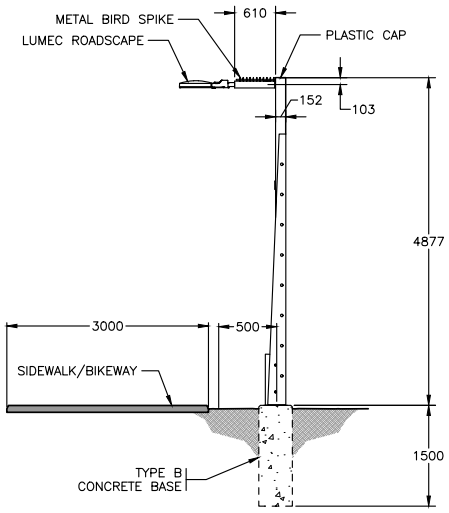
CLEVELAND LIGHT POLE

SQUAMISH	TITLE: CLEVELAND STREET LIGHT POLE ASSEMBLY	DISTRICT OF SQUAMISH STANDARD DETAIL APPR.: AH | DATE: 2023 SCALE: 1:75 | DWG. No.: ESK006

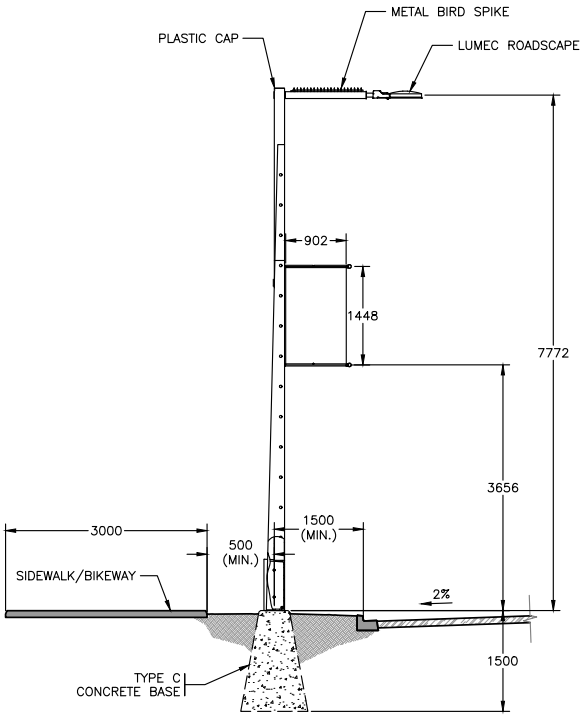
NOTES:

1. ALL POLES SHALL BE GALVANIZED STEEL WITH POWDER–COATED TEXTURED BLACK FINISH
2. ALL LUMINAIRES SHALL BE 2700K COLOR TEMPERATURE
3. ALL BANNERS TO BE PREVIOUSLY APPROVED BY DoS REPRESENTATIVE
4. ALL CONDUCTORS SHALL BE RW90 STRANDED COPPER, INSULATED AND COLOUR CODED
5. ALL COMMON CIRCUIT WIRING SHALL BE GROUPED, TAGGED, TY–WRAPPED, AND STORED IN THE HANDOLE IN A TIDY MANNER
6. WIRE SENTRY ANTI–THEFT GUARDS SHALL BE INSTALLED IN ALL POLES
7. ALL CONCRETE BASES SHALL BE PRECAST

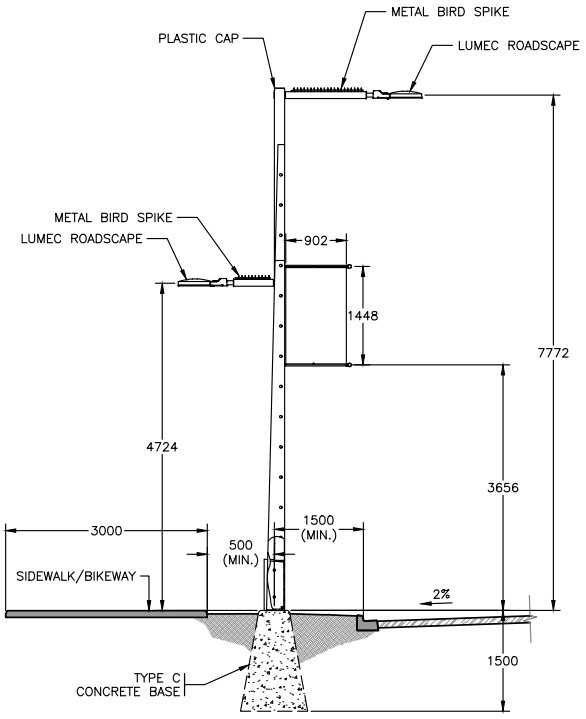
APPROVED LUMEC ROADSCAPE WATTAGES		
WATTAGE	ROAD CLASS	MODEL NUMBER
15	MUP	S–RSCF–15W40LED–727–G1–2–UNV–DMG–API–PH9–BK
25	MUP	S–RSCF–20W40LED–727–G1–2–UNV–DMG–API–PH9–BK
60	ROADWAY	S–RSCF–60W40LED–727–G1–2–UNV–DMG–API–PH9–BK
75	ROADWAY	S–RSCF–80W40LED–727–G1–2–UNV–DMG–API–PH9–BK
105	ROADWAY	S–RSCF–105W40LED–727–G1–2–UNV–DMG–API–PH9–BK



PEDESTRIAN LIGHT POLE



STREET LIGHT POLE



COMBINATION LIGHT POLE

SQUAMISH

TITLE:

GATEWAY STREET LIGHT POLE ASSEMBLY

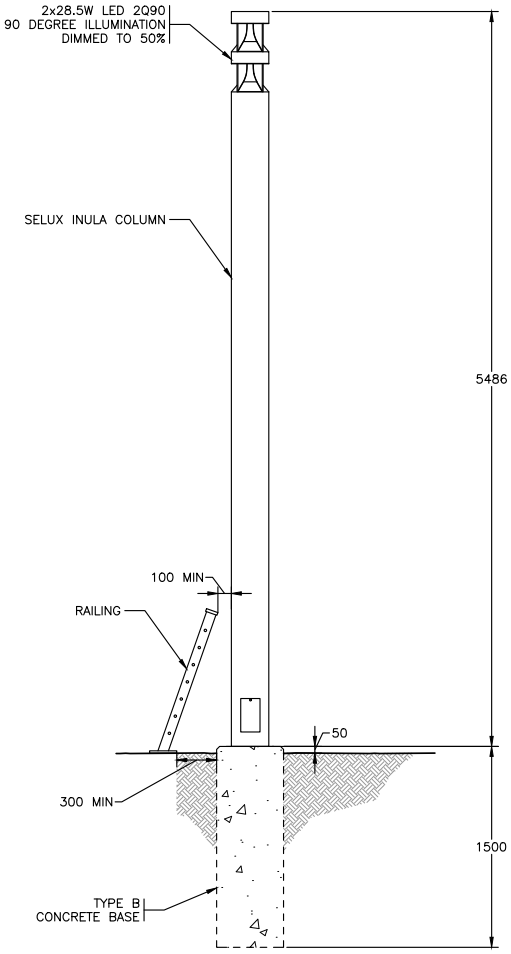
DISTRICT OF SQUAMISH

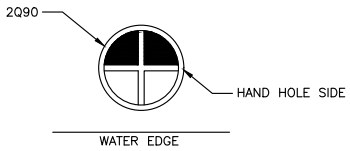
STANDARD DETAIL

APPR.: AH	DATE: 2024
SCALE: 1:100	DWG. No.: ESK004

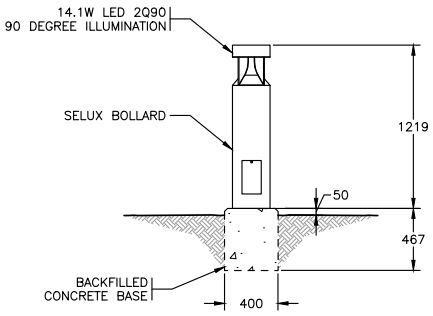
NOTES:

1. THE ILLUMINATION POINT LOCATED HALFWAY BETWEEN POLES SHALL BE 1 LUX MIN.
2. ALL BOLLARDS SHALL BE SEMI MATTE BLACK FINISH.
3. ALL LED LUMINAIRES SHALL BE 2700K COLOR TEMPERATURE.
4. APPROVED SELUX BOLLARD:
   - 4.1. ICL-18-2Q90-2Q90-30-BK-120 (2x2Q90, 28.5W/2189lm, 2700K , DIMMED TO 50%)
   - 4.2. IBL-4-2Q90-30-BK-120 (2Q90, 14.1W/1156lm, 2700K)





LIGHTING DISTRIBUTION PATTERN

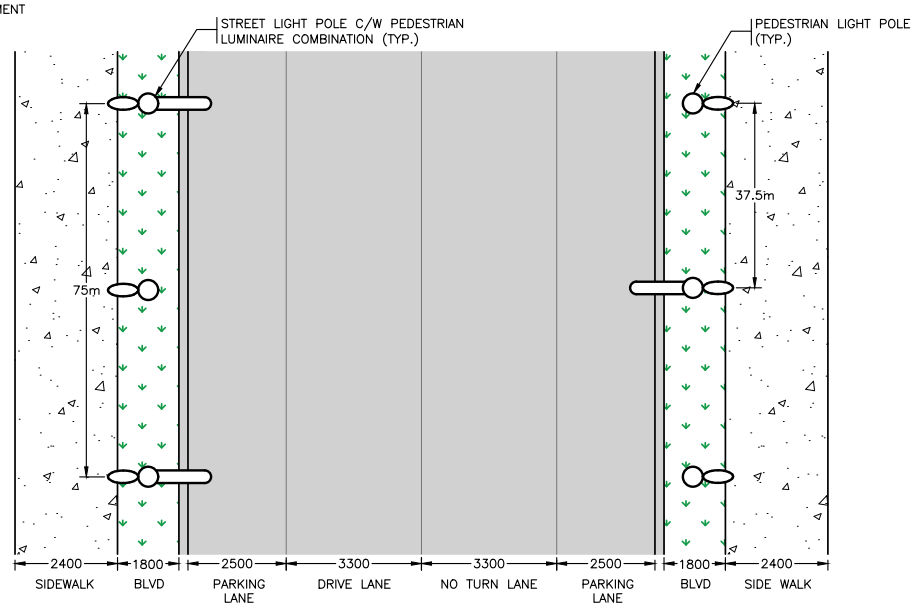


MAMQUAM BLIND CHANNEL LIGHT

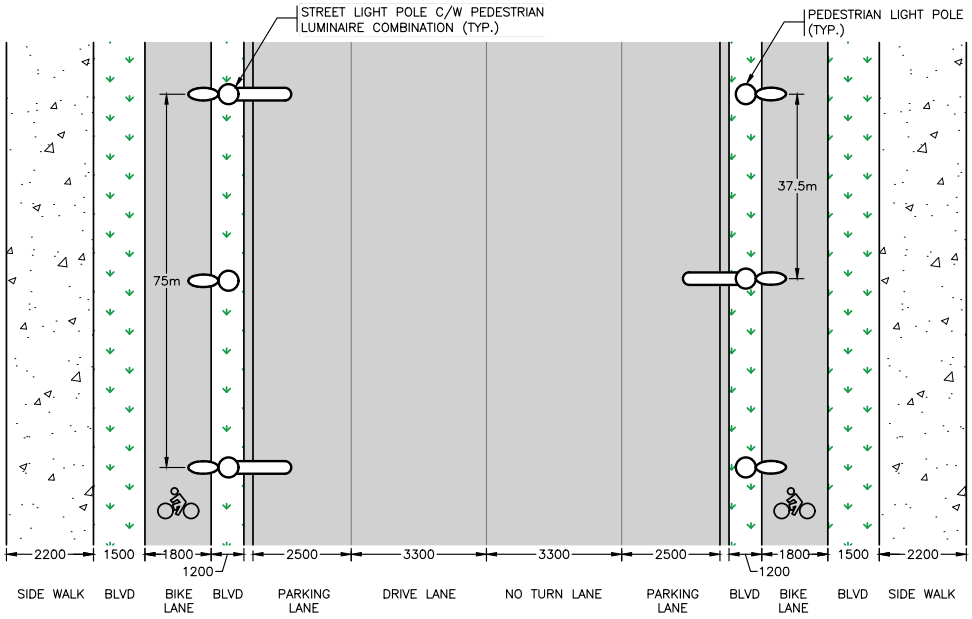
SQUAMISH	TITLE: MAMQUAM BLIND CHANNEL LIGHT POLE ASSEMBLY	DISTRICT OF SQUAMISH STANDARD DETAIL APPR.: AH — DATE: 2024 SCALE: 1:100 — DWG. No.: ESK005

NOTES:

1. STAGGERED STREET LIGHT POLES PATTERN SHALL BE USED AT DOWNTOWN STREETS
2. 75m DISTANCE BETWEEN STREET LIGHT POLES AND 37.5m DISTANCE BETWEEN PEDESTRIAN LIGHT POLES
3. FOR POLE ASSEMBLY DETAILS REFER TO DRAWING ESK003
4. STREETSCAPE DIMENSIONS MAY VARY
5. THIS STANDARD DETAIL IS INTENDED TO BE USED AS A GUIDELINE, NOT A REQUIREMENT



SIDE WALK LUMINAIRE POLE LAYOUT



BIKE LANE LUMINAIRE POLE LAYOUT

SQUAMISH	TITLE: DOWNTOWN STREET LIGHT POLE PATTERN	DISTRICT OF SQUAMISH	
		STANDARD DETAIL	
		APPR.: AH	DATE: 2024
		SCALE: NTS	DWG. No.: ESK006

SQUAMISH

District of Squamish
37955 Second Avenue | Squamish, BC
squamish.ca