OIR: 2223/462

22 February 2023

[redacted]

[redacted]

Request for Information under the Local Government and Official Information and Meetings Act 1987 (the Act) (the LGOIMA)

Thank you for your email of 1 February 2023 requesting the following information, our responses are below your questions:

1. ***Please include all internal correspondence including the domains in resolving this OIA Request.***
2. ***Can you please provide me with detailed data sheets and testing schedules for each type of Street Light. (There appear to be 3 different types in our area).***

These details need to include but not limited to the following:

a) Potential frequencies emitted
b) Potential levels of these emitted frequencies

Attached is Kapiti Coast District Council (Council) Street light Standards which detail approved luminaire and poles. Please refer to the following page on our website which provide various links to information about streetlights Search - Kāpiti Coast District Council (kapiticoast.govt.nz)

Each road has an acceptable level and is in accordance with national standard AS/NZS 1158 Lighting for roads and public spaces. Vehicle and Pedestrian Categories vary depending on the location of the light. Therefore, without further detail, we cannot answer question a) and b). On that basis I must decline this part of your request as the documents alleged to contain the information requested do not exist, despite reasonable efforts to locate them, they cannot be found, section 17(e) of the LGOIMA refers.

c) Are these frequencies emitted only when the lights are operational

The streetlight network is timer-based set to turn on and off at set times.

d) The method used to identify if/or when these levels may be exceeded

The district was upgraded to LED within the last 5 years. All luminaires are in line with manufacture standards, Council and National standards.

Council manages a Streetlight Contract for the maintenance and renewal of the Streetlight Network which includes inspection frequencies from suitably qualified personnel.

e) Under who's responsibility is the monitoring carried out

Council is the responsible.

f) Is there a method I can use to check the street lights myself

You are free to conduct your own assessment without conducting any work on Road Reserve without permission. If you require access refer to Council website for further information for completing a Corridor Access Request. Alternatively, a service request via the Council call centre (04 296 4700 or 0800 486 486) is the recommended approach to seek assistance from a member of the Transport team.

You have the right to request the Ombudsman to review this decision. Complaints can be sent by email to info@ombudsman.parliament.nz, by fax to (04) 471 2254, or by post to The Ombudsman, PO Box 10152, Wellington 6143.

Ngā mihi

Sean Mallon
Group Manager Infrastructure Services
Te Kaihautū Ratonga Pakiaka

Kāpiti Coast
DISTRICT COUNCIL
Me Huri Whakamuri, Ka Titiro Whakamua

Standard Details and Specifications for Road Lighting Infrastructure

Version 1.1- 31.03.2019

CONTENTS

1 INTRODUCTION

This standard serves as a basis of compliance for lighting projects carried out by the Kāpiti Coast District Council *('the Council')* as part of its works programmes, as well as the subdivision and development of land where these activities are subject to the Resource Management Act. The intended audience for this document are any parties that are commissioning or carrying out road lighting installations or related works within the road network that is or will be maintained by the Council.

It supplements the NZTA document "M30 - Specification and Guidelines for Road Lighting Design ", which is the primary standard for road lighting in the Kāpiti Coast District, by specifying further local requirements and refinements. If not specified otherwise herein, the details of the M30 standard including all processes described and references to other documents within apply.

It is recommended that the user of this document first familiarise themselves with the M30 standard. See:http://www.nzta.govt.nz/consultation/specification-and-guidelines-for-road-lighting-design/docs/m30-road-lighting-design.pdf

Infrastructure to be installed as part of a subdivisions are controlled by the Subdivision and Development Principles and Requirements [(SDPR) KCDC's Code of Practice]. Street lighting requirements are set out under Part 3 D and Schedule 3 of the SDPR and generally require that the lighting is in accordance with AS/NZS 1158. This document supplements the SDPR in order to help standardise the products used and their installation.

The Council is presently modernising its entire road lighting asset to be consistent with M30 standard as part of a luminaire upgrade and replacement programme. LED technology is being used to reduce energy use, improve lighting quality and control and reduce the maintenance requirements.

2 DEFINITIONS AND ABBREVIATIONS

Refer to AS/NZS1158.0 for further information.

CCT	Colour-corrected temperature (unit - Kelvin [K])
Column	A dedicated support for a road lighting luminaire. Usually owned by the Council.
Pole	A utility pole suitable for attaching an outreach arm and road lighting luminaire.
Council	Kāpiti Council District Council
Electricity Network Operator	The owner of the electricity network (lines, poles, cables etc.) in KCDC area is Electra Ltd
LED	Light Emitting Diode
LV	Low voltage
P-category	'Pedestrian' category roads
V-category	'Vehicle' category roads

3 REQUIREMENTS IN ADDITION TO M30

3.1 APPROVED LUMINAIRES

The Council has approved a subset of luminaires from the list of those accepted by NZTA for P and V category road lighting. Only these luminaires can be used on the Council's road network. They are detailed in Appendix I. These luminaires have been selected based on consistency with those supplied as part of Council's streetlight maintenance contract, and to increase standardisation of the streetlight stock in the district for ease of management. In addition to the M30 list, the Council specifies the accepted luminaire for pedestrian crossings in Appendix I.

Some of the approved M30 luminaires also have variants that emit light at warmer colour-corrected temperatures (CCT) than the ones in the M30 list. These variant luminaire models are approved by Council provided their CCT falls within the range 3,000 to 4,000K. There are also variants in terms of electrical power/light output intensity and light distribution ('optics').

Important note: warmer CCTs are given as lower temperature figures – i.e. a 3,000K CCT light source is 'warmer' (that is, it appears more yellow and less white-blue) than a 4,000K CCT light source

3.2 LUMINAIRE SELECTION

The power (wattage) and optic of a luminaire should be selected based on design considerations related to the achieving AS/NZS 1158 standard for road lighting, which in turn depends on other factors such as road width. For any new installation, developers must out a lighting design to ensure the AS/NZS 1158 standard is being met. Where work is being carried out on an existing area of road lighting (for example to replace luminaires, columns or outreaches as part of maintenance), the minimum acceptable standard is that the current lighting service level should be maintained.

3.3 LIGHTING CONTROLLERS AND CENTRAL MANAGEMENT SYSTEMS

The Council has not yet selected a lighting controller or central management system for its luminaires, but may wish to install these in the future. To ensure ease of implementation of this in the future, all luminaires installed on the Council's road network are required to have a 7-contact point NEMA ANSI C136.41 receptacle, as described in section 16.3a) of the M30 standard.

3.4 APPROVED COLUMNS AND OUTREACH ARMS

All columns and outreach arms to be designed to have an expected design life of 40 years, designed to meet loads imposed by AS/NZS 1170 and to have corrosion protection to AS/NZS 4680.

A producer statement is required for the manufacture of all columns and outreach arms.

When the electricity network operator (Electra) allows outreach arms to be attached to their distribution poles. The preferred outreach arm types are:

- 3.0m vertical extension and 2m outreach at 15° above horizontal bolted to pole via approved outreach arm plate, spacer and 2 x M16 bolts, washers and nuts. Spigot to be 150mm long and 42mm OD angled at 5° above horizontal.
- 3.0m vertical extension and 3m outreach at 15° above horizontal bolted to pole via approved outreach arm plate, spacer and 2 x M16 bolts, washers and nuts. Spigot to be 150mm long and 42mm OD angled at 5° above horizontal.
- 3.4m vertical extension and 4m outreach at 15° above horizontal bolted to pole via approved outreach arm plate, spacer and 2 x M16 bolts, washers and nuts. Spigot to be 150mm long and 42mm OD angled at 5° above horizontal.

- 4.4m angled outreach attached to pole and LV cross arm bolted to pole via approved outreach arm plate, spacer and 1 x M16 bolt, washer and nut plus "J" bolt attached to cross arm. Spigot to be 150mm long and 42mm OD angled at 5° above horizontal.

The electrical connection to the overhead conductor (demarcation point) must be to Electra's standard.

All columns and outreaches will have a galvanised finish. Painted or powder-coated finishes are not permitted.

All column bases will be treated with the Oclyte Tuff Coat© protective treatment system, or equivalent.

All columns will be 7.3m in height for P category roads, and 10.0m in height for V category roads.

All column bases must be located with a minimum set back of 1m from the vehicle carriageway.

Standard drawings for all permitted columns and outreaches are in Appendix 2[1]. Note that atop columns, only curved outreaches are permitted.

[1] Note that the design and specification of any attachments to poles (e.g. outreaches) must be approved by both the responsible person at Council (normally the contract manager for streetlight maintenance) and the electricity network operator.

3.5 SELECTION OF LIGHTING CATEGORIES

Category	Road Name	Section start	Section end
V2	KAPITI RD	SH1	FRIENDSHIP PLACE
V3	ARAWHATA RD	N/A	
	GUILDFORD DR	N/A	
	HINEMOA ST	RUAPEHU ST	KAPITI RD
	IHAKARA ST	SH1	RIMU RD
	KAPITI RD	OCEAN RD	MANLY ST ROUNDABOUT
	MANLY ST ROUNDABOUT	N/A	
	MARINE PARADE (PARAPARAUMU)	KAPITI RD	OCEAN RD
	NGAIO RD (WAIKANAE)	SH1	OMAHI ST
	RAUMATI RD	N/A	
	RIMU RD (RAUMATI)	N/A	
	TE MOANA RD	SH1	RAUPARAHA ST
	TE ROTO DR (EAST)	N/A	
	TE ROTO DR (WEST)	N/A	
V4	AOTAKI ST	N/A	
	AOTAKI ST (NORTH)	N/A	
	BEACH RD	N/A	
	ELIZABETH ST	SH1	WINARA AVE
	GOLF RD	N/A	
	HINEMOA ST	KAPITI RD	TARARUA ST
	IHAKARA ST	RIMU RD	END
	KAPITI RD	FRIENDSHIP PLACE	OCEAN RD
	MACLEAN ST	N/A	
	MAIN ST	N/A	
	MANLY ST	MANLY ST ROUNDABOUT	NGAPOTIKI ST
	MARAE LANE	N/A	
	MARINE PARADE (PARAPARAUMU)	OCEAN RD	WHAREMAUKU RD
	MARTIN RD (PARAPARAUMU)	FRANCIS RD	GRAY AVE
	MATAI RD (RAUMATI)	N/A	
	MATATUA RD	N/A	
	MAZENGARB RD	N/A	
	MILL RD	N/A	
	NGARARA RD	TE MOANA RD	BELVEDERE AVE
	PARATA ST	NGAIO RD	KAPANUI RD
	POPLAR AVE	N/A	
	RATANUI RD	N/A	
	RIVERBANK RD	SH1	AOTAKI ST
	ROSETTA RD	N/A	
	RUAPEHU ST	HINEMOA ST	RUAHINE ST
	SEAVIEW RD	HOWELL RD	MIDDLETON RD
	TASMAN RD	N/A	
	TE MOANA RD	RAUPARAHA ST	WAIMEA RD

Roads marked 'N/A' are the same category along their entire length.

If a road or section of road is not listed it is P-category. In rural areas, road lighting is generally not provided except for 'flag' lighting at intersections.

For new roads, the road lighting category should be selected in accordance with AS/NZS 1158 and in consultation with Council.

4 APPENDIX I – APPROVED LUMINAIRES

P-category

Manufacturer	Model and approved optics	Max system wattage	Approved CCT variants
Betacom	GL520P (Premium driver with 5032, 7012, 7022, 7032 & 7052 optics only)	Only 17W & 27W variants permitted	4000K
OrangeTek	Terraled Mini AP1 (MX1 & WX1 optics)	36W	3045K & 4000K
OrangeTek	Terraled Mini AP2 (Osram LEDs, PMMA Lens & AP2 Optic only)	34W	3045K & 4000K
Philips	Roadgrace BRP711 (DWP optic)	20W	4000K
Philips	Roadgrace BRP711 (DWP3 optic)	26W	4000K

V-category

Manufacturer	Model and approved optics	Max system wattage	Approved CCT variants
Philips	Luma 1 80 (R5 optic only)	135W	3000K & 4000K
Philips	Roadgrace BRP712 (DW1 optic)	120W	4000K
Schréder	TECEO 1 (5068 optic only)	113W	3000K & 4000K
Schréder	TECEO 1 Cree XPL (5118, 5163 & 5164 optics only)	150W	3000K & 4000K
Schréder	TECEO 2 (5102, 5103 & 5118 optics only)	279W	3000K & 4000K

Pedestrian Crossings

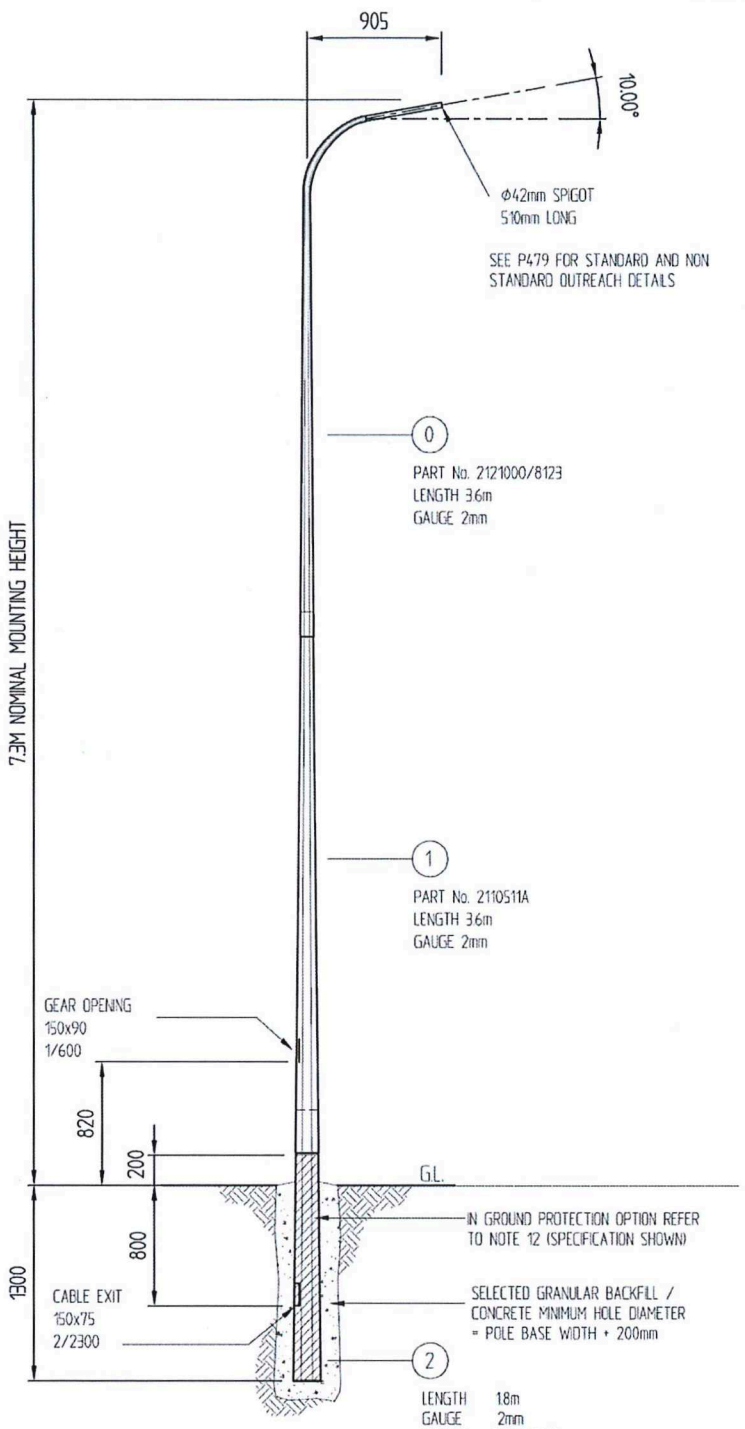
Manufacturer	Model and approved optics	System wattage	Approved CCT variants
Philips	Roadgrace BRP711 ped crossing system (LED78/NW 70W PSD DWP3 only)	70W	4000K

5 APPENDIX II – APPROVED COLUMNS AND OUTREACHES INCLUDING DETAILS[2]

[2] Drawings reproduced with permission

5.1 P-CATEGORY COLUMN

Revision	Rev. Date	Changes Made



NOTES

1. See Installation Instructions for Oclyte™ Columns for assembly and installation - see our web site www.csppacific.conz or phone 0800 655 200
2. Foundation design based on cohesive soils "Good ground" as per NZS3604:1999 (typically firm clay)
3. For column foundation in cohesionless soils (sand, gravel) refer to Installation Instructions for Oclyte™ Columns
4. Maximum slope of ground surface within 5m of column base to be 1V:6H
5. No excavations allowed within 3m of column footing without Engineer's approval.
6. Column seam welds to be partial penetration butt welds, Category SP to AS/NZS 1554.1 Use CSP Pacific Welding Procedure #8 for 2mm and #8 or#7 for 3mm sections
7. Steel material - Grade 250 to AS/NZS 3678
8. All other welds to be fillet welds with a min 5mm leg length, Category SP to AS/NZS 1554.1, unless noted otherwise
9. Column design to AS/NZS 1170, AS/NZS 4676 and AS/NZS 3404.1
10. For site specific soil area, base reactions or reduced planting depth information please contact CSP Pacific.
11. In ground Protection Specifications as follows: Full TUFF COAT™ (FTC) from 200mm above ground level to the base of the column refer to P1737-5 for details.
    700mm TUFF COAT™ Strip (TC) or Epoxy Strip from 200mm above ground level to 500mm below ground level refer to P1737-5 for details.
12. Assembly galvanized weight = 530 Kg, including outreach.
13. See P493 for Spigot details.

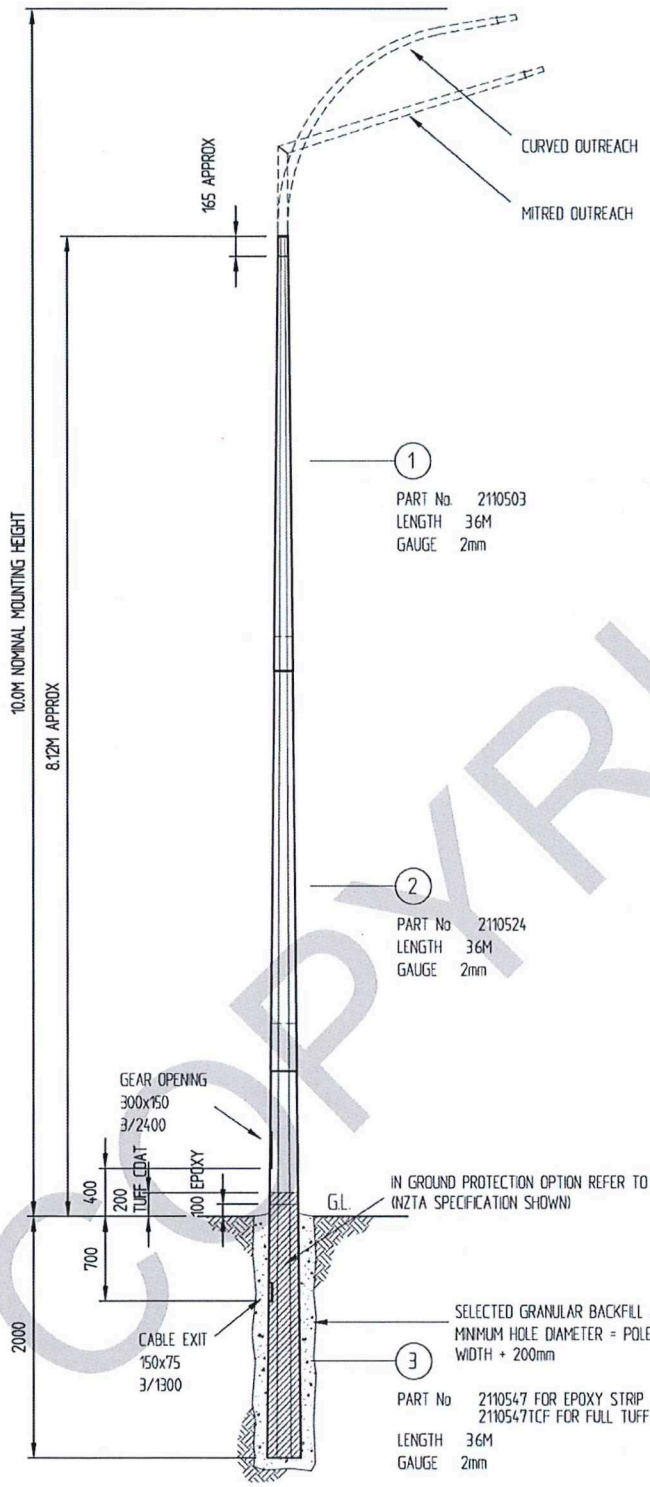
CSP PACIFIC
306 Neilson Street,
Onehunga, Auckland
PO Box 12 949, Penrose
Auckland, New Zealand
Telephone 09-634 1239
Facsimile 09-634 4525
www.csppacific.co.nz

OCLYTE 7.3M NOMINAL MOUNTING HEIGHT
GROUND PLANTED SUB-DIVISION COLUMN
0.9m OUTREACH
Φ42 SPIGOT ASS'Y, PART No's:
2110409CXF-XF

Drawn by MJH	Date 07/11/96
Checked	Scale A4 1/40
Reference No.	
Drawing no. P547-4	Rev. No. 0

5.2 V-CATEGORY COLUMN

Revision	Rev. Date	Changes Made
Rev.1 (MY)	15/10/12	General note updated



NOTES

1. See Installation Instructions for Oclyte™ Columns for assembly and installation - see our web site www.csppacific.co.nz or phone 0800 655 200
2. Foundation design based on cohesive soils "Good ground" as per NZS3604:1999 (typically firm clay)
3. For column foundation in cohesionless soils (sand, gravel) refer to Installation Instructions for Oclyte™ Columns
4. Maximum slope of ground surface within 5m of column base to be 1V:6H
5. No excavations allowed within 3m of column footing without Engineer's approval.
6. Column seam welds to be partial penetration butt welds, Category SP to AS/NZS 1554.1. Use CSP Pacific Welding Procedure #8 for 2mm and #8 or#7 for 3mm sections
7. Steel material - Grade 250 to AS/NZS 3678
8. All other welds to be fillet welds with a min 5mm leg length, Category SP to AS/NZS 1554.1, unless noted otherwise
9. Column design to AS/NZS 1170, AS/NZS 4676 and AS/NZS 3404.1
10. For site specific soil area, base reactions or reduced planting depth information please contact CSP Pacific.
11. Assembly galvanized weight = 110.0 Kg not including outreach
12. IN GROUND PROTECTION SPECIFICATION IS AS FOLLOWS: FOR NZTA COLUMNS-TUFF COAT™ 200mm ABOVE GROUND LEVEL TO THE BASE OF THE COLUMN REFER TO P1737-5 FOR DETAILS OTHER COLUMNS- EPOXY PAINT STRIP 100mm ABOVE GROUND LEVEL AND 400MM BELOW GROUND LEVEL REFER TO P1737 FOR DETAILS
13. Column to be hot dip galvanized to AS/NZS 4680:2006

CSP PACIFIC
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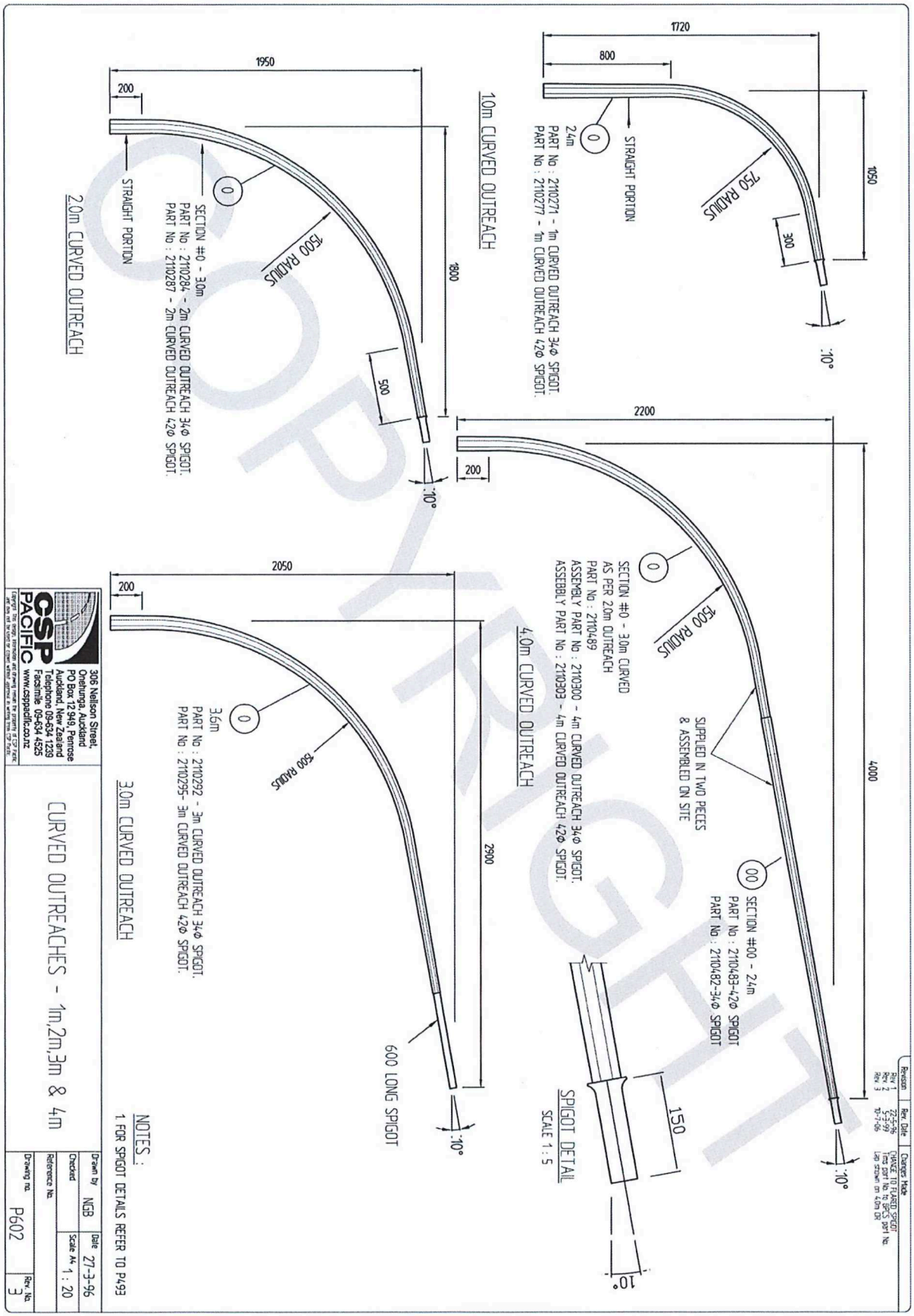
Telephone 09-634 1239
Facsimile 09-634 4525
www.csppacific.co.nz

OCLYTE 10.0M NOMINAL MOUNTING HEIGHT
GROUND PLANTED STREETLIGHT COLUMN

ASSEMBLY PART No. 2110677/2110677TCF
(OUTREACH NOT INCLUDED)

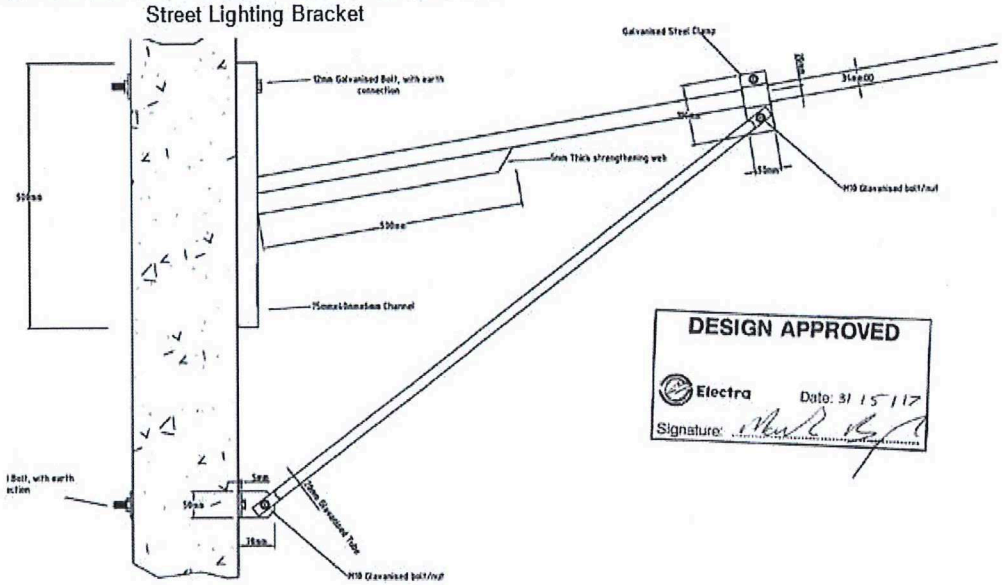
Drawn by MJH	Date 18 Sept. 2012
Checked	Scale A4 1/50
Reference No.	
Drawing no. P713-6	Rev. No. 1

5.3 COLUMN OUTREACHES



5.4 OUTREACH ON POLE – P CATEGORY

Horowhenua District Council – New or Replacement
Street Lighting Bracket



5.5 OUTREACH ON POLE – V CATEGORY