

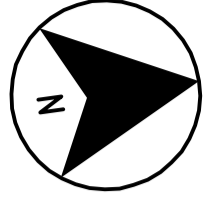


## APPENDIX C PART 2

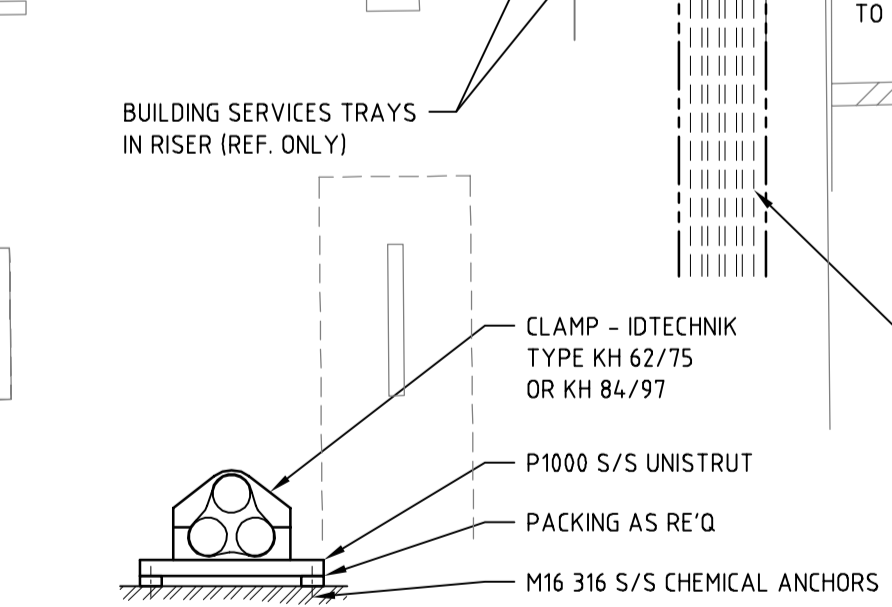
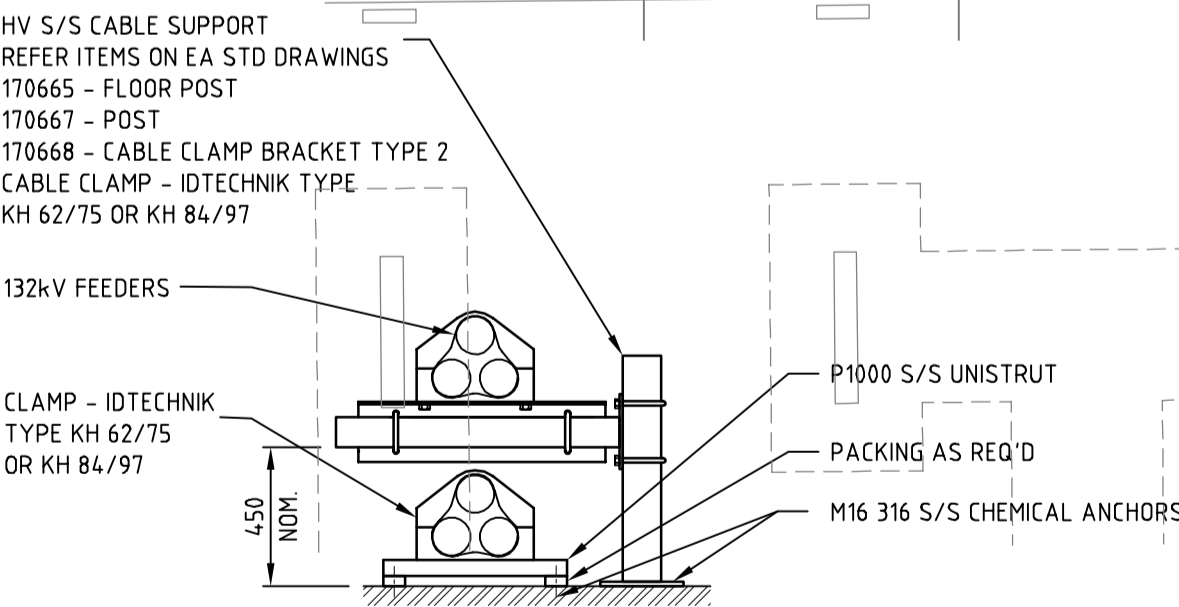
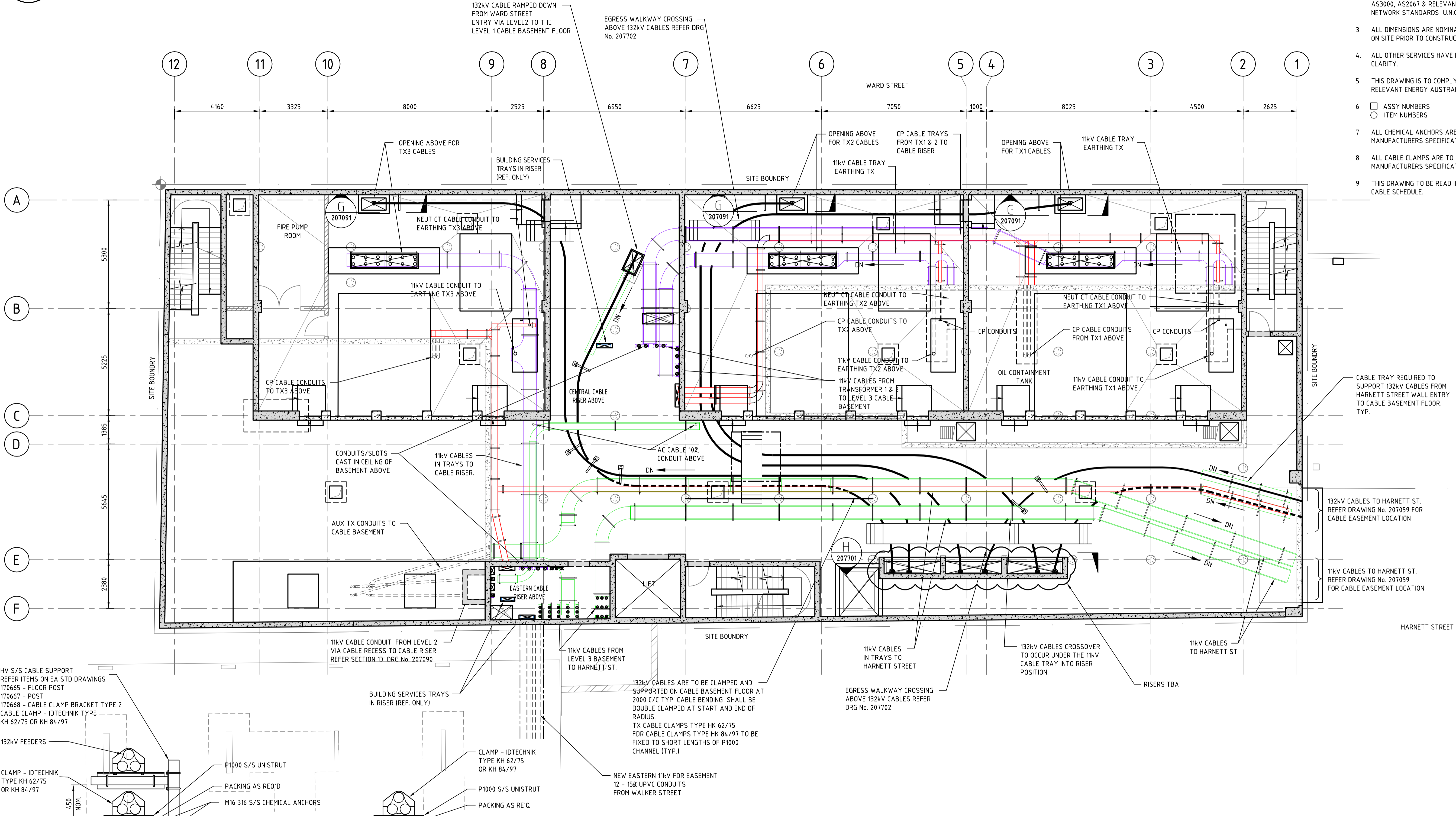
---

### Design Drawings

Last modified: 13 Sep 10 - 08:41  
 Cad ref: K:\NB603 - North Sydney DE - Design\Acad\5. CADD\5.3 Working\Org\30\_Detailed\EL\_Primary\207032.dwg



- NOTES:**
1. ALL WORKMANSHIP SHALL COMPLY WITH AS4100 U.N.O.
  2. ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH AS3000, AS2067 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS U.N.O.
  3. ALL DIMENSIONS ARE NOMINAL AND SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
  4. ALL OTHER SERVICES HAVE BEEN REMOVED FOR CLARITY.
  5. THIS DRAWING IS TO COMPLY WITH AS1100, AS4383 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS.
  6. □ ASSY NUMBERS  
○ ITEM NUMBERS
  7. ALL CHEMICAL ANCHORS ARE TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS U.N.O.
  8. ALL CABLE CLAMPS ARE TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
  9. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE CABLE SCHEDULE.



**BASEMENT LEVEL - LEVEL 1**  
 F.F.L. 60.150  
 S.F.L. 60.150

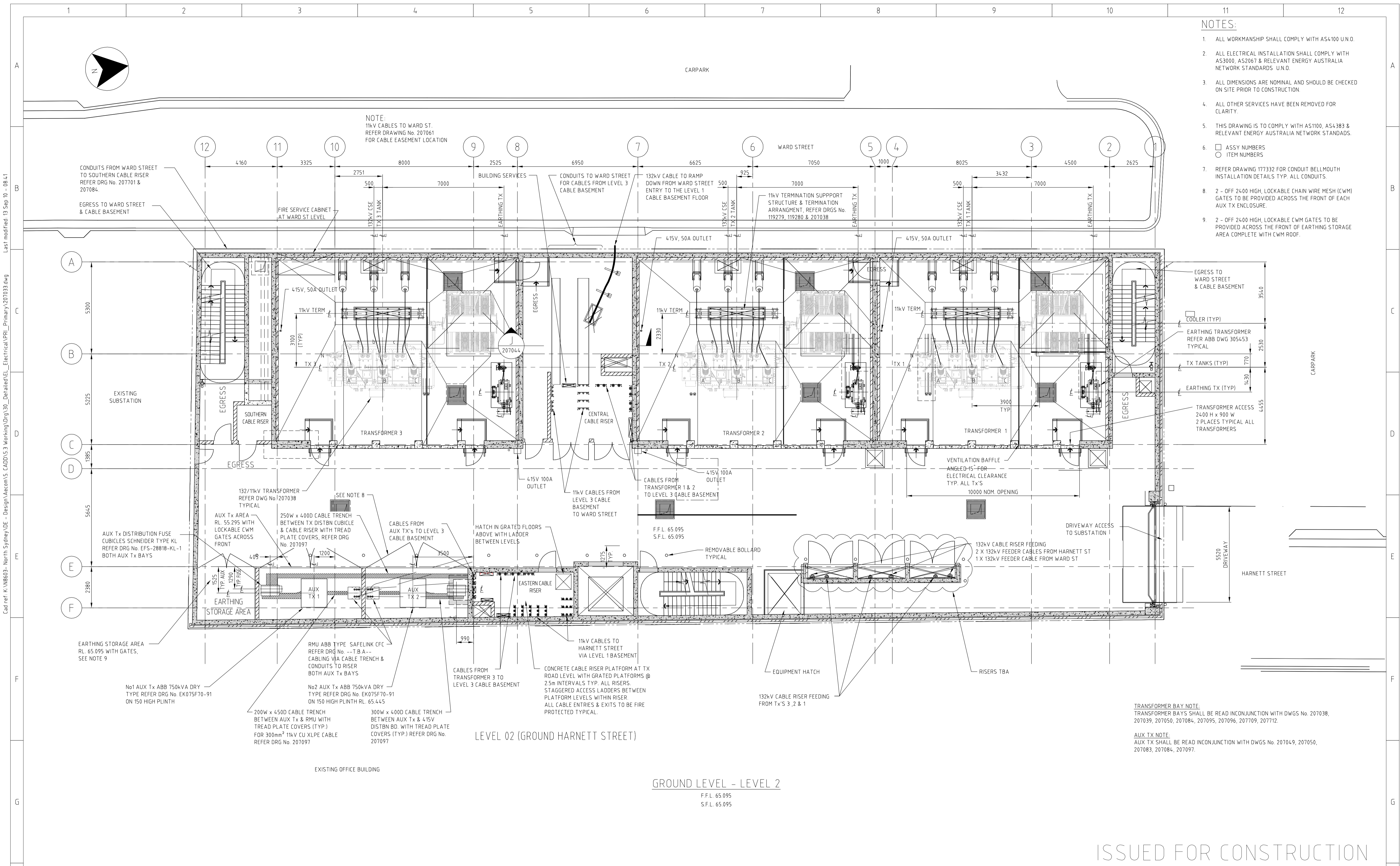
ISSUED FOR CONSTRUCTION

CAD DRAWING DO NOT MANUALLY AMEND	
AMENDMENTS	
REVISION: 0	ISSUED FOR CONSTRUCTION
DATE: 10/09/10	APPROVED BY: JP00L

207702	LEVEL 1 - EGRESS PATHWAY PLAN	DESIGNER:
207098	LEVEL 1 - CABLE TRAY COLUMN PLAN	
207090	SECTIONS - SHEET 4 (CABLE TRAYS & CONDUITS)	
207083	LEVEL 1 - CABLE TRAY PLAN	
207047	LEVEL 1 - EMBEDDED EARTHING LAYOUT	
207033	LEVEL 2 - EQUIPMENT LAYOUT PLAN	DESIGN AND ENGINEERING BRANCH 24 CAMPBELL ST SYDNEY, NSW 2000
207030	PRIMARY DRAWING LIST	
207704	LEVEL 1 - CONDUIT / FLOOR PENETRATIONS LAYOUT PLAN	
REFERENCE DRAWINGS		
REFERENCE DRAWINGS		

SCALE	1:100
DESIGNED	L.F. GRAHAM (E2U)
DRAWN	L.F. GRAHAM (E2U)
CHECKED	P.McEWAN (E2U)
APPROVED	S.PHANG (E2U)
DATE	21.04.10
PRJTRK No.	
PROJECT NUMBER	SJ-5586

ZN 2473 North Sydney PRIMARY - 132kV ZONE CONVERSION ELECTRICAL - BASEMENT LEVEL - LEVEL 1 EQUIPMENT LAYOUT PLAN			
DRAWING No	207032	SHEET	1
AMD	0	SIZE	A1



- NOTES:**
- 1 ALL WORKMANSHIP SHALL COMPLY WITH AS4100 U.N.O.
  - 2 ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH AS3000, AS2067 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS U.N.O.
  - 3 ALL DIMENSIONS ARE NOMINAL AND SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
  - 4 ALL OTHER SERVICES HAVE BEEN REMOVED FOR CLARITY.
  - 5 THIS DRAWING IS TO COMPLY WITH AS1100, AS4383 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS.
  - 6  ASSY NUMBERS  
 ITEM NUMBERS
  - 7 REFER DRAWING 177332 FOR CONDUIT BELLMOUTH INSTALLATION DETAILS TYP. ALL CONDUITS.
  - 8 2 - OFF 2400 HIGH, LOCKABLE CHAIN WIRE MESH (CWM) GATES TO BE PROVIDED ACROSS THE FRONT OF EACH AUX TX ENCLOSURE.
  - 9 2 - OFF 2400 HIGH, LOCKABLE CWM GATES TO BE PROVIDED ACROSS THE FRONT OF EARTHING STORAGE AREA COMPLETE WITH CWM ROOF.

Last modified: 13 Sep 10 - 08 L1  
 Cal ref: K:\WB603 - North Sydney\DE - Design\Acem\5\_CADD\53\_Working\Orig\30\_Detailed\EL\_Electrical\PRI\_Primary\_207033.dwg

**LEVEL 02 (GROUND HARNETT STREET)**

**GROUND LEVEL - LEVEL 2**  
 F.F.L. 65.095  
 S.F.L. 65.095

**ISSUED FOR CONSTRUCTION**

ZN 2473 North Sydney  
 PRIMARY - 132kV ZONE CONVERSION  
 ELECTRICAL - GROUND LEVEL - LEVEL 2  
 EQUIPMENT LAYOUT  
 PLAN

REVISION	DESCRIPTION	DATE	APPROVED BY
0	ISSUED FOR CONSTRUCTION	15/09/10	JPOOL
DRAWN: SWATTS			
DO NOT MANUALLY AMEND			
AMENDMENTS			

NO.	DESCRIPTION	NO.	DESCRIPTION
207037	CAPACITOR BANK - LEVEL 4 - EQUIPMENT LAYOUT PLAN	207030	PRIMARY DRAWING LIST
207036	11kV SWITCHROOM/CONTROL ROOM - LEVEL 3A - EQUIPMENT LAYOUT PLAN		
207035	132kV/11kV CABLE BASEMENT - LEVEL 3 - EQUIPMENT LAYOUT PLAN		
207034	WARD STREET - LEVEL 2A - ELECTRICAL LAYOUT PLAN		
207720	GROUND LEVEL - LEVEL 2 - CABLE TRAY COLUMN PLAN	207032	BASEMENT LEVEL - LEVEL 1 - ELECTRICAL LAYOUT PLAN
207705	GROUND LEVEL - LEVEL 2 - CONDUIT LAYOUT PLAN	207031	SITE LAYOUT EQUIPMENT LAYOUT
207084	GROUND LEVEL - LEVEL 2 - CABLE TRAY PLAN		

DESIGNER

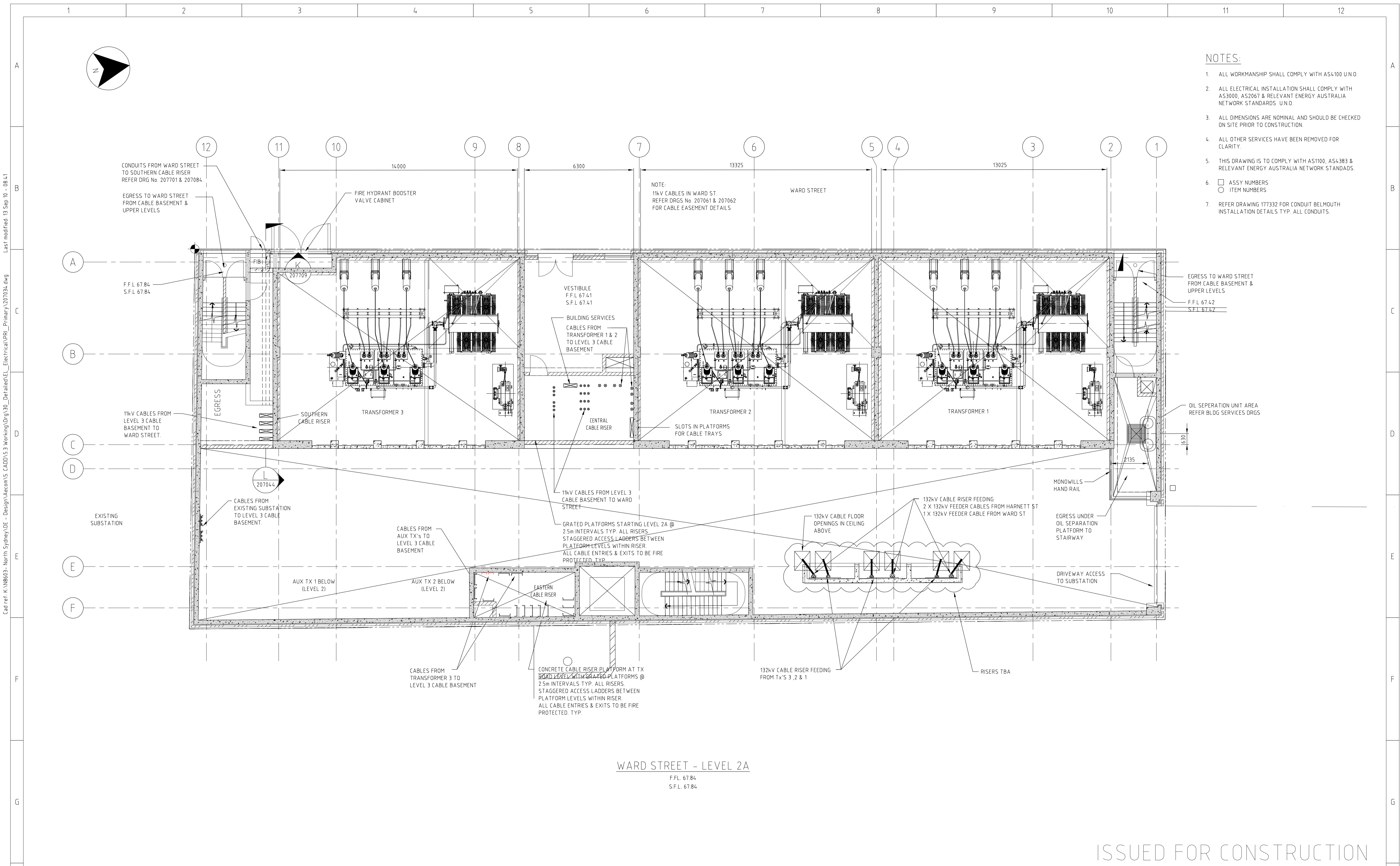
**Energy2U Alliance**

DESIGN AND ENGINEERING BRANCH  
 24 CAMPBELL ST SYDNEY, NSW 2000

**EnergyAustralia**

SCALE	1:100
DESIGNED	L.F. GRAHAM (E2U)
DRAWN	L.F. GRAHAM (E2U)
CHECKED	P. McEWAN (E2U)
APPROVED	S. PHANG (E2U)
DATE	21.04.10
PRJTRK No.	
PROJECT NUMBER	SJ-5586

DRAWING No	207033	SHEET	1	AMD	0	SIZE	A1
------------	--------	-------	---	-----	---	------	----



- NOTES:**
1. ALL WORKMANSHIP SHALL COMPLY WITH AS4100 U.N.O.
  2. ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH AS3000, AS2067 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS U.N.O.
  3. ALL DIMENSIONS ARE NOMINAL AND SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
  4. ALL OTHER SERVICES HAVE BEEN REMOVED FOR CLARITY.
  5. THIS DRAWING IS TO COMPLY WITH AS1100, AS4383 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS.
  6. □ ASSY NUMBERS  
○ ITEM NUMBERS
  7. REFER DRAWING 177332 FOR CONDUIT BELMOUTH INSTALLATION DETAILS TYP. ALL CONDUITS.

**WARD STREET - LEVEL 2A**  
F.F.L 67.84  
S.F.L 67.84

ISSUED FOR CONSTRUCTION

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS
REVISION: 0
ISSUED FOR CONSTRUCTION
DRAWN: S.WATTS
DATE: 15/05/10
APPROVED BY: J.POOL

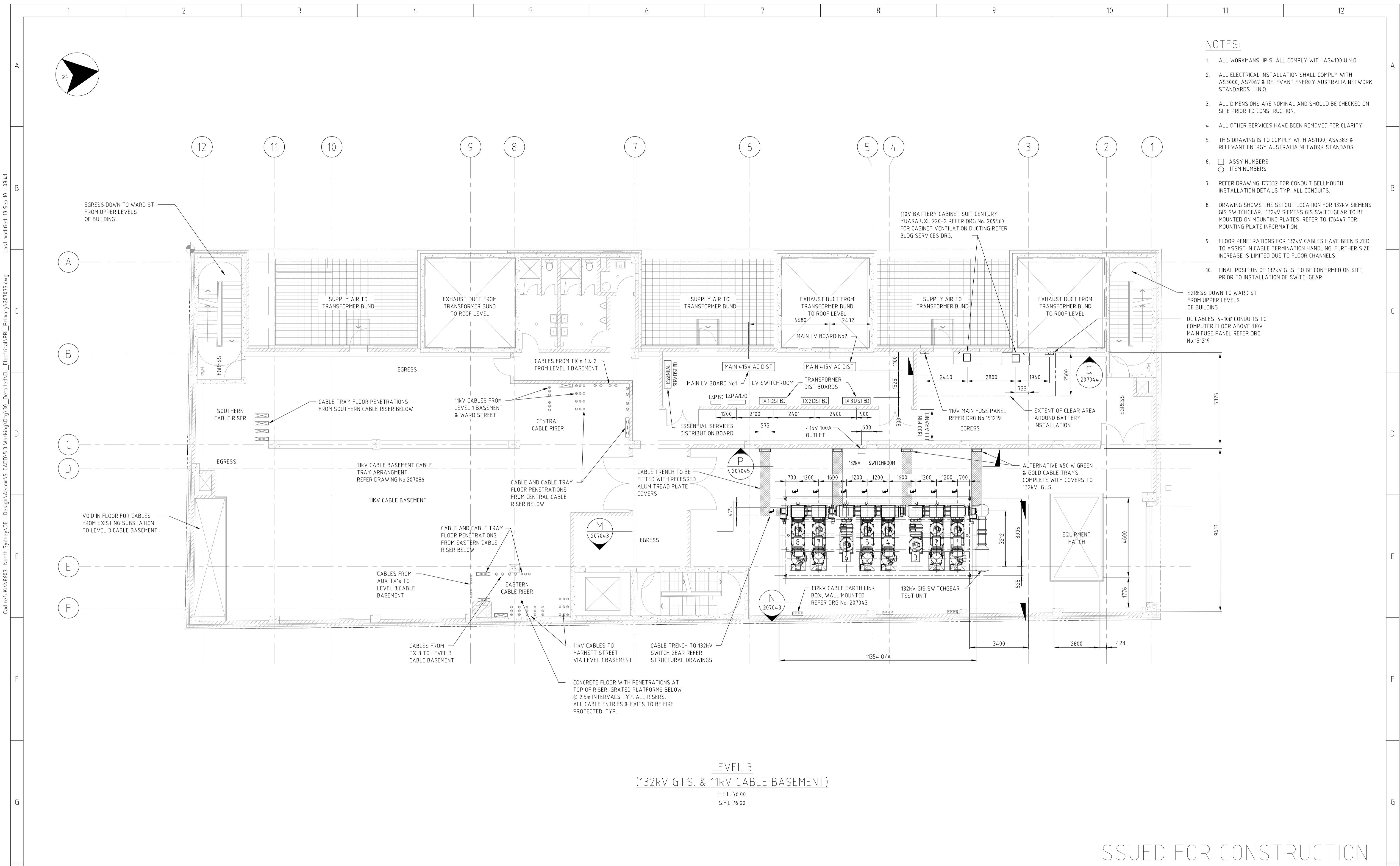
NO.	DESCRIPTION
207706	LEVEL 2A - CONDUIT/FLOOR PENETRATIONS LAYOUT PLAN
207085	LEVEL 2A - CABLE TRAY PLAN
207058	LEVEL 2A - EARTHING PLAN
207033	GROUND LEVEL - LEVEL 2 - ELECTRICAL LAYOUT PLAN
207030	PRIMARY DRAWING LIST
REFERENCE DRAWINGS	

DESIGNER

DESIGN AND ENGINEERING BRANCH  
24 CAMPBELL ST SYDNEY, NSW 2000

SCALE	1:100
DESIGNED	L.F.GRAHAM (E2U)
DRAWN	L.F.GRAHAM (E2U)
CHECKED	P.McEWAN (E2U)
APPROVED	S.PHANG (E2U)
DATE	21.04.10
PRJTRK No.	
PROJECT NUMBER	SJ-5586

ZN 2473 North Sydney PRIMARY - 132kV ZONE CONVERSION ELECTRICAL - WARD STREET - LEVEL 2A EQUIPMENT LAYOUT PLAN			
DRAWING No	207034	SHEET	1
AMD	0	SIZE	A1

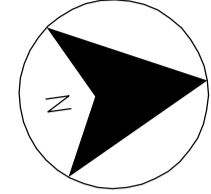


- NOTES:**
- ALL WORKMANSHIP SHALL COMPLY WITH AS4100 U.N.O.
  - ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH AS3000, AS2067 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS U.N.O.
  - ALL DIMENSIONS ARE NOMINAL AND SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
  - ALL OTHER SERVICES HAVE BEEN REMOVED FOR CLARITY.
  - THIS DRAWING IS TO COMPLY WITH AS1100, AS4383 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS.
  - ASSY NUMBERS  
○ ITEM NUMBERS
  - REFER DRAWING 177332 FOR CONDUIT BELLMOUTH INSTALLATION DETAILS TYP. ALL CONDUITS.
  - DRAWING SHOWS THE SETOUT LOCATION FOR 132kV SIEMENS GIS SWITCHGEAR. 132kV SIEMENS GIS SWITCHGEAR TO BE MOUNTED ON MOUNTING PLATES. REFER TO 176447 FOR MOUNTING PLATE INFORMATION.
  - FLOOR PENETRATIONS FOR 132kV CABLES HAVE BEEN SIZED TO ASSIST IN CABLE TERMINATION HANDLING. FURTHER SIZE INCREASE IS LIMITED DUE TO FLOOR CHANNELS.
  - FINAL POSITION OF 132kV G.I.S. TO BE CONFIRMED ON SITE, PRIOR TO INSTALLATION OF SWITCHGEAR.

**LEVEL 3**  
 (132kV G.I.S. & 11kV CABLE BASEMENT)  
 F.F.L 76.00  
 S.F.L 76.00

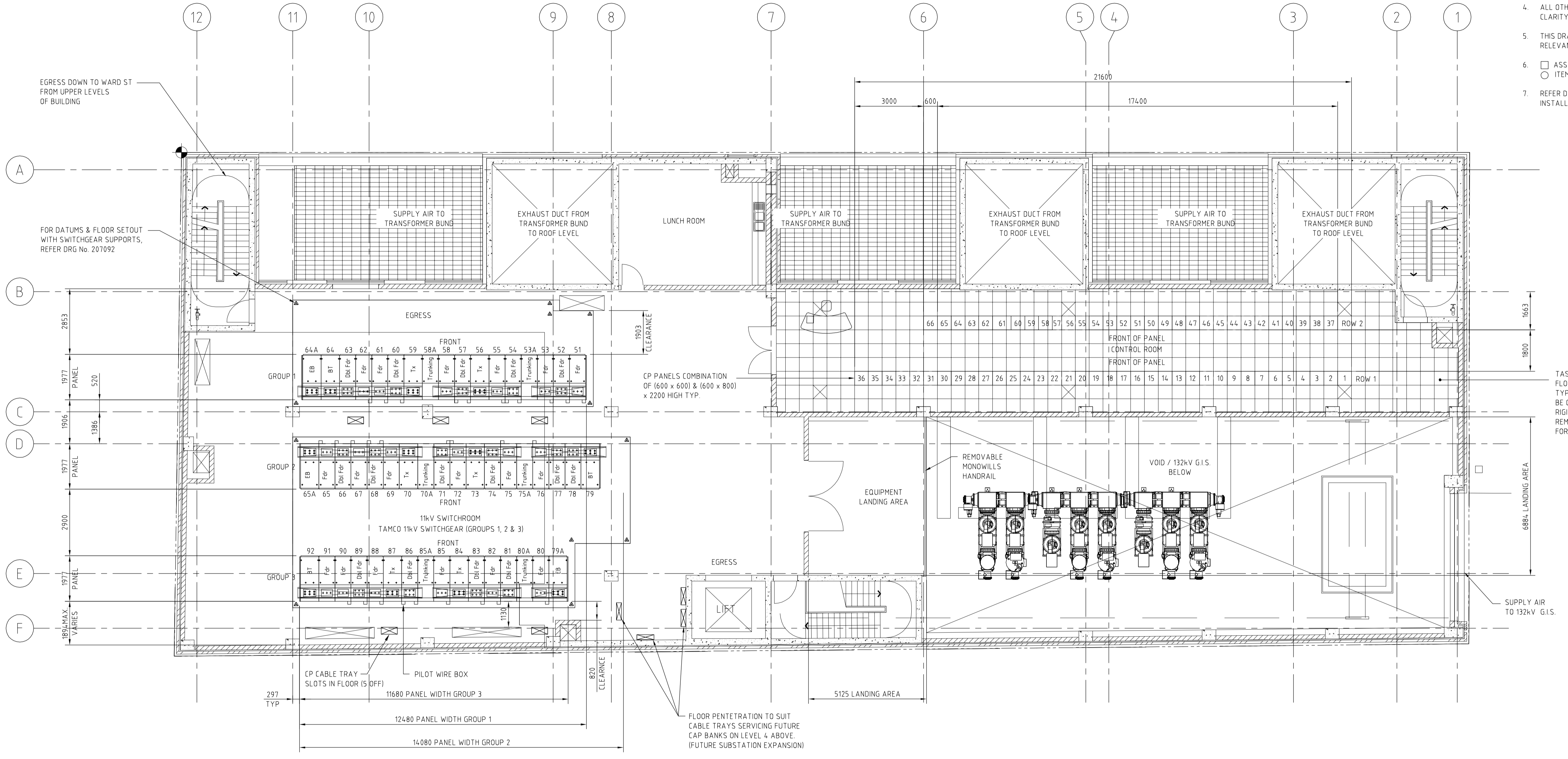
ISSUED FOR CONSTRUCTION

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS REVISION: 0 DESCRIPTION: ISSUED FOR CONSTRUCTION DRAWN: S.WATTS DATE: 15/05/10 APPROVED BY: J.POOL	207727	LEVEL 3 - CABLE TRAY COLUMN PLAN	DESIGNER:  <b>EnergyAustralia</b> DESIGN AND ENGINEERING BRANCH 24 CAMPBELL ST SYDNEY, NSW 2000	SCALE	1:100	ZN 2473 North Sydney PRIMARY - 132kV ZONE CONVERSION ELECTRICAL - 132kV GIS/11kV CABLE BASEMENT - LEVEL 3 EQUIPMENT LAYOUT PLAN	PROJECT NUMBER SJ-5586	DRAWING No 207035	SHEET 1	AMD 0	SIZE A1	
	207707	LEVEL 3 - CONDUIT LAYOUT PLAN		DESIGNED	L.F.GRAHAM (E2U)							
207703	LEVEL 3 - EGRESS PATHWAY PLAN	DRAWN		L.F.GRAHAM (E2U)								
207094	LEVEL 3 - 132kV SWITCHGEAR SETOUT - PLAN & SECTION	CHECKED		P.McEWAN (E2U)								
207086	LEVEL 3 - CABLE TRAY PLAN	APPROVED		S.PHANG (E2U)								
207052	LEVEL 3 - EARTHING LAYOUT	DATE		21.04.10								
207030	PRIMARY DRAWING LIST	PRJTRK No.										
REFERENCE DRAWINGS			PROJECT NUMBER	SJ-5586	DRAWING No	207035	SHEET	1	AMD	0	SIZE	A1



- NOTES:**
1. ALL WORKMANSHIP SHALL COMPLY WITH AS4:100 U.N.O.
  2. ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH AS3000, AS2067 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS U.N.O.
  3. ALL DIMENSIONS ARE NOMINAL AND SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
  4. ALL OTHER SERVICES HAVE BEEN REMOVED FOR CLARITY.
  5. THIS DRAWING IS TO COMPLY WITH AS1100, AS4:383 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS.
  6. □ ASSY NUMBERS  
○ ITEM NUMBERS
  7. REFER DRAWING 177332 FOR CONDUIT BELLMOUTH INSTALLATION DETAILS TYP. ALL CONDUITS.

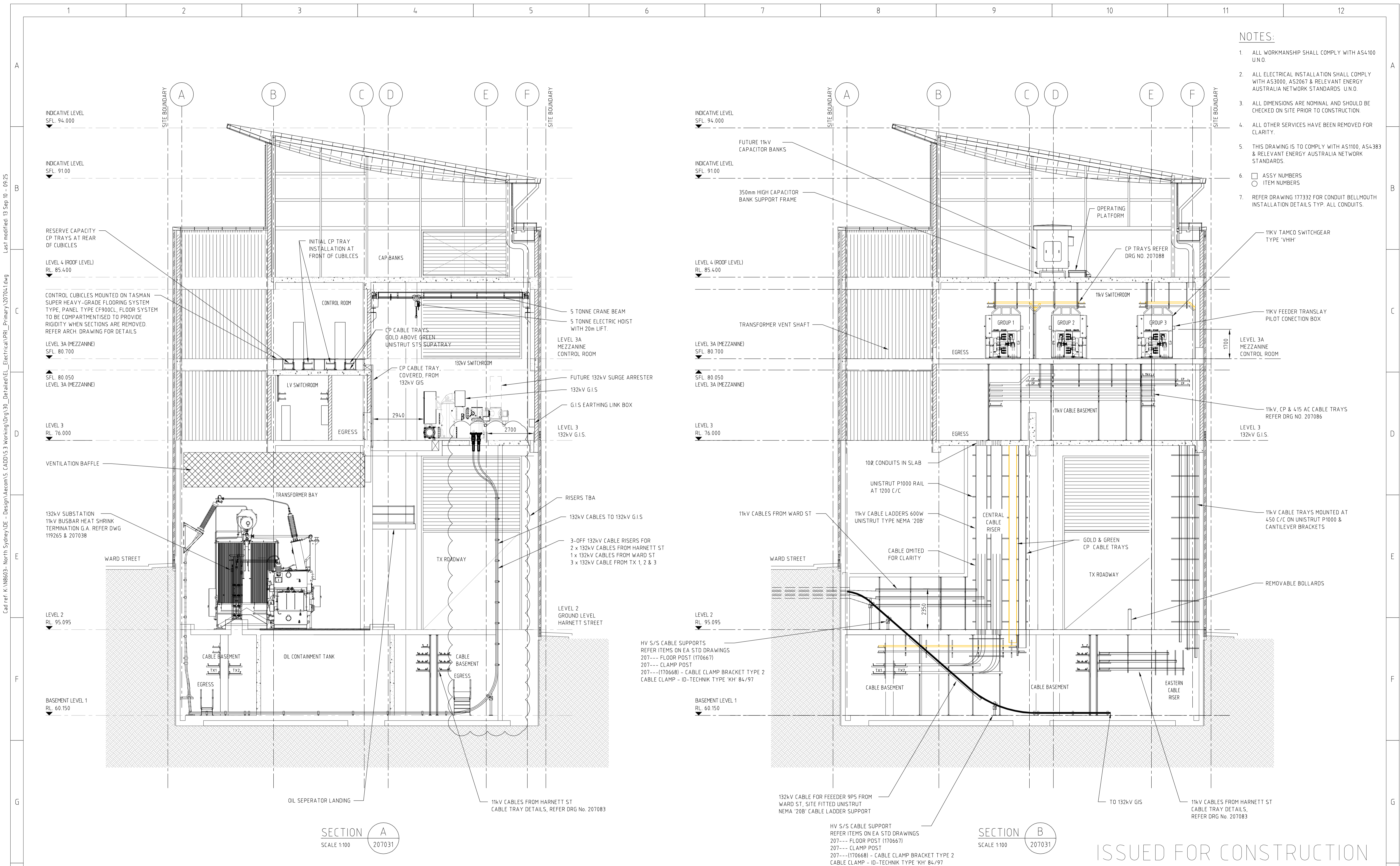
Last modified: 13 Sep 10 - 08 L1  
 Cad ref: K:\WB03 - North Sydney DE - Design\Acem\5\_CADD\53\_Working\Orig\30\_Detailed\EL\_Electrical\PRI\_Primary\_207036.dwg



ISSUED FOR CONSTRUCTION

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS REVISION: 0 DESCRIPTION: ISSUED FOR CONSTRUCTION DRAWN: S.WATTS DATE: 10/05/10 APPROVED BY: J.POOL	207730	LEVEL 3A - CABLE TRAY COLUMN PLAN	DESIGNER:  EnergyAustralia® DESIGN AND ENGINEERING BRANCH 24 CAMPBELL ST SYDNEY, NSW 2000	SCALE	1:100	ZN 2473 North Sydney PRIMARY - 132kV ZONE CONVERSION ELECTRICAL - 11kV SWITCHROOM/CONTROL ROOM - LEVEL 3A EQUIPMENT LAYOUT PLAN	PROJECT NUMBER SJ-5586	DRAWING No 207036	SHEET 1	AMD 0	SIZE A1	
	207708	LEVEL 3A - CONDUIT/FLOOR PENETRATIONS LAYOUT PLAN		DESIGNED	L.F.GRAHAM (E2U)							
207098	LEVEL 3A - CABLE TRAY COLUMN PLAN	DRAWN		L.F.GRAHAM (E2U)								
207092	LEVEL 3A - 11kV SWITCHGEAR SETOUT PLAN	CHECKED		P.McEWAN (E2U)								
207087	LEVEL 3A - CABLE TRAY PLAN	APPROVED		S.PHANG (E2U)								
207082	LEVEL 3A - C & P PANEL ARRANGEMENT PLAN	DATE		21.04.10								
207030	PRIMARY DRAWING LIST	PRJTRK No.										
REFERENCE DRAWINGS			PROJECT NUMBER	SJ-5586	DRAWING No	207036	SHEET	1	AMD	0	SIZE	A1





- NOTES:**
- ALL WORKMANSHIP SHALL COMPLY WITH AS4100 U.N.O.
  - ALL ELECTRICAL INSTALLATION SHALL COMPLY WITH AS3000, AS2067 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS U.N.O.
  - ALL DIMENSIONS ARE NOMINAL AND SHOULD BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
  - ALL OTHER SERVICES HAVE BEEN REMOVED FOR CLARITY.
  - THIS DRAWING IS TO COMPLY WITH AS1100, AS4383 & RELEVANT ENERGY AUSTRALIA NETWORK STANDARDS.
  - ASSY NUMBERS  
○ ITEM NUMBERS
  - REFER DRAWING 177332 FOR CONDUIT BELLMOUTH INSTALLATION DETAILS TYP. ALL CONDUITS.

Cad ref: K:\WB03- North Sydney\DE - Design\Aecom\5\_CADD\53 Working\030\_Detailed\Electrical\PR1\_Primary\_207041.dwg  
 Last modified: 13 Sep 10 - 09:25

CAD DRAWING DO NOT MANUALLY AMEND	
REVISION: 0	AMENDMENTS
ISSUED FOR CONSTRUCTION	
DRAWN: S.WATTS	
DATE: 10/09/10	
APPROVED BY: J.POOL	

207037	CAPACITOR BANK - LEVEL 4 -EQUIPMENT LAYOUT PLAN
207036	11kV SWITCHROOM/CONTROL ROOM - LEVEL 3A - EQUIPMENT LAYOUT PLAN
207035	132kV/11kV CABLE BASEMENT - LEVEL 3 - EQUIPMENT LAYOUT PLAN
207034	LEVEL 2A - EQUIPMENT LAYOUT PLAN
207033	LEVEL 2 - EQUIPMENT LAYOUT PLAN
207032	LEVEL 1 - EQUIPMENT LAYOUT PLAN
207030	PRIMARY DRAWING LIST

REFERENCE DRAWINGS	
--------------------	--

DESIGNER

DESIGN AND ENGINEERING BRANCH  
24 CAMPBELL ST SYDNEY, NSW 2000

SCALE	1:100
DESIGNED	L.F.GRAHAM (E2U)
DRAWN	L.F.GRAHAM (E2U)
CHECKED	P.McEWAN (E2U)
APPROVED	S.PHANG (E2U)
DATE	21.04.10
PRJTRK No.	
PROJECT NUMBER	SJ-5586

DRAWING No	207041
SHEET	1
AMD	0
SIZE	A1

ZN 2473 North Sydney  
PRIMARY - 132kV ZONE CONVERSION  
ELECTRICAL - SECTION A & SECTION B  
EQUIPMENT LAYOUT

ISSUED FOR CONSTRUCTION