

**RESORT MUNICIPALITY OF WHISTLER
ZONING AMENDMENT BYLAW (5298 ALTA LAKE ROAD) NO. 2283, 2020**

A BYLAW TO AMEND THE WHISTLER ZONING AND PARKING BYLAW NO. 303, 2015

WHEREAS Council may, in a zoning bylaw pursuant to Section 479 of the *Local Government Act*, divide all or part of the area of the Municipality into zones, name each zone and establish the boundaries of the zones, regulate the use of land, buildings and structures within the zones, and require the provision of parking spaces for uses, buildings and structures;

AND WHEREAS Council may, pursuant to section 482 of the *Local Government Act*, establish different density rules for a zone, one generally applicable and the others to apply if the owner meets conditions set out in the bylaw.

NOW THEREFORE the Council of the Resort Municipality of Whistler, in open meeting assembled, ENACTS AS FOLLOWS:

1. This Bylaw may be cited for all purposes as “Zoning Amendment Bylaw (5298 Alta Lake Road) No. 2283, 2020”.
2. Resort Municipality of Whistler Zoning and Parking Bylaw No. 303, 2015 is amended by:
 - a) in Part 15, Section 17, replacing the regulations for the TA17 Zone with the regulations attached to this Bylaw as Schedule 1; and
 - b) in Part 24, attaching Schedule 2 to this Bylaw as Schedule S.

GIVEN FIRST AND SECOND READING this 23rd day of June, 2020.

FIRST AND SECOND READING RESCINDED this 1st day of December, 2020.

GIVEN FIRST AND SECOND READING this 1st day of December, 2020.

FIRST AND SECOND READING RESCINDED this 2nd day of February, 2021.

GIVEN FIRST AND SECOND READING this 2nd day of February, 2021.

Pursuant to Section 464 of the *Local Government Act*, a Public Hearing was held this ___ day of ____, 2021.

GIVEN THIRD READING this ___ day of ____, 2021.

Approved by the Minister of Transportation and Infrastructure this ___ day of ____, 2021.

ADOPTED by the Council this ___ day of ____, 2021.

Jack Crompton, Mayor

Brooke Browning, Municipal Clerk

I HEREBY CERTIFY that this is a true copy
of "Zoning Amendment Bylaw (5298 Alta
Lake Road) No. 2283, 2020."

Brooke Browning, Municipal Clerk

SCHEDULE 1 to Zoning Amendment Bylaw (5298 Alta Lake Road) No. 2283, 2020

17. TA17 Zone (Tourist Accommodation Seventeen)

Intent and Interpretation

- (1) The TA17 Zone is primarily intended to provide for site sensitive residential townhouse development, commercial tourist accommodation, and employee housing, together with parks and riparian protection uses, and the relocation and restoration of heritage structures.
- (2) The Key Plan for the TA17 Zone is shown in subsection (15).

Subdivision and Use of Park and Housing Parcels

- (3) Land in the TA17 Zone shall not be initially subdivided except to create parcels having boundaries in accordance with the Key Plan for the TA17 Zone.

Permitted Uses

- (4) The following uses are permitted and all other uses are prohibited:
 - (a) Employee housing contained in townhouses, but only at the locations and within the buildings specified for such use in the Key Plan for the TA17 Zone
 - (b) Tourist accommodation contained in townhouses, but only at the locations and within the buildings specified for such use in the Key Plan for the TA17 Zone
 - (c) Residential use contained in townhouses, but only at the locations and within the buildings specified for such use in the Key Plan for the TA17 Zone
 - (d) Caretaker's residence in one of the employee housing townhouses
 - (e) Amenity building for use as check-in facility for tourist accommodation uses and pool changing facility and other pool related uses
 - (f) Nature conservation park
 - (g) Community park, including one cabin and one barn, but the only structures permitted to be used for a cabin and a barn as part of a community park use are the cabin and barn located in the TA17 Zone on the date of adoption of Zoning Amendment Bylaw (5298 Alta Lake Road) No. 2283, 2020, which may be relocated and restored as contemplated under subsection (6)(c)
 - (h) Two Auxiliary buildings
 - (i) Auxiliary uses

Base Density

- (5) The maximum permitted densities for the uses permitted in the TA17 Zone are as follows:
 - (a) Twenty-one employee housing dwelling units, having combined a gross floor area of no more than 2000 square metres;

- (b) Two tourist accommodation dwelling units, having a combined gross floor area of no more than 382 square metres;
- (c) Two residential townhouse dwelling units, having a combined gross floor area of no more than 382 square metres;
- (d) Amenity building with tourist accommodation check-in facility and pool change room and related pool facilities, having a gross floor area of no more than 40 square metres;
- (e) 250 square metres for the cabin and barn as shown on the Key Plan for the TA17 Zone

Additional density

- (6) The maximum densities permitted in subsection (5), above, may be increased in accordance with subsection (7) if all of the following conditions are satisfied:
 - (a) Dedicate, as park, the areas shown on the Key Plan for the TA17 Zone as “community park” and “nature conservation park” to the Municipality as park and transfer to the Municipality ownership in fee simple of the area shown on the Key Plan as “Future Employee Housing”, and for the purpose of this subsection the minimum area of the lands to be dedicated and transferred are as follows:
 - (i) Nature Conservation Park: 0.563 hectares
 - (ii) Community Park : 0.877 hectares
 - (iii) Future Employee Housing: 0.5 hectares;
 - (b) Construct to completion the valley trail as shown approximately on the Key Plan for the TA17 Zone, with lighting, and Gebhart Creek bridge, all to the standards attached as Schedule S;
 - (c) Move existing cabin as shown on the Key Plan for the TA17 Zone, and refinish the existing barn shown on the Key Plan and the relocated cabin and repair them so that they are weather proofed and structurally sound and the main floor of the cabin may be safely used and occupied;
 - (d) Construct to completion at least twenty-one employee housing units within the TA17 Zone, having a gross floor area no less than 1991 square meters and enter into a housing agreement with the Municipality under section 403 of the *Local Government Act* with respect to all of those units, in the form authorized for the TA17 Zone by housing agreement bylaw adopted prior to or concurrently with the adoption of Zoning Amendment Bylaw 2283, 2020; and
 - (e) Construct to completion the community park in the location identified on the Key Plan for the TA17 Zone, such community park to be a neighbourhood serving park containing the following features:
 - (i) A mix of passive and active elements and spaces.
 - (ii) Lawn areas shall have no greater than 2 percent slope, shall be irrigated, shall have a sand based growing medium, and shall be designed to be mowed with a ride-on product. Subsurface drainage may be required.
 - (iii) Irrigation systems shall be consistent with municipal specifications and shall include electrical and communication services.

- (iv) Benches, picnic tables, waste receptacles, bike racks, drinking water fountain and signage to municipal standards.
 - (v) A playground structure with a rubber poured in place safety surface.
 - (vi) An asphalt surfaced pocket pump track appropriately scaled for young children new to riding a bicycle.
 - (vii) Walking paths shall be asphalt.
 - (viii) Trees shall be deciduous with a light canopy to allow sufficient sunlight for lawn growth.
 - (ix) Perennials and ornamental flower and shrub beds are discouraged.
 - (x) Any naturally occurring features that reinforce the mountain landscape should be retained.
 - (xi) A hard surface space for maintenance vehicle parking.
- (7) If the owner satisfies all of the conditions described in subsection (6), the density of development in the TA17 Zone shall be increased as follows:
- (a) A further nine tourist accommodation dwelling units, having a combined gross floor area of no more than 1719 square metres;
 - (b) A further nine residential townhouse dwelling units, having a combined gross floor area of no more than 1719 square metres.

Siting / Setbacks

- (8) The siting of all buildings and structures in the TA17 Zone shall be in accordance with the Key Plan for the TA17 Zone.
- (9) All buildings and structures in the TA17 Zone shall be set back a minimum of 7.6 metres from the boundary of any parcel, except that the minimum set back from a parcel boundary abutting a highway or private road within the TA17 Zone is 6.1 metres and the minimum setback from the parcel line of Strata Plan BCS556 that forms part of the boundary of the TA17 Zone is 20 metres.

Height

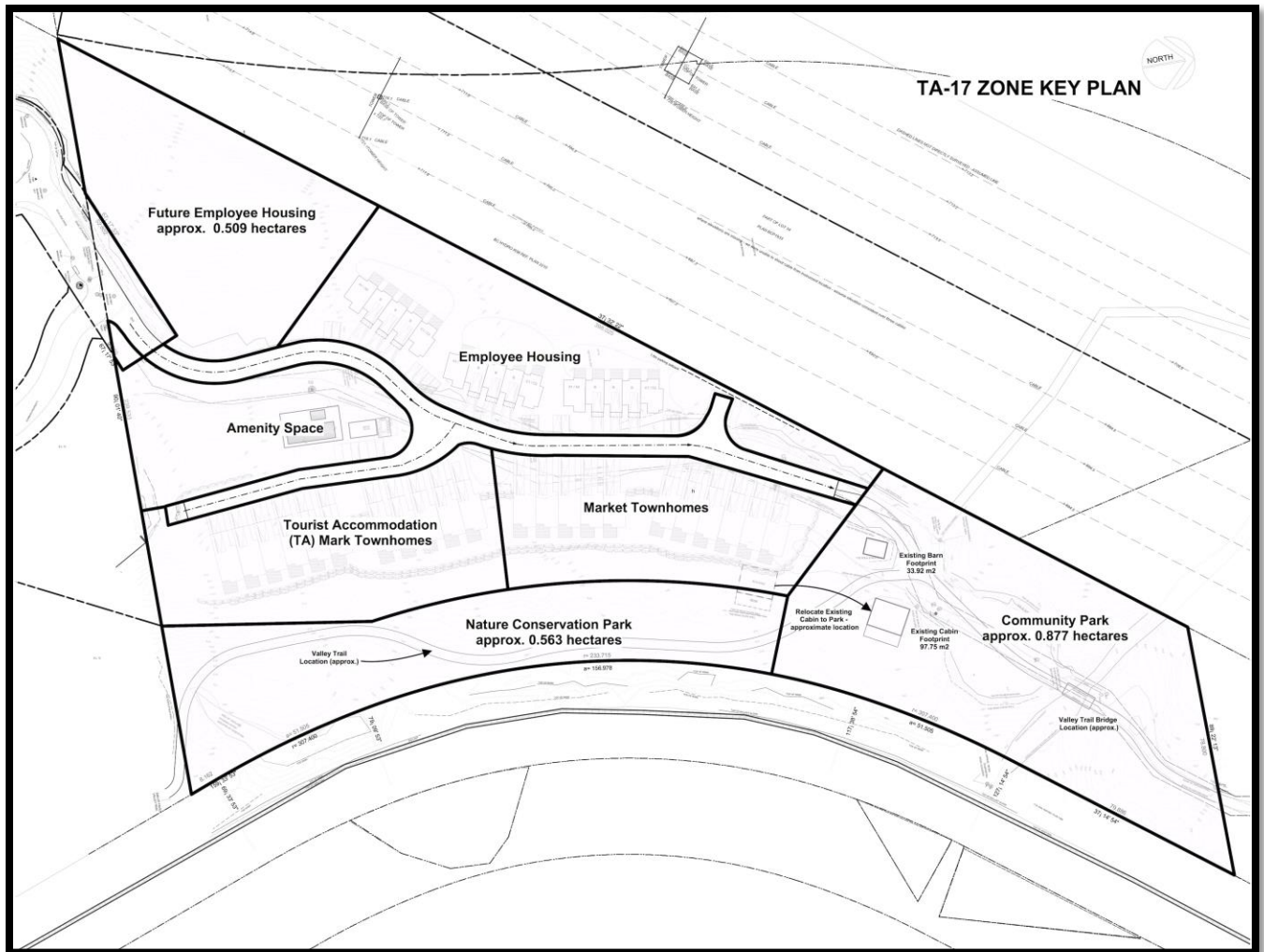
- (10) The maximum permitted height of any building or structure is 11 metres.

Other regulations

- (11) Despite anything to the contrary in this Bylaw the maximum permitted floor area for auxiliary parking use contained in a principal or auxiliary building or structure is 25 square metres for each employee unit and 35 square metres for each market unit.
- (12) An employee unit shall contain an area not less than 56 square metres.
- (13) One employee unit may be used for a caretaker for the lands.
- (14) An employee unit shall not be used for tourist accommodation and all other uses are prohibited.

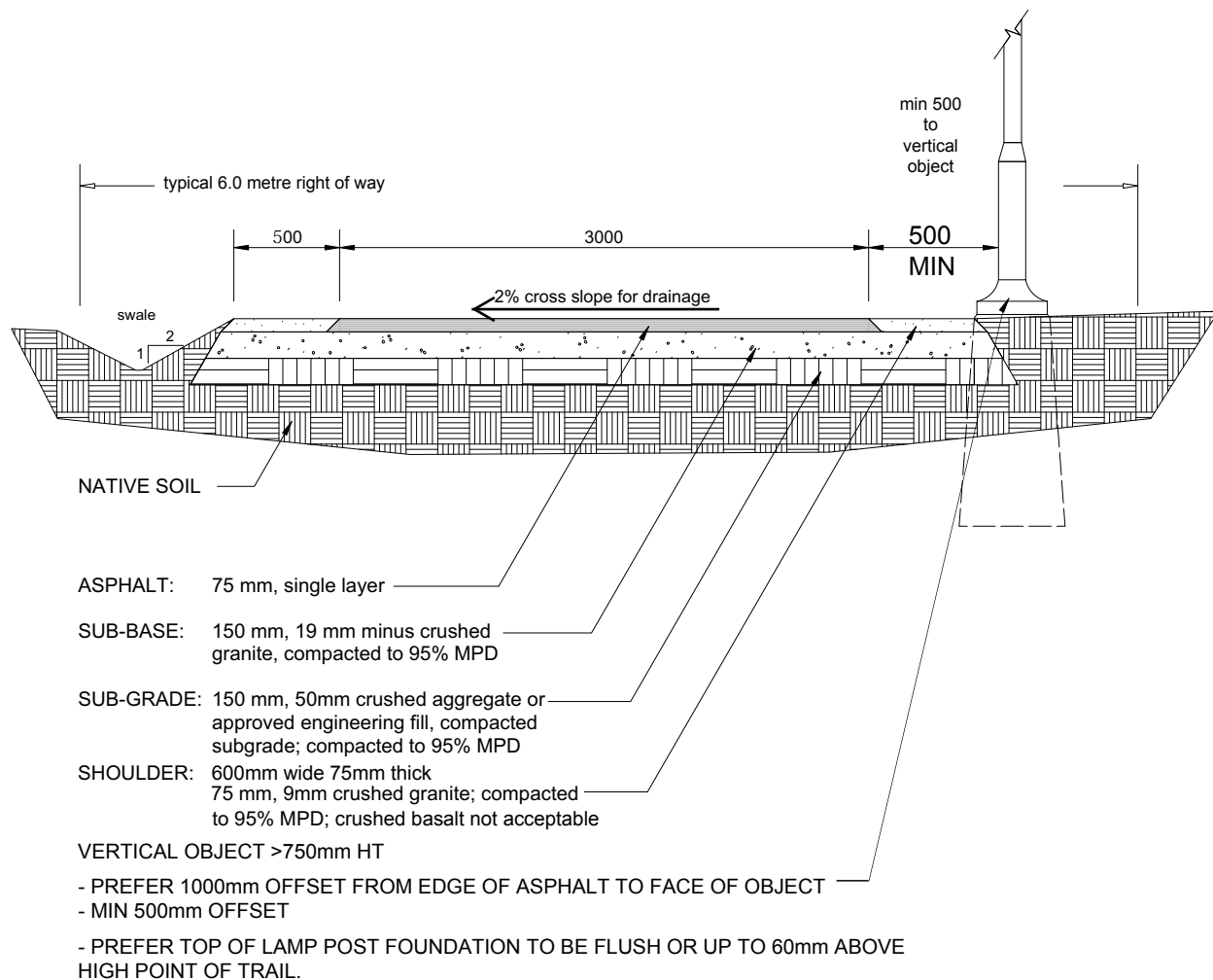
Key Plan

(15) Key Plan for the TA17 Zone:



NOTES:

1. ALL DIMENSIONS IN MILLIMETRES (mm), EXCEPT WHERE NOTED.
2. REFER TO SECTION FOR MATERIAL SPECIFICATIONS.
3. ALL SIGNS LOCATED AT NON ROAD SIDE OF VALLEY TRAIL OTHER THAN STOP, YIELD AND CROSSWALK.
4. BOULDERS MAY BE USED TO SHORE UP STEEP SLOPES.
5. ON STEEP CUT BANKS > 2:1 SLOPE A COMBINATION OF HYDRO-SEEDING, STRAW AND NETTING IS TO BE APPLIED TO STABILIZE UNTIL PLANTING ESTABLISHED.
6. THIS DRAWING SUPPLEMENTS THE "VALLEY TRAIL DESIGN GUIDELINES" (2019) AND MAY NOT REPRESENT ALL DESIGN AND CONSTRUCTION DETAILS. REFER TO THE GUIDELINES FOR ALL DETAILS.
7. FOR NORDIC GROOMED VALLEY TRAILS SHOULDER & SWALE CLEARED TO A MIN. 1600mm.



RESORT MUNICIPALITY OF WHISTLER

TYPE 1A - RURAL / FOREST
MULTI USE RECREATIONAL 'VALLEY TRAIL'

DRAWN BY: KM/MP

DATE: OCTOBER 8, 2020

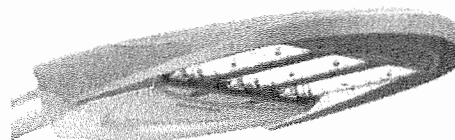
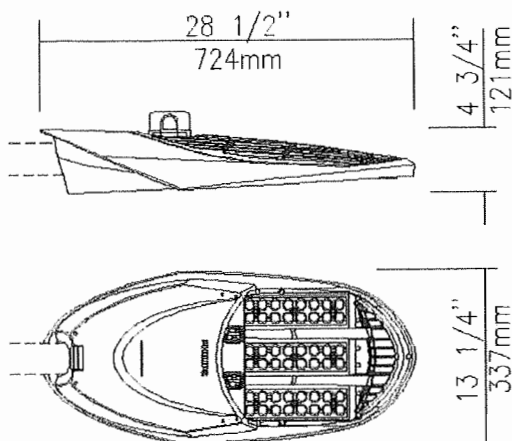
SCALE: N.T.S.

DWG. NO.:

Whistler Valley Trail at Cheakamus Lake Rd (62993)



LEDGINE



APPROVED

JASON FENTIMAN

OCT. 25, 2018

EPA: 0.65 sq ft / weight: 17 lb (7.7 kg)

Note: 3D image may not represent color or option selected.
Logos above include link, click to access.

Qty	10	Luminaire	GPLS-16L700NW-G2-R2M-UNV-DMG-RCD-BE2TX
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Description of Components:

Housing: The upper grid and lower part of the housing are made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 7 3/4" (197mm) minimum long tenon. Comes with two zinc plated clamps fixed by 4 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. Complete with a bird guard protecting against birds and similar intruders. ANSI label to identify wattage and source included in box.

Light Engine: Composed of 4 main components: **Heat Sink / LED Module / Optical System / Driver**

Electrical components are RoHS compliant, IP66 sealed light engine. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink: Built in the housing, designed to ensure high efficacy and superior cooling by natural convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +40°C / +104°F.

LED Module: Composed of 16 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical.

Optical System: (R2M), IES type II medium (asymmetrical). Composed of high-performance UV stabilized optical grade

Whistler Valley Trail at Cheakamus Lake Rd (62993)

polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.0% uplight and U0 per IESNA TM-15.

Driver: High power factor of 90% minimum%. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class 2, THD of 20% max. **Driver comes with dimming compatible 0-10 volts.**

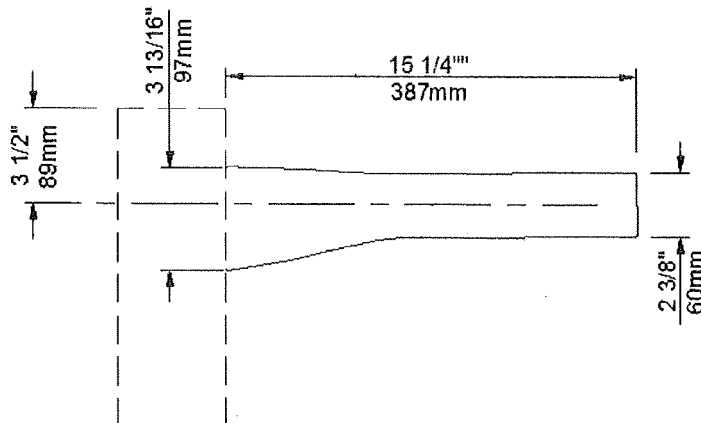
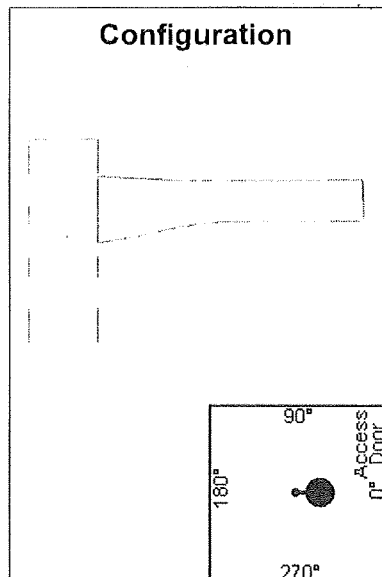
The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

Driver Options: (DMG), Dimming compatible 0-10 volts. For applicable warranty, certification and operation guide see "*Philips Lumec dimmable luminaire specification document for unapproved device installed by other*". To get document, click on this link: [Specification document](http://www.lumec.com/Lumec3DV2/PdfWebLink/Philips%20Lumec%20dimmable%20luminaire%20specification%20document%20for%20unapproved%20device%20installed%20by%20other.pdf) or go on web site on this address: <http://www.lumec.com/Lumec3DV2/PdfWebLink/Philips Lumec dimmable luminaire specification document for unapproved device installed by other.pdf>

Surge Protector: Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

Luminaire Options: (RCD), Receptacle with 5 pins enabling dimming, can be used with a twist-lock control device or photoelectric cell or a shorting cap. Use of photocell or shorting cap is required to ensure proper illumination.

Whistler Valley Trail at Cheakamus Lake Rd (62993)



Qty 10 Bracket RLAR-1A-R5@6-BE2TX

Description of Components:

Arm: (RLAR) Made of cast A356 aluminum, mechanically assembled to the pole.

Bracket Properties (Weight and EPA): 3 lbs (1.4 kg), .25 ft²


APPROVED

JASON FENTIMAN

OCT-25, 2018

Whistler Valley Trail at Cheakamus Lake Rd (62993)

APPROVED

JASON FENTIMAN

OCT. 25, 2018

Qty	10	Accessories	PH8
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Description of Components:

Accessories: (PH8), Photoelectric Cell, Twist-lock Type. UNV (120-277V)

Miscellaneous

Description of Components:

Wiring: The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2-14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Hardware: All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish: Color to be **textured dark blue (BE2TX)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 3000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

Pole Information: (R5@6), Bracket to be side mounted on a round pole from 5" min. to 6" (127mm min. to 152mm).

LED products manufacturing standard: The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Quality Control: The manufacturer must provide a written confirmation of its ISO 9001-2008 and ISO 14001-2004 International Quality Standards Certification.

Certification: The manufacturer will have to supply a copy of approval products certificate, CSA or UL.

Vibration Resistance: The GPLS meets the **ANSI C136.31**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested for 3G over 100 000 cycles).

The GPLS meets the **California Test 611, Testing durability of mast arm mounted luminaires**, specifications (a 2 000 000 cycles test).

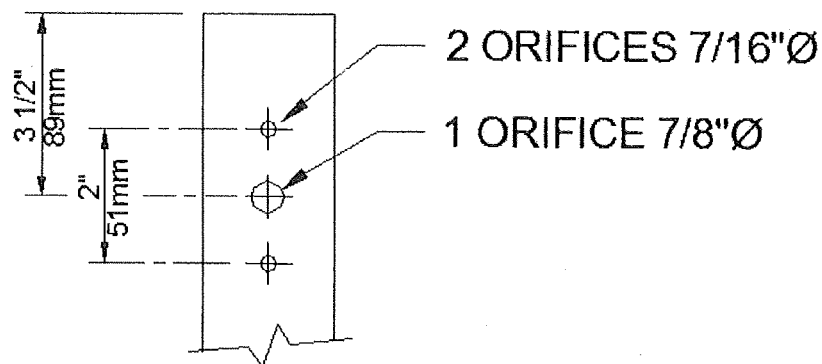
Web site information details: Click on any specific information details you need:

[Paint finish](#) / [Warranties](#) / [Installation pictures](#) / [ISO 9001-2008 Certification](#) / [ISO 14001-2004 Certification](#) / [cULus Certification](#)

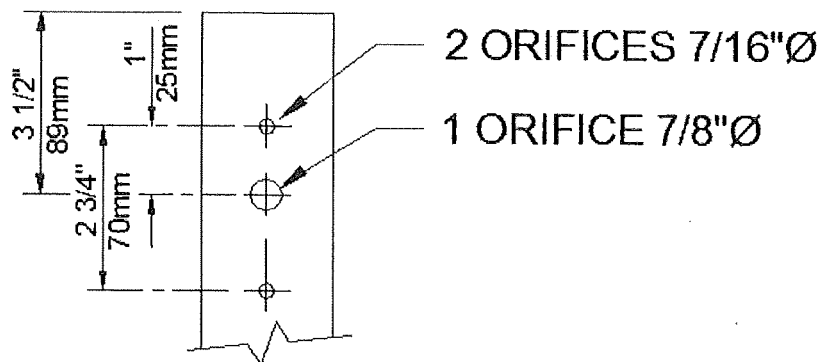
Whistler Valley Trail at Cheakamus Lake Rd (62993)

Coordination

This bracket can accept both coordinations.
Cette console est conçue pour accepter ces deux coordinations.



or



Whistler Valley Trail at Cheakamus Lake Rd (62993)

LED light engine technical information for GPLS											
CRI = 70, CCT = 4000K (3985K +/- 275K or 3710K to 4260K)											
System (LED + driver) rated life = 100,000 hrs ¹											
LED Module	Typical delivered lumens	Typical system wattage ² (W)	Typical current @ 120 V (A)	Typical current @ 208 V (A)	Typical current @ 240 V (A)	Typical current @ 277 V (A)	Typical current @ 347 V (A)	Typical current @ 480 V (A)	LED current (mA)	Luminaire Efficacy Rating (lm/W)	BUG rating
16L530NW-G2-R2M	3033	27	0.23	0.14	0.12	0.11	0.10	0.08	530	111	B1-U0-G1
16L530NW-G2-R2S	3339	27	0.23	0.14	0.12	0.11	0.10	0.08	530	123	B1-U0-G0
16L530NW-G2-R3M	3124	27	0.23	0.14	0.12	0.11	0.10	0.08	530	115	B1-U0-G1
16L530NW-G2-R3S	3089	27	0.23	0.14	0.12	0.11	0.10	0.08	530	113	B1-U0-G1
16L530NW-G2-R3W	3059	27	0.23	0.14	0.12	0.11	0.10	0.08	530	112	B1-U0-G1
16L530NW-G2-4	3165	27	0.23	0.14	0.12	0.11	0.10	0.08	530	116	B1-U0-G1
16L530NW-G2-5	3054	27	0.23	0.14	0.12	0.11	0.10	0.08	530	112	B2-U0-G1
16L700NW-G2-R2M	3816	38	0.32	0.19	0.17	0.15	0.12	0.10	700	100	B1-U0-G1
16L700NW-G2-R2S	4201	38	0.32	0.19	0.17	0.15	0.12	0.10	700	111	B1-U0-G1
16L700NW-G2-R3M	3930	38	0.32	0.19	0.17	0.15	0.12	0.10	700	103	B1-U0-G1
16L700NW-G2-R3S	3886	38	0.32	0.19	0.17	0.15	0.12	0.10	700	102	B1-U0-G1
16L700NW-G2-R3W	3849	38	0.32	0.19	0.17	0.15	0.12	0.10	700	101	B1-U0-G1
16L700NW-G2-4	3982	38	0.32	0.19	0.17	0.15	0.12	0.10	700	105	B1-U0-G1
16L700NW-G2-5	3843	38	0.32	0.19	0.17	0.15	0.12	0.10	700	101	B2-U0-G1
16L1050NW-G2-R2M	5227	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	95	B1-U0-G1
16L1050NW-G2-R2S	5754	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	104	B1-U0-G1
16L1050NW-G2-R3M	5383	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	98	B1-U0-G1
16L1050NW-G2-R3S	5323	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	97	B1-U0-G2
16L1050NW-G2-R3W	5272	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	96	B1-U0-G2
16L1050NW-G2-4	5454	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	99	B1-U0-G2
16L1050NW-G2-5	5264	55	0.46	0.27	0.23	0.20	0.17	0.13	1050	96	B3-U0-G1
32L530NW-G2-R2M	6046	53	0.45	0.27	0.24	0.22	0.17	0.14	530	114	B2-U0-G1
32L530NW-G2-R2S	6656	53	0.45	0.27	0.24	0.22	0.17	0.14	530	126	B2-U0-G1
32L530NW-G2-R3M	6227	53	0.45	0.27	0.24	0.22	0.17	0.14	530	118	B2-U0-G1
32L530NW-G2-R3S	6158	53	0.45	0.27	0.24	0.22	0.17	0.14	530	117	B1-U0-G2
32L530NW-G2-R3W	6099	53	0.45	0.27	0.24	0.22	0.17	0.14	530	115	B1-U0-G2
32L530NW-G2-4	6309	53	0.45	0.27	0.24	0.22	0.17	0.14	530	119	B1-U0-G2
32L530NW-G2-5	6089	53	0.45	0.27	0.24	0.22	0.17	0.14	530	115	B3-U0-G1
32L700NW-G2-R2M	7594	71	0.60	0.34	0.295	0.27	0.23	0.18	700	107	B2-U0-G2

¹ L70 = 100,000 hrs (at ambient temperature = 25°C)

² System wattage or total luminaire wattage includes the LED module and the LED driver.

Note that LED files with HS house side shield option are also available – contact the factory.

Note: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Philips.

Whistler Valley Trail at Cheakamus Lake Rd (62993)

LED light engine technical information for GPLS											
CRI = 70, CCT = 4000K (3985K +/- 275K or 3710K to 4260K)											
System (LED + driver) rated life = 100,000 hrs ¹											
LED Module	Typical delivered lumens	Typical system wattage ² (W)	Typical current @ 120 V (A)	Typical current @ 208 V (A)	Typical current @ 240 V (A)	Typical current @ 277 V (A)	Typical current @ 347 V (A)	Typical current @ 480 V (A)	LED current (mA)	Luminaire Efficacy Rating (lm/W)	806 rating
32L700NW-G2-R2M	7594	71	0.60	0.34	0.295	0.27	0.23	0.18	700	107	B2-U0-G2
32L700NW-G2-R2S	8360	71	0.60	0.34	0.295	0.27	0.23	0.18	700	118	B2-U0-G1
32L700NW-G2-R3M	7822	71	0.60	0.34	0.295	0.27	0.23	0.18	700	110	B2-U0-G2
32L700NW-G2-R3S	7735	71	0.60	0.34	0.30	0.27	0.23	0.18	700	109	B1-U0-G2
32L700NW-G2-R3W	7660	71	0.60	0.34	0.30	0.27	0.23	0.18	700	108	B1-U0-G2
32L700NW-G2-4	7925	71	0.60	0.34	0.30	0.27	0.23	0.18	700	111	B1-U0-G2
32L700NW-G2-5	7648	71	0.60	0.34	0.30	0.27	0.23	0.18	700	106	B3-U0-G2
32L1050NW-G2-R2M	10341	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	94	B2-U0-G2
32L1050NW-G2-R2S	11384	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	104	B2-U0-G2
32L1050NW-G2-R3M	10651	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	97	B2-U0-G2
32L1050NW-G2-R3S	10532	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	96	B1-U0-G2
32L1050NW-G2-R3W	10431	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	95	B2-U0-G2
32L1050NW-G2-4	10791	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	98	B2-U0-G2
32L1050NW-G2-5	10414	110	0.91	0.53	0.47	0.41	0.32	0.24	1050	95	B3-U0-G2
48L530NW-G2-R2M	9037	78	0.66	0.39	0.35	0.31	0.24	0.18	530	116	B2-U0-G2
48L530NW-G2-R2S	9949	78	0.66	0.39	0.35	0.31	0.24	0.18	530	127	B2-U0-G2
48L530NW-G2-R3M	9308	78	0.66	0.39	0.35	0.31	0.24	0.18	530	119	B2-U0-G2
48L530NW-G2-R3S	9204	78	0.66	0.39	0.35	0.31	0.24	0.18	530	118	B1-U0-G2
48L530NW-G2-R3W	9116	78	0.66	0.39	0.35	0.31	0.24	0.18	530	117	B2-U0-G2
48L530NW-G2-4	9431	78	0.66	0.39	0.35	0.31	0.24	0.18	530	121	B2-U0-G2
48L530NW-G2-5	9101	78	0.66	0.39	0.35	0.31	0.24	0.18	530	117	B3-U0-G2
48L700NW-G2-R2M	11327	107	0.89	0.52	0.46	0.39	0.32	0.24	700	106	B2-U0-G2
48L700NW-G2-R2S	12469	107	0.89	0.52	0.46	0.39	0.32	0.24	700	117	B3-U0-G2
48L700NW-G2-R3M	11666	107	0.89	0.52	0.46	0.39	0.32	0.24	700	110	B2-U0-G2
48L700NW-G2-R3S	11536	107	0.89	0.52	0.46	0.39	0.32	0.24	700	108	B2-U0-G2
48L700NW-G2-R3W	11426	107	0.89	0.52	0.46	0.39	0.32	0.24	700	107	B2-U0-G2
48L700NW-G2-4	11820	107	0.89	0.52	0.46	0.39	0.32	0.24	700	111	B2-U0-G2
48L700NW-G2-5	11407	107	0.89	0.52	0.46	0.39	0.32	0.24	700	107	B4-U0-G2
48L1050NW-G2-R2M	15312	161	1.33	0.76	0.67	0.58	0.47	0.34	1050	95	B3-U0-G3
48L1050NW-G2-R2S	16856	161	1.33	0.76	0.67	0.58	0.47	0.34	1050	105	B3-U0-G2
48L1050NW-G2-R3M	15770	161	1.33	0.76	0.67	0.58	0.47	0.34	1050	98	B3-U0-G2
48L1050NW-G2-R3S	15595	159	1.33	0.76	0.67	0.58	0.47	0.34	1050	98	B2-U0-G3
48L1050NW-G2-R3W	15445	162	1.33	0.76	0.67	0.58	0.47	0.34	1050	95	B2-U0-G3
48L1050NW-G2-4	15979	162	1.33	0.76	0.67	0.58	0.47	0.34	1050	99	B2-U0-G3
48L1050NW-G2-5	15420	161	1.33	0.76	0.67	0.58	0.47	0.34	1050	96	B4-U0-G2

1 L70 = 100,000 hrs (at ambient temperature = 25°C).

2 System wattage or total luminaire wattage includes the LED module and the LED driver.

Note that IES files with HS house side shield option are also available – contact the factory.

Note: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Philips.



[REDACTED]

4.30m wide x 9.60m Lg. - CL 625
CONCRETE SLAB BRIDGE

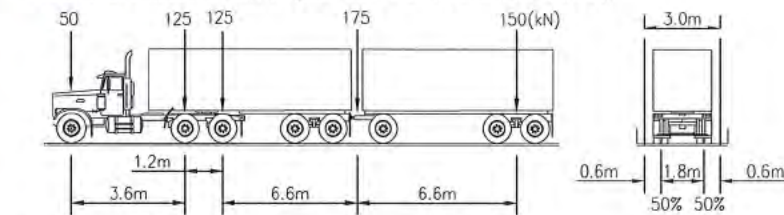
DRAWING LIST		
DRAWING NUMBER	DESCRIPTION	REVISION
1601-085-00-01	SPECIFICATIONS	1
1601-085-00-02	BRIDGE ASSEMBLY	2
1601-085-00-03	PRECAST CONCRETE SLAB EXTERIOR 9.6m CL 625 MK-A	2
1601-085-00-04	PRECAST CONCRETE SLAB INTERIOR 9.6m CL 625 MK-B	1
1601-085-00-05	PRECAST CONCRETE CAP AND BALLAST WALL 895 DEEP	1
1601-085-00-06	PRECAST CONCRETE S1 FOOTING 1800x1800	1

DESIGN LOADS:

1. DEAD LOAD - UNIT WEIGHTS AND MATERIALS ARE AS FOLLOWS:
- | | |
|--|-----------------------|
| CONCRETE (INCLUDING REINFORCING STEEL) | = 24kN/m ³ |
| STRUCTURAL STEEL | = 77kN/m ³ |
| SOIL | = 22kN/m ³ |
| TIMBER | = 6kN/m ³ |

2. LIVE LOAD:

LOADING DIAGRAM CL-625 ON HIGHWAY G.V.W. = 63 500kg;
DESIGN IN ACCORDANCE WITH CAN/CSA-S6-14 WITH LOADING AS FOLLOWS:



3. CONSTRUCTION LIVE LOAD:
CONSTRUCTION LIVE LOAD NOT TO EXCEED 36500kg UNTIL SLABS ARE CONNECTED.

4. THERMAL ACTION:
MAXIMUM DAILY MEAN TEMPERATURE IS 40°C.
MINIMUM DAILY MEAN TEMPERATURE IS -40°C.

NOTE: ALL DIMENSIONS ON DRAWINGS TAKEN @ 15°C. IF TEMPERATURE DIFFERS AT TIME OF INSTALLATION OF BEARING, COMPENSATION WILL BE REQUIRED BY SITE ENGINEER.

DESIGN SPECIFICATIONS:

1. DESIGN IN ACCORDANCE WITH CAN/CSA-S6-14.
2. FATIGUE CATEGORY: 1,000,000 CYCLES AS PER CAN/CSA-S6-14 (DYNAMIC LOAD ALLOWANCE INCLUDED), ALL MATERIAL SHALL BE NEW.
3. STRUCTURE HAS BEEN DESIGNED FOR FUTURE 50mm ASPHALT OVERLAY.

HANDLING SPECIFICATIONS:

1. THE BRIDGE WILL BE HANDLED, DURING TRANSPORTATION AND ERECTION, IN SUCH A MANNER AS TO NOT CAUSE HARM TO THE BRIDGE OR TO THE COMPONENTS OF THE BRIDGE.

BRIDGE IDENTIFICATION:

1. THE BRIDGE SHALL HAVE LOAD RATING, DATE OF MANUFACTURE, STRUCTURE NUMBER, MANUFACTURER'S NAME CLEARLY STAMPED OR PERMANENTLY MARKED ON ONE SIDE OF THE STRUCTURE. THE HEIGHT OF LETTERING USED SHALL BE MINIMUM 50mm UNLESS NOTED OTHERWISE.

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ROAD DESIGN BY OTHERS.
3. ALL MATERIALS SHALL BE NEW.
4. FOR INSTALLATION BY OTHERS. HMR ENGINEERING ACCEPTS NO RESPONSIBILITY FOR WORK BY OTHERS.

GROUT:

1. GROUT TO BE TARGET TRAFFIC PATCH. GROUT SHALL BE MIXED AND PLACED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SHALL ACHIEVE A MINIMUM COMPRESSIVE STRENGTH OF 35MPa @ 28 DAY.

TRANSPORTATION AND ERECTION:

1. THE BRIDGE WILL BE HANDLED DURING TRANSPORTATION AND ERECTION, IN SUCH A MANNER AS TO NOT CAUSE HARM TO THE BRIDGE OR TO THE COMPONENTS OF THE BRIDGE.
2. GIRDERS MUST BE SUPPORTED WITHIN 1m OF BEARING LOCATIONS DURING TRANSPORTATION AND STORAGE.
3. ONLY LOW IMPACT LIFTS ARE PERMITTED, ANGLE OF LIFT MUST NOT EXCEED 30° FROM THE VERTICAL.
4. GIRDER IS DESIGNED FOR CANTILEVERED LAUNCH. GIRDER MUST NOT CANTILEVER MORE THAN HALF ITS LENGTH DURING LAUNCHING.

CONCRETE:

1. ALL PRECAST CONCRETE SHALL BE DESIGNED, MIXED, TRANSPORTED, CAST AND CURED ACCORDING TO CSA A23.4-16 "PRECAST CONCRETE - MATERIALS AND CONSTRUCTION".
2. CONCRETE SHALL HAVE THE FOLLOWING SPECIFICATIONS:
- EXPOSURE CLASS C-1
 - 35MPa STRENGTH AT 28 DAYS
 - MAX. AGGREGATE SIZE 20mmØ
 - MIN. ENTRAINED AIR 5% TO 8%
 - MAX. W/C RATIO BY MASS 0.40
 - DECK SURFACE FINISH, ROUGH TRANSVERSE BROOM
3. MINIMUM REINFORCING COVER REQUIREMENTS UNLESS NOTED OTHERWISE:
- TOP = 50mm
 - BOTTOM = 30mm
 - SIDE = 50mm
4. PRECAST COMPONENTS TO BE MADE IN CSA APPROVED SHOP.
5. ALL EXPOSED CORNERS SHALL HAVE A 20mm CHAMFER OF FILLET UNLESS NOTED OTHERWISE.
6. ALL REINFORCING STEEL TO BE DEFORMED BARS CONFORMING TO CSA G30.18-M, GRADE 400. ALL BARS TO BE CONTINUOUS LENGTH.
7. CONCRETE TEST CERTIFICATES TO BE FORWARDED TO THE ENGINEER.
8. ALL LIFTING RECESSES TO BE GROUTED AFTER COMPONENT INSTALLATION.

FOOTINGS:

1. FOOTINGS HAVE BEEN DESIGNED FOR 200kPa MAXIMUM ALLOWABLE BEARING PRESSURE. A MINIMUM THICKNESS OF 300MM OF GRANULAR MATERIAL SHALL BE COMPACTED TO 98% STANDARD PROCTOR DENSITY. BELOW EACH FOOTING, UNDER THE DIRECT SUPERVISION OF THE ENGINEER.

BRIDGE RAIL NOTES:

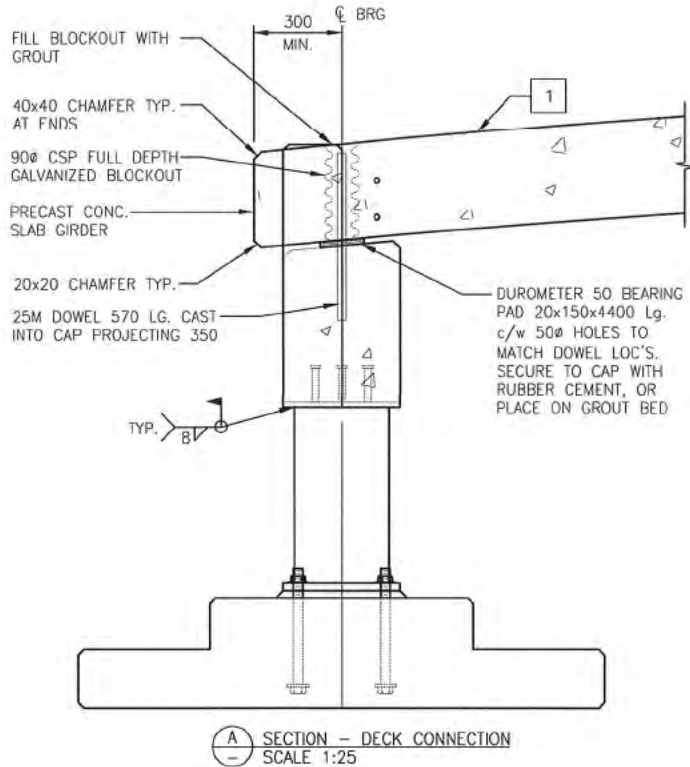
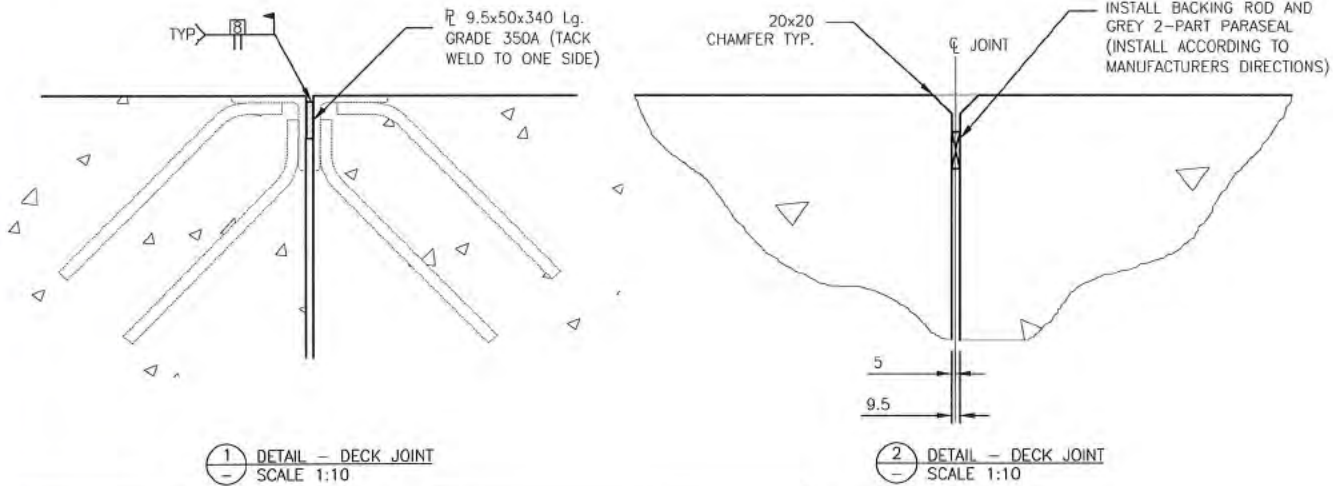
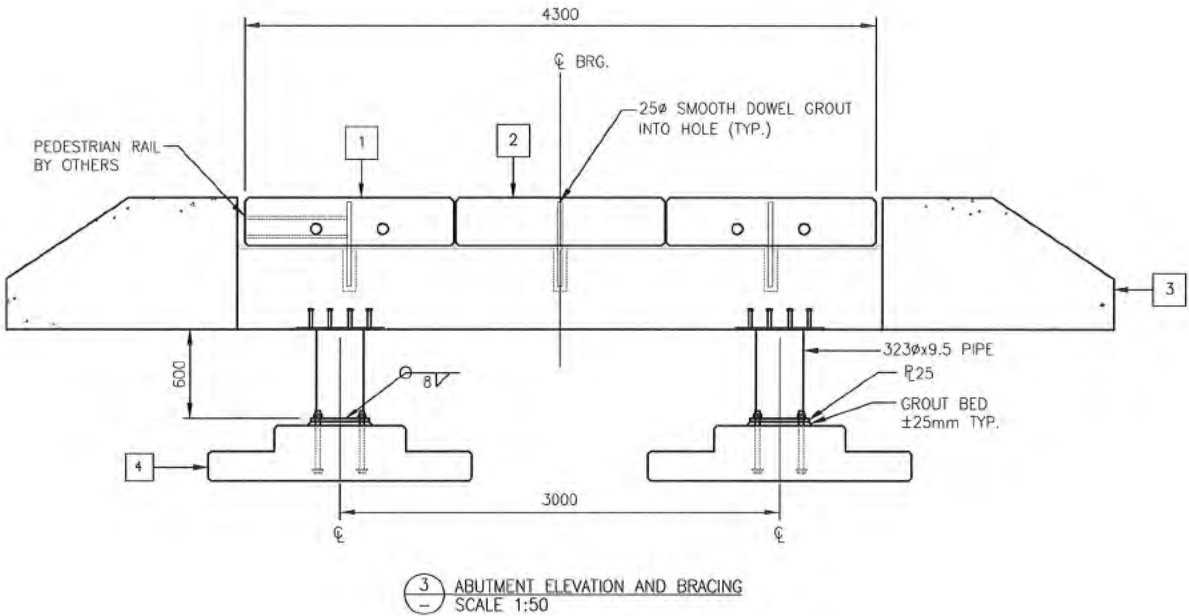
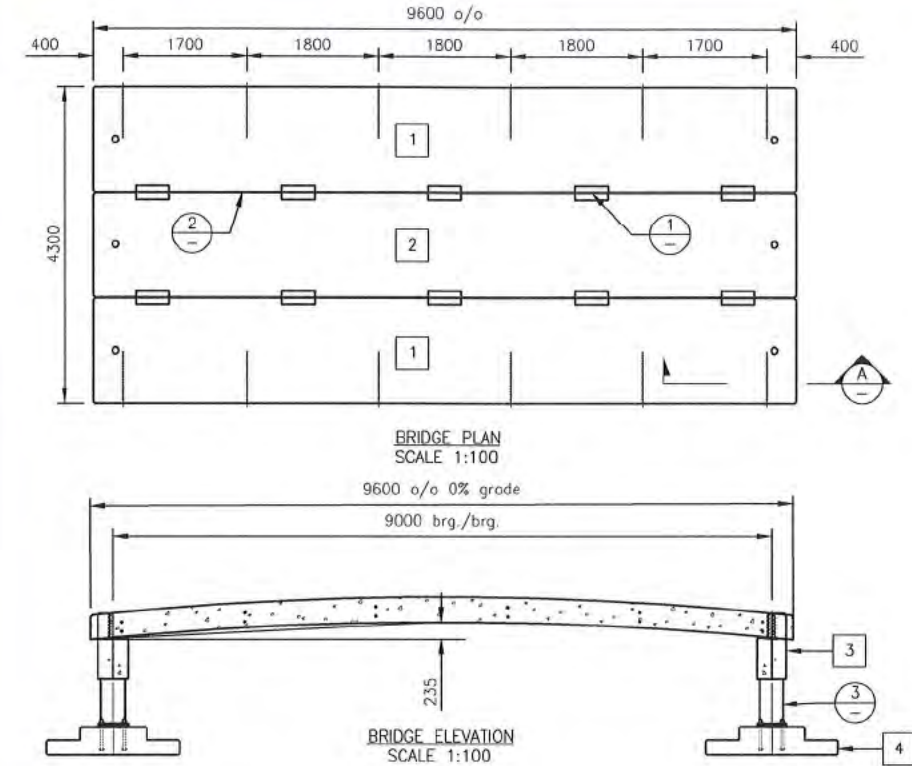
1. GUARDRAILS HAVE BEEN DESIGNED BY OTHERS

SCHEDULE 2



PROJECT:			
4.30m wide x 9.60m Lg. - CL 625 CONCRETE SLAB BRIDGE			
TITLE:			
SPECIFICATIONS			
PROJECT NO.:	1601-085-00	DRWN BY:	TJB
DRAWING SIZE:	ANSI "B"	DSND BY:	RI
SCALE:	AS NOTED	APPD BY:	WBM
OWG. NO.:	1601-085-00-01	REV:	1

1	19/05/02	ISSUED FOR CONSTRUCTION	TJB	WBM
0	19/04/30	ISSUED FOR REVIEW	TJB	WBM
REV	YY/MM/DD	DESCRIPTION	DR	APP



MATERIAL LIST			
ITEM	PAGE #	QUANTITY	DESCRIPTION
1	3	2	PRECAST CONCRETE SLAB EXTERIOR 9.6m CL 625 MK-A
2	4	1	PRECAST CONCRETE SLAB INTERIOR 9.6m CL 625 MK-B
3	5	2	PRECAST CONCRETE CAP AND BALLAST WALL 895 DEEP
4	6	4	PRECAST CONCRETE S1 FOOTING 1800x1800

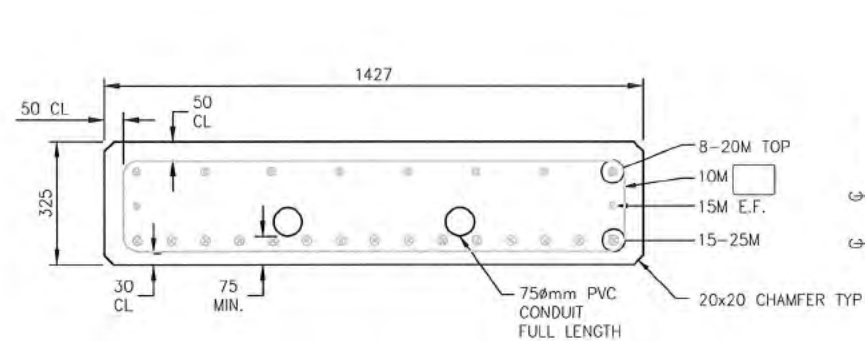
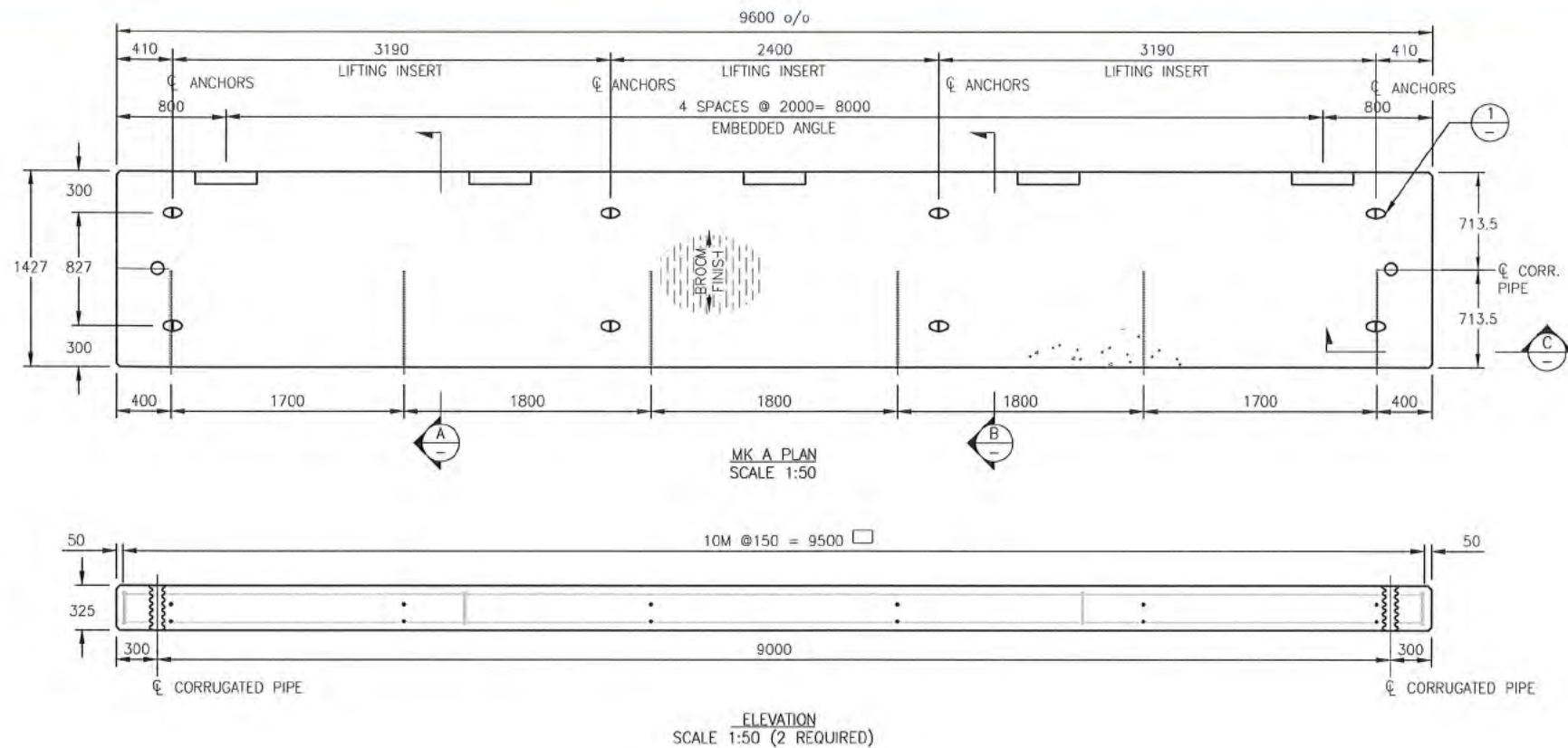


PROJECT:
 4.30m wide x 9.60m Lg. - CL 625
 CONCRETE SLAB BRIDGE

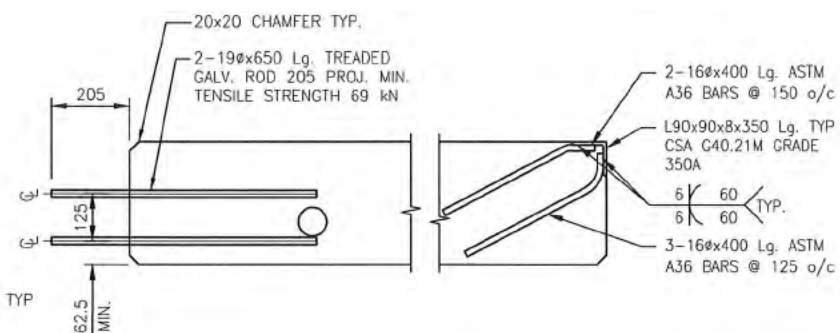
TITLE:
 BRIDGE ASSEMBLY

PROJECT NO.:	1601-085-00	DRWN BY:	TJB	DATE:	19/04/29
DRAWING SIZE:	ANSI "B"	DSND BY:	RI	DATE:	19/04/29
SCALE:	AS NOTED	APPD BY:	WBM	DATE:	19/05/06
OWC. NO.:	1601-085-00-02	REV:	2		

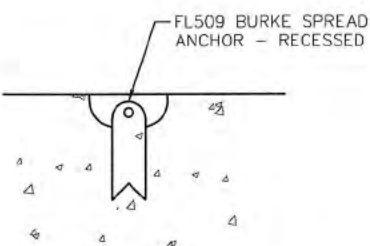
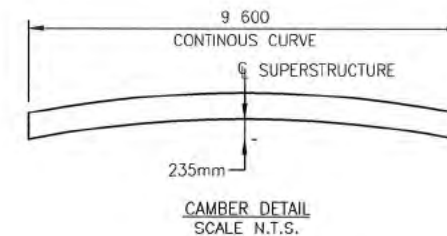
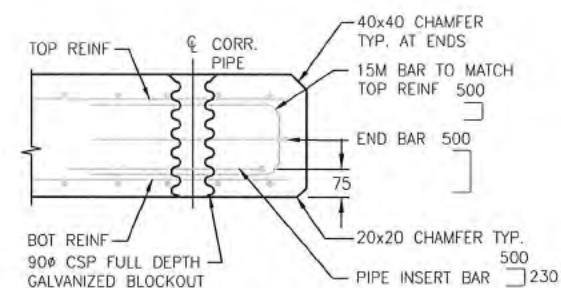
REV	YY/MM/DD	DESCRIPTION	DR	APP
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1	19/05/02	ISSUED FOR CONSTRUCTION	TJB	WBM
0	19/04/30	ISSUED FOR REVIEW	TJB	WBM



SEE ELEVATION FOR TIE SPACING



NOTE REBAR NOT SHOWN FOR CLARITY
POST SUPPORT ANCHOR CL 625 EMBEDDED ANGLE



SCHEDULE 2



NOTE:

1. ESTIMATED MASS = 10,895Kg.

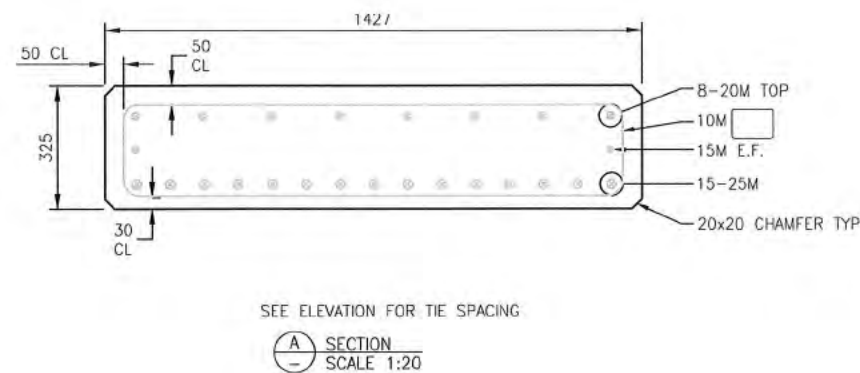
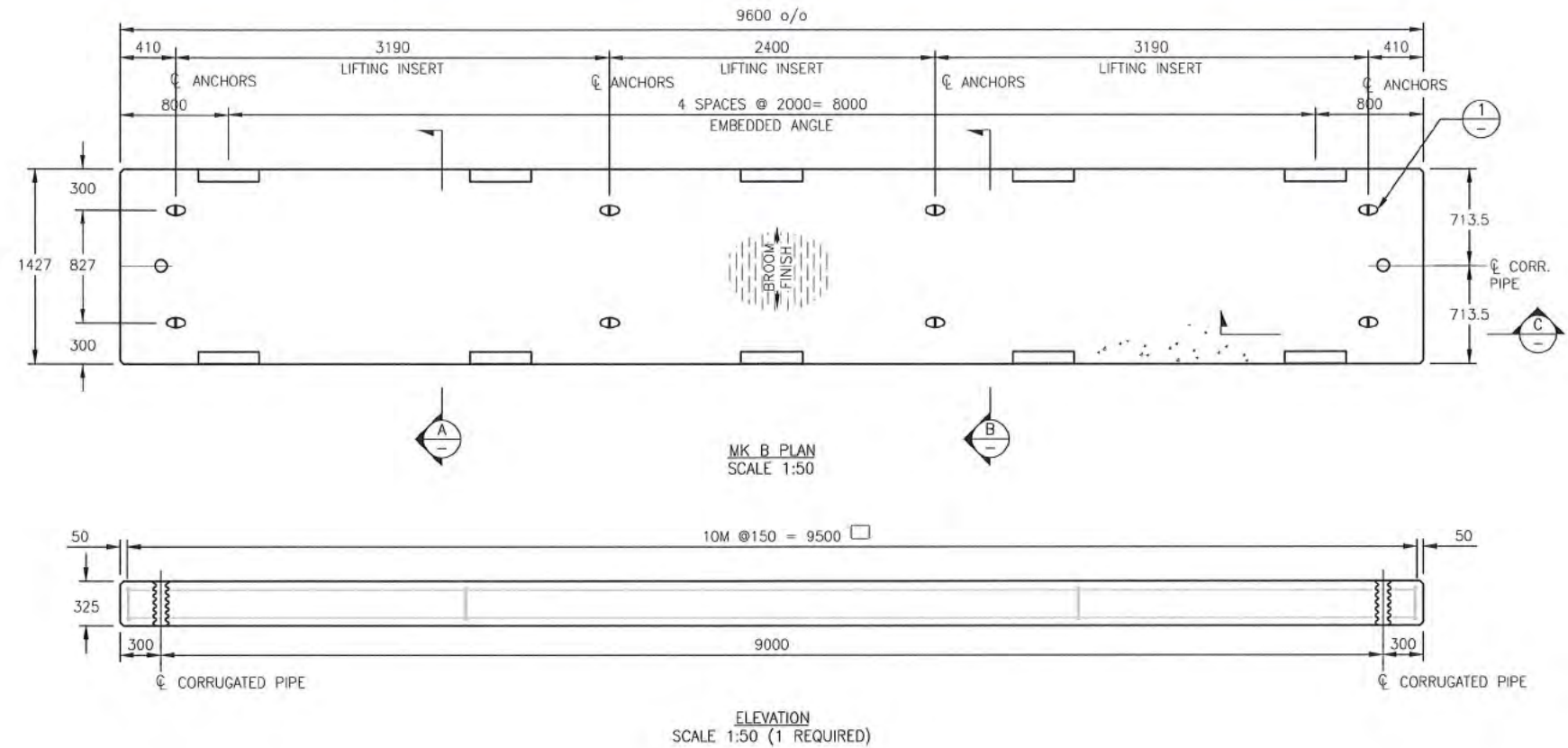


PROJECT: [REDACTED]
4.30m wide x 9.60m Lg. - CL 625
CONCRETE SLAB BRIDGE

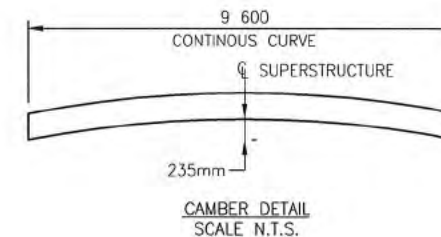
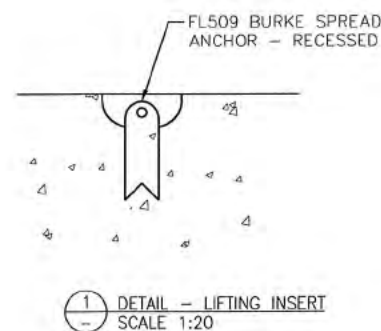
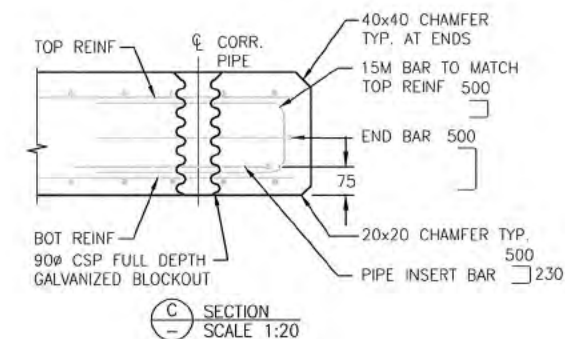
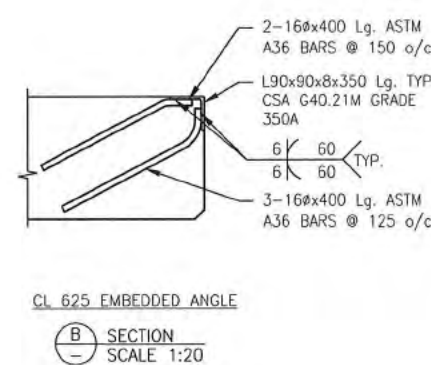
TITLE: PRECAST CONCRETE SLAB
EXTERIOR 9.6m CL 625
MK-A

PROJECT NO.:	1601-085-00	DRWN BY:	TJB	DATE:	19/04/29
DRAWING SIZE:	ANSI "B"	DSND BY:	RI	DATE:	19/04/29
SCALE:	AS NOTED	APPD BY:	WBM	DATE:	19/05/06
DWG. NO.:	1601-085-00-03	REV:	2		

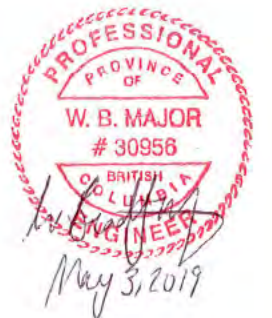
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1	19/05/02	ISSUED FOR CONSTRUCTION	TJB	WBM
0	19/04/30	ISSUED FOR REVIEW	TJB	WBM
REV	YY/MM/DD	DESCRIPTION	DR	APP



SEE ELEVATION FOR TIE SPACING



NOTE:
1. ESTIMATED MASS = 10,895Kg.

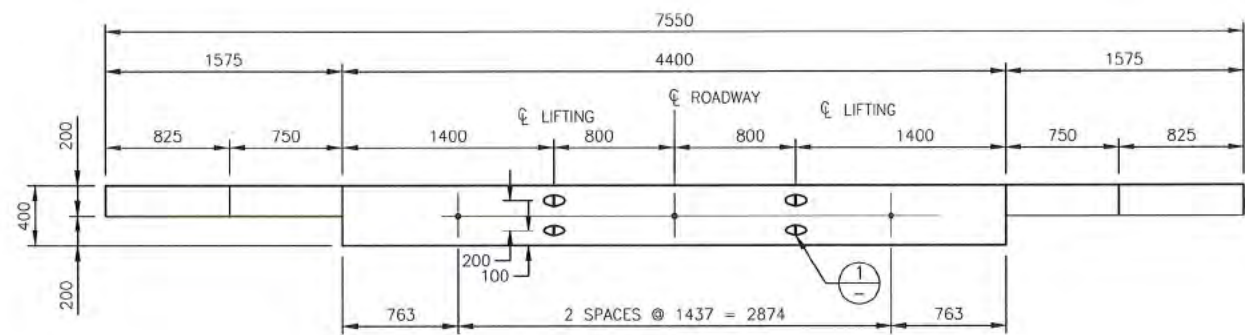


PROJECT:
4.30m wide x 9.60m Lg. - CL 625
CONCRETE SLAB BRIDGE

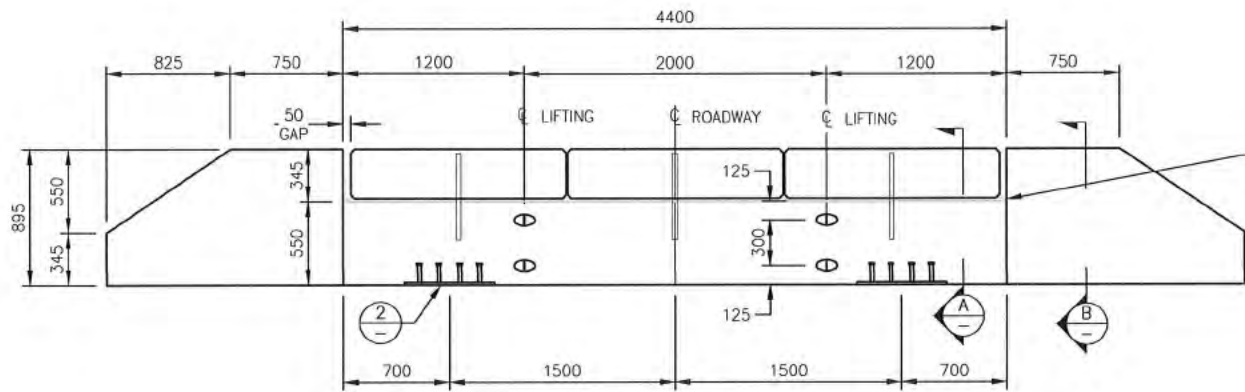
TITLE:
PRECAST CONCRETE SLAB
INTERIOR 9.6m CL 625
MK-B

PROJECT NO.:	1601-085-00	DRWN BY:	TJB	DATE:	19/04/29
DRAWING SIZE:	ANSI "B"	DSND BY:	RI	DATE:	19/04/29
SCALE:	AS NOTED	APPD BY:	WBM	DATE:	19/05/02
DWG. NO.:	1601-085-00-04	REV:	1		

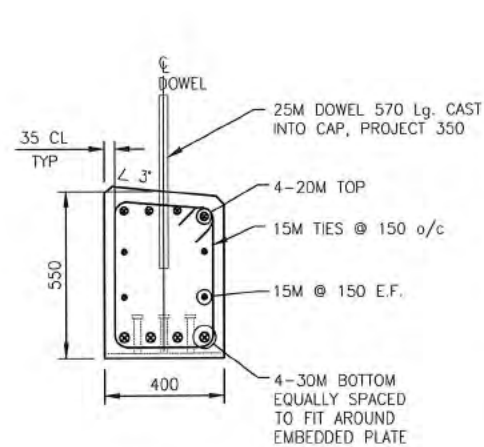
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0	19/04/30	ISSUED FOR REVIEW	TJB	WBM



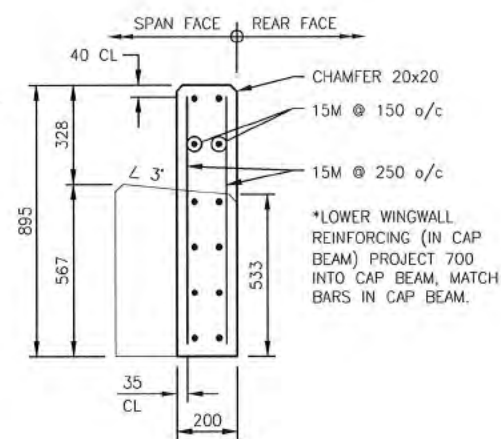
BALLAST WALL PLAN
SCALE 1:50



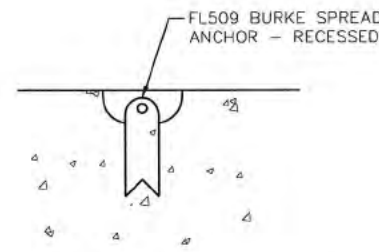
BALLAST WALL ELEVATION
SCALE 1:50 (2 REQUIRED)



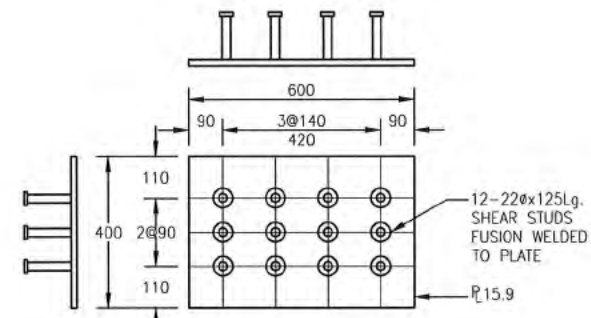
A SECTION
SCALE 1:25



B SECTION
SCALE 1:25



1 DETAIL - LIFTING INSERT
SCALE 1:20



2 DETAIL
SCALE 1:20



NOTE:
1. ESTIMATED MASS = 3527Kg.

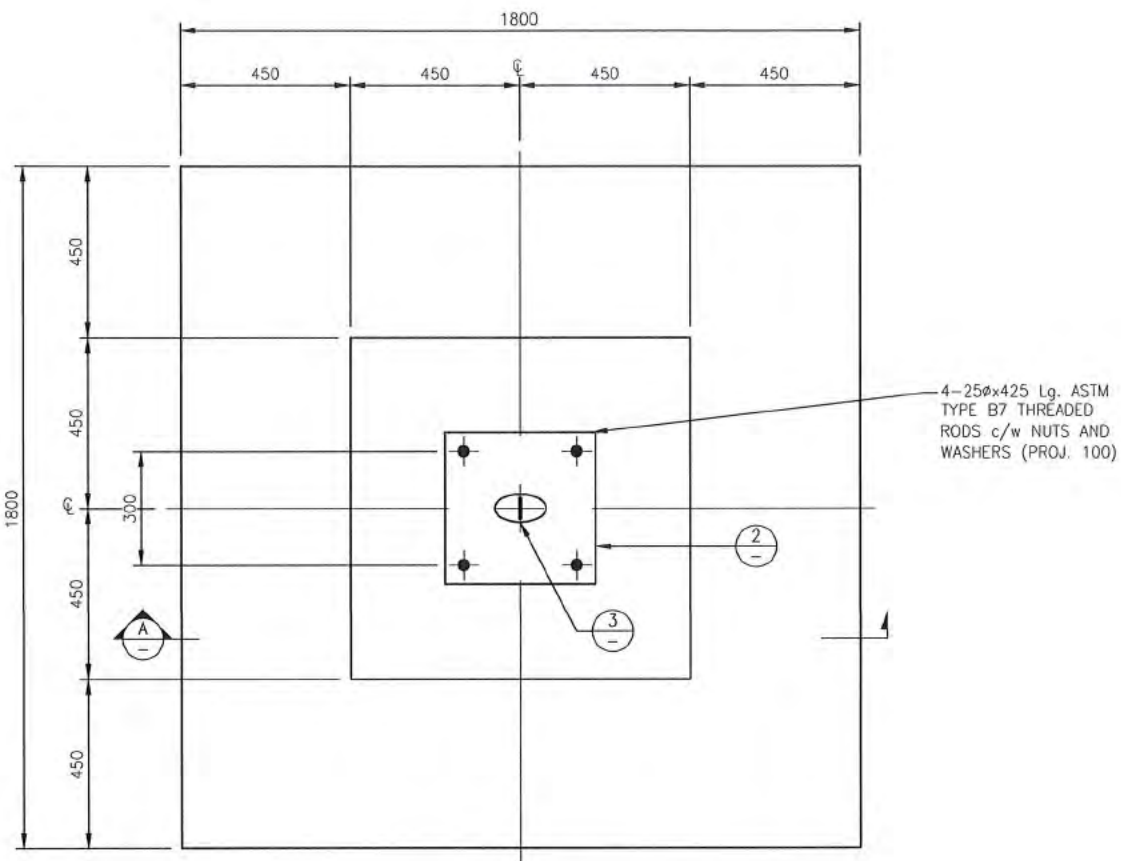


PROJECT:
4.30m wide x 9.60m Lg. - CL 625
CONCRETE SLAB BRIDGE

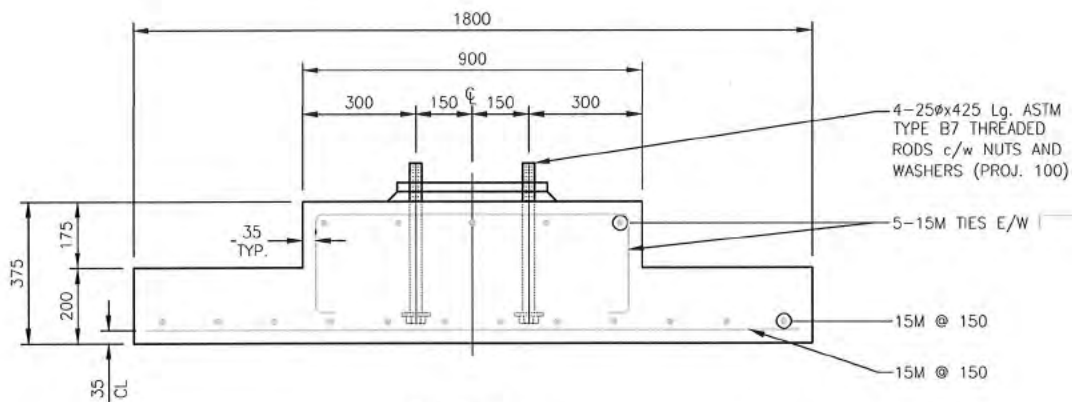
TITLE:
PRECAST CONCRETE
CAP AND BALLAST WALL
895 DEEP

PROJECT NO.:	1601-085-00	DRWN BY:	TJB	DATE:	19/04/29
DRAWING SIZE:	ANSI "B"	DSND BY:	R	DATE:	19/04/29
SCALE:	AS NOTED	APPO BY:	WBM	DATE:	19/05/02
DWG. NO.:	1601-085-00-05	REV:	1		

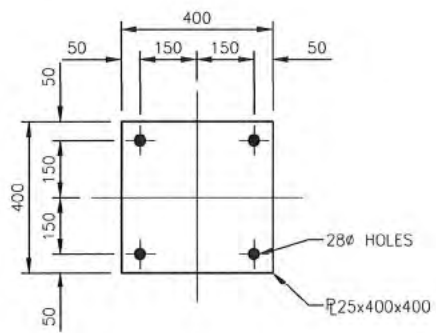
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REV	YY/MM/DD	DESCRIPTION	DR	APP



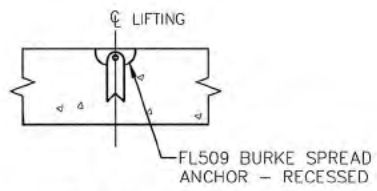
S1 FOOTING PLAN
SCALE 1:20 (4 REQUIRED)



SECTION
SCALE 1:20



2 DETAIL - BASE PLATE
SCALE 1:20



3 DETAIL
SCALE 1:20

SCHEDULE 2



NOTE:
1. ESTIMATED MASS = 1960Kg.



PROJECT:
4.30m wide x 9.60m Lg. - CL 625
CONCRETE SLAB BRIDGE

TITLE:
PRECAST CONCRETE
S1 FOOTING
1800x1800

1	19/05/02	ISSUED FOR CONSTRUCTION	TJB	WBM
0	19/04/30	ISSUED FOR REVIEW	TJB	WBM
REV	YY/MM/DD	DESCRIPTION	DR	APP

PROJECT NO.:	1601-085-00	DRWN BY:	TJB	DATE:	19/04/29
DRAWING SIZE:	ANSI "B"	DSND BY:	RI	DATE:	19/04/29
SCALE:	AS NOTED	APPD BY:	WBM	DATE:	19/05/02
DWG. NO.:	1601-085-00-06	REV:	1		