
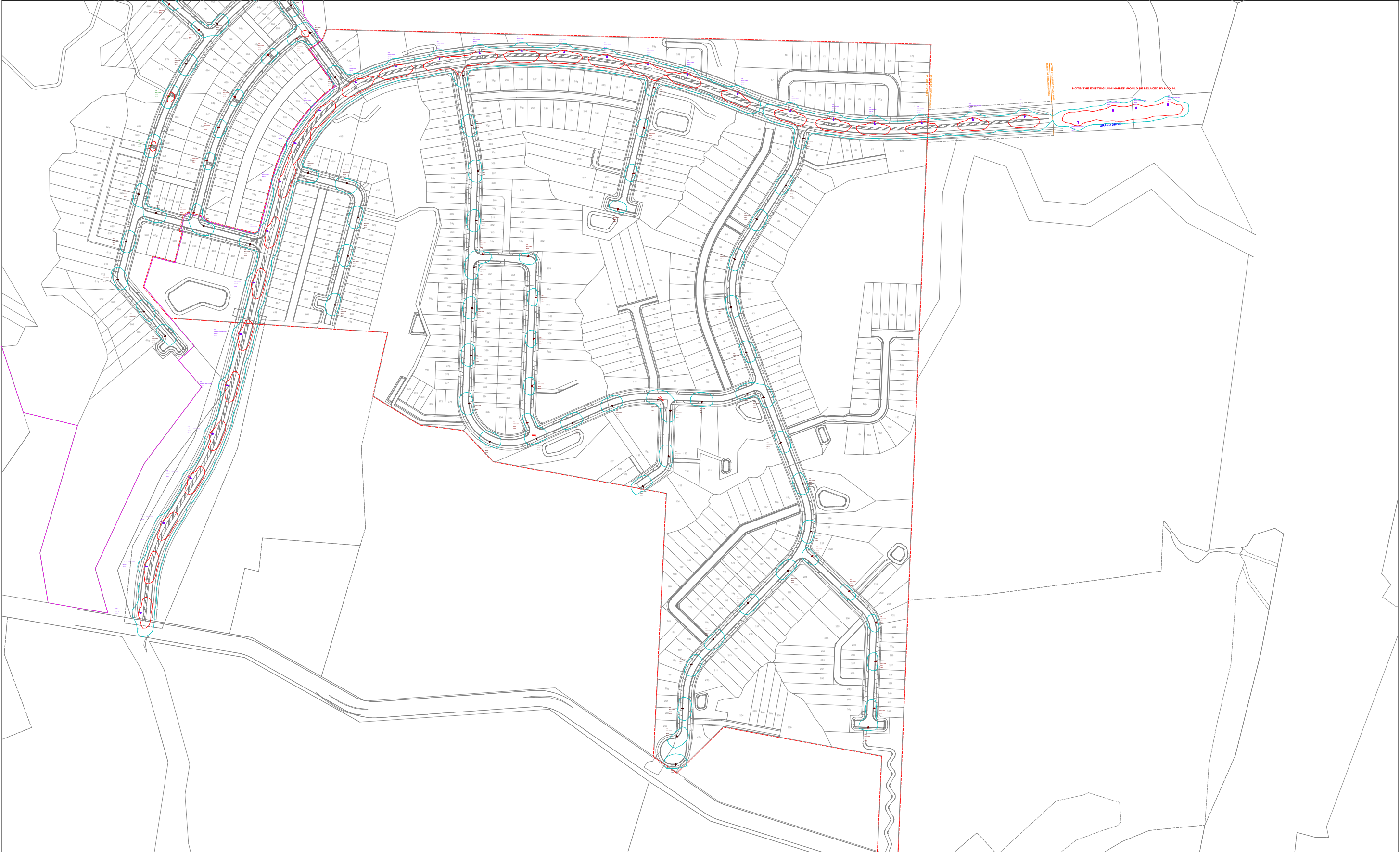



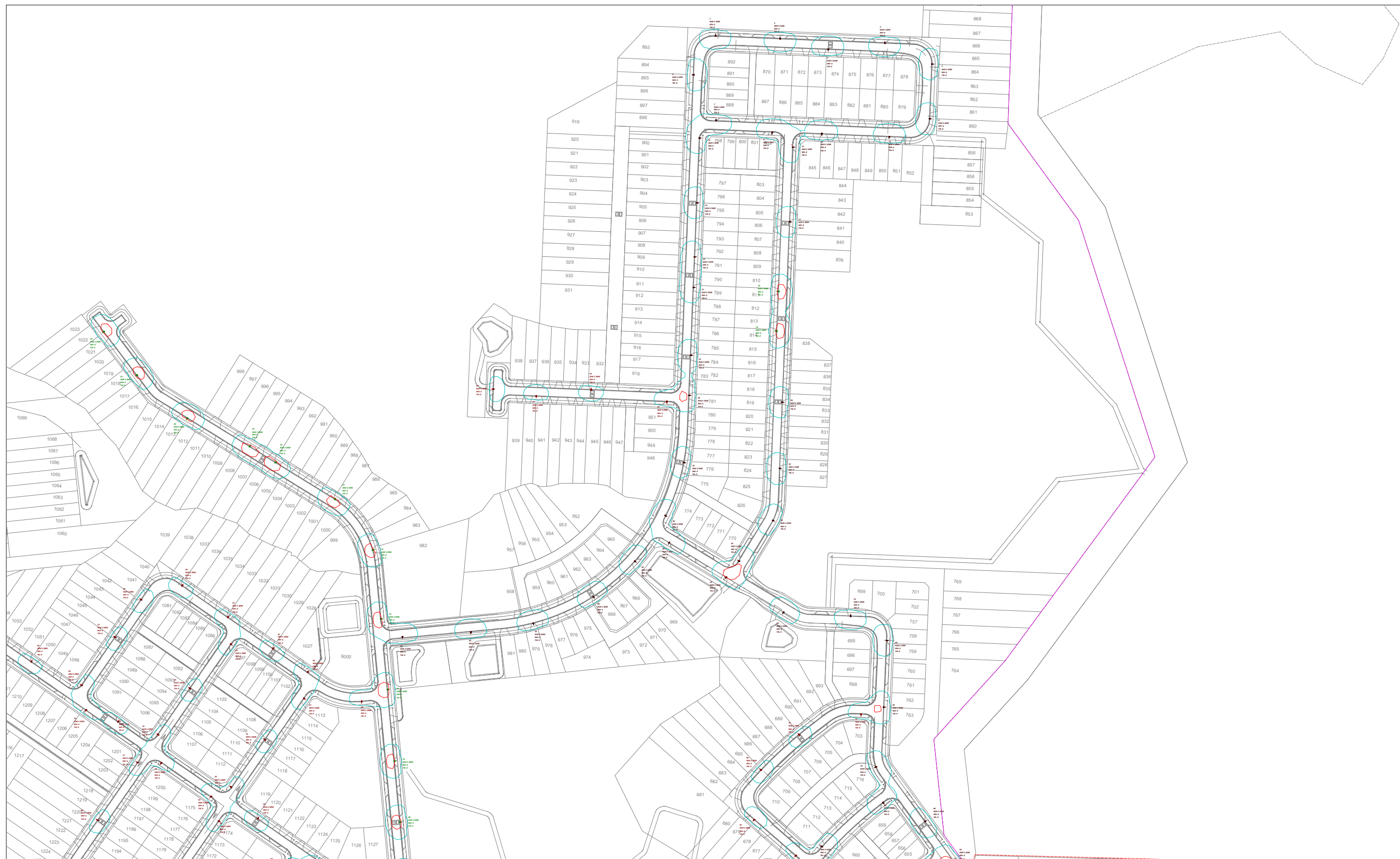
PROJECT NUMBER		PROJECT	DRAWING INFORMATION		COMPANY	AS PREPARED FOR	
9851		DELMORE OVERALL OREWA	ROADWAY LIGHTING PLAN - ISOLUX PLOTS		IBEX LIGHTING L1, THE PRECINCT 40 ONEHUNGA MALL AUCKLAND 1061 2 MATARAWA PLACE TAURIKO TAURANGA 3171 NZ FREEPHONE 0800 63 65 67 www.ibexlighting.com	 MCKENZIE & CO.	
DRAWING NO. :	REVISION:		Scale : 1 : 6000 @ A3	DESIGNED BY: SF			
1	-		Date:26-June-2025	CHECKED BY: /			






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PROJECT NUMBER		PROJECT	DRAWING INFORMATION		COMPANY	AS PREPARED FOR
<div>9851</div> <div> <div>DRAWING NO. :</div> <div>3</div> <div>REVISION:</div> <div>-</div> </div>		<div>DELMORE OVERALL OREWA</div>	<div>ROADWAY LIGHTING PLAN - ISOLUX PLOTS</div>		<div>IBEX LIGHTING</div> <div> <div>L1, THE PRECINCT</div> <div>40 ONEHUNGA MALL</div> <div>AUCKLAND 1061</div> <div>2 MATARAWA PLACE</div> <div>TAURIKO</div> <div>TAURANGA 3171</div> </div> <div> <div>NZ FREEPHONE 0800 63 65 67</div> <div>www.ibexlighting.com</div> </div>	<div>  <div>MCKENZIE & CO.</div> </div>
			<div>Scale : 1: 2500 @ A3</div> <div>DESIGNED BY: SF</div>			
			<div>Date: 26-June-2025</div> <div>CHECKED BY: /</div>			










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




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Luminaire Schedule					
Project: 09 - Luminaires - Proposed					
Symbol	Qty	Label	Mounting Height	Outreach Length	Lum. Tilt Angle
	90	NOX S 2000	6 metres	1 metre	0 degrees
	91	NOX S 3200	6 metres	1 metre	0 degrees
	29	NOX S 3900	6 metres	1 metre	0 degrees
	3	NOX M 7800	8 metres	1 metre	0 degrees
	19	NOX M 12000	10 metres	2 metres	0 degrees
	4	NOX M 12000 on Ex Pole	8 metres	1 metre	0 degrees
	3	NOX MC4 5200	8 metres	1 metre	0 degrees

Luminaire Schedule					
Project: 10 - Luminaires - Existing & Future					
Symbol	Qty	Label	Mounting Height	Outreach Length	Lum. Tilt Angle
	9	Indicative - NOX M 12000	10 metres	2 metres	0 degrees


Luminaire Details	"NOX S 2000"	"NOX S 3200"	"NOX S 3900"
Manufacturer and Product Name	NSS-08-020-740-P1	NSS-08-032-740-P1	NSS-16-039-740-P1
Lamp type and Rating	LED 14.0W	LED 23.2W	LED 26.6W
Luminous flux	2031 Lumens (4000K)	3209 Lumens (4000K)	3907 Lumens (4000K)
Origin of Photometric Data	NSS-08-014-740-P1	NSS-08-014-740-P1	NSS-16-027-740-P1
Upward Waste Light Ratio	0.0% at 0 degree tilt	0.0% at 0 degree tilt	0.0% at 0 degree tilt
Maintenance factor used	0.80	0.80	0.80
Peak Luminous Intensity (Glare) : 60-80 degrees	953 Candela	1505 Candela	1804 Candela
Peak Luminous Intensity (Glare) : 80 degrees	263 Candela	398 Candela	396 Candela
Luminaire Details	"NOX S 2000"	"NOX M 12000"	"NOX MC4 5200"
Manufacturer and Product Name	NMS-32-078-740-V2	NMS-32-122-740-V2	NMS-32-052-740-C4
Lamp type and Rating	LED 51.4W	LED 86.8W	LED 34.2W
Luminous flux	7840 Lumens (4000K)	12183 Lumens (4000K)	5207 Lumens (4000K)
Origin of Photometric Data	NMS-32-101-740-V2	NMS-32-101-740-V2	NMS-32-097-740-C4
Upward Waste Light Ratio	0.0% at 0 degree tilt	0.0% at 0 degree tilt	0.0% at 0 degree tilt
Maintenance factor used	0.80	0.80	0.80
Peak Luminous Intensity (Glare) : 60-80 degrees	5279.4 Candela	8204.4 Candela	4070.2 Candela
Peak Luminous Intensity (Glare) : 80 degrees	2470 Candela	3838.5 Candela	458.0 Candela

- GENERAL NOTES:
- These lighting calculations are based upon the Initial Lamp Lumens as described in the product information table(s) and a Maintenance Factor calculated in accordance with AS/NZS 1158.
 - Isolux plots show the Illuminance value at Ground Level.
 - The Mounting Height of the Luminaire is indicated on the drawing and the Tilt (upcast) angle is zero degrees unless indicated on the drawing.
 - These lighting calculations are subject to the accuracies and tolerances in accordance with AS/NZS 3827.1:1998 and AS/NZS 3827.2:1998
 - All work shall conform to the requirements the local energy supplier and to AS/NZS 3008, AS/NZS 1158, and the Electrical (Safety) Regulations 2010.
 - Should there be a clash between a column position and underground services, the column position may be altered by upto 1m while retaining the general pole arrangement. This should be confirmed with the Engineer prior to final installation.

- PROJECT NOTES:
- Final pole locations have been agreed to by the client.
 - Lighting from existing poles and luminaires adjacent to the scope of work have been taken into account where details are known.
 - For calculation grids and calculation values, refer to the .dwg file of this project.
 - A minimum ten (10) year warranty from the date of on site installation shall be provided for the luminaire and electronic control gear.
 - Each luminaire shall be supplied with a 7-pin NEMA Socket compliant with ANSI C136.41:2013.
 - New LED luminaires shall be supplied with electronic DALI dimmable control gear.
 - The lighting standard for each road is documented in the appropriate 'Calculation Summary' table on this sheet.

- INSTALLATION NOTES
- Final pole locations are to be confirmed on site prior to installation.
 - Columns shall be positioned 1.0m behind the kerb unless otherwise stated or advised.
 - Allowable tolerances of the column location are:
 - 0.5m parallel to the carriageway
 - 0.2m perpendicular to the carriageway
 - 0.2m verticallyShould the final pole location be outside the permitted tolerance, a further lighting design may be required.
 - Mounting heights are to be measured with respect to the luminaire above the carriageway.
 - The contractor shall be responsible for the fixing of outreaches taking into account work on or near existing services. The contractor shall liaise with the appropriate service provider in relation to working on or near services, and shall give a suitable notice period.
 - All metal columns, outreaches, and luminaires are to be effectively Earthed. Earthing is to be designed to conform to the requirments of the NZ Electrical (Safety) Regulations and AS/NZS 3000:2018.
 - Wiring shall be in accordance with AS/NZS 3000 and AS/NZS 3008:1.2
 - The internal wiring between the terminal blocks and the luminaire shall be circular 2C 2.5sq.mm Neutral Screen cable

Design Revision Summary		
Rev.	Date	Comment
-	26/05/25	Original Design

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