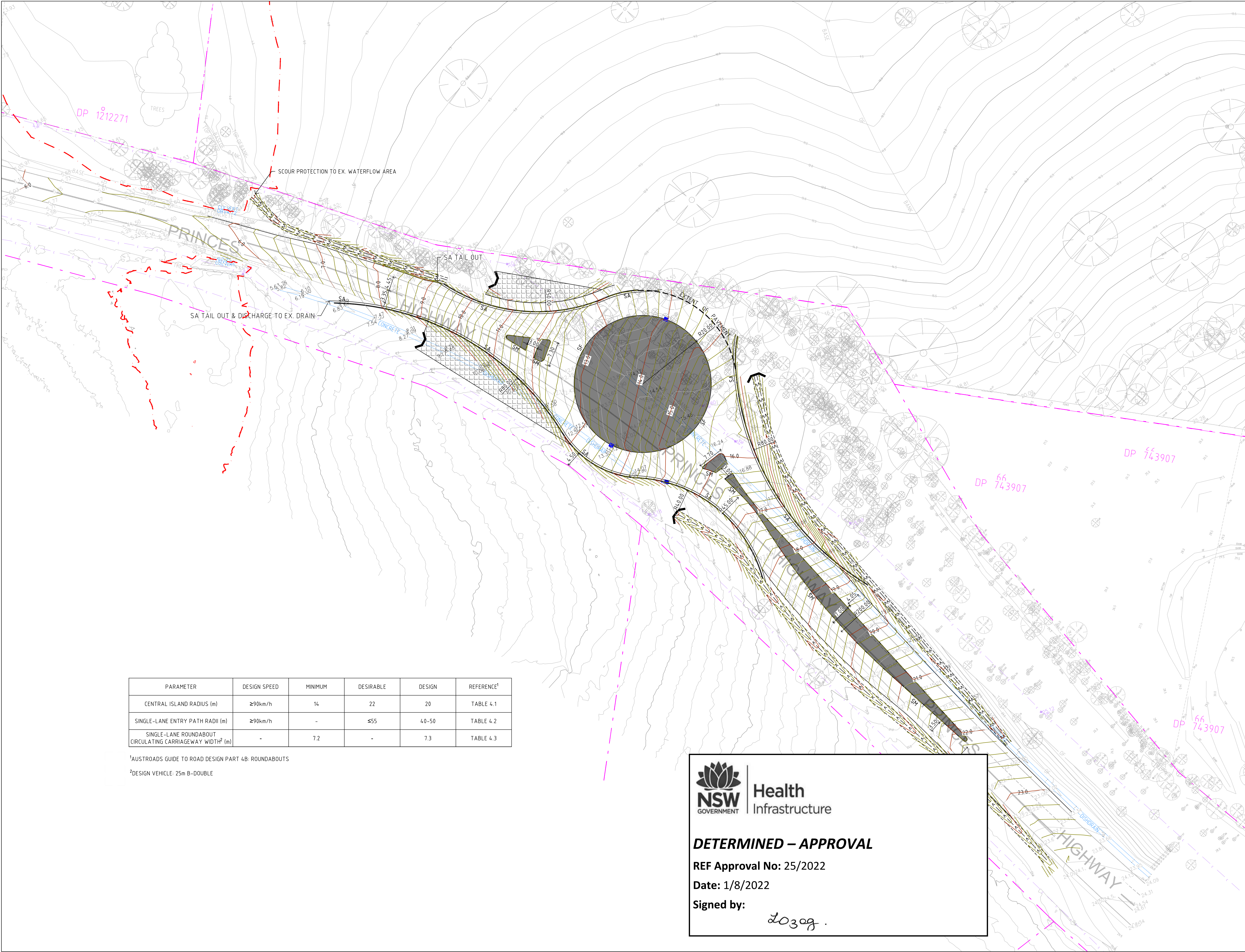




PARAMETER	DESIGN SPEED	MINIMUM	DESIRABLE	DESIGN	REFERENCE ¹
CENTRAL ISLAND RADIUS (m)	≥90km/h	14	22	20	TABLE 4.1
SINGLE-LANE ENTRY PATH RADII (m)	≥90km/h	-	≤55	40-50	TABLE 4.2
SINGLE-LANE ROUNDABOUT CIRCULATING CARRIAGEWAY WIDTH ² (m)	-	7.2	-	7.3	TABLE 4.3

¹AUSTROADS GUIDE TO ROAD DESIGN PART 4B: ROUNDABOUTS

²DESIGN VEHICLE: 25m B-DOUBLE



Health Infrastructure

DETERMINED – APPROVAL

REF Approval No: 25/2022

Date: 1/8/2022

Signed by:

20309 .

- EXISTING SURVEY LEGEND:
- SITE BOUNDARY
 - +3.59 SURFACE SPOT LEVEL
 - X-X- SURFACE CONTOUR
 - - - 1% AEP FLOOD EXTENT
 - ⊙ TREE
 - - - TELECOMMUNICATIONS LINE
 - ⊗ PILLAR (TELSTRA)
 - +3.59 COMMS SPOT LEVEL
 - = = = DISH DRAIN
 - +3.59 DISH DRAIN SPOT LEVEL

- DESIGN WORKS LEGEND:
- X-X- MAJOR DESIGN CONTOUR
 - - - MINOR DESIGN CONTOUR
 - SA SA KERB (KERB & GUTTER)
 - SF SF KERB (RAISED KERB)
 - SM SM KERB (BARRIER KERB)
 - HEADWALL
 - SWALE
 - CONCRETE LINED DRAIN
 - INDICATIVE FILL AREA (HEADWALL)

- NOTES:
1. ROUNDABOUT HAS BEEN DESIGNED FOR VEHICLES UP TO A 26m LONG B-DOUBLE
 2. 20m ROUNDABOUT CENTRAL ISLAND RADIUS PER TABLE 4.1 OF AUSTRROADS GUIDE TO ROAD DESIGN PART 4B FOR ≥90km/h DESIRED DRIVER SPEED ON THE FASTEST LEG PRIOR TO ROUNDABOUT.
 3. ENTRY PATH APPROACH CURVE RADIUS NO GREATER THAN 55m PER TABLE 4.2 OF AUSTRROADS GUIDE TO ROAD DESIGN PART 4B FOR ≥90km/h DESIRED DRIVER SPEED ON THE ON THE LEG PRIOR TO THE ROUNDABOUT.

DRAWING KEY

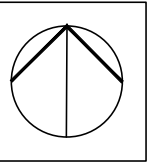
REV	DATE	DESCRIPTION	DRAWN	REVIEWED
P1	19/04/22	FOR APPROVAL	SC	SN

PROJECT
PRINCES HIGHWAY
ROUNDABOUT WORKS,
MORUYA

DRAWING TITLE
CIVIL WORKS PLAN

ptc. Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

CLIENT	HEALTH INFRASTRUCTURE
DRAWING #	SK-0301
PROJECT #	21-3123
SCALE	1 : 500 @ A1 1 : 1000 @ A3
FOR APPROVAL	



REV P1

SCOPE OF WORKS

1. A NEW ROUNDABOUT IS BEING CONSTRUCTED. THIS DRAWING DETAILS THE ASSOCIATED SCOPE OF WORKS REQUIRED TO ENABLE THE WORKS TO BE COMPLETED.
2. TELSTRA DIVERSION
OBTAIN THE DETAILED SCOPE OF WORKS FROM TELSTRA. THE WORKS INCLUDES DIVERSION OF EXISTING CABLING WITH ADDITIONAL PITS. ALL WORKS TO COMPLY WITH TELSTRA STANDARDS AND WIRING RULES.
3. STREET LIGHTING
OBTAIN THE LIGHTING CATEGORY FROM THE RMS. OBTAIN AND THE DESIGN BRIEF FROM ESSENTIAL ENERGY AND PROVIDE LIGHTING TO AS/NZS 1158.
4. SITE POWER
WHERE THE CONTRACTOR REQUIRES AC POWER FOR SITE FACILITIES IT SHALL BE OBTAINED FROM THE LOCAL SUPPLY AUTHORITY.
5. ALL PITS, CONDUITS, CABLES AND LIGHTING POLES ARE TO BE POSITIONED ON THE COORDINATED CIVIL DRAWINGS INDICATING EXACT LOCATION LEVELS AND CLEARANCES.
6. ALL WORKS MUST BE COORDINATED WITH ASP L3 DESIGN.
7. ASP WORKS MUST INCLUDE FOR THE UNDER BORING AND STEEL SLEEVE INSTALLATION TO ADDRESS THE WATER CREEK LANDSCAPE.
8. ENSURE THAT THE EXISTING COMMUNICATIONS ON THE SOUTHERN SIDE OF PRINCESS HIGHWAY ARE RETAINED AND AVOIDED DURING THE WORKS. PROVIDE ALL NECESSARY PROTECTION AND PROVISIONS DURING THE CONSTRUCTION OF THE NEW ROUND ABOUT AND STREET LIGHTING TO MAINTAIN AND PROTECT THE COMMUNICATIONS CABLING.
9. REFER TO THE CIVIL DRAWINGS FOR THE EXACT LOCATION AND SETOUT OF SERVICES AND POSITION ON NEW ROUNDABOUT.

STANDARDS
THE WORKS MUST BE COMPLETED IN ACCORDANCE WITH THE FOLLOWING:

AS/NZS 3000 WIRING RULES;
NSW SERVICE AND INSTALLATION RULES;
ESSENTIAL ENERGY NETWORK STANDARDS;
ELECTRICITY DISTRIBUTOR SERVICE AND INSTALLATION RULES;
AS/NZS 1158 EXTERNAL LIGHTING – ROADS AND PUBLIC SPACES;
AS/NZS 4282-2019 CONTROL OF OBTRUSIVE LIGHTING EFFECTS;
AS/CA S009: INSTALLATION REQUIREMENTS FOR CUSTOMER CABLING (WIRING RULES)
AS/CA S008: TELECOMMUNICATIONS TECHNICAL STANDARD – REQUIREMENTS FOR CUSTOMER CABLING PRODUCTS 2015;
TLN: TELECOMMUNICATIONS (LABELLING NOTICE FOR CUSTOMER EQUIPMENT AND CUSTOMER CABLING) INSTRUMENT 2015;
TELECOMMUNICATIONS (TYPES OF CABLING WORK) DECLARATION 2013;

LIGHTING EQUIPMENT AND BILLING SCHEDULE									
SYMBOL	STATE	LUMINAIRE		COLUMN/POLE		BRACKET/OUTREACH	UPCAST	CATEGORY	LUMINAIRE MOUNTING HEIGHT (m)
		DESCRIPTION	PART NO	DESCRIPTION	FOOTING (BOLT/FOUNDATION)	DESCRIPTION			
	New	NEW 150w ROADLED MIDI	290340	10.5m IMPACT ABSORBING COLUMN		4.5m Single Outreach	5*	V3	10.5

DESIGNED UNDER QUALITY SYSTEM CERTIFIED AS COMPLYING WITH ISO 9001 BY AN ACCREDITED CERTIFICATION BODY

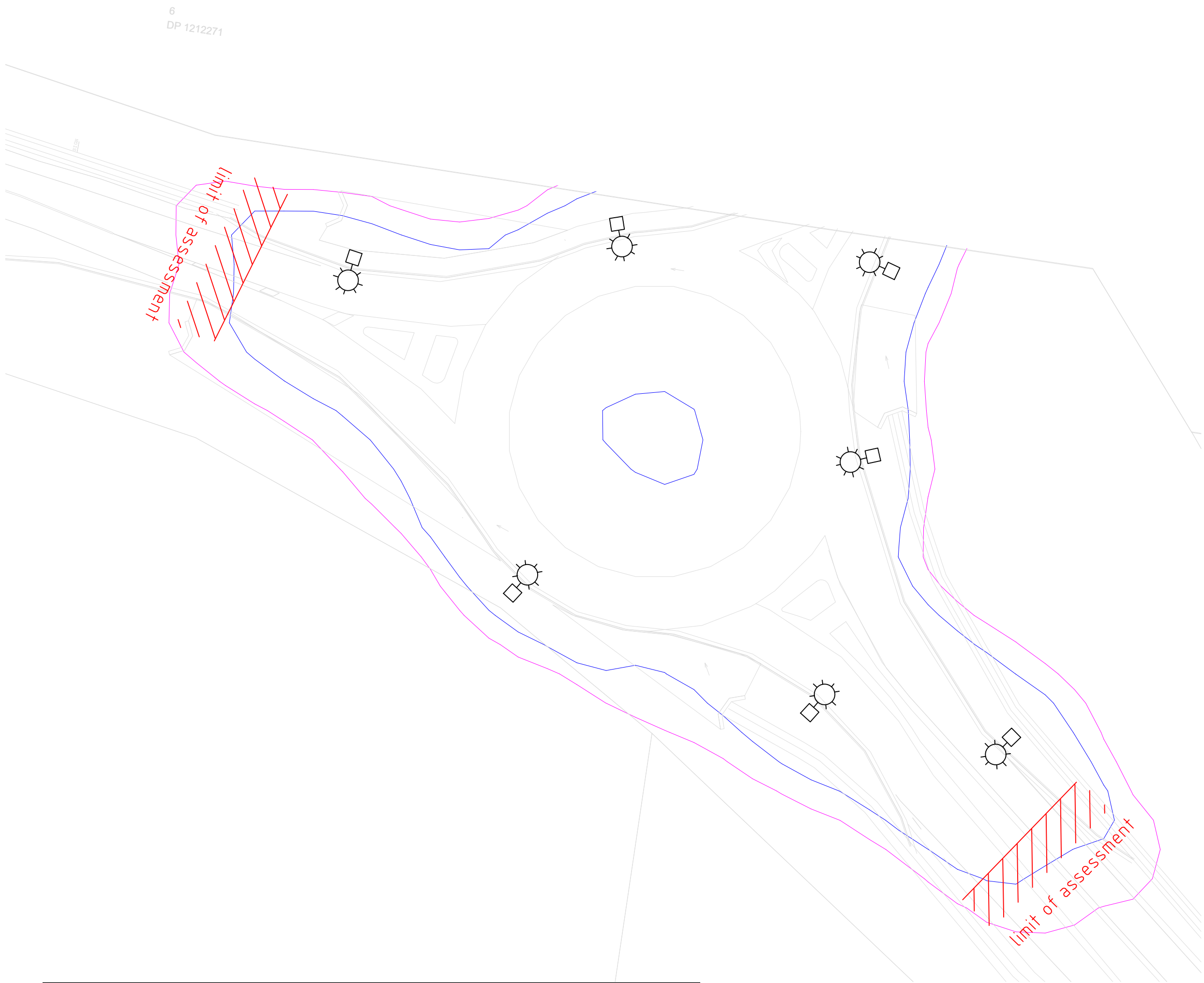
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NOTES:

Status
DESIGN DEVELOPMENT

Revision			
REV	DESCRIPTION	DATE	INT
A	75% DESIGN DEVELOPMENT ISSUE	12.04.2022	MH
B	REF ISSUE	22.04.2022	MH
C	REF ISSUE	28.04.2022	MH

Key Plan



Road Lighting Certification

This design has been produced by bransonjames and is certified to comply with the design brief and relevant current sections of AS/NZS 1158, except at locations noted on the design.

bransonjames disclaims any responsibility or liability in connection with the following:

- The design has been based on information received by bransonjames from third parties. Such information has not been verified by bransonjames for completeness or correctness.
- In producing this design, no account has been taken by bransonjames for sloping terrain/carriageways, crests, vehicular barriers, trees and vegetation, or any other object that may interfere with the lighting design.
- The design must be installed as specified on this drawing, and no variations allowed without written consent from bransonjames.
- bransonjames cannot be responsible for environmental conditions, which may compromise the compliance of the design.
- Calculated results, shown herein are subject to practical tolerances such as photometric measurement, manufacturing variation, lamp and control gear characteristics, supply voltage and frequency variation.
- The compliance of this design is dependent upon the luminaire manufacturer supplying luminaires that are representative of the data contained with the appropriate registered laboratory photometric test report.
- The design is predicated upon the adoption of a maintenance regime that will maintain the performance of the luminaire to a level equal to or above the Maintenance factors used in the design.

Company Representative: Brendon Hince MIES IES373

Signed
Date3/11/18.....

THE LIGHTING HAS BEEN DESIGNED TO ACHIEVE COMPLIANCE WITH CATEGORY V3 IN ACCORDANCE WITH AS1158.1.1



DETERMINED – APPROVAL

REF Approval No: 25/2022

Date: 1/8/2022

Signed by: *Lozoga*

ELECTRICAL & LIGHTING

STEENSEN VARMING

Copenhagen
London
Sydney
Canberra
Hong Kong
New York

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e : info@steensenvarming.com

Client



Architect

Conrad Gargett

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Queensland Australia 4001

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Web: www.conradgargett.com.au

Project

PRINCESS HIGHWAY MORUYA
NEW ROUNDABOUT

Drawing

ELECTRICAL SERVICES
STREET LIGHTING

A1 Scale

Project 207183

Issue C

Number SV-EL-DWG-SD-15PW13

DRAWN

DESIGNED

CHECKED

APPROVED

IR

AK

MH

MH

10

0

10

20

30

40

50

60

70

SCALE 1:1

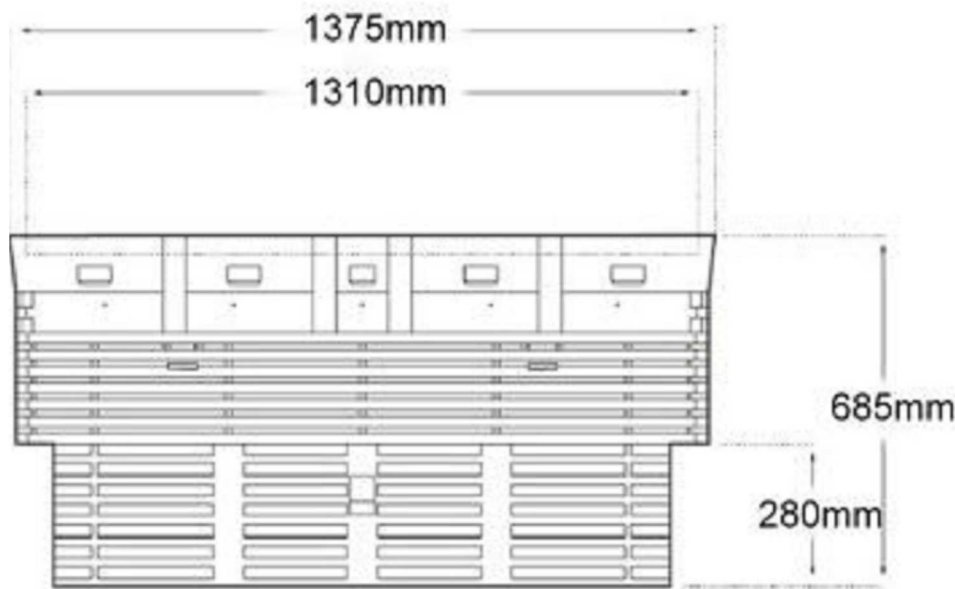
mm

SCOPE OF WORKS

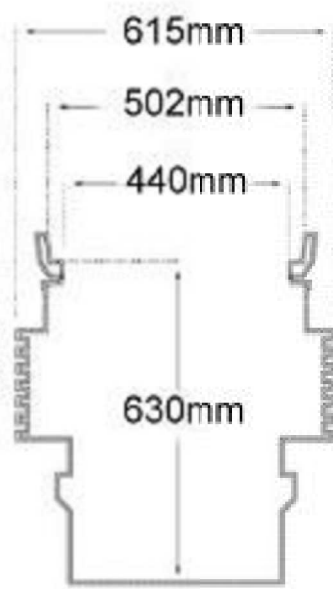
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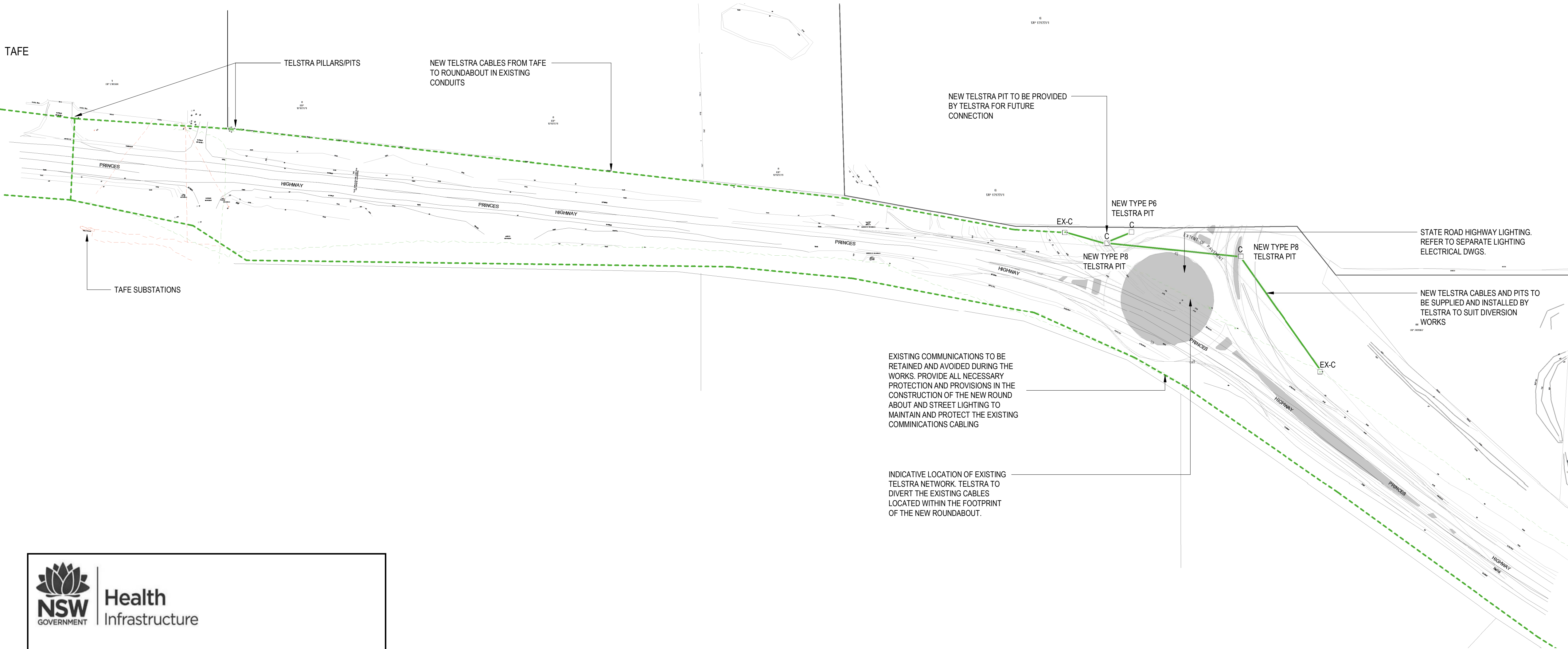
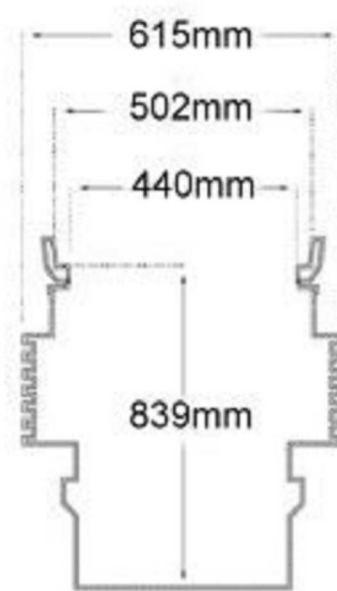
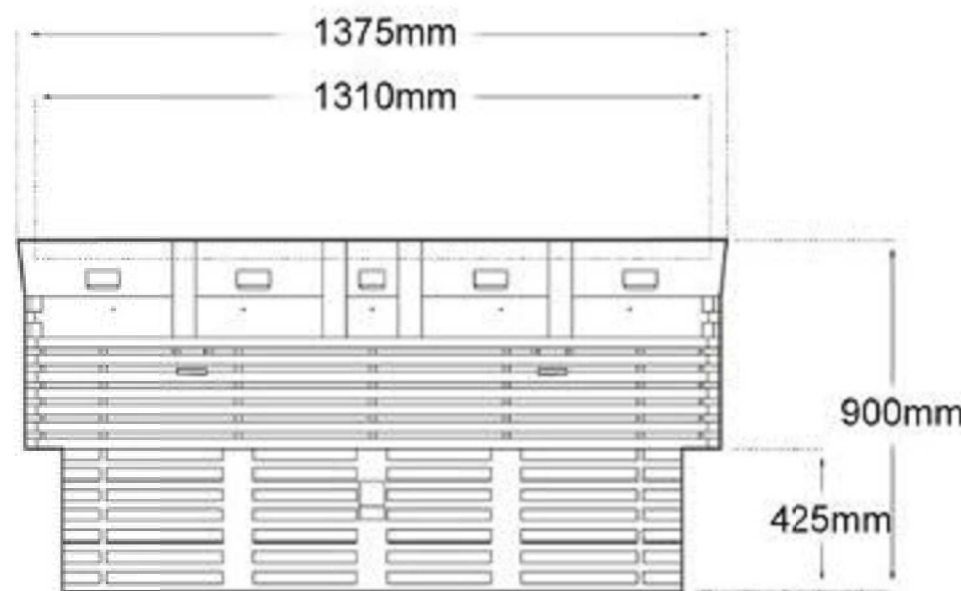
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TELECOMMUNICATIONS (TYPES OF CABLING WORK) DECLARATION 2013;



NEW TYPE P6 TELSTRA PIT DETAIL



NEW TYPE P8 TELSTRA PIT DETAIL



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NOTES:

Status
DESIGN DEVELOPMENT

Revision		DATE	INT.
REV	DESCRIPTION		
A	75% DESIGN DEVELOPMENT ISSUE	12.04.2022	MH
B	REF ISSUE	22.04.2022	MH
C	REF ISSUE	28.04.2022	MH

Key Plan

ELECTRICAL & LIGHTING
STEENSEN VARMING
Copenhagen
London
Sydney
Canberra
Hong Kong
New York
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Sydney, NSW, 2000, Australia
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Architect
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Queensland Australia 4001
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Web: www.conradgargett.com.au

Project
**PRINCESS HIGHWAY MORUYA
NEW ROUNDABOUT**

Drawing
**ELECTRICAL SERVICES
TELSTRA DIVERSION SCOPE OF
WORKS**

A1 Scale **As indicated**
Project **207183**
Issue **C**
Number
SV-EL-DWG-SD-15PW11

DRAWN	DESIGNED	CHECKED	APPROVED
IR	AK	MH	MH

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SCALE 1: 1 mm

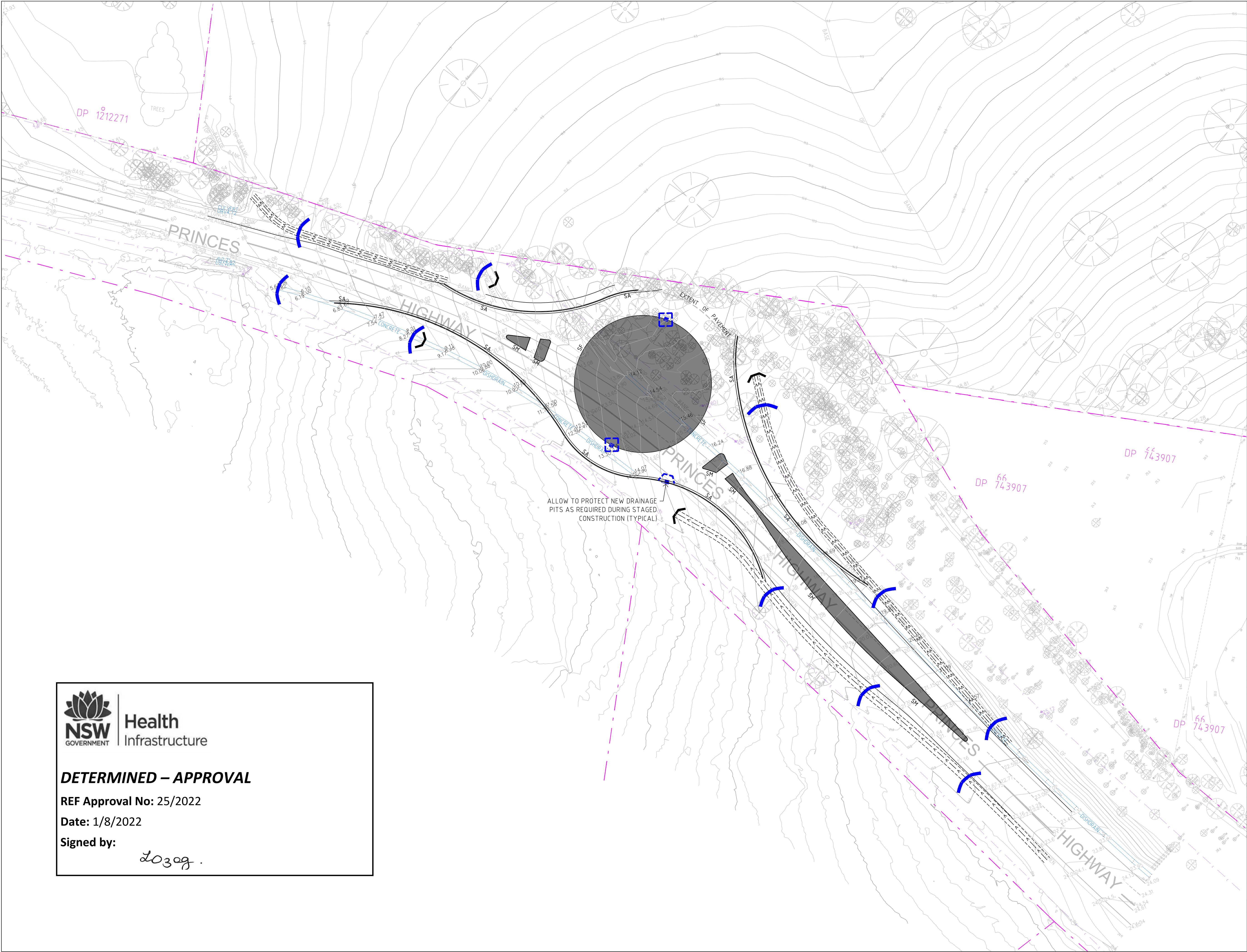


DETERMINED – APPROVAL

REF Approval No: 25/2022

Date: 1/8/2022

Signed by: *20308*



EROSION & SEDIMENT CONTROL LEGEND:

- GEOTEXTILE PIT FILTER 2
- KERB INLET SEDIMENT TRAP
- STRAW BALE
- STRAW BALE MINI SEDIMENT BASIN

DRAWING KEY

REV	DATE	DESCRIPTION	DRAWN	REVIEWED
P1	19/04/22	FOR APPROVAL	SC	SN

PROJECT
PRINCES HIGHWAY
ROUNDBOUT WORKS,
MORUYA

DRAWING TITLE
EROSION AND SEDIMENT
CONTROL PLAN

ptc. Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

CLIENT HEALTH INFRASTRUCTURE

DRAWING # SK-0101

PROJECT # 21-3123

SCALE 1 : 500 @ A1
1 : 1000 @ A3

FOR APPROVAL

REV P1



Health
Infrastructure

DETERMINED – APPROVAL

REF Approval No: 25/2022

Date: 1/8/2022

Signed by: *20309*