

From: "Elise Campbell" <ecampbell@emmconsulting.com.au>
Sent: Wed, 14 Oct 2026 10:10:38 +1000
To: "Development Assessment" <developmentassessment@townsville.qld.gov.au>;
"Lachlan Pether" <lachlan.pether@townsville.qld.gov.au>
Cc: "Dale Armbrust" <dale.armbrust@townsville.qld.gov.au>; "Greg Connors"
<gco@private-energypartners.com>; "Sigrid Pembroke" <spembroke@emmconsulting.com.au>
Subject: MCU26/0034 - Response - Information Request - 128 Manton Quarry Road
CALCIUM
Attachments: Response to MCU260034 Information Request.pdf, Attachment A - Relevant
Plans.pdf

Good morning Lachlan,

On behalf of Supernode North BESS ProjectCo Pty Ltd (Supernode North), EMM Consulting provide herein a response to the Information Request received on 9 June 2026.

Pursuant to Section 13.2 of the Development Assessment Rules 2017 (version 3.0), we provide a complete response to this information request within the attached information. The responses are intended to provide sufficient information to facilitate assessment of MCU26/0034 Major Electricity Infrastructure (Transmission Lines) & Substation located at 128 Manton Quarry Road, Calcium QLD 4816.

The information attached to this email includes:

- Response to MCU26/0034 Information Request - 128 Manton Quarry Road Calcium
- Attachment A - Relevant Plans

If you require any additional information, have questions or require additional information, please do not hesitate to reach out

Kindly
Elise

Elise Campbell

Associate Environmental Engineer



0413 897 691

emmconsulting.com.au

Brisbane | Yuggera/Turrbal Country

Level 2, 95 North Quay, Brisbane QLD 4000

EMM Consulting Pty Limited



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From: Development Assessment <developmentassessment@townsville.qld.gov.au>
Sent: Tuesday, June 9, 2026 3:41 PM
To: Elise Campbell <ecampbell@emmconsulting.com.au>
Cc: Lachlan Pether <lachlan.pether@townsville.qld.gov.au>; Dale Armbrust <dale.armbrust@townsville.qld.gov.au>
Subject: MCU26/0034 - Letter - Information Request - 128 Manton Quarry Road CALCIUM

Your Reference: E231133

Good afternoon,

Please find attached an electronic copy of the above mentioned.

If you have any questions please don't hesitate to contact the Assessing Officer Lachlan Pether, on 4417 5847.

If you would like to follow the progress of your application online, please click on [Launch ePlanning](#) to access.

Kind Regards,

Planning & Development
TOWNSVILLE CITY COUNCIL

Discover everything you need to undertake planning and development in Townsville, visit [Planning - Townsville City Council](#)

P 13 48 10 E developmentassessment@townsville.qld.gov.au
143 Walker Street, Townsville QLD 4810
PO Box 1268, Townsville QLD 4810
www.townsville.qld.gov.au

**Townsville City Council acknowledges the Wulgurukaba of Gurambilbarra and Yunbenun, Bindal, Gugu Badhun and Nywaigi as the Traditional Owners of this land.
We pay our respects to their cultures, their ancestors and their Elders – past and present – and all future generations.**

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13 October 2026

Lachlan Pether
Senior Planning Officer
Townsville City Council - Planning & Development Section, Executive Office Division
142 Walker Street
Townsville QLD 4810

Re: Response to MCU26/0034 Information Request - 128 Manton Quarry Road Calcium

Dear Lachlan,

This letter has been prepared by EMM Consulting Limited (EMM) on behalf of Supernode North BESS ProjectCo Pty Ltd (Supernode North) in response to the Information Request received on 9 June 2026. Pursuant to Section 13.2 of the *Development Assessment Rules 2017* (version 3.0), we provide a complete response to this information request within this document.

The responses are intended to provide sufficient information to facilitate assessment of MCU26/0034 Major Electricity Infrastructure (Transmission Lines) & Substation located at 128 Manton Quarry Road, Calcium QLD 4816. Table 1.1 overleaf summarises the response to Information Request.

Attachment A provides updated plans reflecting minor design refinements undertaken since submission of the development application. The updated plans are provided to support TCC's ongoing assessment of the application and supersede the corresponding plans previously submitted, which includes the proposed staging plan incorporating the adjacent BESS development (SDA 2604-51978).

Public Notification in accordance with Part 4 of the *Development Assessment Rules 2017* will commence shortly, details of which will be confirmed in separate correspondence.

If you require any additional information, have questions or require additional information, please do not hesitate to get in contact on 0413 897 691 or via ecampbell@emmconsulting.com.au.

Yours sincerely



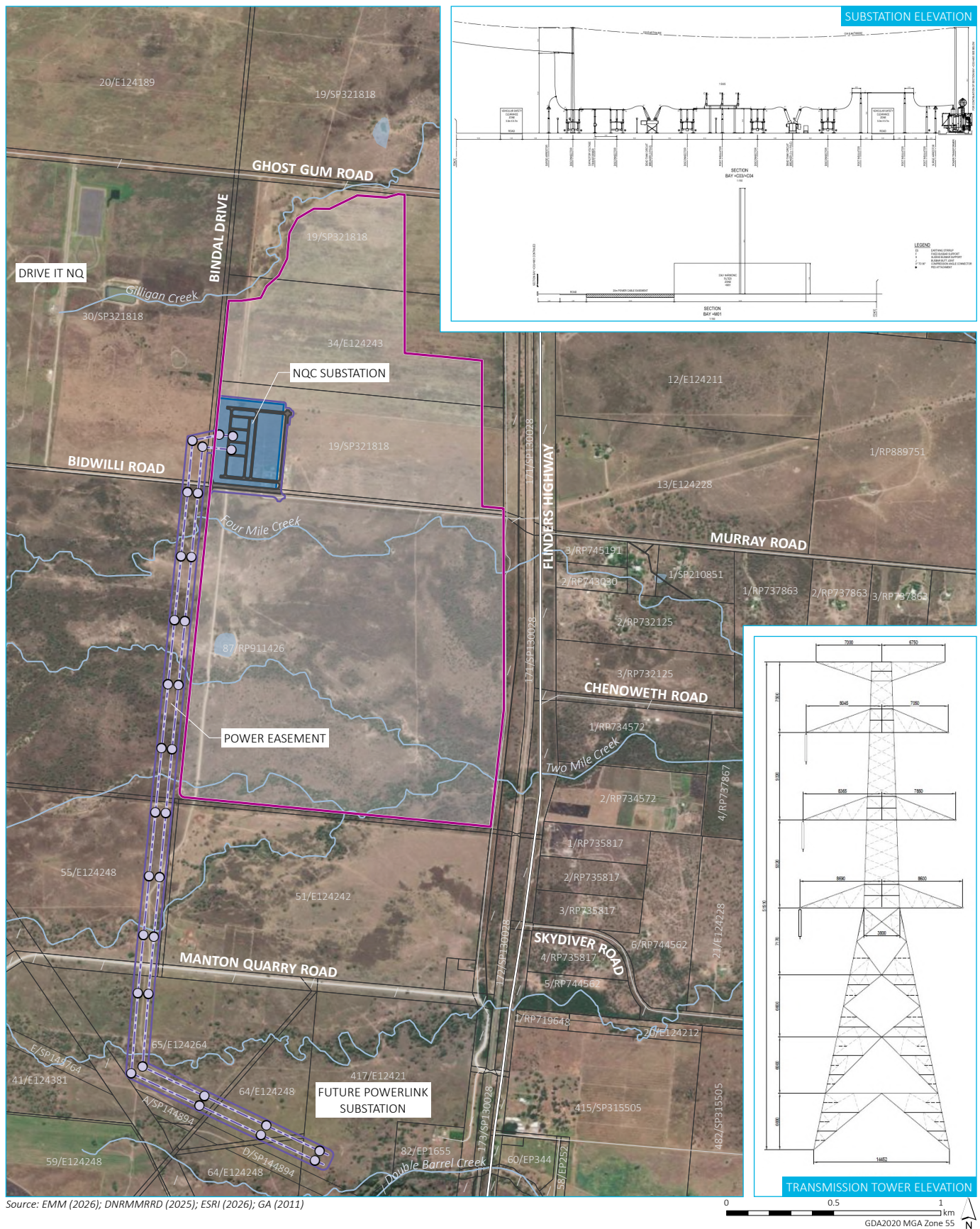
Elise Campbell
Associate Environmental Engineer
ecampbell@emmconsulting.com.au

1 Information response

Table 1.1 summarises the information requested by Townsville City Council (received on 9 June 2026), and the proposed response.

Table 1.1 Information request MCU26/0034 – applicant response

IR Identifier	Detail	Applicant response
IR - 1	Request Item 1 – Flood Report The applicant is requested to address the following: a) Blockage factors are requested to be applied to drainage structures in accordance with ARR2019, and the afflux plots are requested to be updated accordingly. b) Figures A1.13 and A1.14 report afflux in the order of 50-100mm within downstream and adjoining properties in 10% and 1% AEP design storms. Offsite flood impacts are requested to be reduced to acceptable limits i.e. less than 10mm. <i>Reason - To demonstrate compliance with the Flood hazard overlay code of the Townsville City Plan.</i>	Detailed stormwater and flood management design for the development will be progressed as part of future Operational Works applications for each stage of the development. These applications will be accompanied by RPEQ-certified, stage-specific stormwater management plans, including assessment of cumulative impacts where relevant. 1. The stormwater management plans will demonstrate: • compliance with the relevant performance outcomes and prescribed outcomes of Part 9.3.2 Healthy Waters Code of the Townsville City Plan; • the measures to be implemented to manage and contain potentially contaminated water, including firewater and firewater waste, to prevent discharge to natural waterways and receiving environments; • assessment of blockage factors for drainage structures in accordance with Australian Rainfall and Runoff 2019 (ARR2019); and • that stormwater infrastructure and flood management measures have been designed to appropriately manage flood impacts and achieve the relevant outcomes of the Flood Hazard Overlay Code. 2. The future Operational Works applications will be assessed by Townsville City Council and will provide the detailed hydraulic modelling, design drawings and supporting technical information necessary to demonstrate compliance with the applicable planning scheme requirements. Accordingly, the detailed matters raised will be addressed through the subsequent Operational Works approval process. <i>Note: As per discussions between the Applicant and TCC, it is noted that Council is accepting of this approach and will condition the application generally in accordance with the above.</i>



Source: EMM (2026); DNRMMRRD (2025); ESRI (2026); GA (2011)

KEY

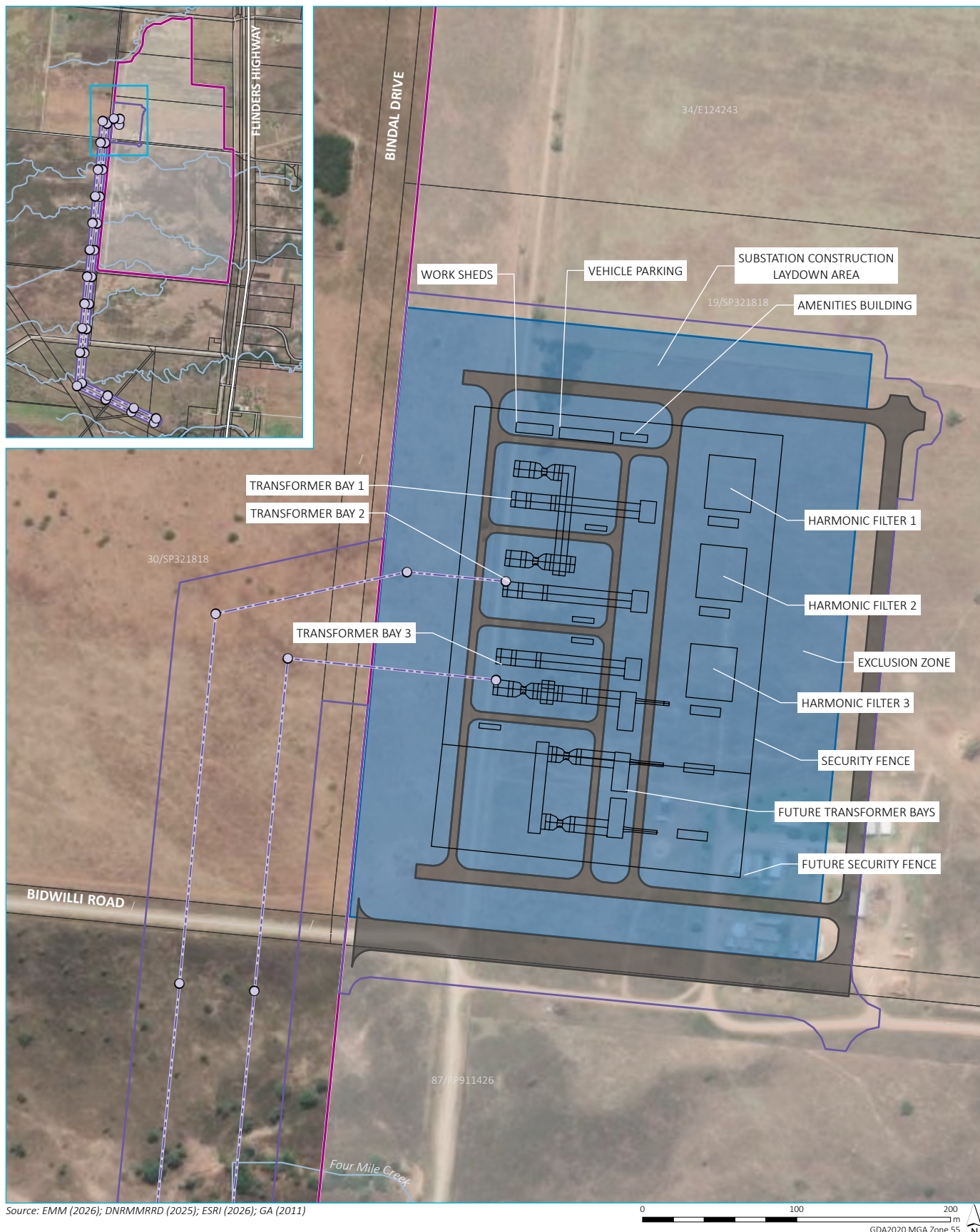
 Northern Quartz Campus	 Proposed site layout
 Premises	 Substation
Existing environment	 Internal road
 Major road	 Transmission line
 Minor road	 Transmission pole
 Watercourse/drainage line	
 Cadastral boundary	

NOTES:

1. Development to be generally in accordance with the Relevant Plans herein.
 2. Premises boundary is subject to detailed site survey and final TCC LEIP design.
 3. An integrated construction approach to be adopted inclusive of the BESS development. This is subject to future operational works applications.
 4. The proposed site wide drainage philosophy considers the wider development that is inclusive of the BESS development and water management pond. The delivery will culminate in an integrated water management delivery method.
 5. NQC Substation - AIS or GIS subject to detailed design
 6. Transmission lines will connect into future PLQ Substation
 7. PLQ Substation (65/E124264) - design and approvals by others
 8. Tie-in point to Powerlink Calcium Substation is proposed to be located in the vicinity of Lots 65/E124264, Lot 64/E124248, Lot 417/E12421 (to be confirmed during detailed design).
- Therefore, the Transmission Line location across Lots 65/E124264, Lot 64/E124248, and Lot 417/E12421 is indicative only and subject to detailed design of the Calcium Substation.

Project Layout

Northern Quartz Campus
NQC Substation and Transmission Line
Planning Assessment Report - Relevant Plans
Figure 1



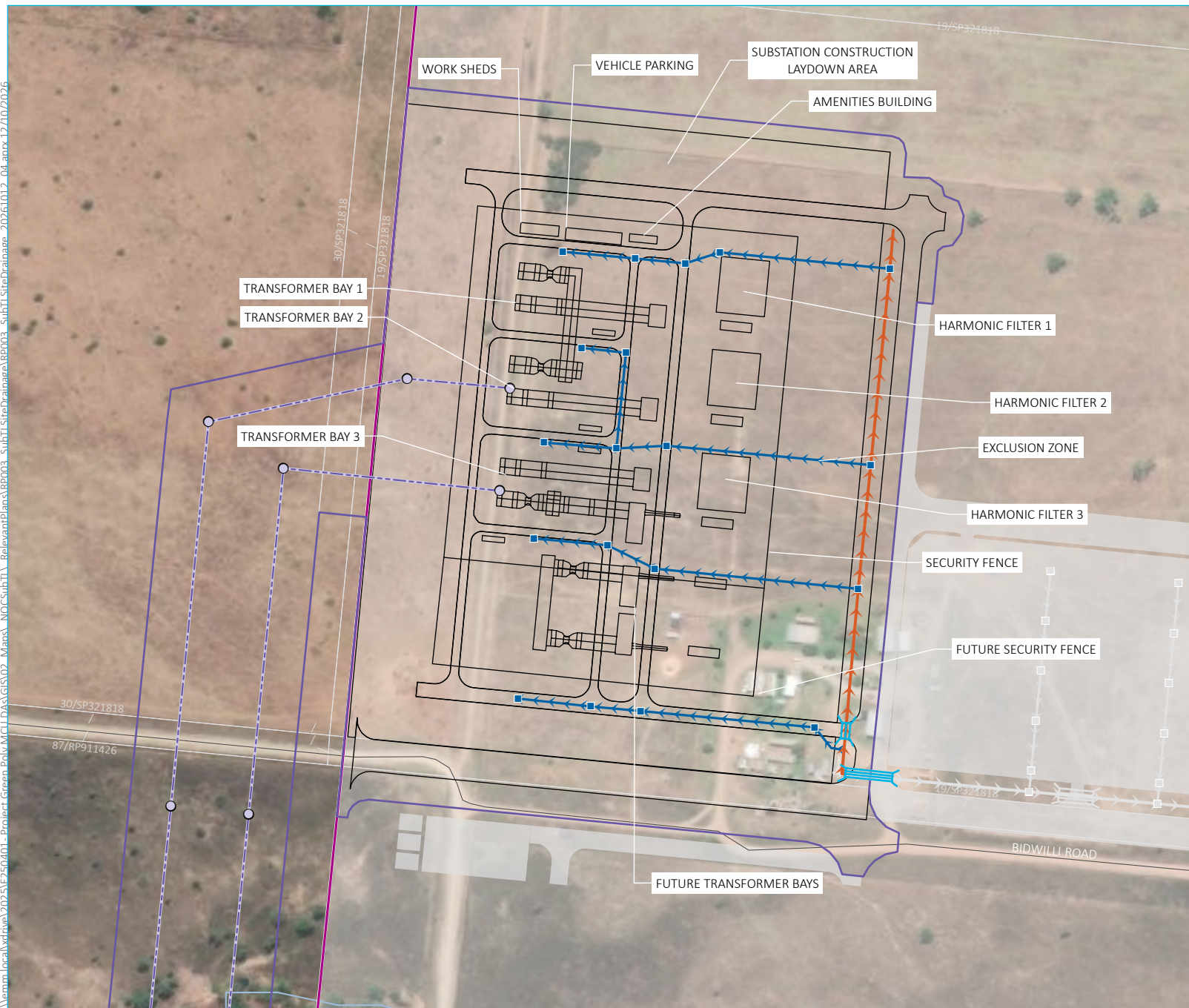
KEY

Northern Quartz Campus	Existing environment
Premises	Minor road
Proposed site layout	Watercourse/drainage line
Substation	Waterbody
Internal road	Cadastral boundary
Substation infrastructure	
Transmission line	
Transmission pole	

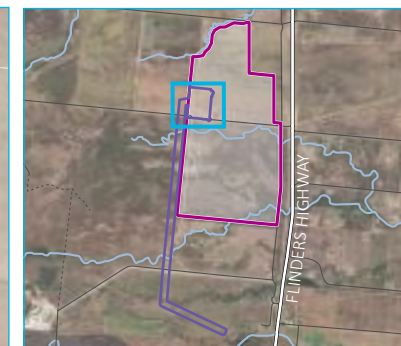
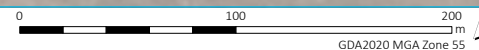
Site infrastructure General arrangement

Northern Quartz Campus
 NQC Substation and Transmission Line
 Planning Assessment Report- Relevant Plans
 Figure 2

\\emm-local\drive\2025\NE250401-Project Green\Polv\MCL\DA\SIG\S102_Mans\NOCSubTI\RelevantPlans\BP003_SubTI_SiteDrainage_20261012_04.aprx 12/10/2026



Source: EMM (2026); DNRMMRRD (2025); ESRI (2026)



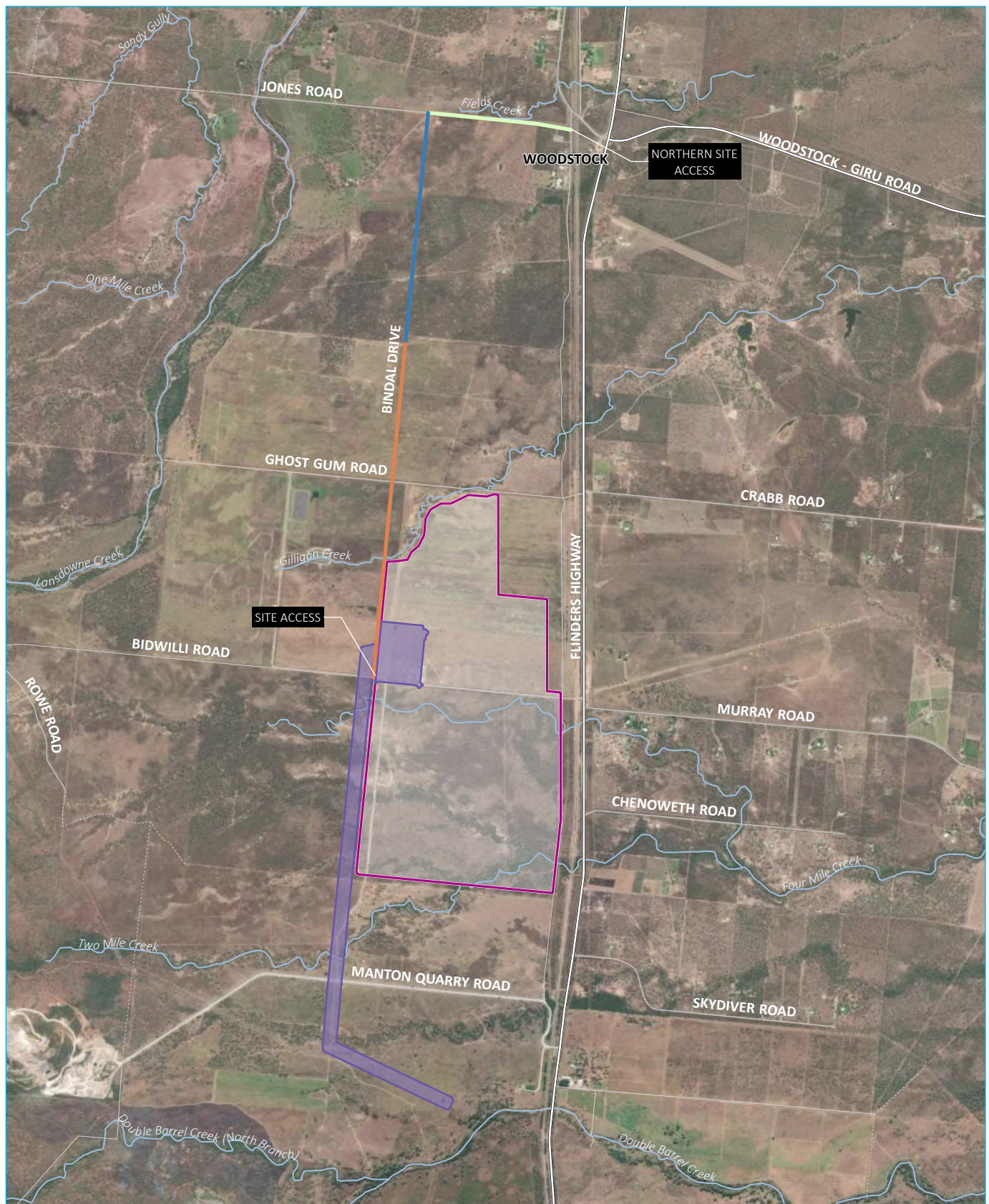
KEY

- ▬ Northern Quartz Campus
- ▬ Premises
- BESS area (separate package)
- Substation infrastructure
- Transmission line
- Transmission pole
- Proposed site drainage
 - Stormwater pit
 - Stormwater drainage pipe
 - Channel drain
 - Culvert
- Existing environment
 - Major road
 - Minor road
 - Vehicular track
 - Named watercourse
 - Cadastral boundary

Civil works
Site drainage and runoff

Northern Quartz Campus
NQC Substation and Transmission Line
Planning Assessment Report- Relevant Plans
Figure 3





Source: EMM (2026); DNRMMRRD (2025); ESRI (2026)

KEY

- Northern Quartz Campus
- Premises
- Site access route
- Jones Road
- No named road- Internal road (constructed)
- No named road- Internal road (to be constructed)

- Existing environment
- Major road
- Minor road
- Vehicular track
- Named watercourse

NOTES:

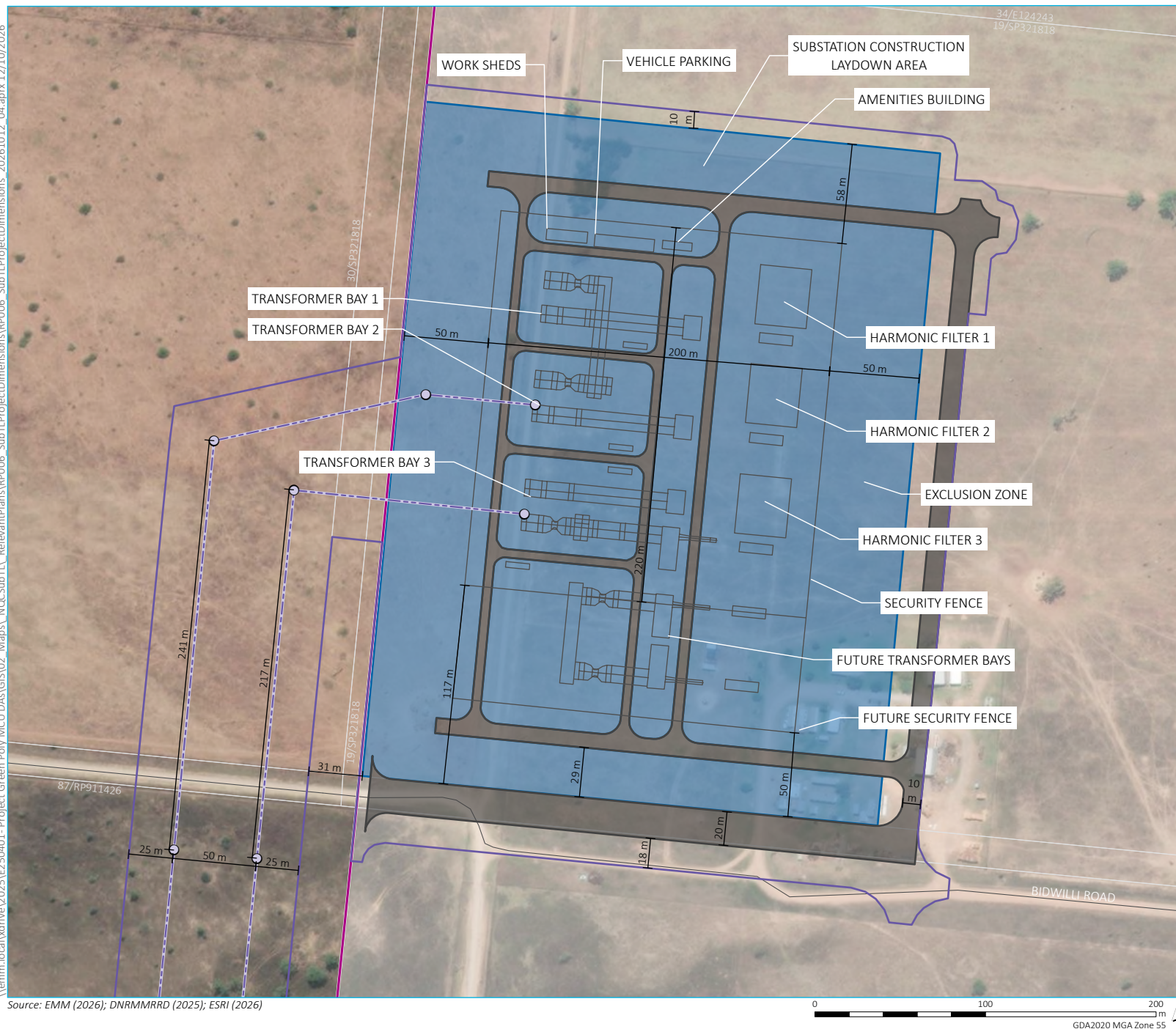
1. Northern Site Access intersection designed, constructed and delivered by others.
2. Construction and operational use of the Site Access point to be shared with the BESS development.

Site access plan

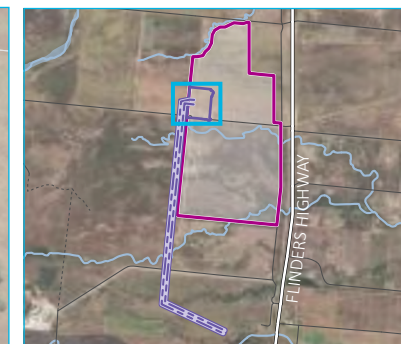
Northern Quartz Campus
 NQC Substation and Transmission Line
 Planning Assessment Report- Relevant Plans
 Figure 4



\\emm.local\drive\2025\E250401 - Project Green Poly MCU DAs\GIS\02 Maps\ NQCSubTL\ RelevantPlans\RP006_SubTLProjectDimensions_20261012_04.aprx 12/10/2026



Source: EMM (2026); DNRMMRRD (2025); ESRI (2026)



KEY

■ Northern Quartz Campus

□ Premises

— Distance

Proposed site layout

■ Substation

■ Internal road

— Substation infrastructure

— Transmission line

○ Transmission pole

Existing environment

— Major road

— Minor road

... Vehicular track

— Named watercourse

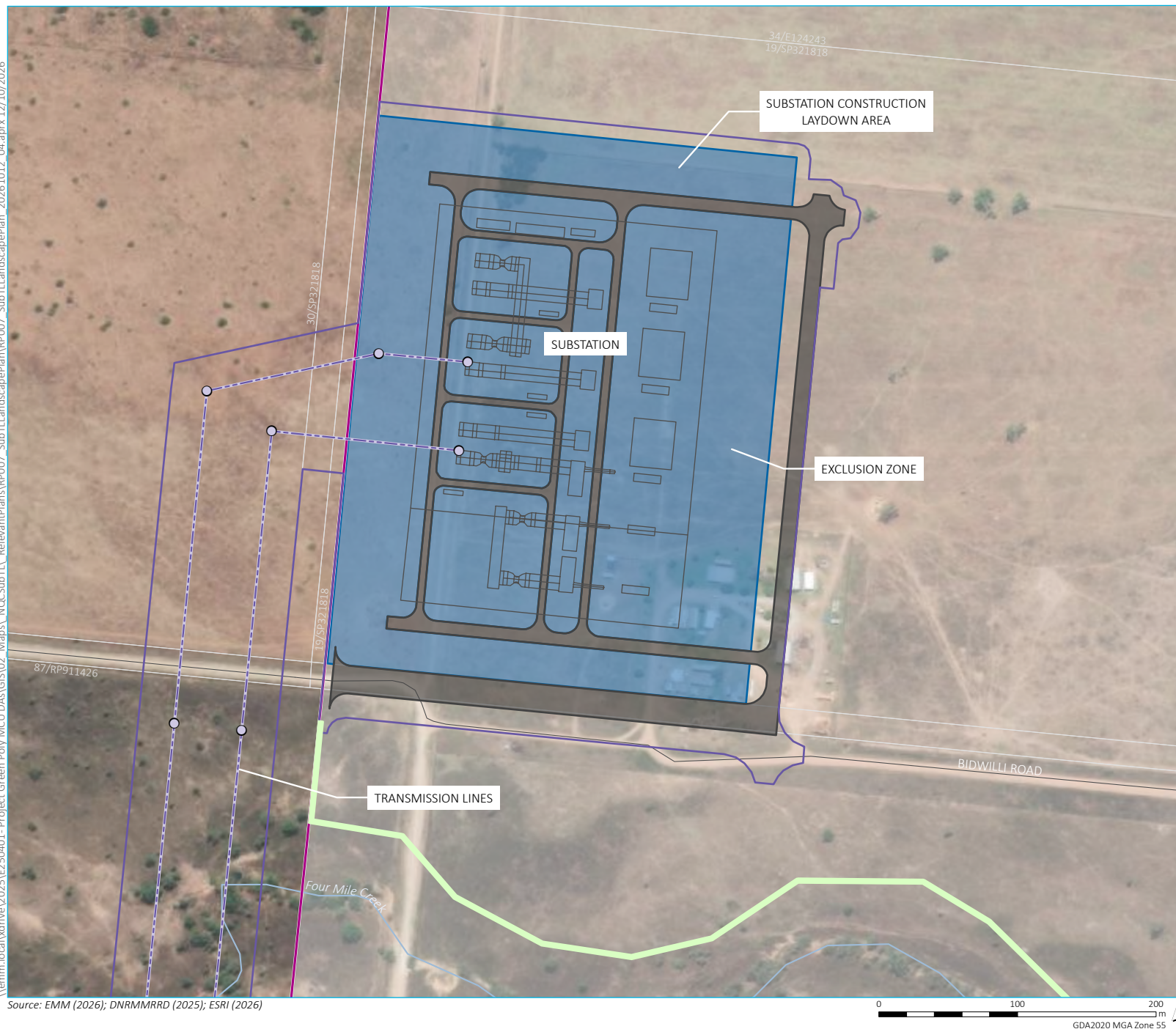
□ Cadastral boundary

Dimensions plan

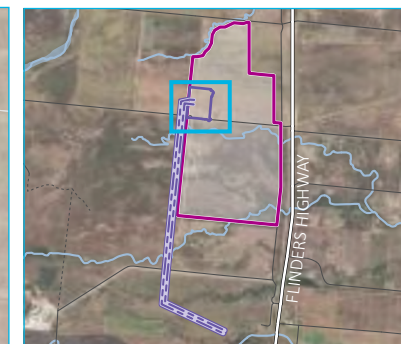
Northern Quartz Campus
NQC Substation and Transmission Line
Planning Assessment Report- Relevant Plans
Figure 5



\\emm.local\drive\2025\E250401 - Project Green Poly MCU DAs\GIS\02 Maps\ NQCSubTL\ RelevantPlans\RP007_subTLandscapePlan\RP007_subTLandscapePlan_20261012_04.aprx 12/10/2026



Source: EMM (2026); DNRMMRRD (2025); ESRI (2026)



KEY

■ Northern Quartz Campus

□ Premises

■ Landscape zone

Proposed site layout

■ Substation

■ Internal road

— Substation infrastructure

— Transmission line

○ Transmission pole

Existing environment

— Major road

— Minor road

..... Vehicular track

— Named watercourse

□ Cadastral boundary

Concept landscape plan

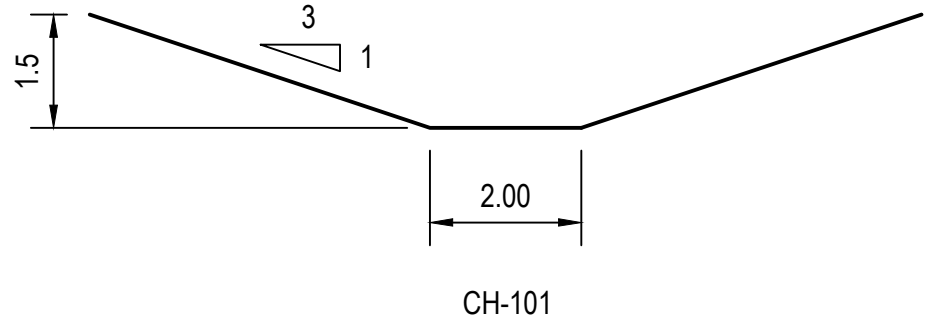
Northern Quartz Campus
 NQC Substation and Transmission Line
 Planning Assessment Report- Relevant Plans
 Figure 6



Plot Date: 2026-09-08 3:51 PM Filename: 529130-W00001-DRG-LC-0042.DWG



- LEGEND:
- PROPERTY BOUDARY (DCDB)
 - CHANNEL DRAIN
 - FLOW DIRECTION
 - PROPOSED STORMWATER DRAINAGE
 - PROPOSED STORMWATER PIT
 - PROPOSED CULVERT
 - ROCK PROTECTION



SECTION A
1:100

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A01.03	2026-08-11	DA APPROVAL	A01.03	W.BUMAGAT	B.E.ARQUELADA	P.ROWEL	M.PATMORE
A01.04	2026-09-02	DA APPROVAL	A01.04	W.BUMAGAT	B.E.ARQUELADA	P.ROWEL	M.PATMORE
A01.05	2026-09-08	DA APPROVAL	A01.05	W.BUMAGAT	B.E.ARQUELADA	P.ROWEL	M.PATMORE

100

0

2

4m

SCALE 1:100

10

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20

40m

SCALE 1:1000

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TITLE

SUPERNODE BESS TECHNICAL SUPPORT
CONCEPT DESIGN - STORMWATER DRAINAGE LAYOUT
HV SUBSTATION

DOCUMENT CODE

529130-W00001-DRG-LC-0042

SCALE
AS SHOWN

SIZE
A1

REFERENCE No.
DRG-LC-0042

REV
A01.05

1. CONTOUR INTERVAL 0.25m, MGA 2020 COORDINATES.
2. EARTH PADS BATTER SLOPES ARE 1V:2H.

CUT/FILL SUMMARY		
ITEM	QUANTITY	UNIT
CUT	-52,122	m ³
FILL	143,643	m ³
TOTAL	91,521	m ³

- PROPERTY BOUNDARY (DCDB)
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR

RANGE DEPTH AT 200MM INTERVAL				
Lower_value		Upper_value		Colour
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-2.8	to	-2.6	m	
-2.6	to	-2.4	m	
-2.4	to	-2.2	m	
-2.2	to	-2.0	m	
-2.0	to	-1.8	m	
-1.8	to	-1.6	m	
-1.6	to	-1.4	m	
-1.4	to	-1.2	m	
-1.2	to	-1.0	m	
-1.0	to	-0.8	m	
-0.8	to	-0.6	m	
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-0.4	to	-0.2	m	
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0.2	to	0.4	m	
0.4	to	0.6	m	
0.6	to	0.8	m	
0.8	to	1.0	m	
1.0	to	1.2	m	
1.2	to	1.4	m	
1.4	to	1.6	m	
1.6	to	1.8	m	
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2.6	to	2.8	m	
2.8	to	3.0	m	



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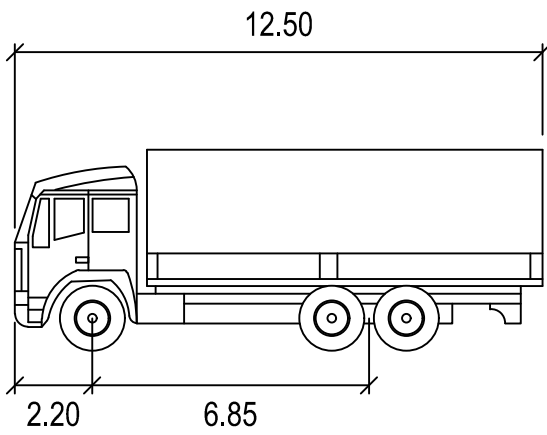
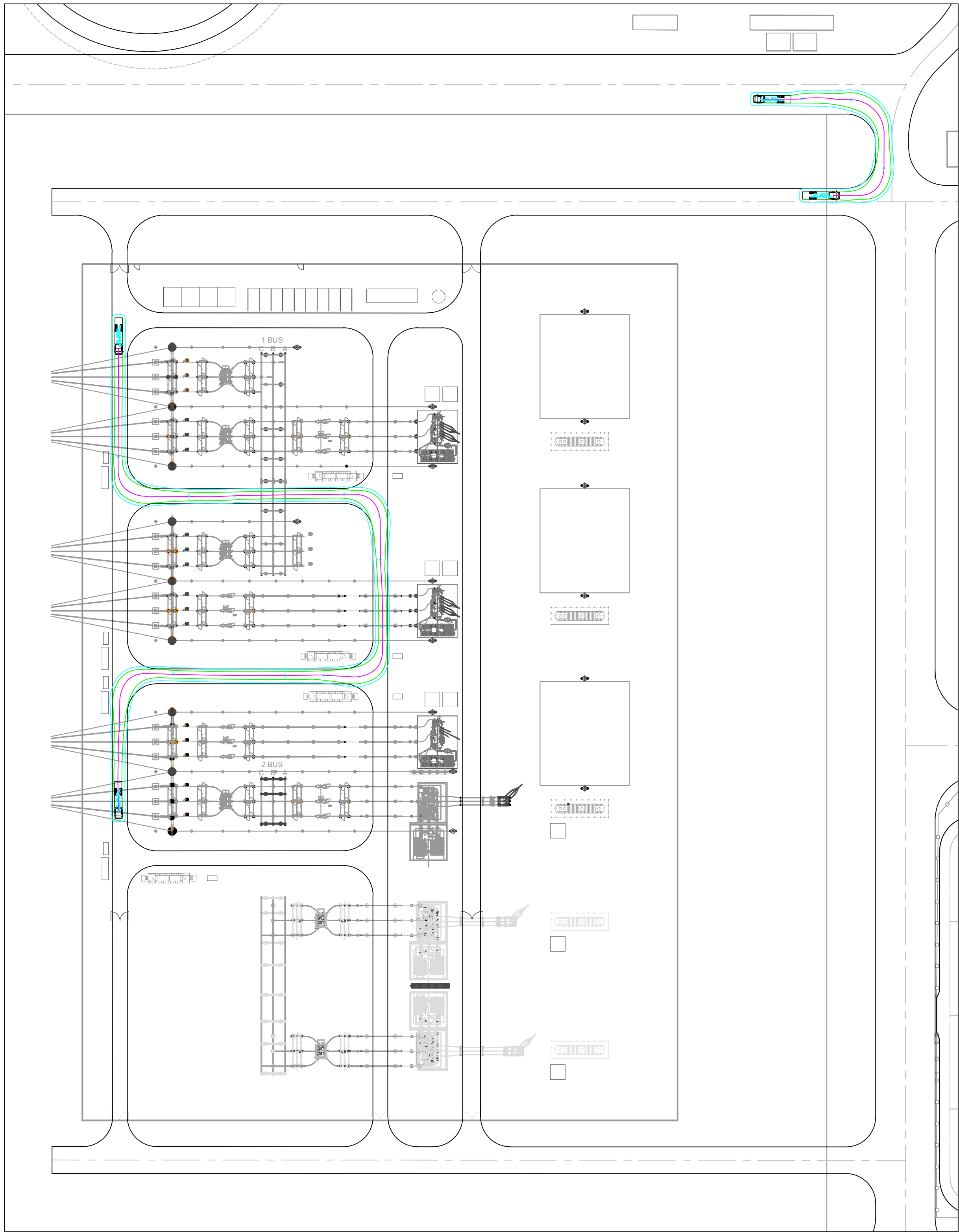
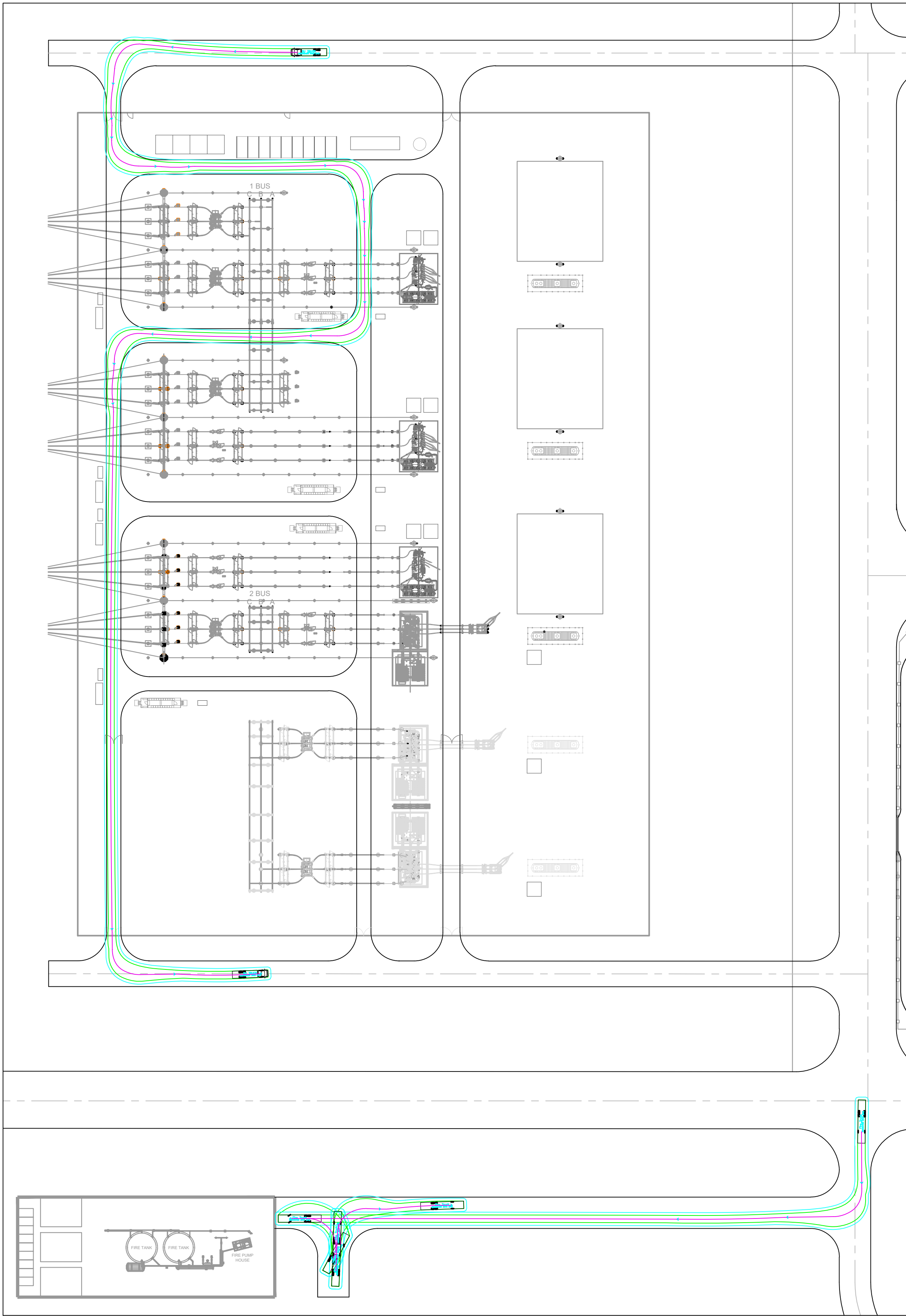
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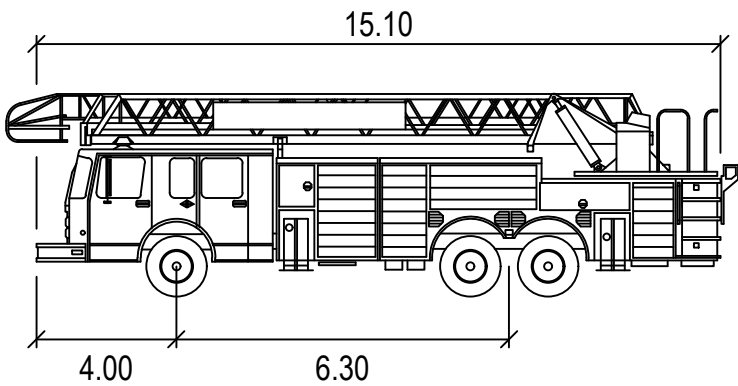
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Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.6



Fire Truck

	meters
Width	: 2.60
Track	: 2.60
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Steering Angle	: 32.6

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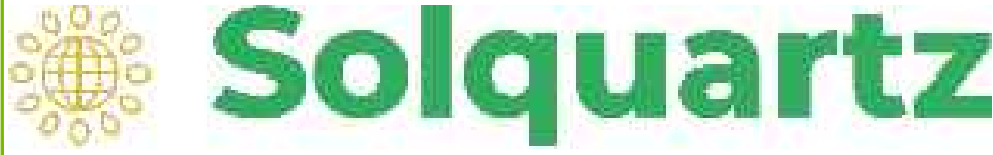
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TITLE

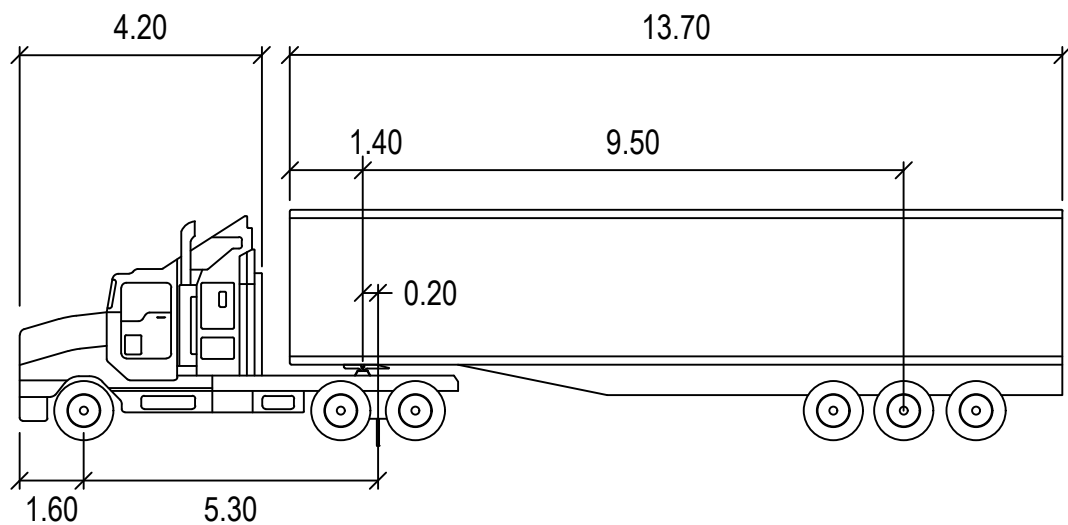
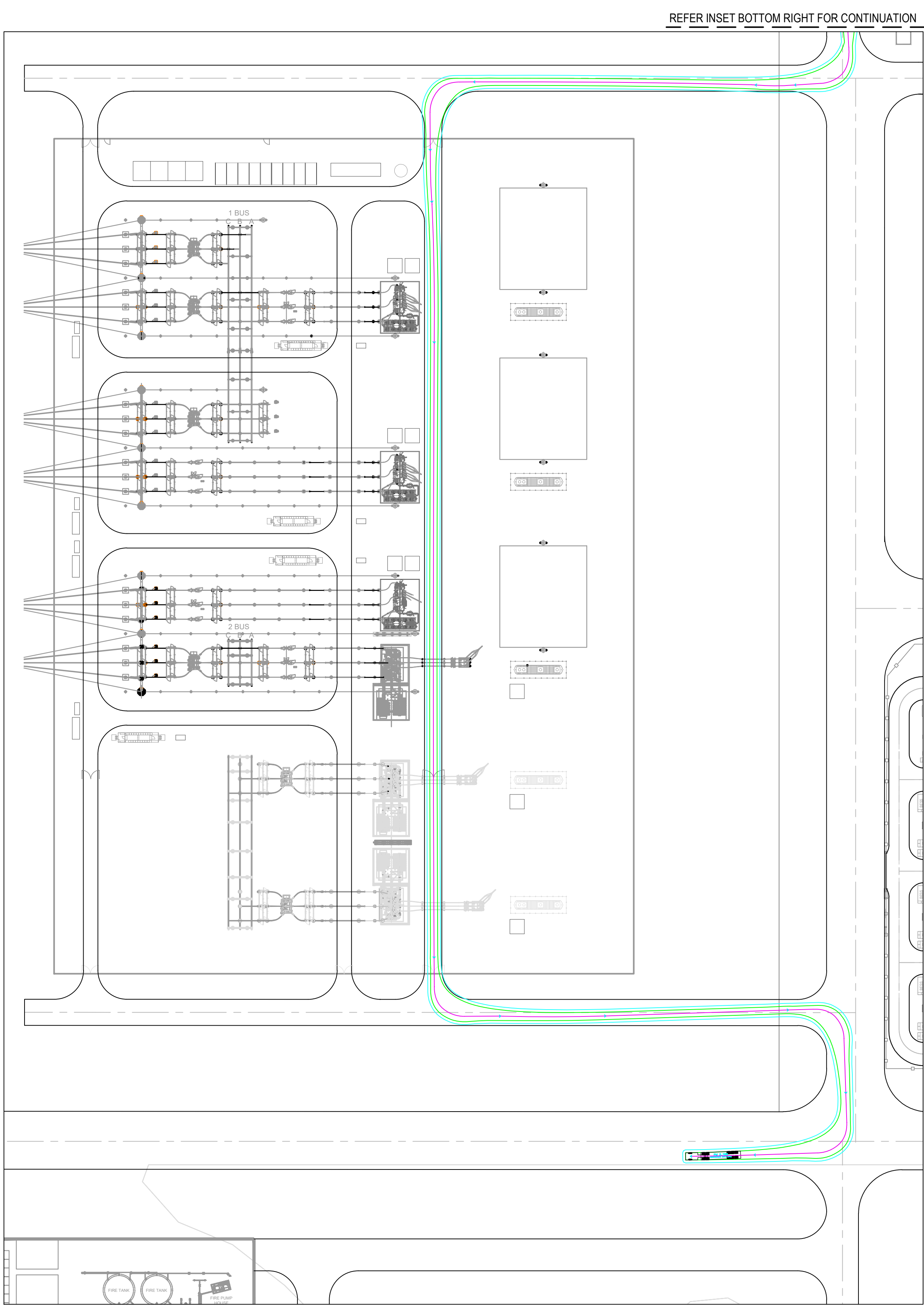
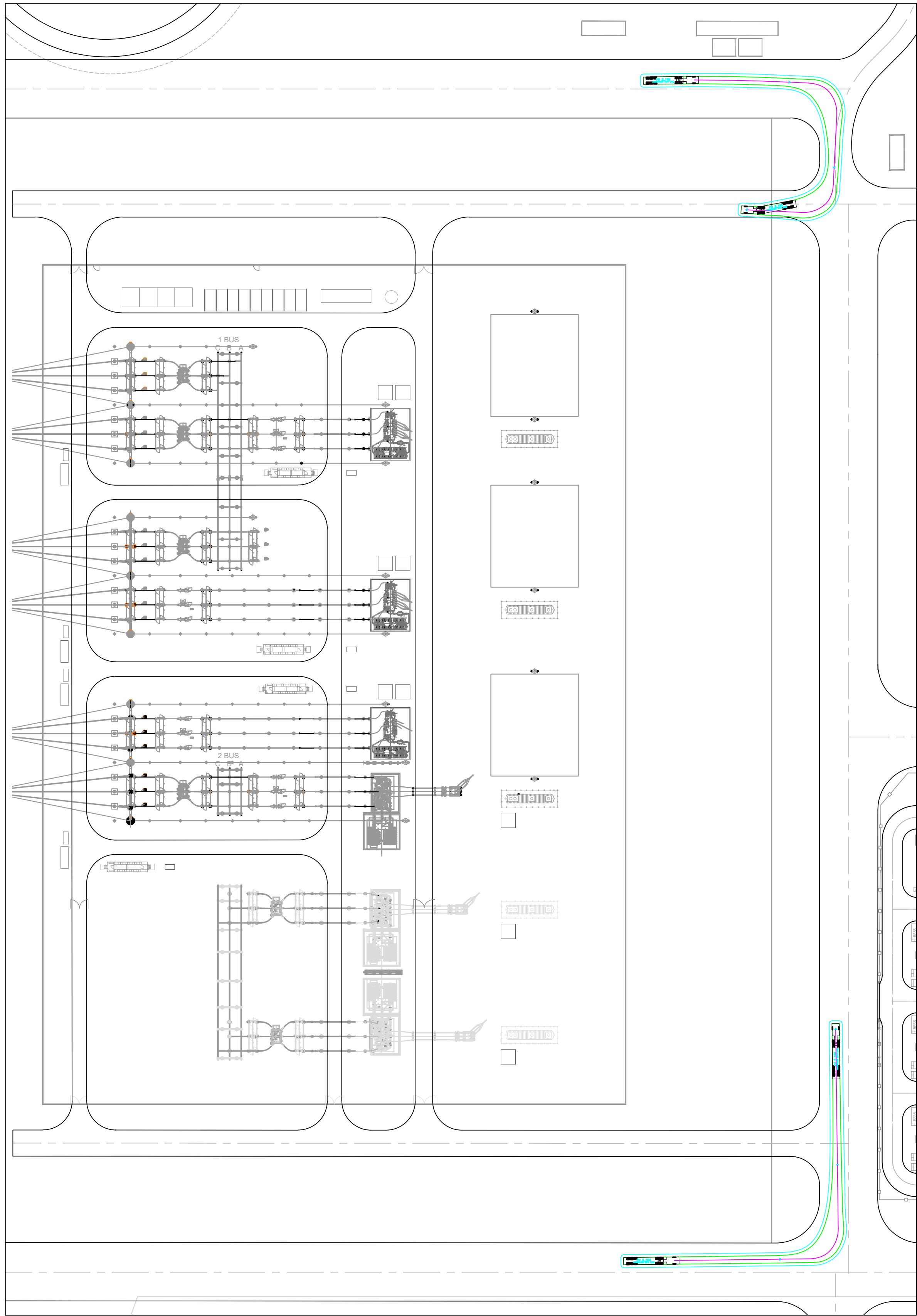
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CONCEPT DESIGN - TURN PATH ANALYSIS
HV SUBSTATION - SHEET 1

DOCUMENT CODE

529130-W00001-DRG-LC-0064

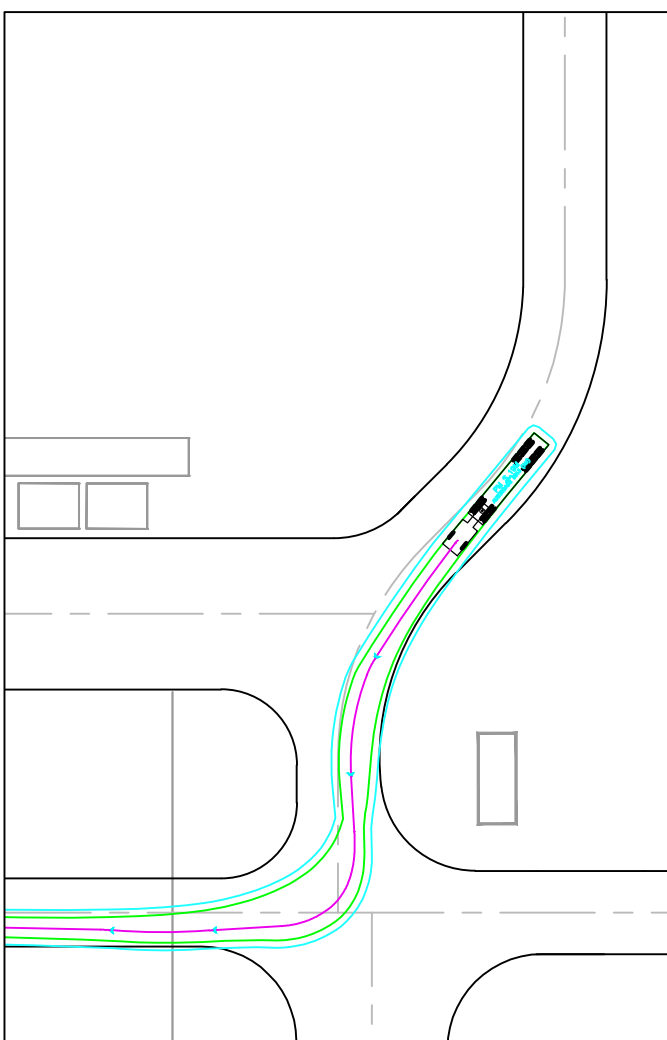
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Plot Date: 2026-09-08 1:13 PM Filename: 529130-W00001-DRG-LC-0065.DWG



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Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		



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A01.05	2026-09-08	DA APPROVAL		A01.05	W.BUMAGAT	M.ANGELO	P.ROWEL	M.PATMORE

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Solquartz

10 0 20 40m

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Height datum AHD

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TITLE

SUPERNODE BESS TECHNICAL SUPPORT

CONCEPT DESIGN - TURN PATH ANALYSIS

HV SUBSTATION - SHEET 2

DOCUMENT CODE

529130-W00001-DRG-LC-0065

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