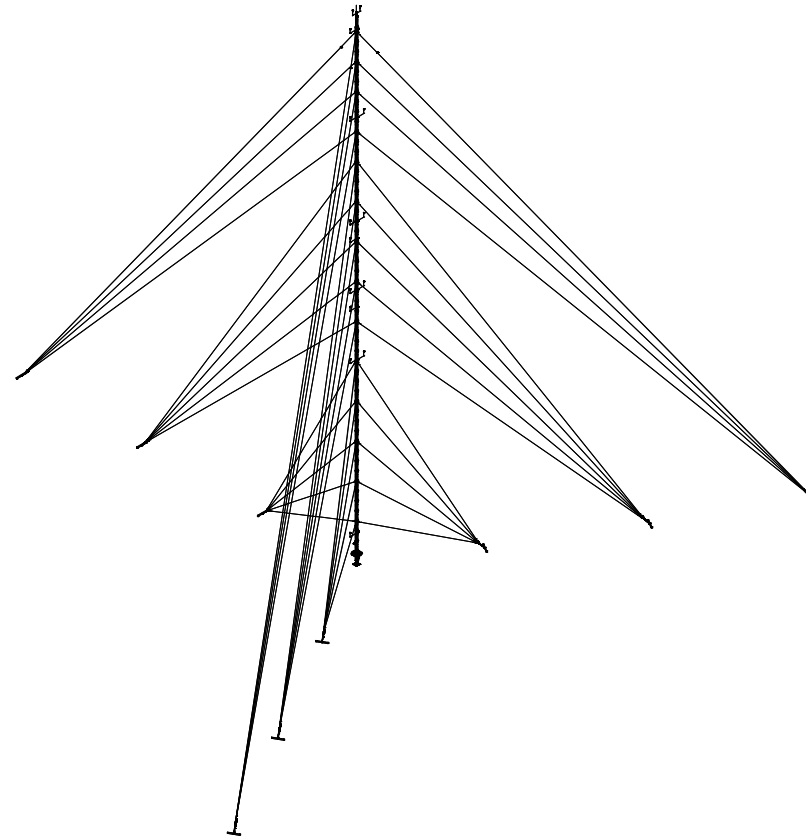


CLIENT: WESTERN GREEN ENERGY HUB
SITE: WGEH EUCLA, WA
MAST NAME: WGEH04
COORDINATES: UTM S 52 J: 257213,579, 6483995,590
dd.ddddd°: -31.753786°N, 126.436828°E
DESCRIPTION: 160m (NOM.) TEMPORARY GL55-36 GUYED LATTICE MAST
WIND REGION: A5
TERRAIN CATEGORY: 2
STRUCTURAL IMPORTANCE: LEVEL 1

AS3995-1994 & AS1170.2:2021

DRAWING REGISTER	
SHEET TITLE	SHEET No.
TITLE SHEET & DRAWING REGISTER	1/10
GENERAL NOTES	2/10
MAST PLAN	3/10
MAST ELEVATION	4/10
MAST ANCILLARY DETAILS	5/10
MAST FOOTING DETAILS - CAST IN-SITU	6/10
MAST FOOTING DETAILS - ROCK ANCHOR	7/10
EARTHING DETAILS	8/10
FENCING DETAILS	9/10
FALL ARREST DETAILS	10/10



1 ISOMETRIC VIEW
S-01

NOTES



REV	DESCRIPTION	DATE
00	ISSUED FOR CONSTRUCTION	10/05/23



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CLIENT



PROJECT
 WGEH, EUCLA, WA
 WGEH04 160M(NOM.) MET MAST
 GL55-36 GUYED LATTICE MAST
 TEMPORARY DEPLOYMENT

SHEET TITLE
 TITLE SHEET & DRAWING REGISTER

STATUS **FOR CONSTRUCTION**

SCALE PLOTTED AT A3
 N.T.S.

THIRD ANGLE
 PROJECTION

DRAWN CG	CHECKED HY	APPROVED LG	CO-ORDIN LG
-------------	---------------	----------------	----------------

DRAWING NUMBER ART-22439-DRG-0002	SHEET 1 / 10
--------------------------------------	-----------------

WGEH04 Mast Drawings

GENERAL NOTES

- ALL MAST STEELWORK COMPONENTS, ASSEMBLIES AND PARTS CALLED OUT ON DETAILS, SECTIONS AND BILL OF MATERIALS ARE THE PROPRIETARY PRODUCTS OF ART GROUP UNLESS NOTED OTHERWISE (U.N.O), COMPLETE DETAILS AND INFORMATION OF ART GROUP PRODUCTS SHOWN ON PRODUCTION SHOP DRAWINGS.
- ALL DIMENSIONS TO BE CHECKED ON-SITE PRIOR TO CONSTRUCTION.
- ALL DIMENSIONS ON SHOWN ARE IN MILLIMETERS U.N.O.
- DO NOT GET DIMENSIONS BY SCALING DRAWINGS.
- ALL WORKMANSHIP PREFORMED AND MATERIALS USED SHALL BE AS PER THE CURRENT AUSTRALIAN STANDARDS, THE BY-LAWS, AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
- ALL BOLTS ARE GRADE 8.8 STRUCTURAL ASSEMBLIES SUPPLIED WITH NUT AND WASHER U.N.O.
- ALL BOLTS TO BE SNUG TIGHTENED U.N.O.
- MAINTAIN STABLE CONDITIONS OF STRUCTURE DURING CONSTRUCTION AND DO NOT OVER STRESS ANY PART DURING CONSTRUCTION.
- PROVIDE "HELICOIL GRIP": OR "FAN WRAP" AT TERMINATION OF ALL GUY WIRES.
- INSTALL LAD-SAF FALL ARREST SYSTEM AS PER MANUFACTURES SPECIFICATIONS.

LOCATION

- THE MAST LOCATION AND PROXIMITY TO PUBLIC ROADS, BUILDINGS AND OTHER INFRASTRUCTURE IS THE RESPONSIBILITY OF THE CLIENT AND RELEVANT LOCAL COUNCIL, STATE AND FEDERAL AUTHORITIES, UNLESS OTHERWISE STATED, ART IS NOT RESPONSIBLE FOR THE FINAL LOCATION IN REGARD TO COMPLIANCE WITH RELEVANT LOCAL COUNCIL, STATE AND FEDERAL AUTHORITIES.

EARTHING

- UNLESS OTHERWISE SPECIFIED ART IS NOT RESPONSIBLE FOR THE SITE EARTHING SYSTEM COMPLIANCE TO AS/NZS 1768-2021 CI 3.5.3 (EARTHING RESISTANCE RECOMMENDED VALUES) AS WELL AS THE PROVISION OF GEOTECHNICAL AND SOIL RESISTIVITY SURVEY DATA.
- THE METAL GUY WIRES ARE CONSIDERED ADEQUATELY EARTHED AS THEY ARE ATTACHED TO BURIED STEEL ANCHOR RODS SET IN EARTH (REFER TO AS/NZS 1768-2021 Appendix I.5.1)
- THE TOWER METALLIC STRUCTURE IS CONSIDERED A NATURAL DOWN CONDUCTOR AND REQUIRES NO ADDITIONAL DOWNCONDUCTOR (REFER TO AS/NZS 1768-2021 CI 3.3.3)

STEEL ERECTION

- MAST INSTALLATION DESIGNED FOR GIN-POLE OR CRANE ERECTION.
- FOR CRANE LIFTS ASSEMBLED SECTIONS MUST NOT EXCEED 40m IN A SINGLE LIFT UNLESS TWO CRANES ARE USED IN A DUAL LIFT CONFIGURATION.
- FOR GIN-POLE LIFTS ONLY ONE SECTION AT A TIME TO BE RAISED WITH GIN-POLE.

FOOTINGS & FOUNDATIONS

- REMOVE ALL TOPSOIL AND UPPER STRATA CONTAINING ORGANIC MATTER FOR ALL FOOTINGS.
- IF MATERIAL ON-SITE IS NOT SUITABLE FOR STANDARD COMPACTION SPECIFICATION, THEN IMPORTED FILL OR BACKFILL SHALL CONSIST OF APPROVED MATERIAL INSTALLED AS PER COMPACTION SPECIFICATIONS.
- GROUND COLLAPSE CONTROL MEASURES SHALL BE USED WHERE GROUND COLLAPSE MAY OCCUR BY APPLYING EITHER SHORING, BENCHING AND OR BATTERING, LOCAL WHS CODE OF PRACTICE SHALL BE ADHERED TO.

GUY ANCHOR COMPACTION SPECIFICATIONS

- THE LEVEL OF TOLERANCE OF GUY ANCHOR FOOTINGS MAY VARY (HIGHER/LOWER) WITHOUT ENGINEERING REVIEW MAINTAINING NOMINATED GUY ANCHOR ANGLES AS SPECIFIED BY THE STRUCTURAL ENGINEER.
INNER FOOTING: 3.0m
INTERMEDIATE FOOTING: 6.0m
OUTER FOOTING: 6.0m
- EXCAVATE ANCHOR PIT AND INSTALL STEEL ANCHOR BEAM, ANCHOR ROD AND ATTACHMENTS AS SPECIFIED IN DETAILS AND INFORMATION PROVIDED ON STRUCTURAL DRAWINGS.
- CLAYS OR SILTS (BASED ON $\phi=20^\circ$ AND $C_u=20kPa$) OR COMPACTABLE SANDS (BASED ON $\phi=32^\circ$ MIN.) CAN BE USED AS FILL MATERIAL, MINIMUM SOIL PROPERTIES ARE AS STATED ABOVE UNLESS A GEOTECHNICAL REPORT IS PROVIDED IN WHICH CASE SPECIFIC SELECT FILL PARTICLES SIZE AND SHAPE IS TO SUIT COMPACTED LAYER THICKNESS AS PER THE GEOTECHNICAL REPORT SPECIFICATIONS.
- ACHIEVE ADEQUATE COMPACTION BY PROVIDING A COMPACTED DENSITY EQUAL TO A CONTROLLED FILL CLASSIFICATION AS DEFINED IN AS2870, PLACE FILL IN LAYERS NO GREATER THAN 150mm WHEN COMPACTED. ACHIEVE REQUIRED COMPACTION BY MECHANICAL TAMPING SUCH AS COMPACTION BY RODDING, VIBRATING PLATE, SMOOTH DRUM ROLLER ATTACHED TO A BACKHOE/EXCAVATOR, OR WALK BEHIND WHACKER PACKER.
- ANGLE OF ANCHOR ROD SHOWN ON GUY ANCHOR FOOTING SCHEDULE REFERS TO PRETENSION FORCE BEING APPLIED TO GUY-WIRES AND RE-COMPACTION OF

CONCRETE

- ALL WORKMANSHIP PREFORMED AND MATERIALS USED ARE AS PER AS3600.
- PLACE CONCRETE WITH COMPRESSIVE STRENGTH F'C 32MPa AS DEFINED IN AS1379.
- MAST BASE FOUNDATION: CONCRETE COVER OF 75mm MIN. TOP, BOTTOM AND SIDES.
- GUY ANCHOR FOUNDATION: MIN, 50mm CONCRETE COVER AROUND THE STEEL ANCHOR BEAM; FOR TOTAL CONCRETE DEPTH REFER TO GUY ANCHOR FOOTING SCHEDULE.
- NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS MADE IN CONCRETE MEMBERS WITHOUT THE WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
- REINFORCEMENT SYMBOLS:
N - GRADE 500 NORMAL DUCTILITY DEFORMED BAR, THE NUMBER FOLLOWING THESE SYMBOLS INDICATES BAR DIAMETER IN MILLIMETRES U.N.O.
REINFORCEMENT TO COMPLY WITH AS4671.

STEEL WORK

- ALL WORKMANSHIP PREFORMED AND MATERIALS USED ARE AS PER AS4100 AND AS1554, EXCEPTION MAY BE PERMITTED ONLY WHERE AS VARIED BY APPROVED CONTRACT DOCUMENTS.
- UNLESS NOTED OTHERWISE, THE FOLLOWING STEEL GRADES YIELD STRENGTH APPLY TO MAST SECTIONS:
MAST CORD (LEGS) 500 MPa
MAST WEBBING 300 MPa
PLATES 250 MPa
- WELDED CONNECTIONS BETWEEN STRUCTURAL MEMBERS ARE 6mm CONTINUOUS FILLET WELD (OR SIZE EQUIVALENT TO THE MINIMUM THICKNESS OF CONNECTION MEMBERS IF LESS THAN 6mm) U.N.O. WELDED CONNECTIONS BETWEEN LATTICE & CHORDS ARE 6mm MIN. COMPLETE AND INCOMPLETE PENETRATION BUTT WELDS CLASS SP U.N.O.
- BOLT TYPES AND DESIGNATIONS WHERE USED ARE AS FOLLOWS:
4.6/S COMMERCIAL BOLTS TO AS1111 SNUG TIGHTENED 8.8/S HIGH STRENGTH STRUCTURAL ASSEMBLY (BOLTS, NUTS AND HARDENED WASHERS) TO AS1252 SNUG TIGHTENED ONLY FOR ALL MAST SECTIONS U.N.O.
- M16 HIGH STRENGTH (8.8/S) BOLTS USED TYPICALLY IN ALL CONNECTIONS U.N.O. NOTWITHSTANDING THIS, NO STEEL-TO-STEEL CONNECTIONS ASSEMBLED WITH LESS THAN 2/ M16 (8.8/S) BOLTS U.N.O. U-BOLTS (4.6/S) USED FOR ANCILLARIES INSTALLATION U.N.O.
- BOLT HOLES IN STEEL-TO-STEEL AND STEEL-TO-CONCRETE CONNECTIONS WITH BOLT DIAMETER +2mm AND +3mm RESPECTIVELY. BASE PLATES MUST HAVE A BOLT DIAMETER +6mm U.N.O.
- ALL NUTS, BOLTS AND WASHERS ARE GALVANIZED U.N.O.
- WELD MATERIAL REQUIRES A NOMINAL TENSILE STRENGTH OF 490MPa AS PER AS4100 AMENDMENT 1, 2012, TABLE 9.7.3.10(1).
- ALL WELDS REQUIRE CATEGORY SP AS PER AS1554 PART 1 U.N.O, PART 3 U.N.O.
- PROTECTIVE SURFACE TREATMENT APPLIED TO STRUCTURAL STEELWORK AS FOLLOWS:

GENERAL MAST FINISH:
HOT-DIP GALVANIZE "HDG600" (AS2312) (AVERAGE 90 MICRON).

GUY ANCHOR BEAMS & ANCHOR RODS FINISH:
HOT-DIP GALVANIZE "HDG600" (AS2312) (AVERAGE 90 MICRON),
BLACK STEEL MAY BE USED WHERE ANCHOR BEAM IS ENCASED IN CONCRETE.

MAST GUY WIRE SPECIFICATIONS

GUY WIRES: AS APPLICABLE

- Ø8.25 (7/2.75) G1320
TENSILE STRENGTH 1320 MPa
PRE-TENSION 3.5 kN

- Ø10 (19/2.00) G1320
TENSILE STRENGTH 1320 MPa
PRE-TENSION 5 kN

MAST DESIGN LOADS	
WIND PARAMETERS (AS1170.2:2021)	
WIND REGION	A5
TERRAIN CATEGORY	2
IMPORTANCE LEVEL (AS1170.0:2011)	1
TOPOGRAPHIC MULTIPLIER Mt	1.000
DIRECTIONAL MULTIPLIER Md	1
CLIMATE CHANGE MULTIPLIER Mc	1
REGIONAL WIND SPEED Vr (m/s) (2)	38
SERVICE WIND Vs (m/s) (3)	27
DEPLOYMENT TYPE (4)	TEMPORARY
STRUCTURE SERVICE LIFE (5)	5 YEARS
MAST STEELWORK INFORMATION	
MAST HUB HEIGHT	160000
MAST HEIGHT	157700
STANDARD MAST SECTION HEIGHT (GL55)	2880
MAST BASE HEIGHT (GL55)	465
MAST BASE RL	100
MAST FOOTING & SOIL PROPERTIES	
SOIL ALLOWABLE BEARING CAPACITY (kPa)	100 kPa
DENSITY OF SOIL (kN/m³)	17 kN/m³
INTERNAL ANGLE OF FRICTION (DEGREES°)	30°
MAST FOUNDATION	BURIED ANCHOR
FOUNDATION DIMENSIONS (WxLxD)	1800x1800x800 UNDER FILL WITH 2.6m³ BLUE METAL & 630kg CEMENT
NOTES: (A)	
<ol style="list-style-type: none"> REGIONAL WIND SPEED FOR AS1170.2:2021 CALCULATIONS OF WIND PRESSURE DETERMINED VIA AS1170.0:2011 ANNEX F TAKING INTO ACCOUNT THE DESIGN WORKING LIFE OF THE DEPLOYMENT TYPE AND ANNUAL PROBABILITY OF WIND EVENT EXCEEDANCE IN ACCORDANCE WITH THE IMPORTANCE LEVEL. THE DESIGN WORKING LIFE IS CONSIDERED AS 5 YEARS FOR TEMPORARY MASTS AND 25 YEARS FOR PERMANENT MASTS. SERVICE WIND SPEED BASED ON CRITERION OF SERVICEABILITY OF COMMUNICATION LATTICE TOWERS WHICH TAKES INTO CONSIDERATION OUTAGES IN BROADCASTING OR LOSS OF SIGNAL IN MICROWAVE RADIO LINKS. A 27 m/s WIND SPEED IS THE REFERENCE SPEED ANNOTATED IN AS3995-1994 ANNEX A AND OTHER INTERNATIONAL STANDARDS THAT REGULATES THIS TYPE OF STRUCTURAL DESIGN. AS DEFINED IN THE PROJECT SCOPE OF WORKS. MINIMUM SERVICE LIFE EXPECTED FOR STEEL MEMBERS, PROTECTIVE COATINGS AND CONCRETE ELEMENTS WITHOUT COMPROMISED TO STRUCTURAL INTEGRITY WITH STANDARD LEVEL OF MAINTENANCE. MAINTENANCE LOAD CONSIDERED AS 2 PERSONNEL AT A TIME OR EQUIVALENT. THE ULTIMATE SOIL CAPACITY IS TAKEN AS AT LEAST 1.5 TIMES THE REFERRED ALLOWABLE CAPACITY. 	

NOTES

00	ISSUED FOR CONSTRUCTION	10/05/23
REV	DESCRIPTION	DATE



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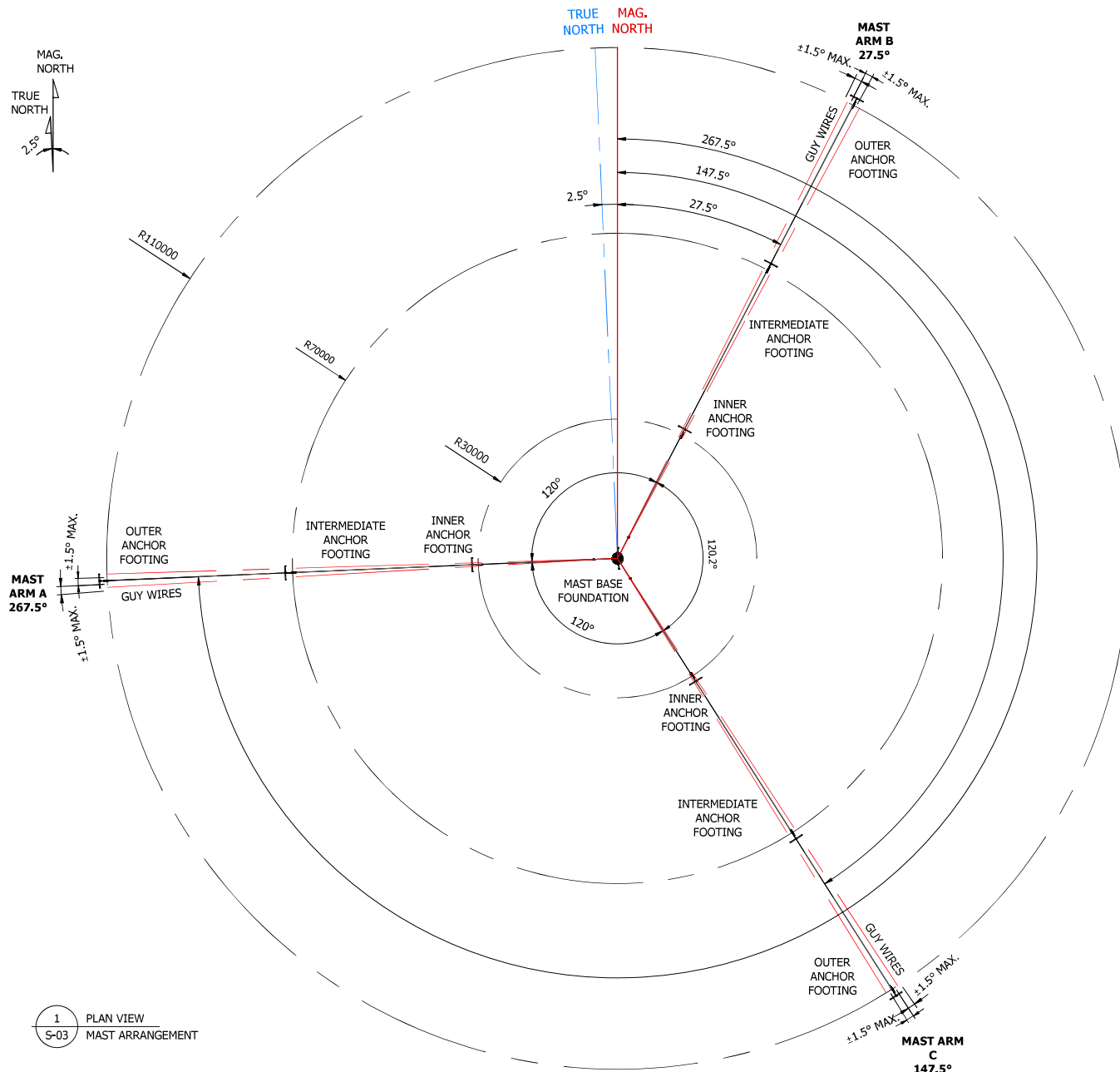


PROJECT
WGEH, EUCLA, WA
WGEH04 160M(NOM.) MET MAST
GL55-36 GUYED LATTICE MAST
TEMPORARY DEPLOYMENT

SHEET TITLE
GENERAL NOTES

STATUS **FOR CONSTRUCTION**

SCALE PLOTTED AT A3 N/A		THIRD ANGLE PROJECTION	
DRAWN CG	CHECKED HY	APPROVED LG	CO-ORDINATED LG
DRAWING NUMBER ART-22439-DRG-0002		SHEET 2 / 10	ISSUE 00



1 PLAN VIEW
S-03 MAST ARRANGEMENT

NOTES

Dr Haydar Yasir Faleh
 Prof. MBE Aust CP Eng
 Chartered Professional Engineer
 383-10705/2023

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PROJECT
 WGEH, EUCLA, WA
 WGEH04 160M(NOM.) MET MAST
 GL55-36 GUYED LATTICE MAST
 TEMPORARY DEPLOYMENT

SHEET TITLE
 MAST PLAN

STATUS **FOR CONSTRUCTION**

SCALE PLOTTED AT A3
 1:900

THIRD ANGLE
 PROJECTION

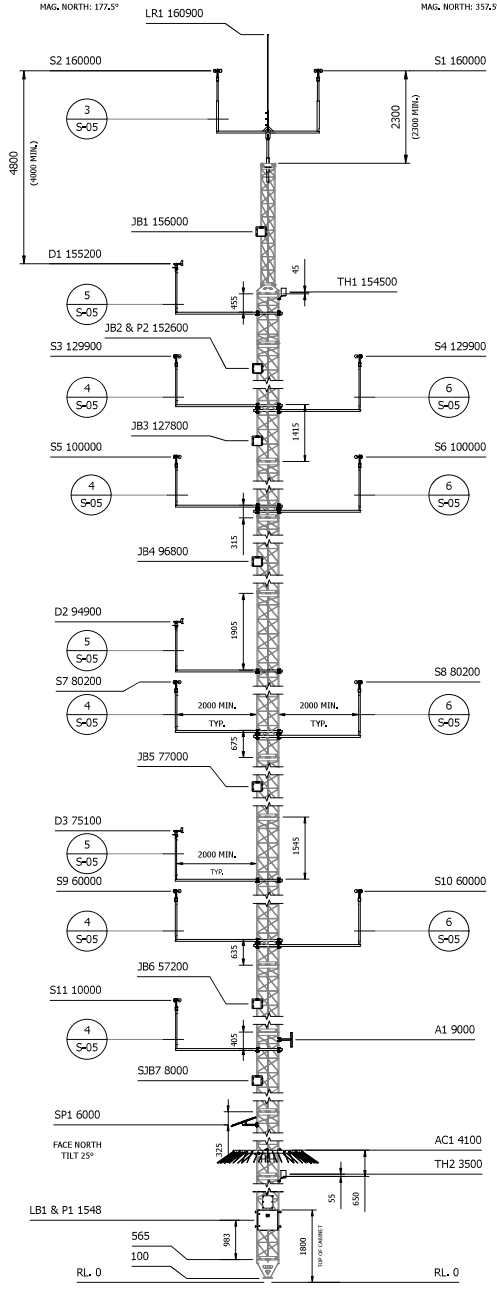
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DRAWING NUMBER ART-22439-DRG-0002	SHEET 3 / 10	ISSUE 00
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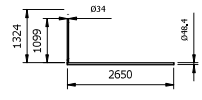
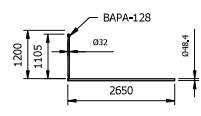
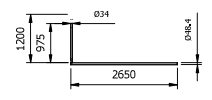
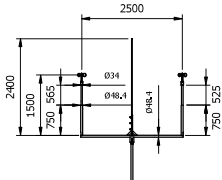
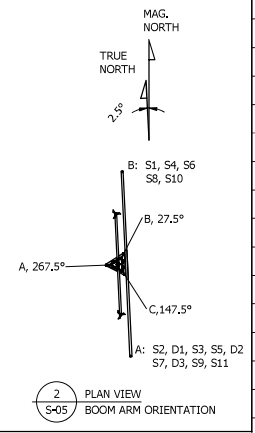
PRIMARY (A) TRUE NORTH: 180°
MAG. NORTH: 177.5°

MAGNETIC DECLINATION: 2.5°

SECONDARY (B) TRUE NORTH: 0°
MAG. NORTH: 352.5°



1 ELEVATION VIEW
MAST ANCILLARIES



MAST ANCILLARY LOADING

MARK	DESCRIPTION	HEIGHT	SECTION	ESA m ²
LR1	LIGHTNING ROD	160900	TOP	0.56
S1	ANEMOMETER THIES FCA2	160000		
S2	ANEMOMETER THIES FCA2			
JB1	JUNCTION BOX	156000	55	0.06
D1	WIND VANE THIES FIRST CLASS	155200	54	0.2
TH1	TEMP. & HUMIDITY GALTEC MELA KPC	154500		0.02
JB2	JUNCTION BOX	152600	53	0.06
P2	PRESSURE SENSOR AMMONIT AB60 (INSIDE JB2)			
S3	ANEMOMETER THIES FCA2	129900	45	0.2
S4	ANEMOMETER THIES FCA2			0.2
JB3	JUNCTION BOX	127800	35	0.06
S5	ANEMOMETER THIES FCA2	100000	35	0.2
S6	ANEMOMETER THIES FCA2			0.2
JB4	JUNCTION BOX	96800	34	0.06
D2	WIND VANE THIES FIRST CLASS	94900	33	0.2
S7	ANEMOMETER THIES FCA2	80200	28	0.2
S8	ANEMOMETER THIES FCA2			0.2
JB5	JUNCTION BOX	77000	27	0.06
D3	WIND VANE THIES FIRST CLASS	75100	26	0.2
S9	ANEMOMETER THIES FCA2	60000	21	0.2
S10	ANEMOMETER THIES FCA2			0.2
JB6	JUNCTION BOX	57200	20	0.06
S11	ANEMOMETER THIES FCA2	10000	3	0.2
SJB7	SMALL JUNCTION BOX	8000	3	0.06
A1	ANTENNA HUGHES 9502	9000	2	0.02
SP1	SOLAR PANEL SOLARWAT 50w	6000	2	0.33
AC1	ANTI CLIMB TO SUIT GL55 N28 MAST SECTION	4100	2	0.27
TH2	TEMP. & HUMIDITY GALTEC MELA KPC	3500	1	0.02
LB1	CAMPBELL SCIENTIFIC DATA LOGGER CR1000X	1548	1	0.27
P1	PRESSURE SENSOR AMMONIT AB60 (INSIDE LB1)			
TOTAL ESA m²				4.31

- NOTES:**
- STRUCTURAL ALLOWANCE FOR BUNDLED CABLES DOWN MAST LEG(S).
 - ESA VALUES INCLUDE BOOM ARMS, BRACKETS AND INSTRUMENTS.

NOTES

Dr Haydar Yasir Faleh
PROF. MEMBER CPEng
Chartered Professional Engineer
Membership No: 2002023
383-10/05/2023

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CLIENT

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GL55-36 GUYED LATTICE MAST
TEMPORARY DEPLOYMENT

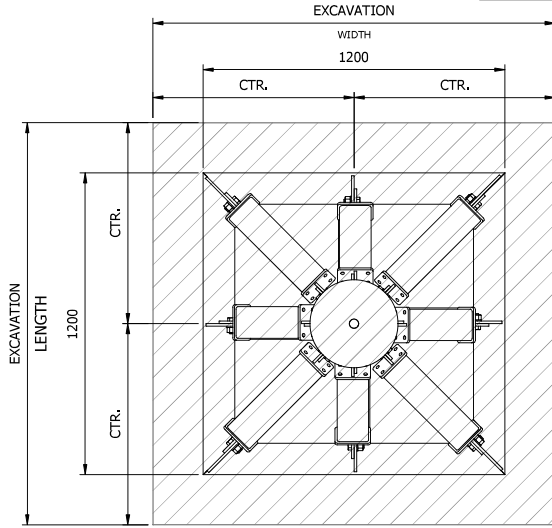
SHEET TITLE
MAST ANCILLARY DETAILS

STATUS **FOR CONSTRUCTION**

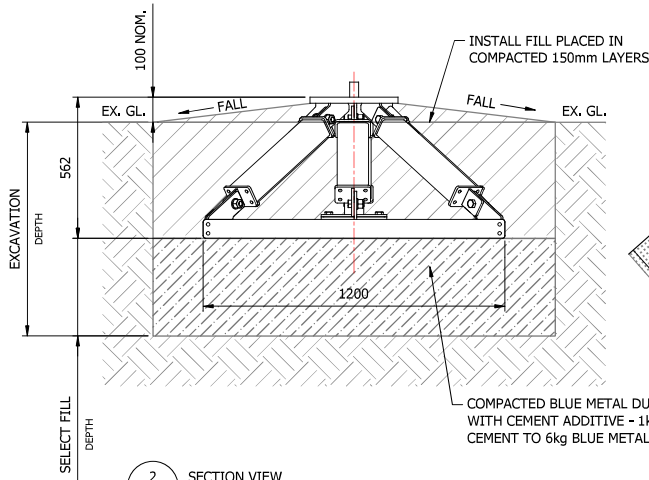
SCALE PLOTTED AT A3 1:125		THIRD ANGLE PROJECTION	
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DRAWING NUMBER ART-22439-DRG-0002		SHEET 5 / 10	ISSUE 00

MAST BASE FOUNDATION					
EXCAV. WIDTH	EXCAV. LENGTH	EXCAV. DEPTH	SELECT FILL DEPTH	BLUE METAL VOL. (m ³)	CEMENT (kg)
1800	1800	1262	800	2.6	630

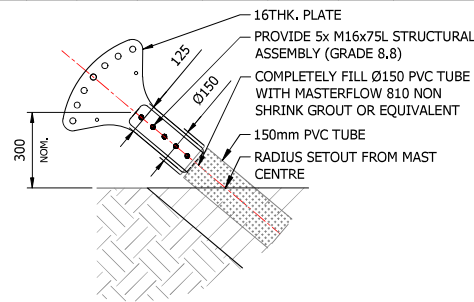
GUY ANCHOR FOOTING SCHEDULE																
FOOTING	RADIUS	No. GUYS	EXCAV. WIDTH	EXCAV. LENGTH	EXCAV. DEPTH	ANCHOR BEAM	CONC. DEPTH	CONC. VOL. PER ANCHOR	ANGLE	DIM A	DIM B	DIM C	GROUT WEIGHT (kg)	PIPE LENGTH	ANCHOR HEAD	TURNBUCKLE GALV. (GRADE P)
INNER	30000	5	800	3400	1600	3000	400	1.088m ³	48°	1357	400	2360	55	2000	7 HOLE	5/8"
INTERMEDIATE	70000	5	800	3400	2000	3000	400	1.088m ³	51°	1580	400	2780	68	2400	7 HOLE	5/8"
OUTER	110000	4	800	3400	2000	3000	400	1.088m ³	49°	1655	400	2840	69	2500	7 HOLE	5/8"



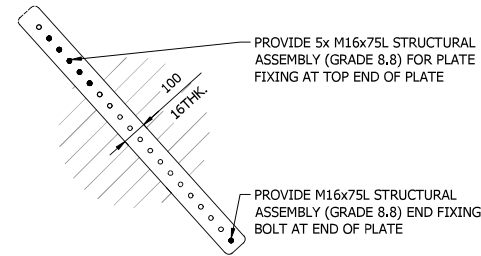
1 PLAN VIEW
S-06 BURIED STEEL MAST FOUNDATION TYPICAL DETAIL



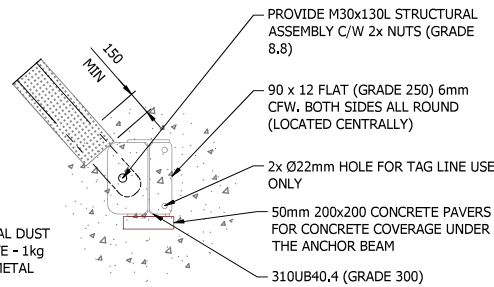
2 SECTION VIEW
S-06 BURIED STEEL MAST FOUNDATION TYPICAL DETAIL



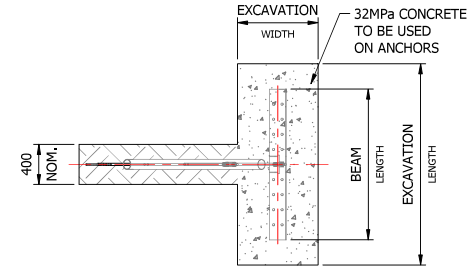
A DETAIL VIEW
S-06 ANCHOR HEAD ASSEMBLY TYPICAL DETAIL



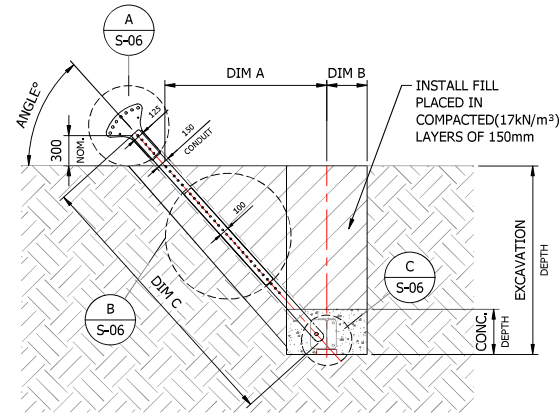
B DETAIL VIEW
S-06 ANCHOR ROD CONNECTION PVC TUBE & EARTH NOT SHOWN FOR CLARITY TYPICAL DETAIL



C DETAIL VIEW
S-06 ANCHOR BEAM ASSEMBLY TYPICAL DETAIL



3 PLAN VIEW
S-06 GUY ANCHOR FOOTING TYPICAL DETAIL



4 SECTION VIEW
S-06 GUY ANCHOR FOOTING TYPICAL DETAIL

NOTES
1. REFER TO GENERAL NOTES (SHEET 2)
GUY ANCHOR CONCRETE & COMPACTION SPECIFICATIONS.

Dr Haydar Yasin Faleh
PRO. MIEAust OFFICE
Chartered Professional Engineer
Membership No. 2562979
383-10/05/2023

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REV	DESCRIPTION	DATE



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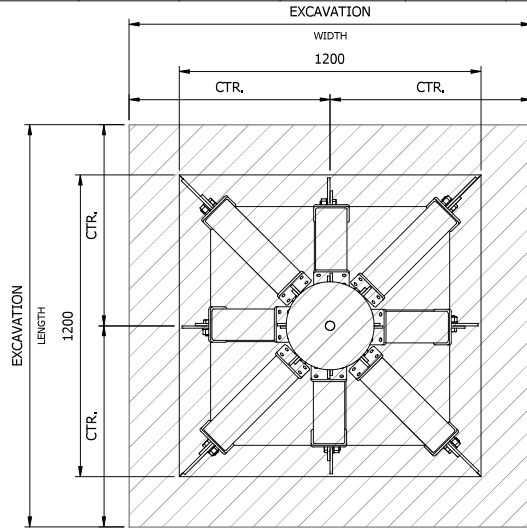


PROJECT
WGEH, EUCLA, WA
WGEH04 160M(NOM.) MET MAST
GL55-36 GUYED LATTICE MAST
TEMPORARY DEPLOYMENT

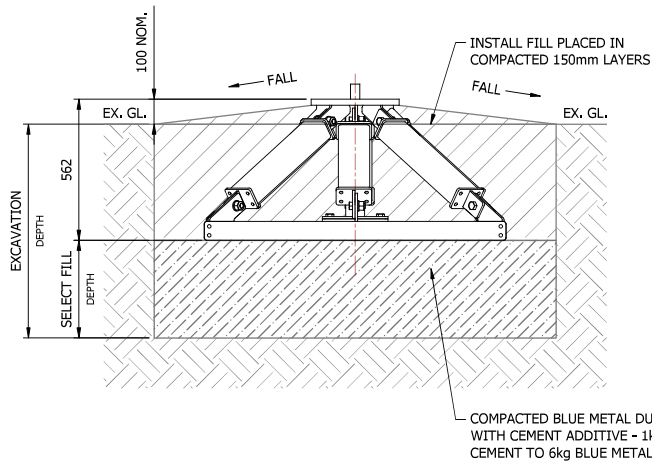
SHEET TITLE
MAST FOOTING DETAILS
STATUS
FOR CONSTRUCTION

SCALE PLOTTED AT A3 N.T.S.		THIRD ANGLE PROJECTION	
DRAWN CG	CHECKED HY	APPROVED LG	CO-ORDINATED LG
DRAWING NUMBER ART-22439-DRG-0002		SHEET 6 / 10	ISSUE 00

MAST BASE FOUNDATION					
EXCAVATION WIDTH	EXCAVATION LENGTH	EXCAVATION DEPTH	SELECT FILL DEPTH	BLUE METAL VOL. (m ³)	CEMENT (kg)
1800	1800	1262	800	2,6m ³	630

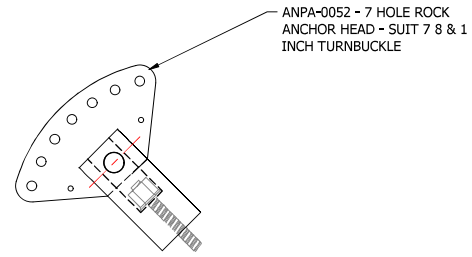


1 PLAN VIEW
S-07 BURIED STEEL MAST FOUNDATION TYPICAL DETAIL

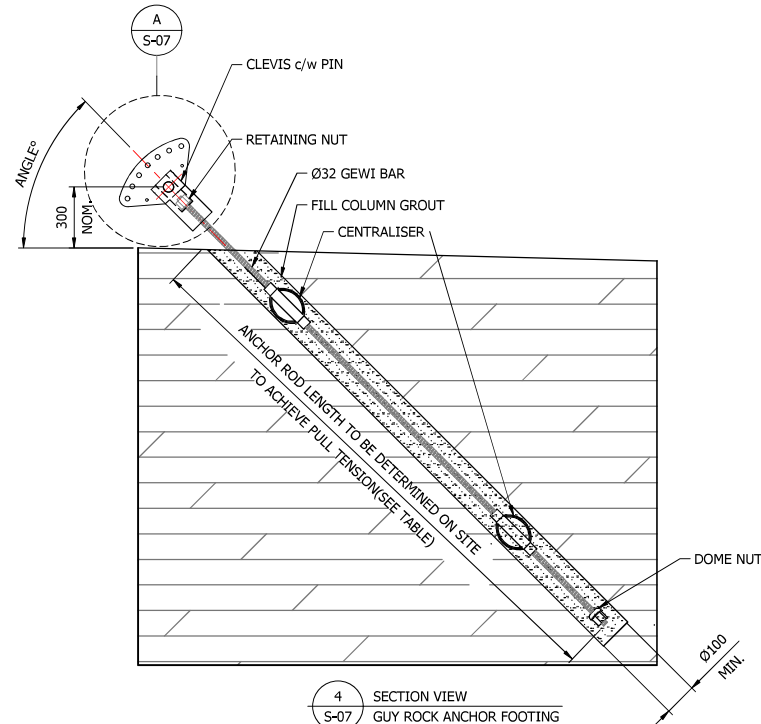


2 SECTION VIEW
S-07 BURIED STEEL MAST FOUNDATION TYPICAL DETAIL

ROCK ANCHOR FOOTING SCHEDULE						
FOOTING	RADIUS	No. OF GUY	ANGLE	REQUIRED REACTION (kN)	TEST LOAD (kN)	ANCHOR HEAD
INNER	30000	5	48°	64,7	97,1	7 HOLE
INTERMEDIATE	70000	5	51°	121,2	181,8	7 HOLE
OUTER	110000	4	49°	119,6	179,4	7 HOLE



A S-07 DETAIL VIEW
ROCK ANCHOR FOOTING



4 SECTION VIEW
S-07 GUY ROCK ANCHOR FOOTING TYPICAL DETAIL

NOTES

- ANCHOR ROCK SYSTEM USED : HULK EARTH ANCHOR CLEVIS AND ROD SYSTEM.
- ALL PILES TO BE SUBJECTED TO "STATIC PROOF" (NOT TO FAILURE) LOAD TESTING AS PER AS 2159
- FORCE IN THE PILE AXIS DIRECTION
- TEST RESULTS NEED TO BE INFORMED/APPROVED PRIOR TO MAINT ERECTION.
- ANCHOR DESIGN UNDERTAKEN BASED ON UNCONFIRMED SOIL TYPE AND PROPERTIES. ADVERSE SITUATIONS NEED TO BE INFORMED.

Dr. Haydar Yasir Faleh
PHD. MEng Civil Eng
Chartered Professional Engineer
383-10/05/2023

00	ISSUED FOR CONSTRUCTION	10/05/23
REV	DESCRIPTION	DATE



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PROJECT
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TEMPORARY DEPLOYMENT

SHEET TITLE
MAST FOOTING DETAILS

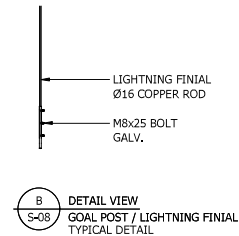
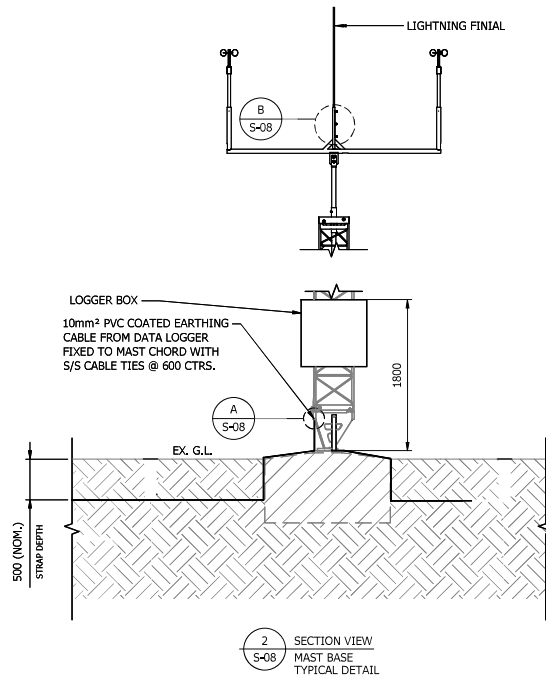
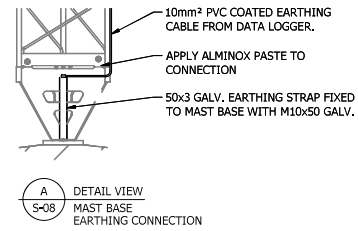
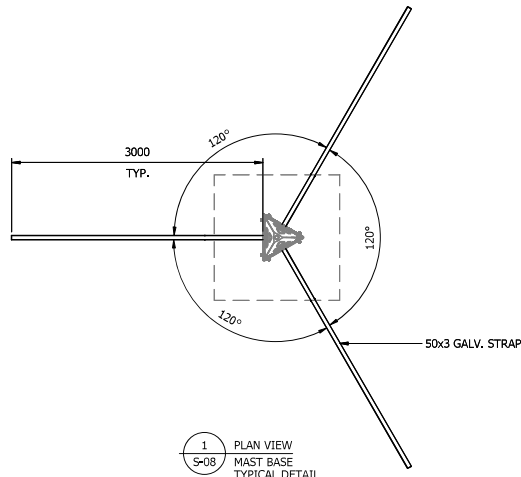
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THIRD ANGLE PROJECTION

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NOTES

1. REFER TO GENERAL NOTES (SHEET 2) FOR EARTHING SPECIFICATIONS.

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PROJECT
WGEH, EUCLA, WA
WGEH04 160M(NOM.) MET MAST
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TEMPORARY DEPLOYMENT

SHEET TITLE
EARTHING DETAILS

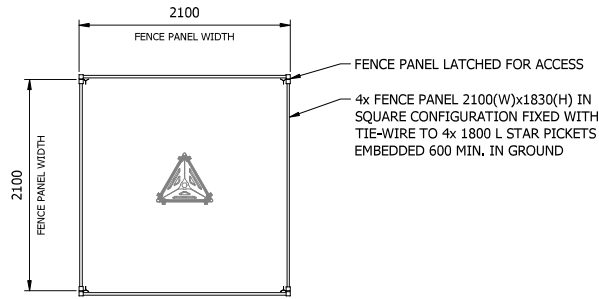
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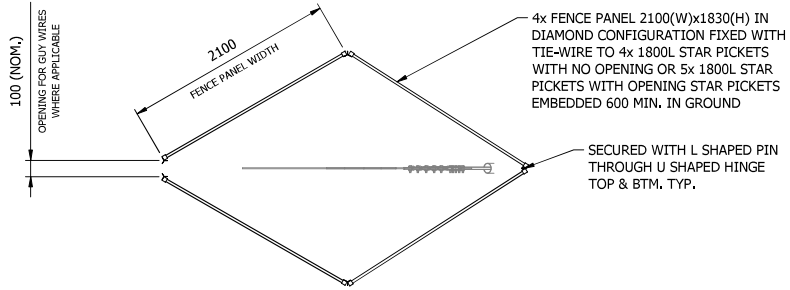
THIRD ANGLE PROJECTION

DRAWN CG	CHECKED HY	APPROVED LG	CO-ORDINATED LG
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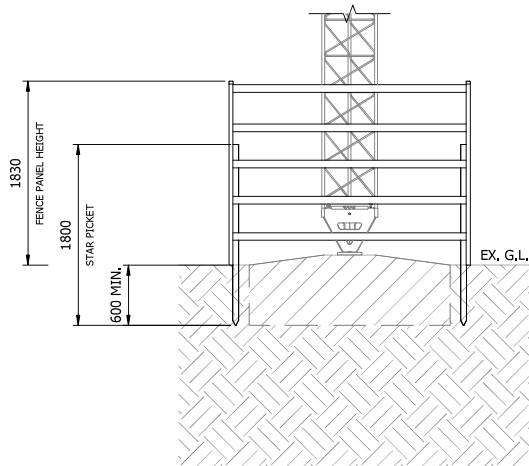
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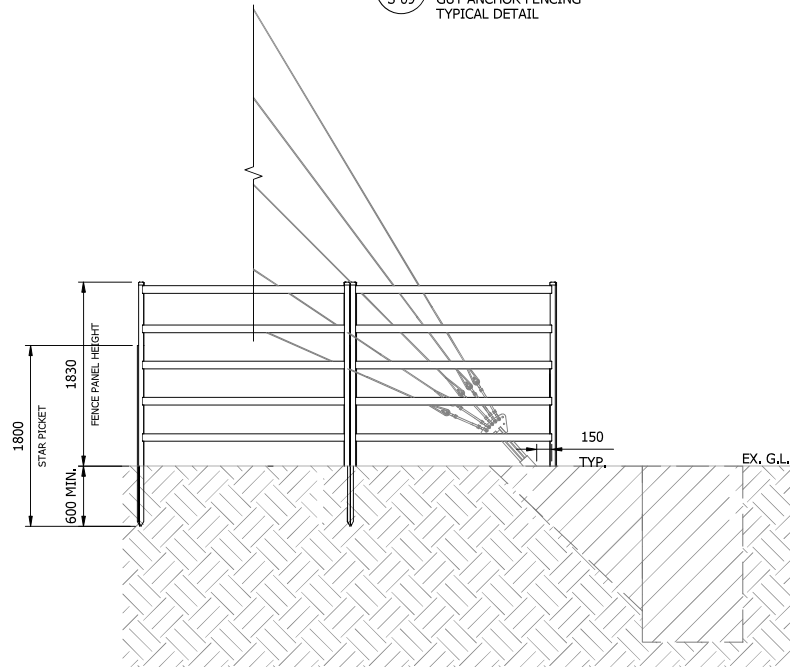
1 PLAN VIEW
S-09 MAST BASE FENCING
TYPICAL DETAIL



3 PLAN VIEW
S-09 GUY ANCHOR FENCING
TYPICAL DETAIL



2 SECTION VIEW
S-09 MAST BASE FENCING
TYPICAL DETAIL



4 SECTION VIEW
S-09 GUY ANCHOR FENCING
TYPICAL DETAIL

- NOTES:**
1. POSITION STAR PICKETS BEHIND FENCE PANELS.
 2. NO SHARP EDGES ON THE OUTSIDE OF FENCE PANELS.
 3. INNER ANCHOR - 4 PANELS & 5 STAR PICKETS (OPENING).
 4. OTHER ANCHOR(S) - 4 PANELS & 4 STAR PICKETS.
 5. FOOTINGS SHOWN FOR INDICATIVE PURPOSE ONLY REFER TO MAST FOOTING AND FOUNDATION DETAILS (SHEET 6).

NOTES

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PROJECT
WGEH, EUCLA, WA
WGEH04 160M(NOM.) MET MAST
GL55-36 GUYED LATTICE MAST
TEMPORARY DEPLOYMENT

SHEET TITLE
FENCING DETAILS

STATUS **FOR CONSTRUCTION**

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N.T.S.

THIRD ANGLE
PROJECTION

DRAWN CG	CHECKED HY	APPROVED LG	CO-ORDINATED LG
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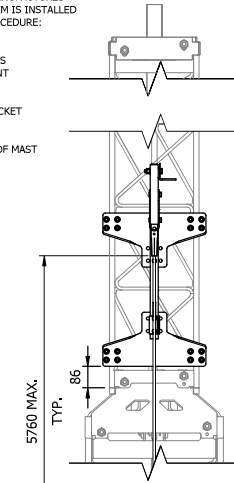
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LAD-SAF FALL ARREST SYSTEM INSTALLATION NOTES:

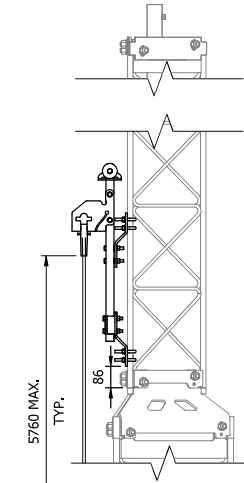
INSTALL LAD-SAF FALL ARREST SYSTEM AS PER MANUFACTURES SPECIFICATIONS, GENERALLY, THE LAD-SAF SYSTEM IS INSTALLED FROM THE TOP DOWN WITH THE FOLLOWING PROCEDURE:

1. INSTALL THE TOP BRACKETS
2. INSTALL THE TOP COMPONENT TO BRACKETS
3. INSTALL THE CABLE TO THE TOP COMPONENT
4. INSTALL THE CABLE GUIDES
5. INSTALL THE BOTTOM BRACKET
6. INSTALL THE BOTTOM COMPONENT TO BRACKET
7. TENSION THE CABLE
8. INSPECT THE INSTALLATION
9. INSTALL THE iSAFE RFID TAG AT BOTTOM OF MAST

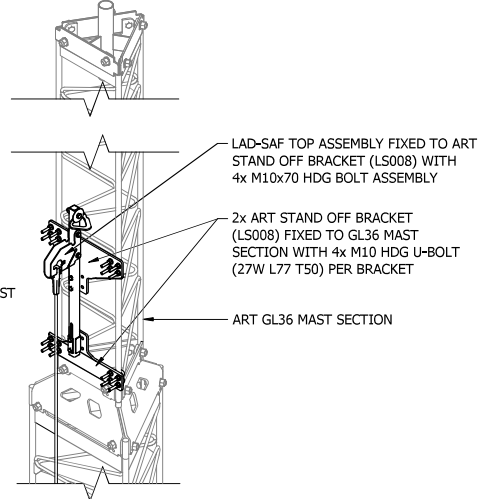
1 FRONT VIEW
S-10 LAD-SAF FALL ARREST TOP ASSEMBLY GL55/36 MAST TYPICAL DETAIL



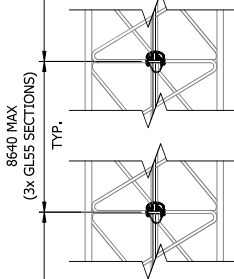
4 SIDE VIEW
S-10 LAD-SAF FALL ARREST TOP ASSEMBLY GL55/36 MAST TYPICAL DETAIL



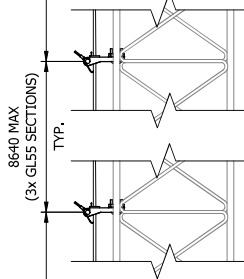
7 ISOMETRIC VIEW
S-10 LAD-SAF FALL ARREST TOP ASSEMBLY GL55/36 MAST TYPICAL DETAIL



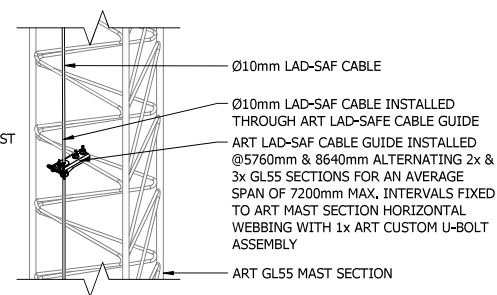
2 FRONT VIEW
S-10 LAD-SAF FALL ARREST CABLE GUIDE GL55/36 MAST TYPICAL DETAIL



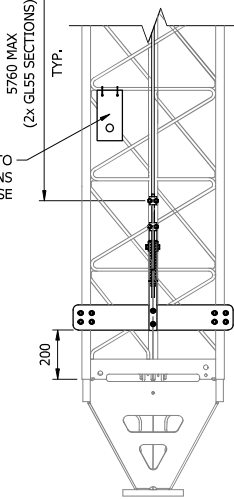
5 SIDE VIEW
S-10 LAD-SAF FALL ARREST CABLE GUIDE GL55/36 MAST TYPICAL DETAIL



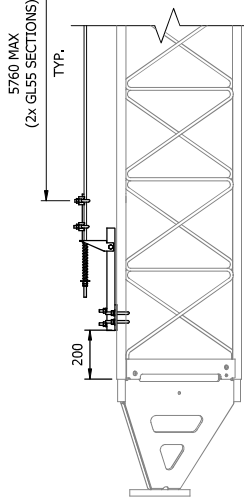
8 ISOMETRIC VIEW
S-10 LAD-SAF FALL ARREST CABLE GUIDE GL55/36 MAST TYPICAL DETAIL



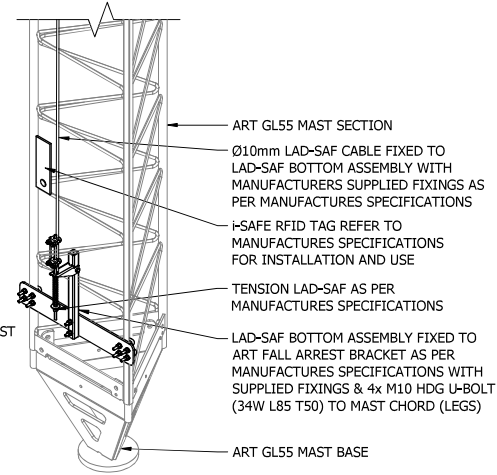
3 FRONT VIEW
S-10 LAD-SAF FALL ARREST BOTTOM ASSEMBLY GL55/36 MAST TYPICAL DETAIL



6 SIDE VIEW
S-10 LAD-SAF FALL ARREST BOTTOM ASSEMBLY GL55/36 MAST TYPICAL DETAIL



9 ISOMETRIC VIEW
S-10 LAD-SAF FALL ARREST BOTTOM ASSEMBLY GL55/36 MAST TYPICAL DETAIL



iSAFE RFID TAG REFER TO MANUFACTURES SPECIFICATIONS FOR INSTALLATION AND USE

NOTES

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PROJECT
WGEH, EUCLA, WA
WGEH04 160M(NOM.) MET MAST
GL55-36 GUYED LATTICE MAST
TEMPORARY DEPLOYMENT

SHEET TITLE
FALL ARREST DETAILS

STATUS **FOR CONSTRUCTION**

SCALE PLOTTED AT A3 N.T.S.	THIRD ANGLE PROJECTION
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