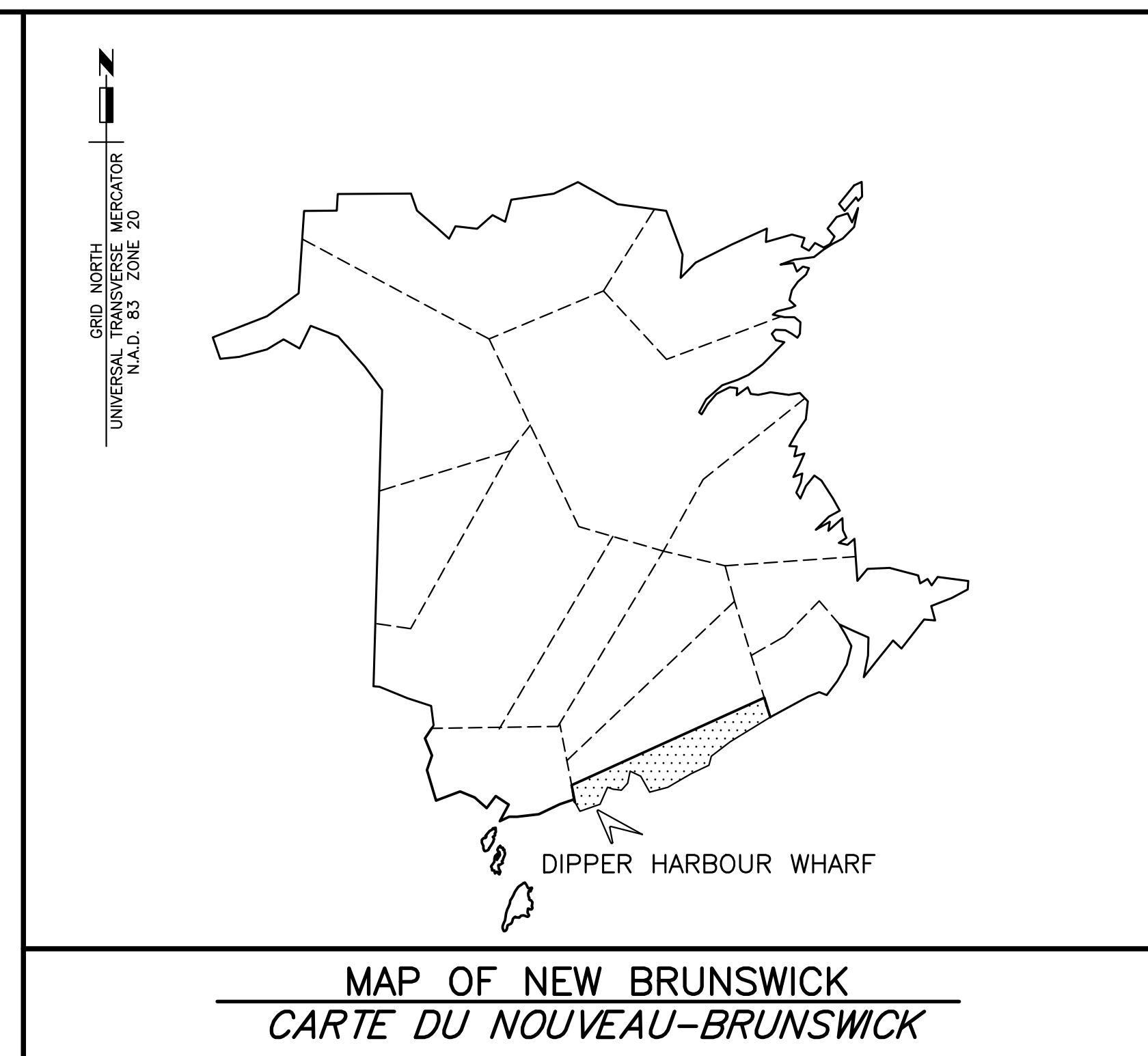


Fisheries and Oceans
Canada

Small Craft Harbours
Maritimes / Gulf Region

Pêches et Océans
Canada

Ports pour Petits Bateaux
Région des Maritimes / Golfe



ELECTRICAL UPGRADE DIPPER HARBOUR WHARF DIPPER HARBOUR SAINT JOHN COUNTY NEW BRUNSWICK

PROJECT NO. C2-00324

DRAWING LIST

ELECTRICAL

- E1 OF 12 WHARF PLAN POWER
- E2 OF 12 WHARF PLAN LIGHTING
- E3 OF 12 SERVICE BUILDING 'A' ELECTRICAL DETAILS
- E4 OF 12 SERVICE 'A' ELECTRICAL SCHEDULES
- E5 OF 12 SERVICE BUILDING 'B' ELECTRICAL DETAILS
- E6 OF 12 SERVICE 'B' ELECTRICAL SCHEDULES
- E7 OF 12 ELECTRICAL OUTLET AND GROUND OUT DETAILS
- E8 OF 12 FLOAT WIRING AND PEDESTAL MOUNTING DETAILS
- E9 OF 12 ELECTRICAL SERVICE BUILDING 'A'
- E10 OF 12 ELECTRICAL SERVICE BUILDING 'B'
- E11 OF 12 EXISTING ELECTRICAL
- E12 OF 12 EXISTING ELECTRICAL SCHEDULES

CIVIL

- C1 OF 2 CIVIL WORK PLANS AND SECTIONS
- C2 OF 2 SECTIONS AND DETAILS

Canada

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- INSTALL WATERTIGHT SPULCE/REDUCER MECHANICAL CONNECTORS FOR CABLES LARGER THAN #6 IN PULL BOXES ON WHARF.

0	ISSUED FOR TENDER	04/05/2022
revisions		date
project		project

**ELECTRICAL UPGRADE
DIPPER HARBOUR WHARF
SAINT JOHN CO., NB**

WHARF PLAN POWER

designed	R.M.B.	conçu
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender		Soumission
F&O Project Manager	Administrateur de projets P&O	
project number	C2-00324	no. du projet
drawing no.	E1 OF 12	no. du dessin

GENERAL SUBSCRIPTS

- E - INDICATES EXISTING TO REMAIN
- W - INDICATES WEATHERPROOF WHEN IN USE COVER

LEGEND

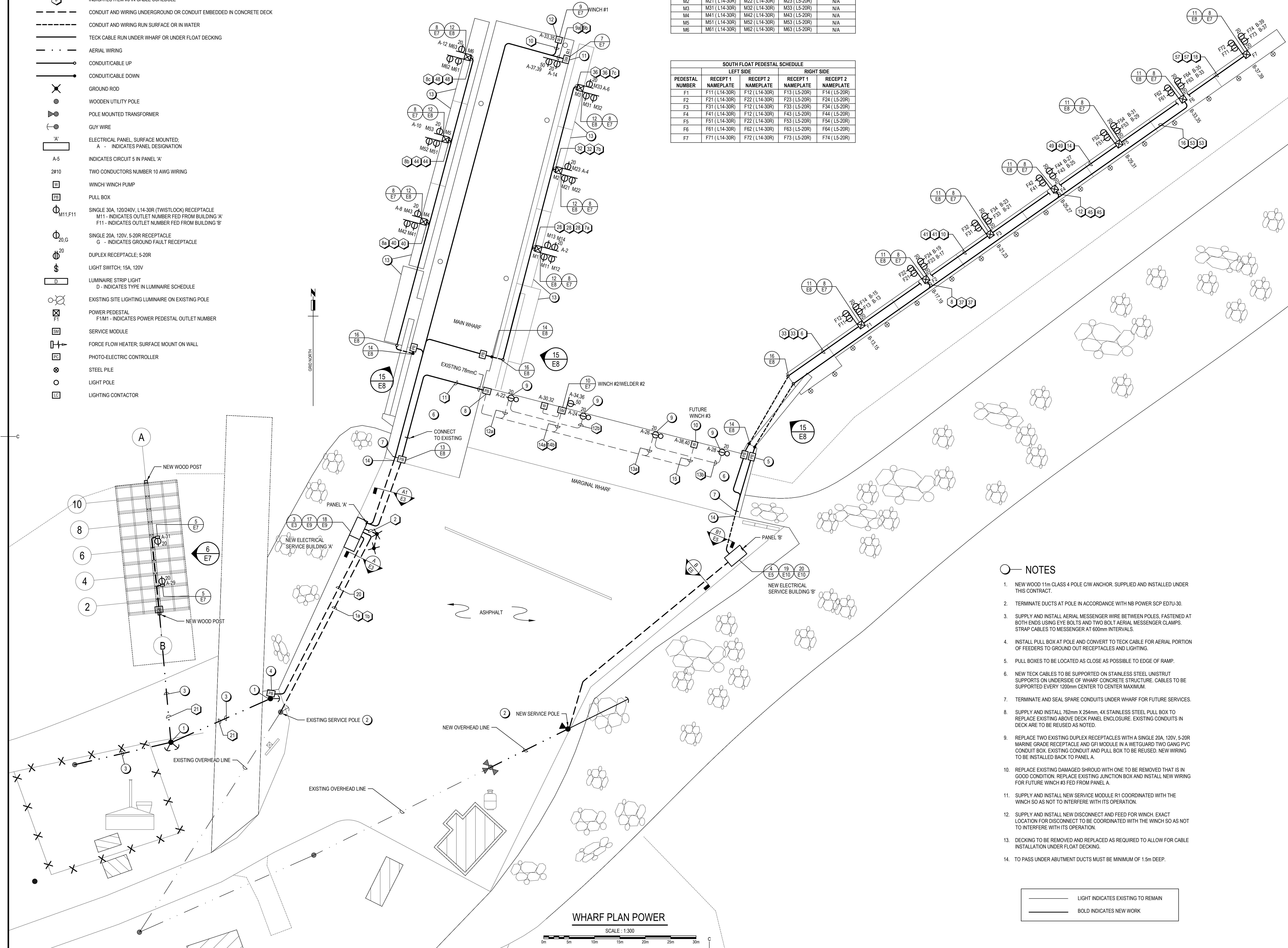
- INDICATES ITEM #5 IN CABLE SCHEDULE
- CONDUIT AND WIRING UNDERGROUND OR CONDUIT EMBEDDED IN CONCRETE DECK
- CONDUIT AND WIRING RUN SURFACE OR IN WATER
- TECK CABLE RUN UNDER WHARF OR UNDER FLOAT DECKING
- AERIAL WIRING
- CONDUIT/CABLE UP
- CONDUIT/CABLE DOWN
- GROUND ROD
- WOODEN UTILITY POLE
- POLE MOUNTED TRANSFORMER
- GUY WIRE
- ELECTRICAL PANEL, SURFACE MOUNTED;
A - INDICATES PANEL DESIGNATION
- A-5 INDICATES CIRCUIT 5 IN PANEL 'A'
- 2#10 TWO CONDUCTORS NUMBER 10 AWG WIRING
- WINCH/ WINCH PUMP
- PULL BOX
- M11,F11 SINGLE 30A, 120/240V, L14-30R (TWISTLOCK) RECEPTACLE
M11 - INDICATES OUTLET NUMBER FED FROM BUILDING 'A'
F11 - INDICATES OUTLET NUMBER FED FROM BUILDING 'B'
- SINGLE 20A, 120V, 5-20R RECEPTACLE
G - INDICATES GROUND FAULT RECEPTACLE
- DUPLEX RECEPTACLE, 5-20R
- LIGHT SWITCH, 15A, 120V
- LUMINAIRE STRIP LIGHT
D - INDICATES TYPE IN LUMINAIRE SCHEDULE
- EXISTING SITE LIGHTING LUMINAIRE ON EXISTING POLE
- POWER PEDESTAL
F1M1 - INDICATES POWER PEDESTAL OUTLET NUMBER
- SERVICE MODULE
- FORCE FLOW HEATER, SURFACE MOUNT ON WALL
- PHOTO-ELECTRIC CONTROLLER
- STEEL PILE
- LIGHT POLE
- LIGHTING CONTACTOR

MAIN WHARF PEDESTAL SCHEDULE

PEDESTAL NUMBER	LEFT SIDE		RIGHT SIDE	
	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE
M1	M11 (L14-30R)	M12 (L14-30R)	M13 (L14-30R)	M14 (L5-20R)
M2	M21 (L14-30R)	M22 (L14-30R)	M23 (L5-20R)	N/A
M3	M31 (L14-30R)	M32 (L14-30R)	M33 (L5-20R)	N/A
M4	M41 (L14-30R)	M42 (L14-30R)	M43 (L5-20R)	N/A
M5	M51 (L14-30R)	M52 (L14-30R)	M53 (L5-20R)	N/A
M6	M61 (L14-30R)	M62 (L14-30R)	M63 (L5-20R)	N/A

SOUTH FLOAT PEDESTAL SCHEDULE

PEDESTAL NUMBER	LEFT SIDE		RIGHT SIDE	
	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE
F1	F11 (L14-30R)	F12 (L14-30R)	F13 (L5-20R)	F14 (L5-20R)
F2	F21 (L14-30R)	F22 (L14-30R)	F23 (L5-20R)	F24 (L5-20R)
F3	F31 (L14-30R)	F12 (L14-30R)	F33 (L5-20R)	F34 (L5-20R)
F4	F41 (L14-30R)	F12 (L14-30R)	F43 (L5-20R)	F44 (L5-20R)
F5	F51 (L14-30R)	F22 (L14-30R)	F53 (L5-20R)	F54 (L5-20R)
F6	F61 (L14-30R)	F62 (L14-30R)	F63 (L5-20R)	F64 (L5-20R)
F7	F71 (L14-30R)	F72 (L14-30R)	F73 (L5-20R)	F74 (L5-20R)

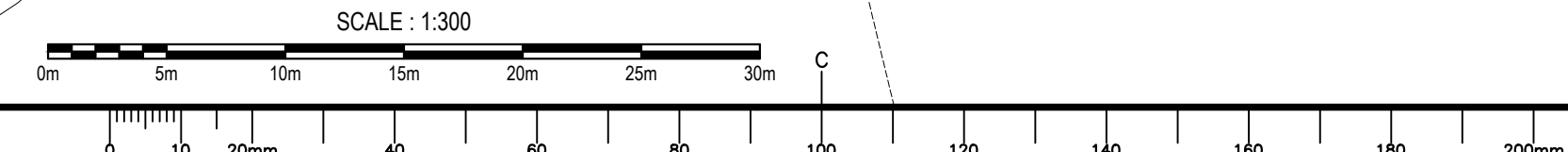


NOTES

- NEW WOOD 11m CLASS 4 POLE C/W ANCHOR. SUPPLIED AND INSTALLED UNDER THIS CONTRACT.
- TERMINATE DUCTS AT POLE IN ACCORDANCE WITH NB POWER SCP ED7U-30.
- SUPPLY AND INSTALL AERIAL MESSENGER WIRE BETWEEN POLES. FASTENED AT BOTH ENDS USING EYE BOLTS AND TWO BOLT AERIAL MESSENGER CLAMPS. STRAP CABLES TO MESSENGER AT 600mm INTERVALS.
- INSTALL PULL BOX AT POLE AND CONVERT TO TECK CABLE FOR AERIAL PORTION OF FEEDERS TO GROUND OUT RECEPTACLES AND LIGHTING.
- PULL BOXES TO BE LOCATED AS CLOSE AS POSSIBLE TO EDGE OF RAMP.
- NEW TECK CABLES TO BE SUPPORTED ON STAINLESS STEEL UNISTRUT SUPPORTS ON UNDERSIDE OF WHARF CONCRETE STRUCTURE. CABLES TO BE SUPPORTED EVERY 1200mm CENTER TO CENTER MAXIMUM.
- TERMINATE AND SEAL SPARE CONDUITS UNDER WHARF FOR FUTURE SERVICES.
- SUPPLY AND INSTALL 762mm X 254mm, 4X STAINLESS STEEL PULL BOX TO REPLACE EXISTING ABOVE DECK PANEL ENCLOSURE. EXISTING CONDUITS IN DECK ARE TO BE REUSED AS NOTED.
- REPLACE TWO EXISTING DUPLEX RECEPTACLES WITH A SINGLE 20A, 120V, 5-20R MARINE GRADE RECEPTACLE AND GFI MODULE IN A WETGUARD TWO GANG PVC CONDUIT BOX. EXISTING CONDUIT AND PULL BOX TO BE REUSED. NEW WIRING TO BE INSTALLED BACK TO PANEL A.
- REPLACE EXISTING DAMAGED SHROUD WITH ONE TO BE REMOVED THAT IS IN GOOD CONDITION. REPLACE EXISTING JUNCTION BOX AND INSTALL NEW WIRING FOR FUTURE WINCH #3 FED FROM PANEL A.
- SUPPLY AND INSTALL NEW SERVICE MODULE R1 COORDINATED WITH THE WINCH SO AS NOT TO INTERFERE WITH ITS OPERATION.
- SUPPLY AND INSTALL NEW DISCONNECT AND FEED FOR WINCH. EXACT LOCATION FOR DISCONNECT TO BE COORDINATED WITH THE WINCH SO AS NOT TO INTERFERE WITH ITS OPERATION.
- DECKING TO BE REMOVED AND REPLACED AS REQUIRED TO ALLOW FOR CABLE INSTALLATION UNDER FLOAT DECKING.
- TO PASS UNDER ABUTMENT DUCTS MUST BE MINIMUM OF 1.5m DEEP.

— LIGHT INDICATES EXISTING TO REMAIN
— BOLD INDICATES NEW WORK

WHARF PLAN POWER
SCALE: 1:300



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GENERAL NOTES:

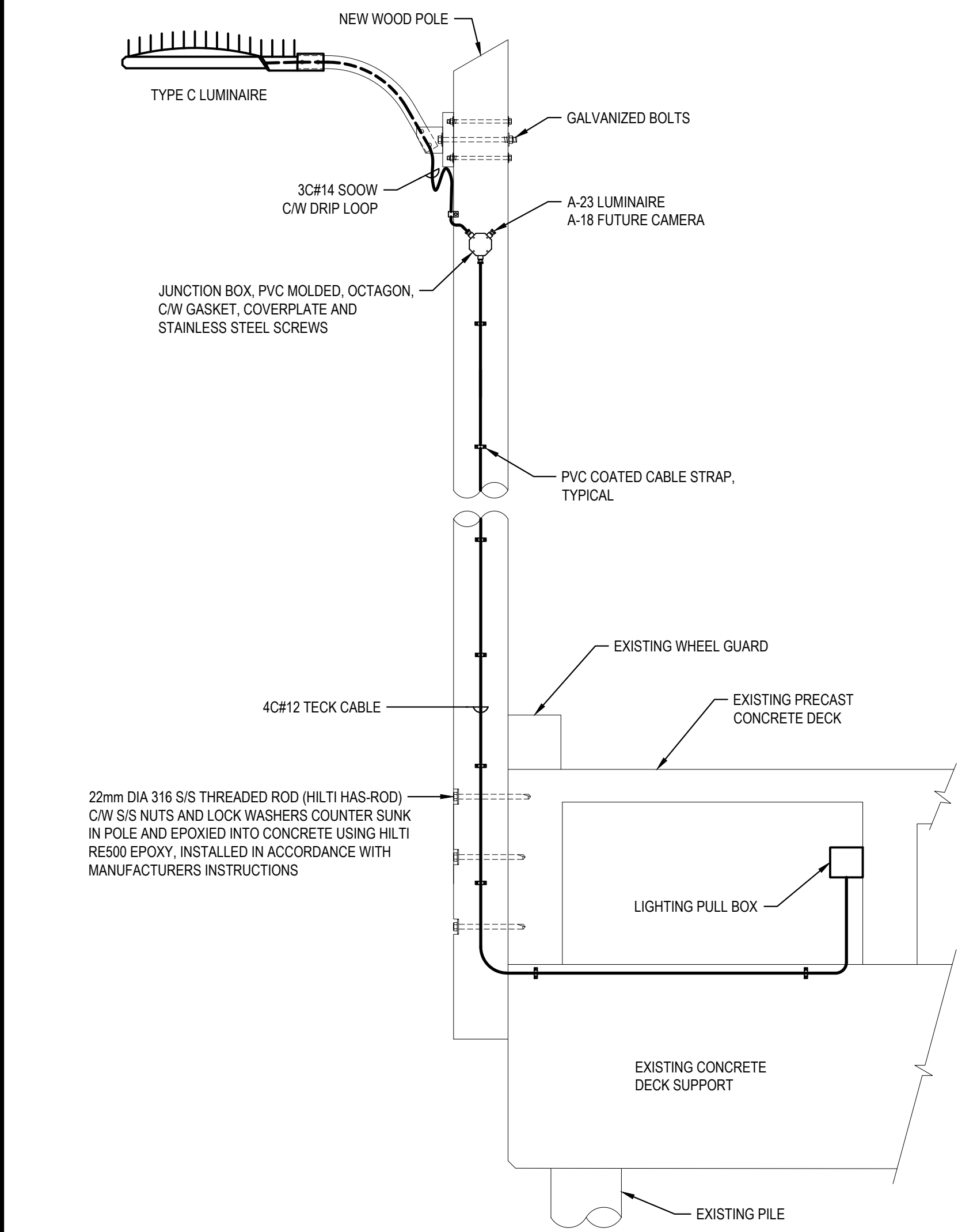
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0	ISSUED FOR TENDER	04/05/2022
revisions		date
project		project

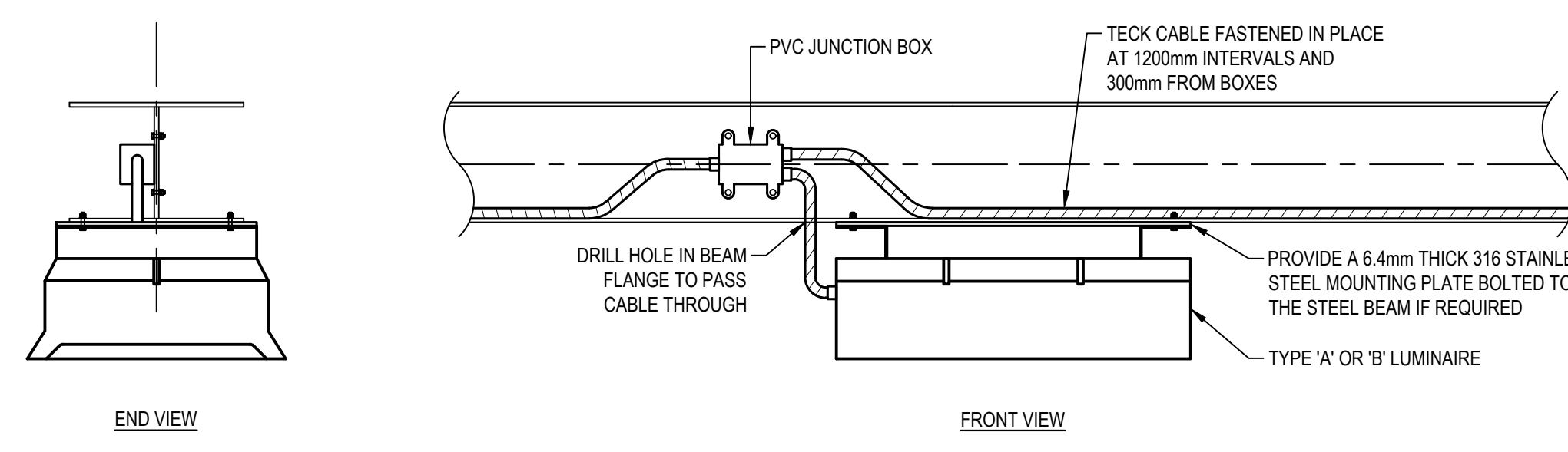
**ELECTRICAL UPGRADE
 DIPPER HARBOUR WHARF
 SAINT JOHN CO., NB**

WHARF PLAN LIGHTING

designed	R.M.B.	conçu
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender		Submission
F&O Project Manager	Administrateur de projets P&O	
project number		no. du projet
	C2-00324	
drawing no.		no. du dessin
	E2 OF 12	



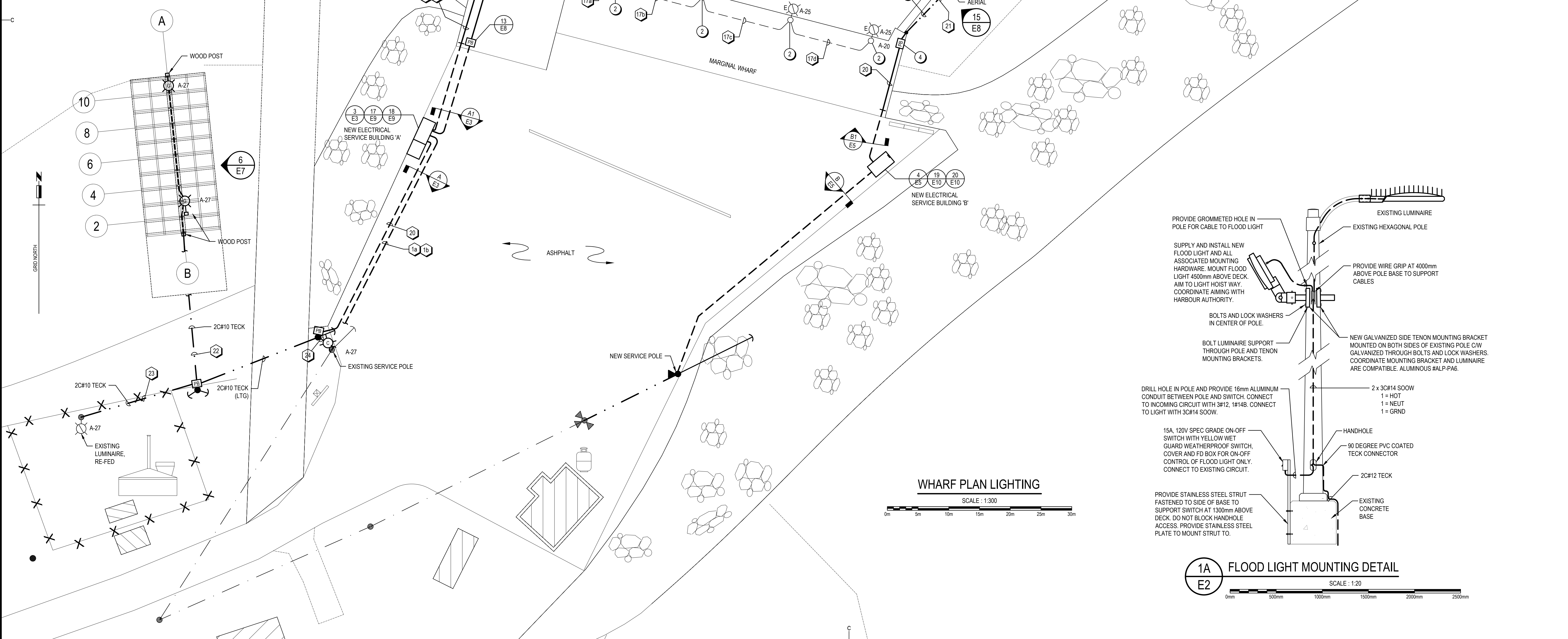
1B RAMP LIGHT MOUNTING DETAIL
 SCALE: 1:20
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



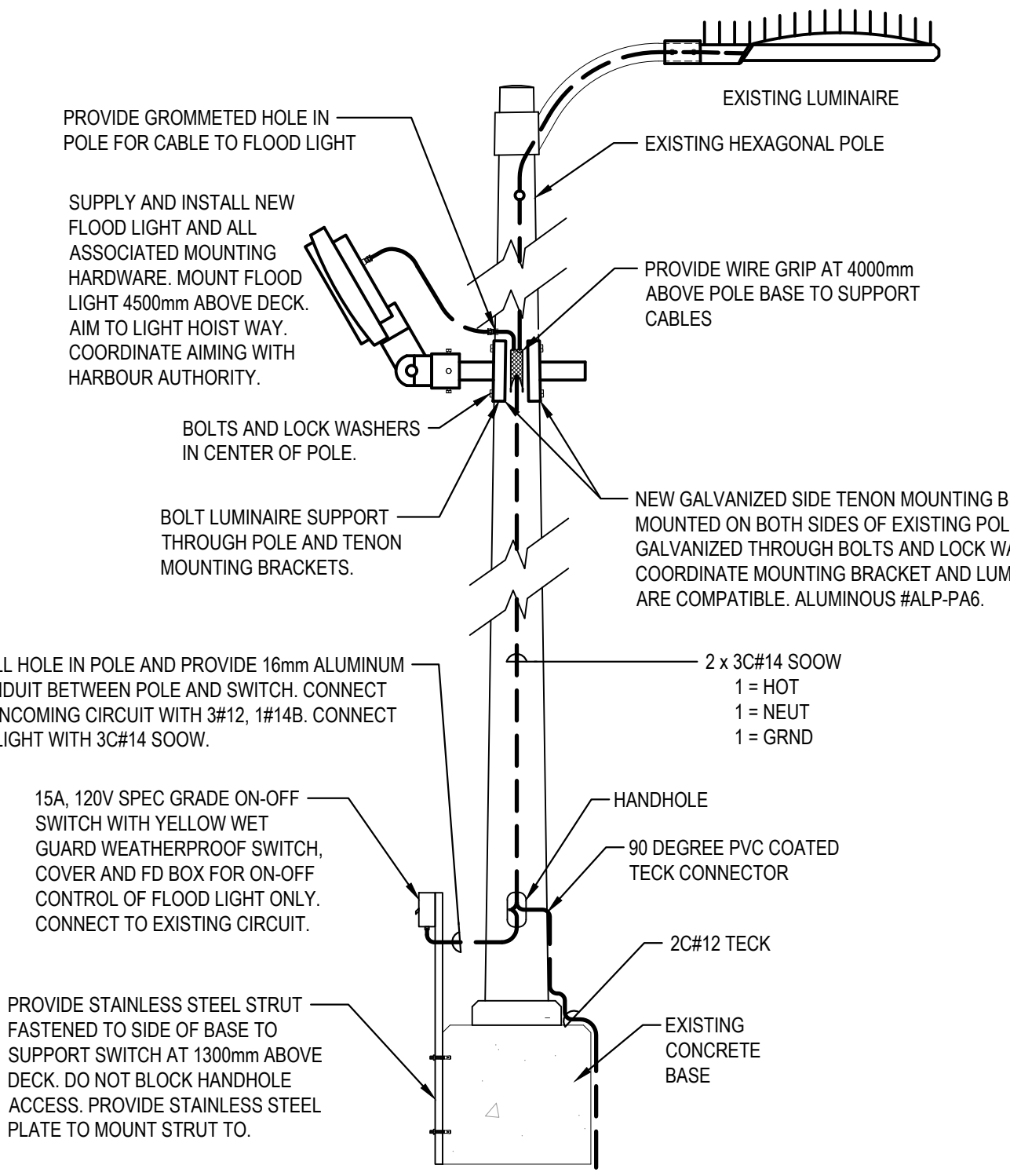
2 TYPICAL FLOAT LIGHTING MOUNTING DETAIL
 SCALE: 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm

NOTES

1. CAMERA POWER SUPPLY CIRCUIT TO BE LEFT IN POLE JUNCTION BOX FOR FUTURE USE.
2. CAMERA POWER SUPPLY CIRCUIT TO BE IDENTIFIED IN POLE HANDHOLE FOR FUTURE USE.
3. USE 90 DEGREE PVC COATED TECK CONNECTOR TO REFEED EXISTING LUMINAIRE.
4. 152mm x 152mm x 102mm STAINLESS STEEL LIGHTING PULL BOX.
5. SUPPLY AND INSTALL AERIAL MESSENGER WIRE BETWEEN POLES, FASTENED AT BOTH ENDS USING EYE BOLTS AND TWO BOLT AERIAL MESSENGER CLAMPS. STRAP CABLES TO MESSENGER AT 600mm INTERVALS.



WHARF PLAN LIGHTING
 SCALE: 1:300
 0m 5m 10m 15m 20m 25m 30m



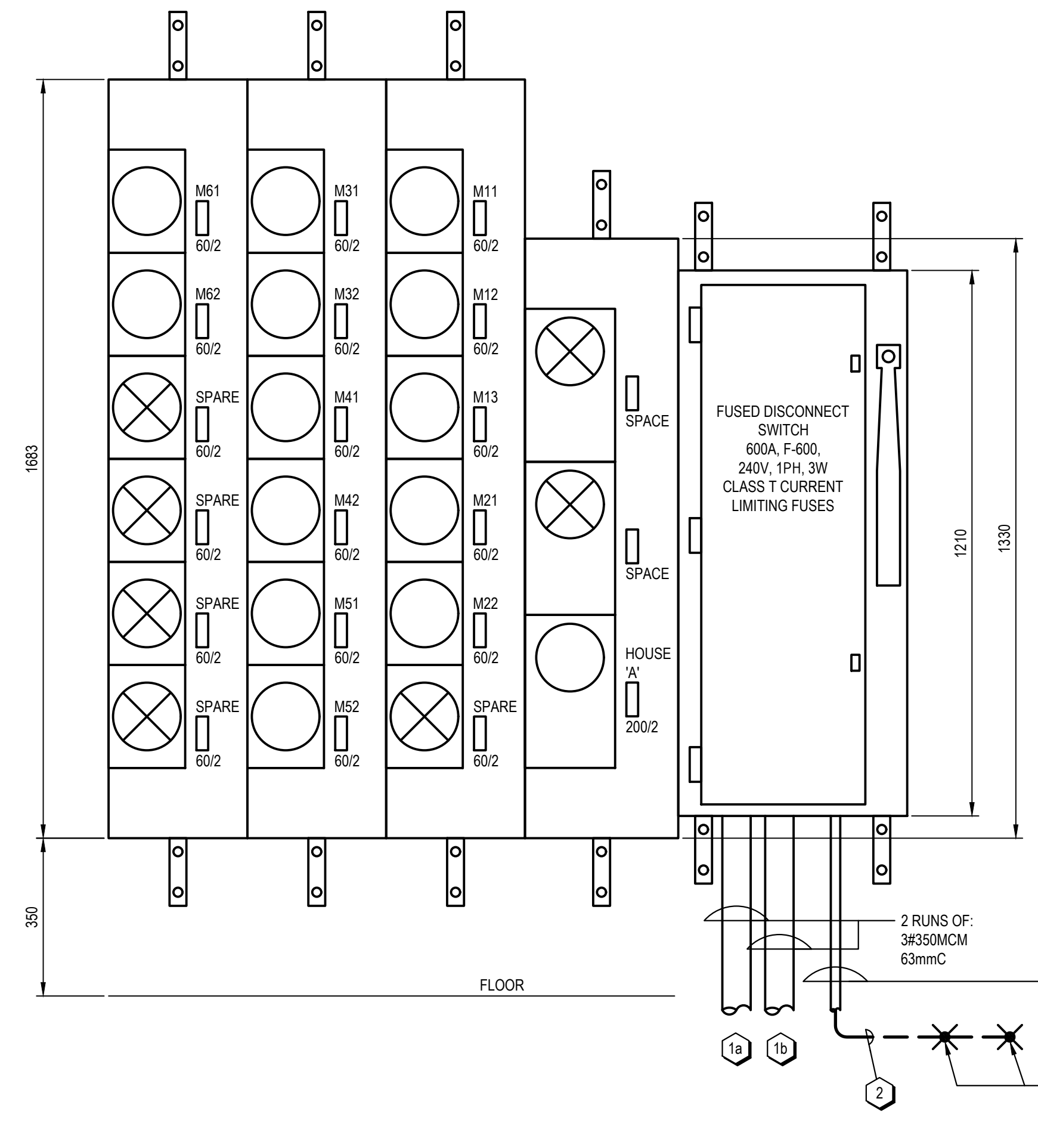
1A FLOOD LIGHT MOUNTING DETAIL
 SCALE: 1:20
 0mm 500mm 1000mm 1500mm 2000mm 2500mm

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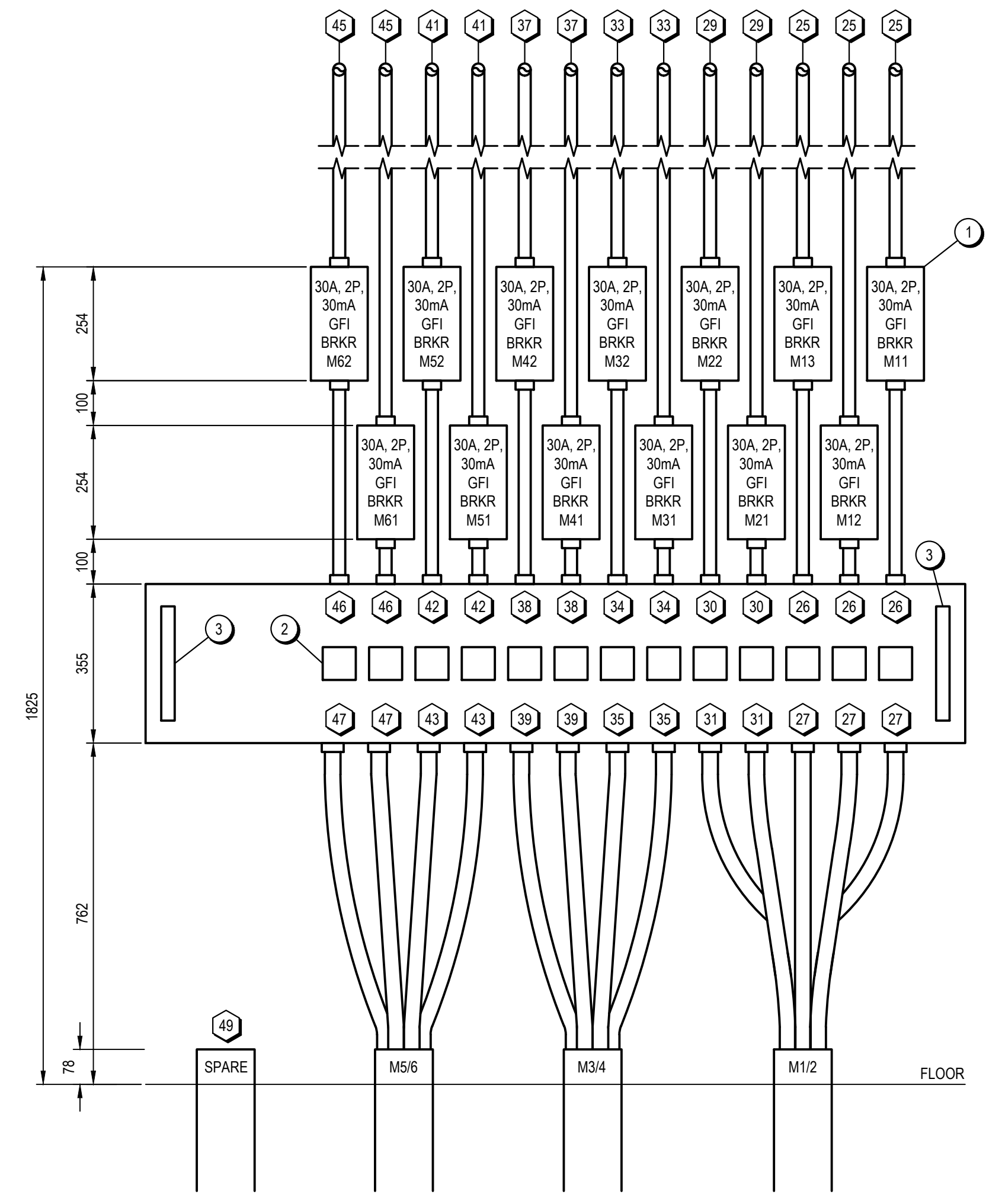


GENERAL NOTES:

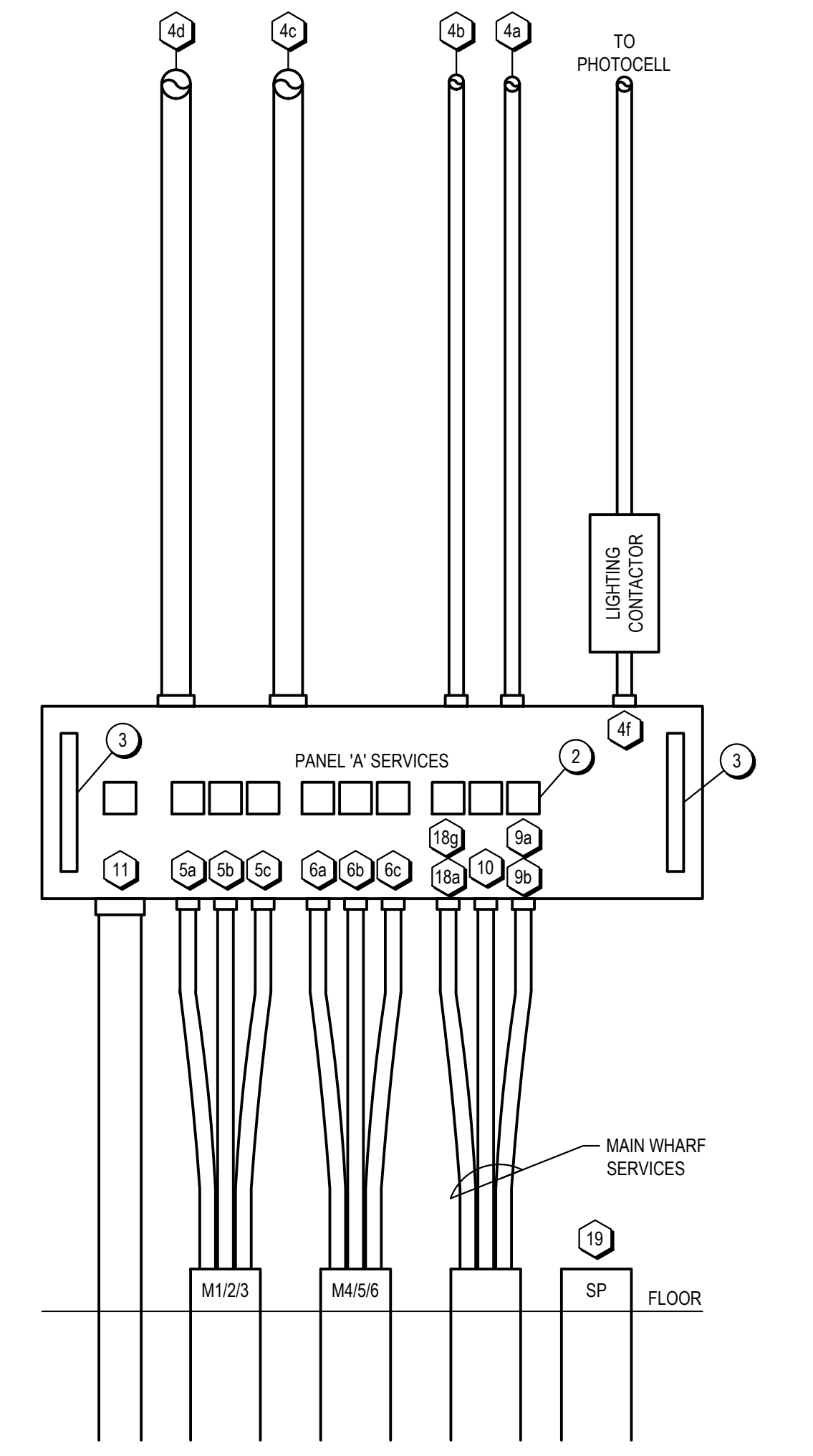
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3A SERVICE ENTRANCE 'A' - MAIN AND MARGINAL WHARF
 SCALE: 1:10



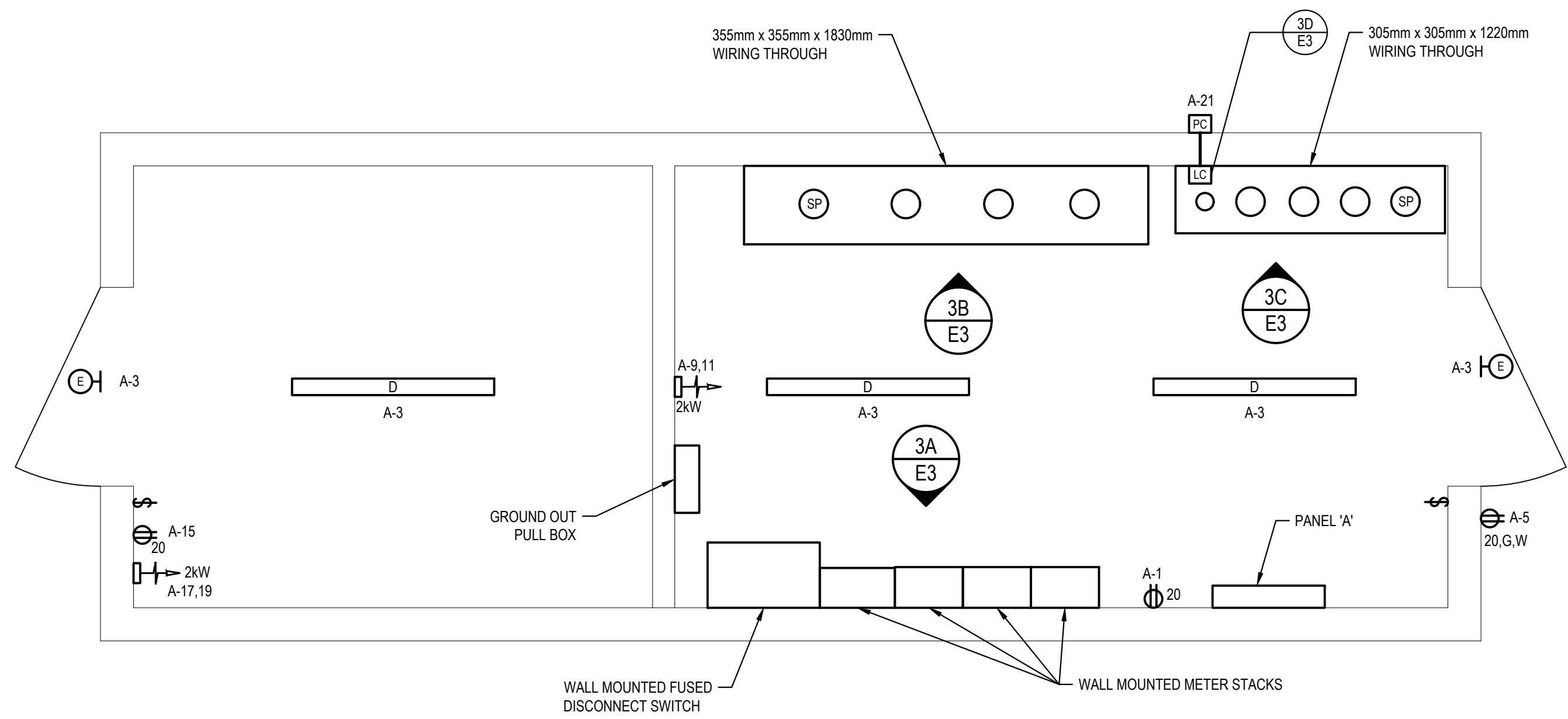
3B SERVICE ENTRANCE PULL BOX ELEVATION - BUILDING 'A'
 SCALE: 1:10



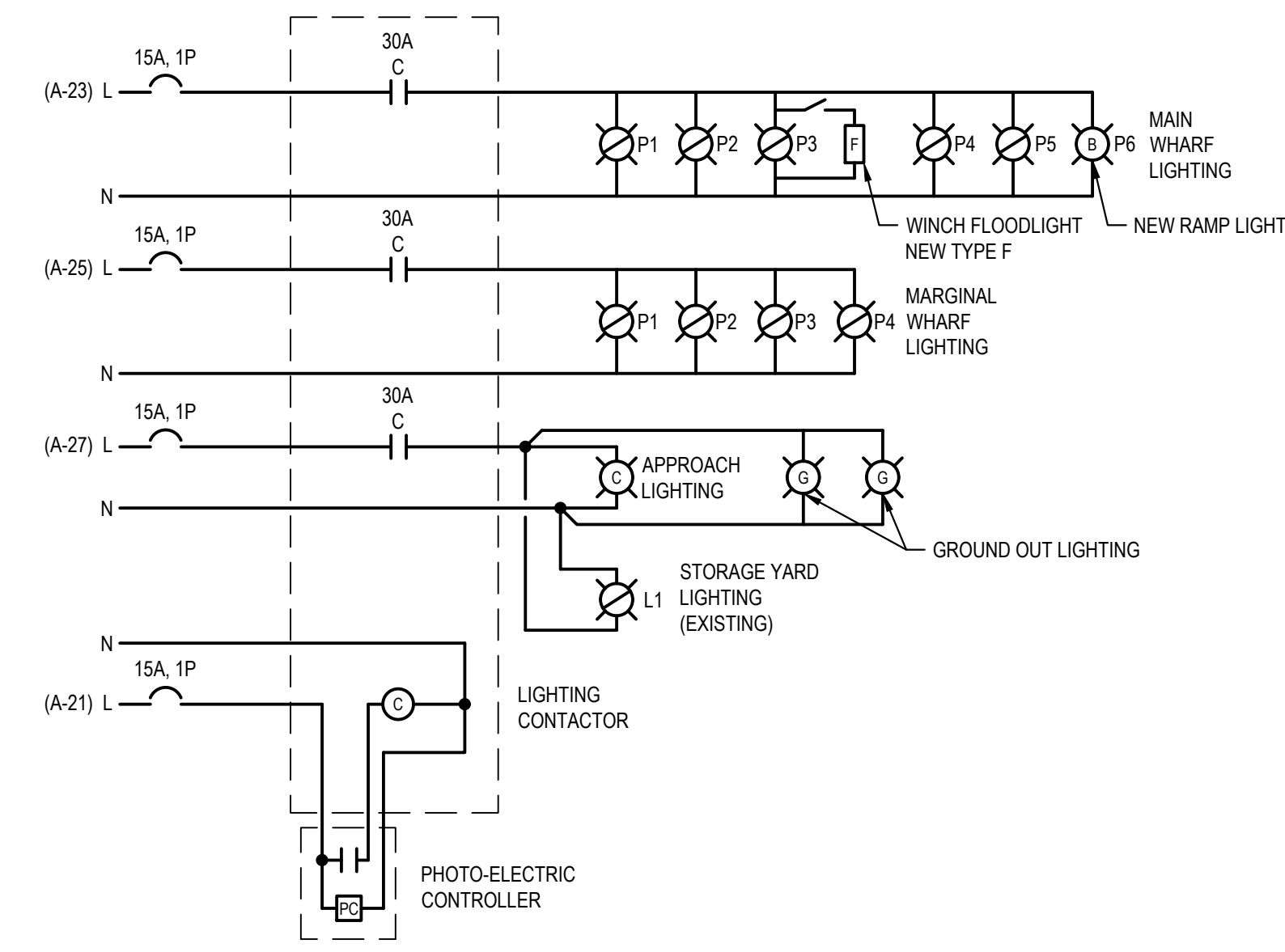
3C PANEL 'A' PULL BOX ELEVATION - BUILDING 'A'
 SCALE: 1:10

NOTES

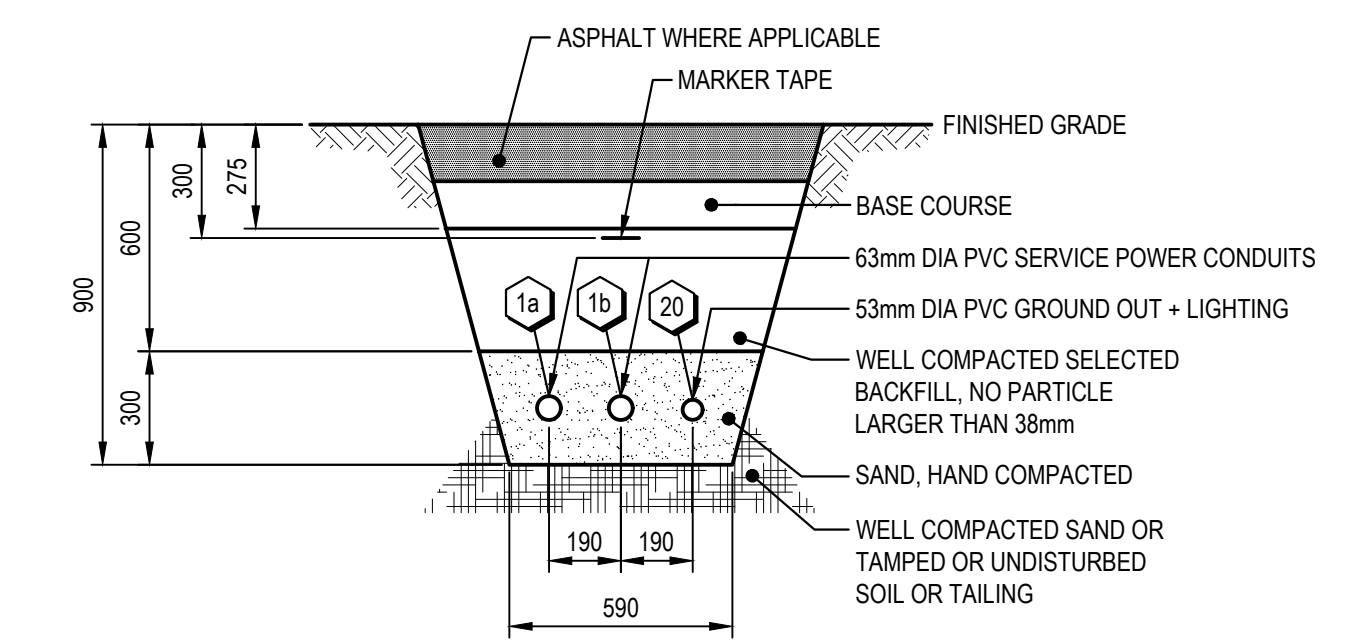
- 70A, 120/240V, 4 CIRCUIT LOADCENTER C/W 30A, 2P, 30mA GFI BREAKER (TYPICAL).
- INSULATED SPICE/REDUCER FINGER SAFE TERMINAL BLOCKS SIZED TO SUIT CABLING (TYPICAL).
- SUPPLY AND INSTALL GROUNDING TERMINAL STRIPS AS REQUIRED (TYPICAL).
- TRENCH TO BE SLOPED DOWN TO 1800mm TO ALLOW CONDUITS TO PASS UNDER CONCRETE ABUTMENT AT WHARF.



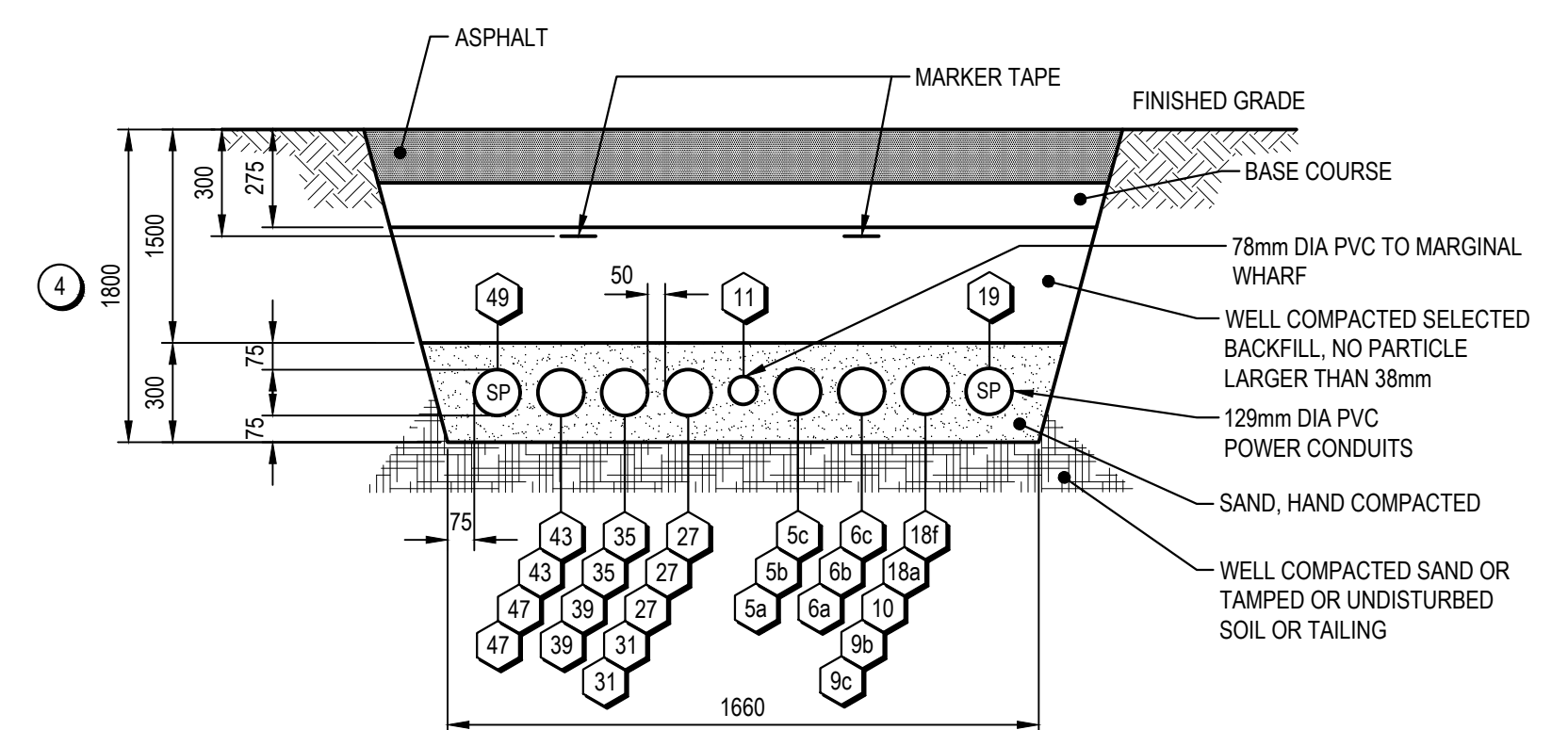
3 SERVICE BUILDING 'A' ELECTRICAL
 SCALE: 1:20



3D LIGHTING CONTROL SCHEMATIC - BUILDING 'A'
 SCALE: N.T.S.



A TRENCH DETAIL



A1 TRENCH DETAIL

0	ISSUED FOR TENDER	04/05/2022
revisions		date

project project
**ELECTRICAL UPGRADE
 DIPPER HARBOUR WHARF
 SAINT JOHN CO., NB**

drawing design
**SERVICE BUILDING 'A'
 ELECTRICAL DETAILS**

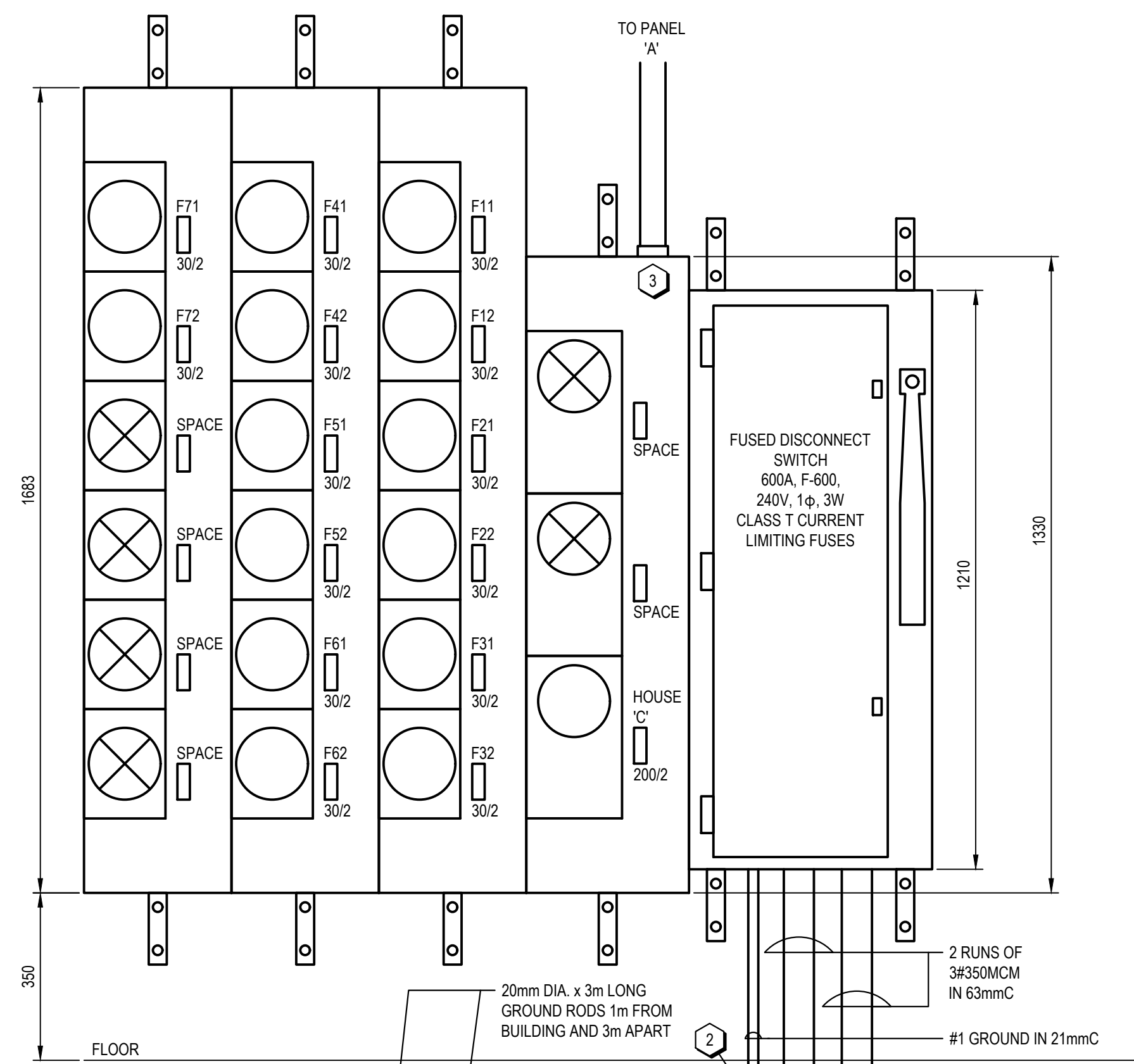
designed	R.M.B.	congr
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender	W. B. B. / J. B. B.	Soumission
F&O Project Manager	Administrateur de projets P&O	no. du projet
	C2-00324	
drawing no.	E3 OF 12	no. du dessin

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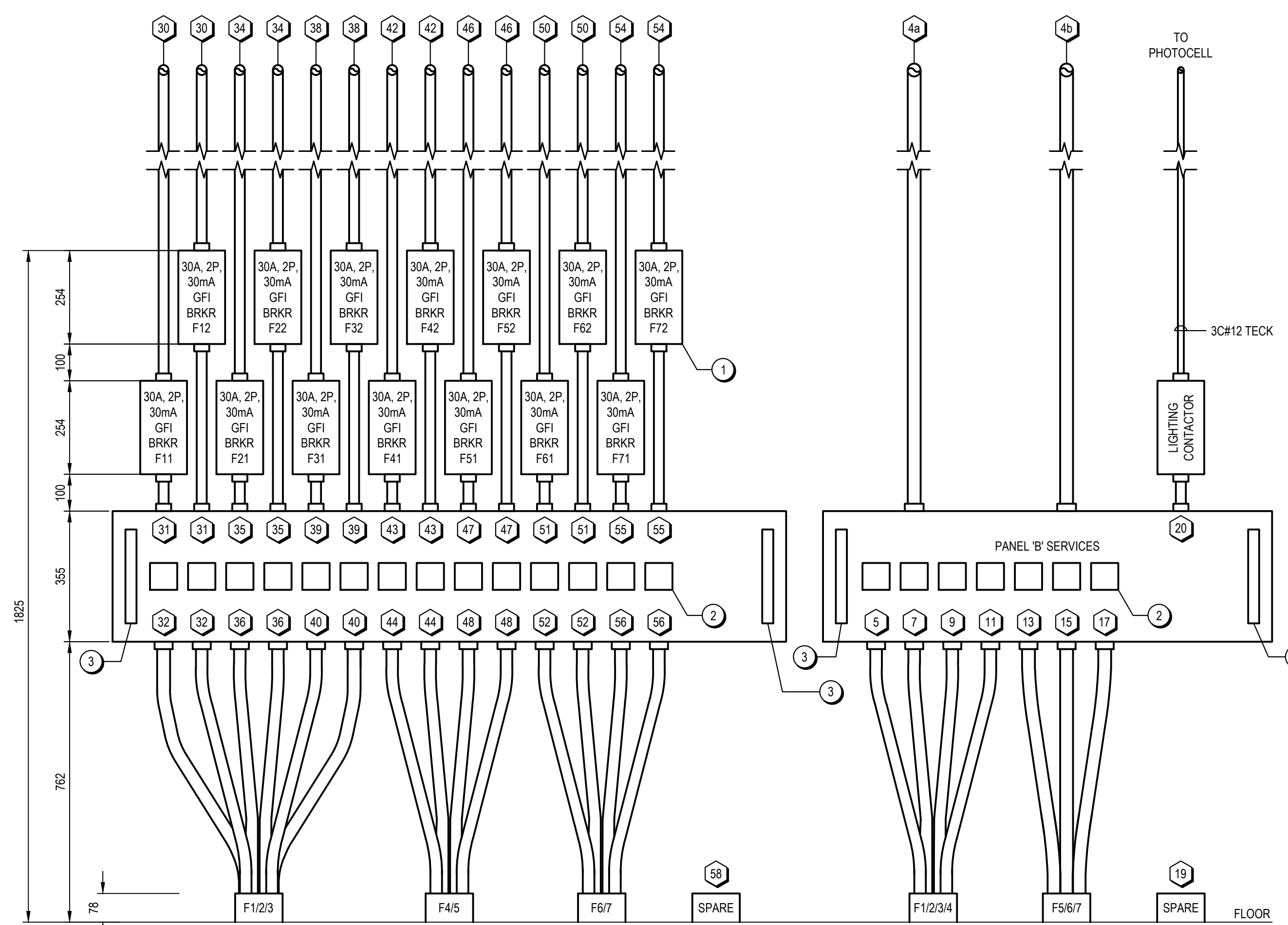


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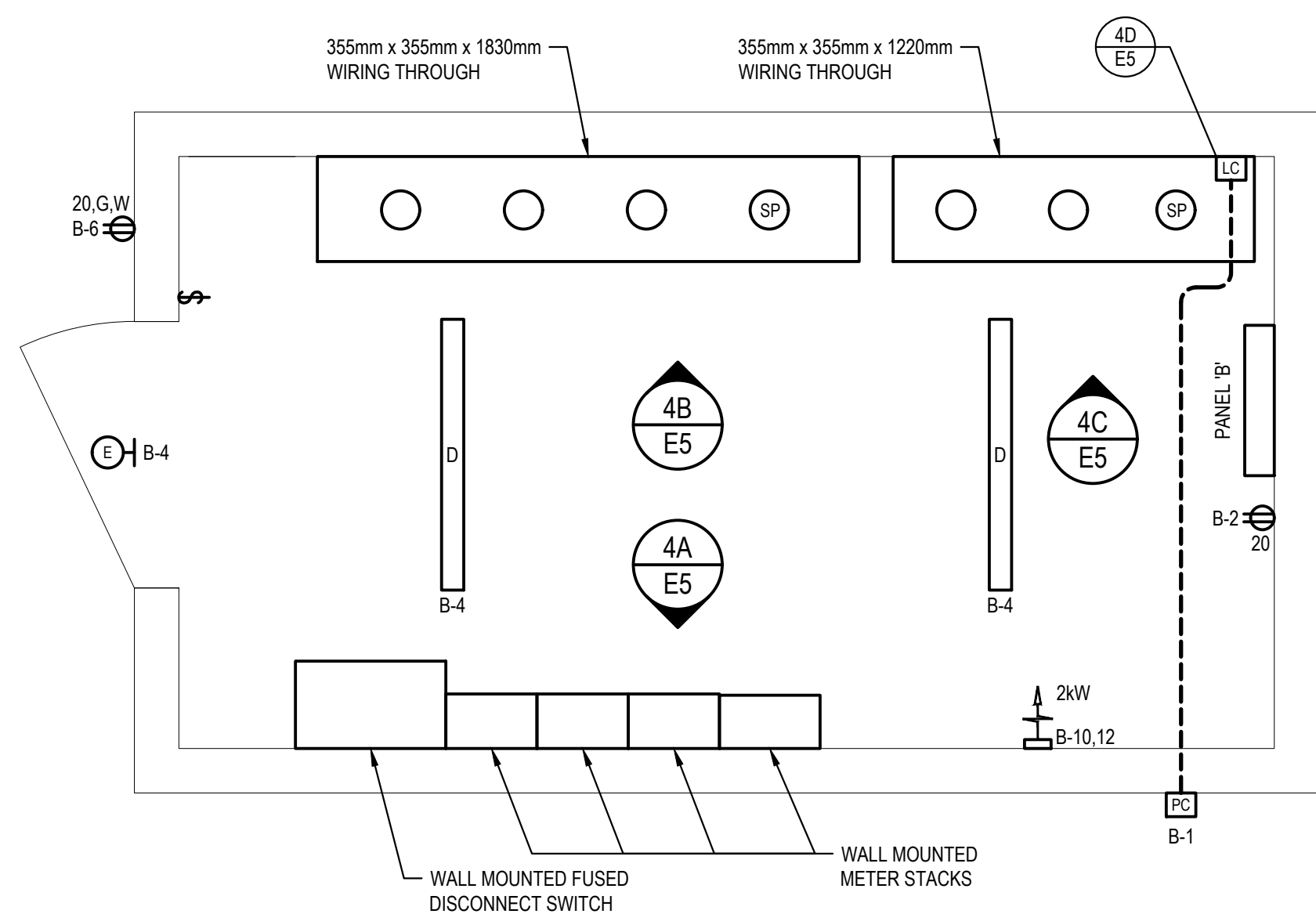


4A SERVICE ENTRANCE 'B' - ELEVATION
 E5 SCALE: 1:10

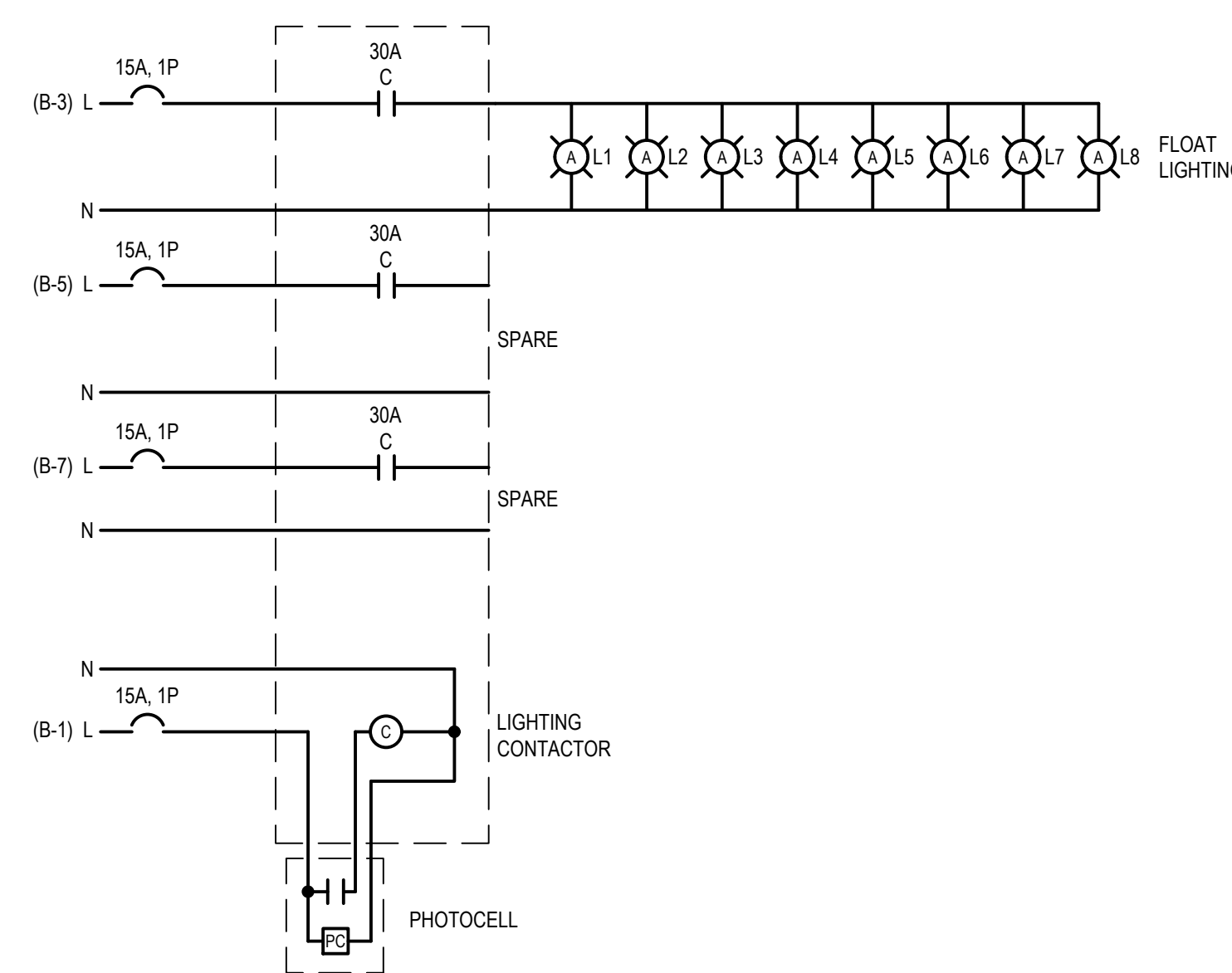


4B SERVICE ENTRANCE PULL BOXES ELEVATION - BUILDING 'B'
 E5 SCALE: 1:10

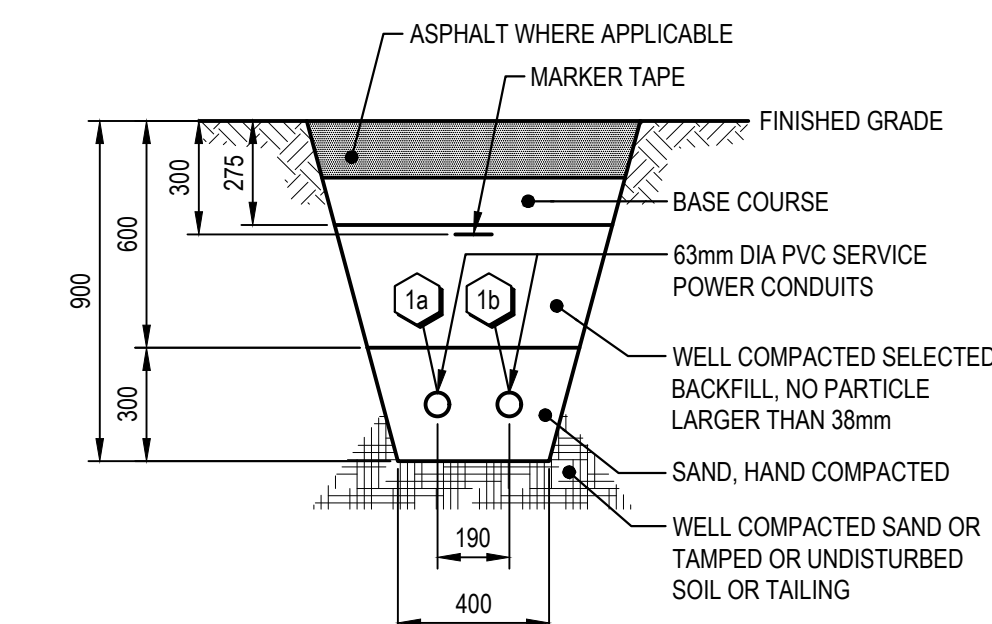
4C PANEL 'B' PULL BOX ELEVATION - BUILDING 'B'
 E5 SCALE: 1:10



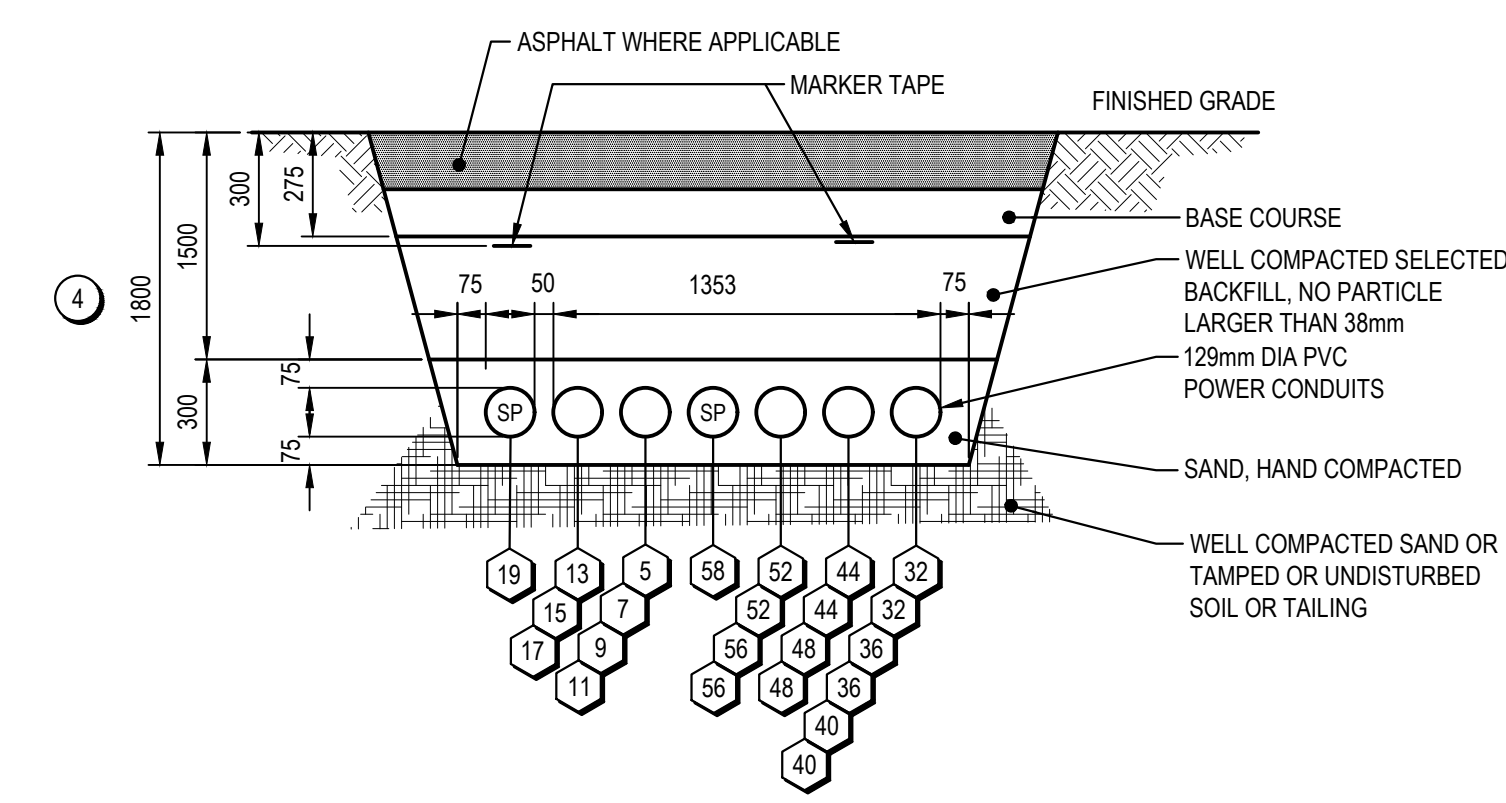
4 SERVICE BUILDING 'B' ELECTRICAL
 E1 E2 SCALE: 1:20



4D LIGHTING CONTROL SCHEMATIC - BUILDING 'B'
 E5 SCALE: N.T.S.



B TRENCH DETAIL
 E1 E2



B1 TRENCH DETAIL
 E1 E2

NOTES

- 70A, 120/240V, 4CCT LOADCENTER CW 30A, 2P, 30mA, GFI BREAKERS (TYPICAL).
- INSULATED SPULCE/REDUCER FINGER SAFE TERMINAL BLOCKS SIZED TO SUIT CABLING (TYPICAL).
- GROUNDING TERMINAL STRIP.
- TRENCH TO BE SLOPED DOWN TO 1800mm TO ALLOW CONDUITS TO PASS UNDER CONCRETE ABUTMENT AT WHARF.

0	ISSUED FOR TENDER	04/05/2022
revisions		date
project		project

**ELECTRICAL UPGRADE
 DIPPER HARBOUR WHARF
 SAINT JOHN CO., NB**

**SERVICE BUILDING 'B'
 ELECTRICAL DETAILS**

designed	R.M.B.	conçu
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender		Submission
F&O Project Manager	Administrateur de projets P&O	
project number		no. du projet

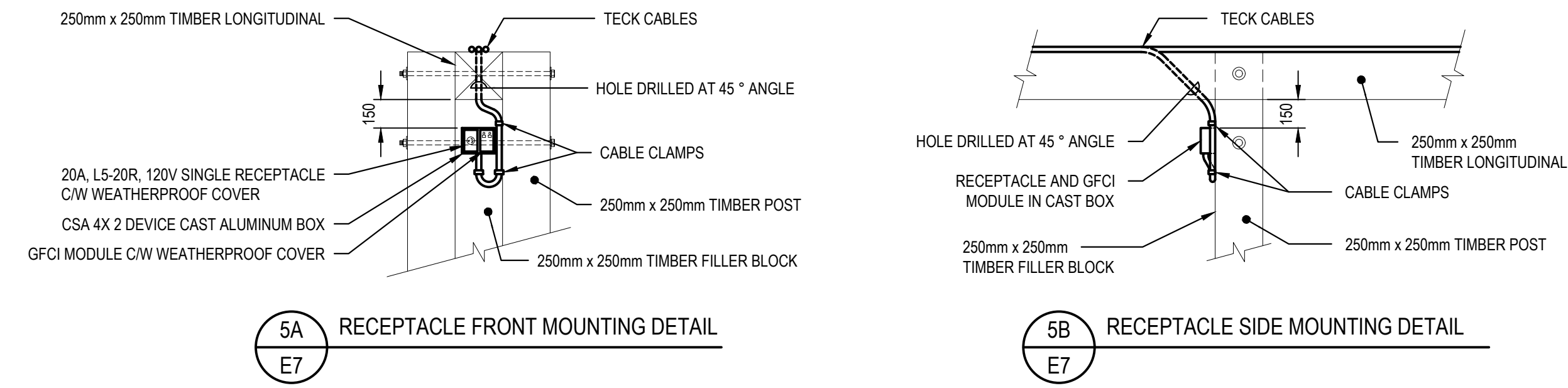
C2-00324

drawing no. E5 OF 12 no. du dessin

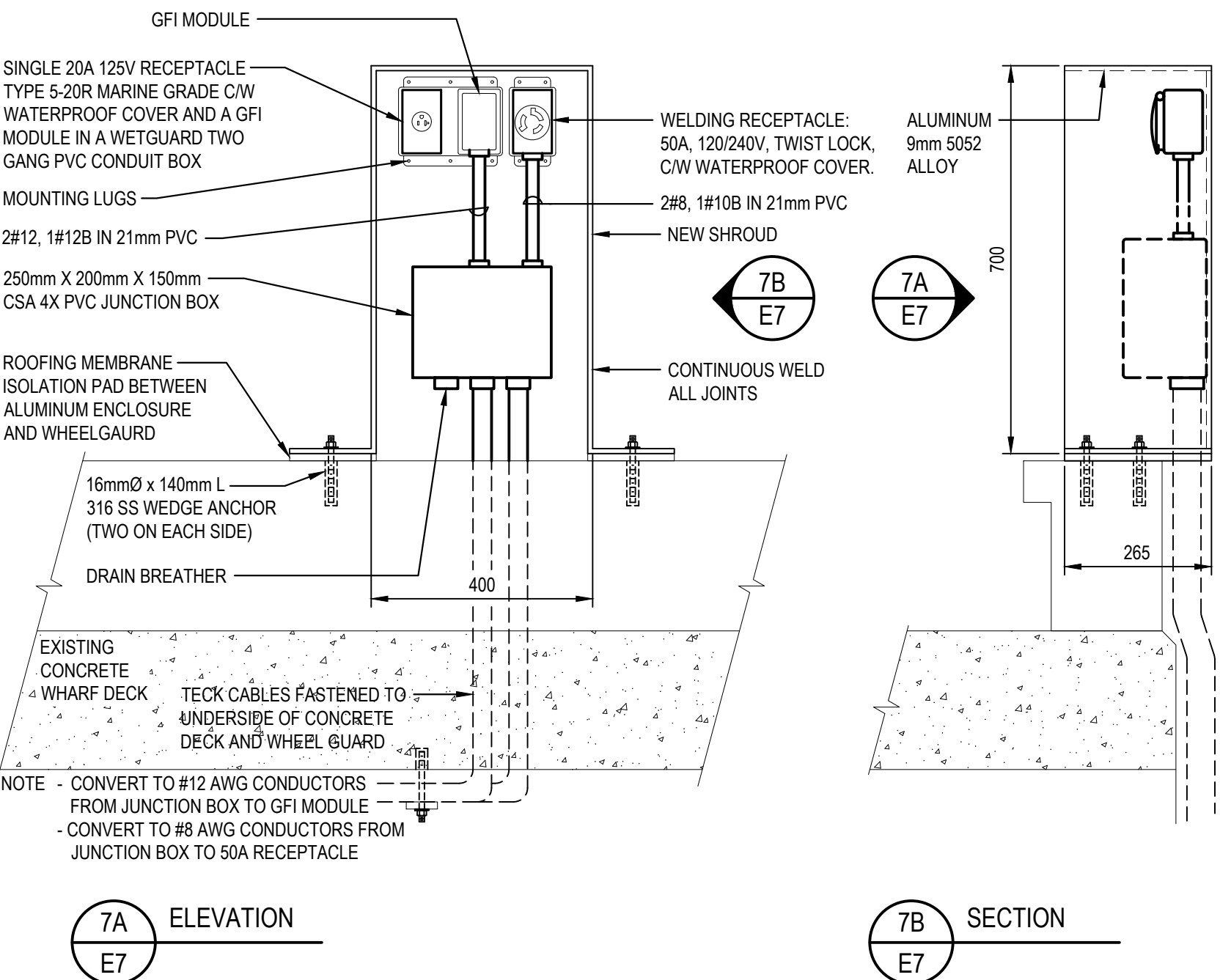
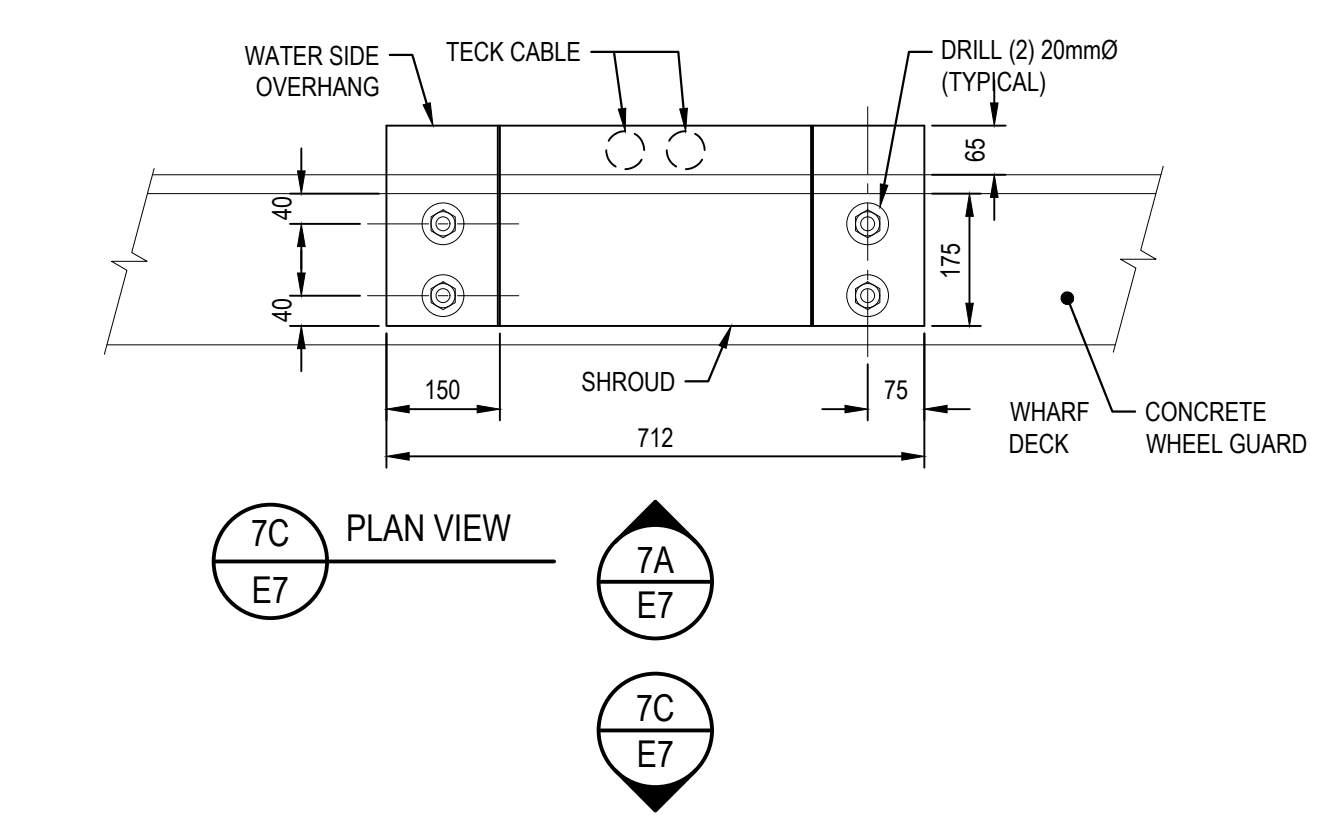
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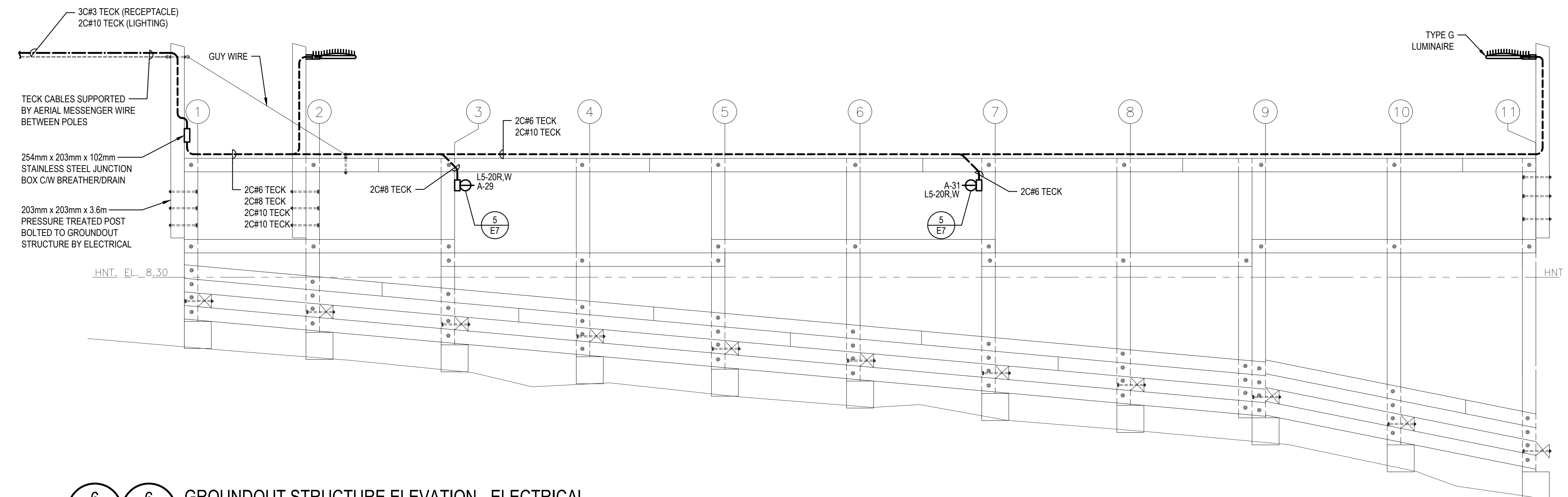
GENERAL NOTES:
 1. CONTRACTOR SHALL EXAMINE ELECTRICAL DRAWINGS, VISIT THE SITE TO VERIFY EXISTING EQUIPMENT AND CONDITIONS AND SCOPE OF WORK INVOLVED PRIOR TO SUBMITTING A TENDER. EXTRAS WILL NOT BE CONSIDERED BECAUSE ACTUAL CONDITIONS DIFFER FROM DRAWINGS AND ALL COSTS RELATING TO EXISTING SITE CONDITIONS MUST BE INCLUDED IN TOTAL TENDERED PRICE.



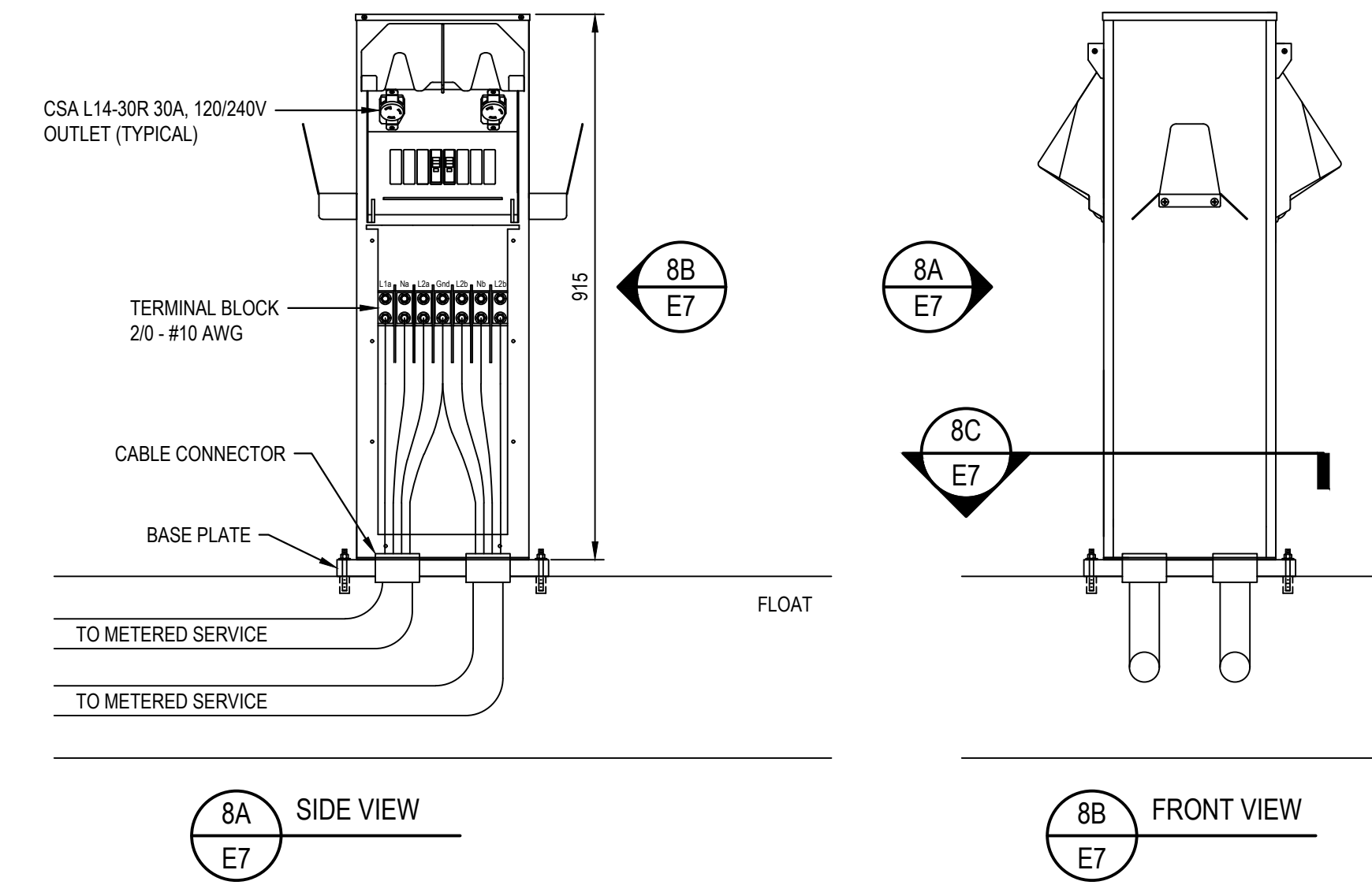
5 RECEPTACLE MOUNTING DETAIL
 SCALE: 1:25
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



7 SERVICE MODULE ENCLOSURE MOUNTING DETAIL
 SCALE: 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm



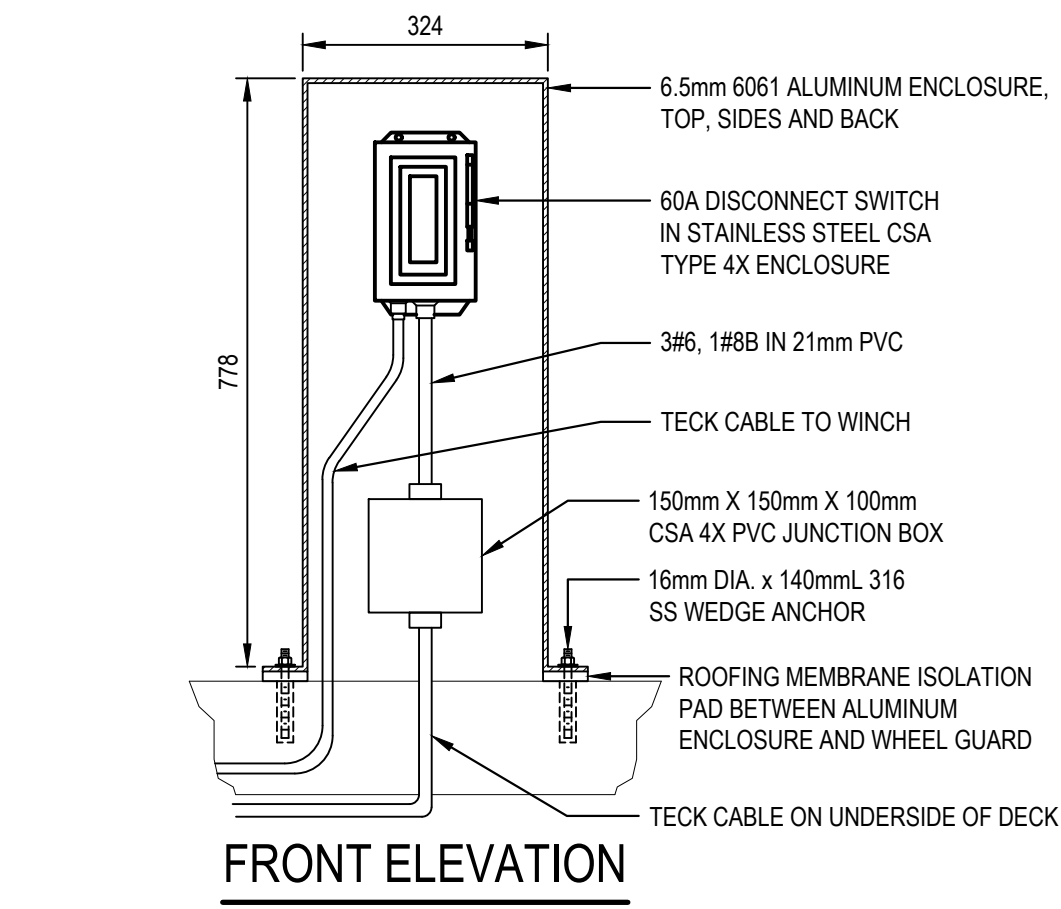
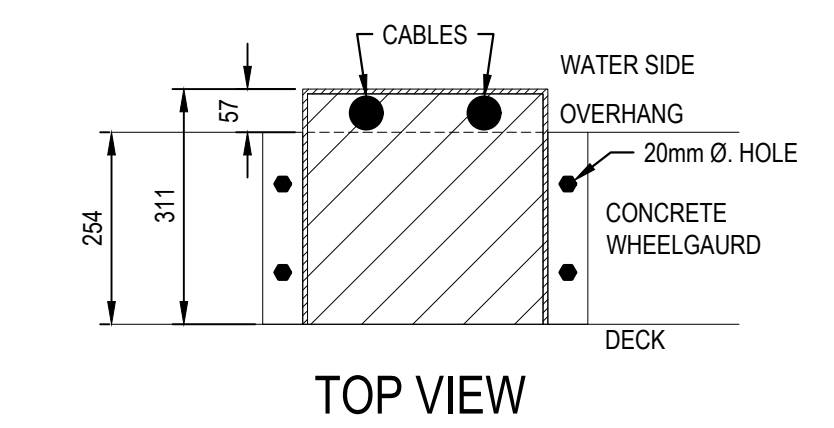
6 GROUNDOUT STRUCTURE ELEVATION - ELECTRICAL
 SCALE: 1:50
 0m 1m 2m 3m 4m 5m



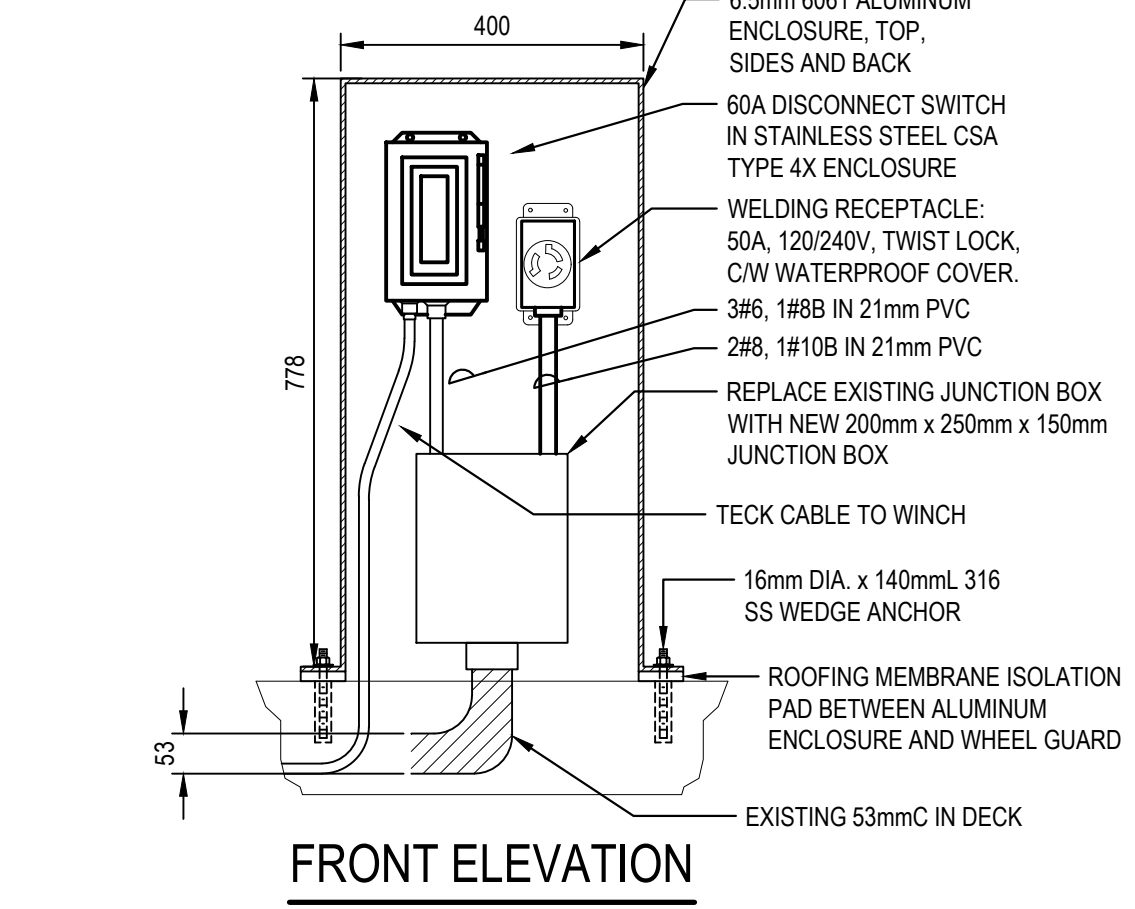
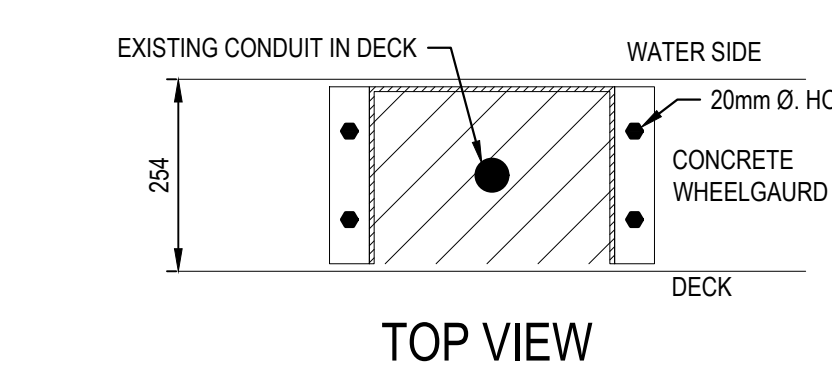
8 FLOAT POWER PEDESTAL DETAIL
 SCALE: 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm

PEDESTAL NUMBER	LEFT SIDE		RIGHT SIDE	
	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE
M1	M11 (L14-30R)	N/A	M12 (L14-30R)	N/A
M2	M21 (L14-30R)	N/A	M22 (L14-30R)	N/A
M3	M31 (L14-30R)	N/A	M32 (L14-30R)	N/A
M4	M41 (L14-30R)	N/A	M42 (L14-30R)	N/A
M5	M51 (L14-30R)	N/A	M52 (L14-30R)	N/A
M6	M61 (L14-30R)	N/A	M62 (L14-30R)	N/A

PEDESTAL NUMBER	LEFT SIDE		RIGHT SIDE	
	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE	RECEPT 1 NAMEPLATE	RECEPT 2 NAMEPLATE
F1	F11 (L14-30R)	F12 (L14-30R)	F13 (L5-20R)	F14 (L5-20R)
F2	F21 (L14-30R)	F22 (L14-30R)	F23 (L5-20R)	F24 (L5-20R)
F3	F31 (L14-30R)	F32 (L14-30R)	F33 (L5-20R)	F34 (L5-20R)
F4	F41 (L14-30R)	F42 (L14-30R)	F43 (L5-20R)	F44 (L5-20R)
F5	F51 (L14-30R)	F52 (L14-30R)	F53 (L5-20R)	F54 (L5-20R)
F6	F61 (L14-30R)	F62 (L14-30R)	F63 (L5-20R)	F64 (L5-20R)
F7	F71 (L14-30R)	F72 (L14-30R)	F73 (L5-20R)	F74 (L5-20R)



9 WINCH #1 DISCONNECT DETAIL
 SCALE: 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm



10 WINCH/WELDER #2 DETAIL
 SCALE: 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm

0	ISSUED FOR TENDER	04/05/2022
revisions		date

project: **ELECTRICAL UPGRADE DIPPER HARBOUR WHARF SAINT JOHN CO., NB**

drawing: **ELECTRICAL OUTLET AND GROUNDOUT DETAILS**

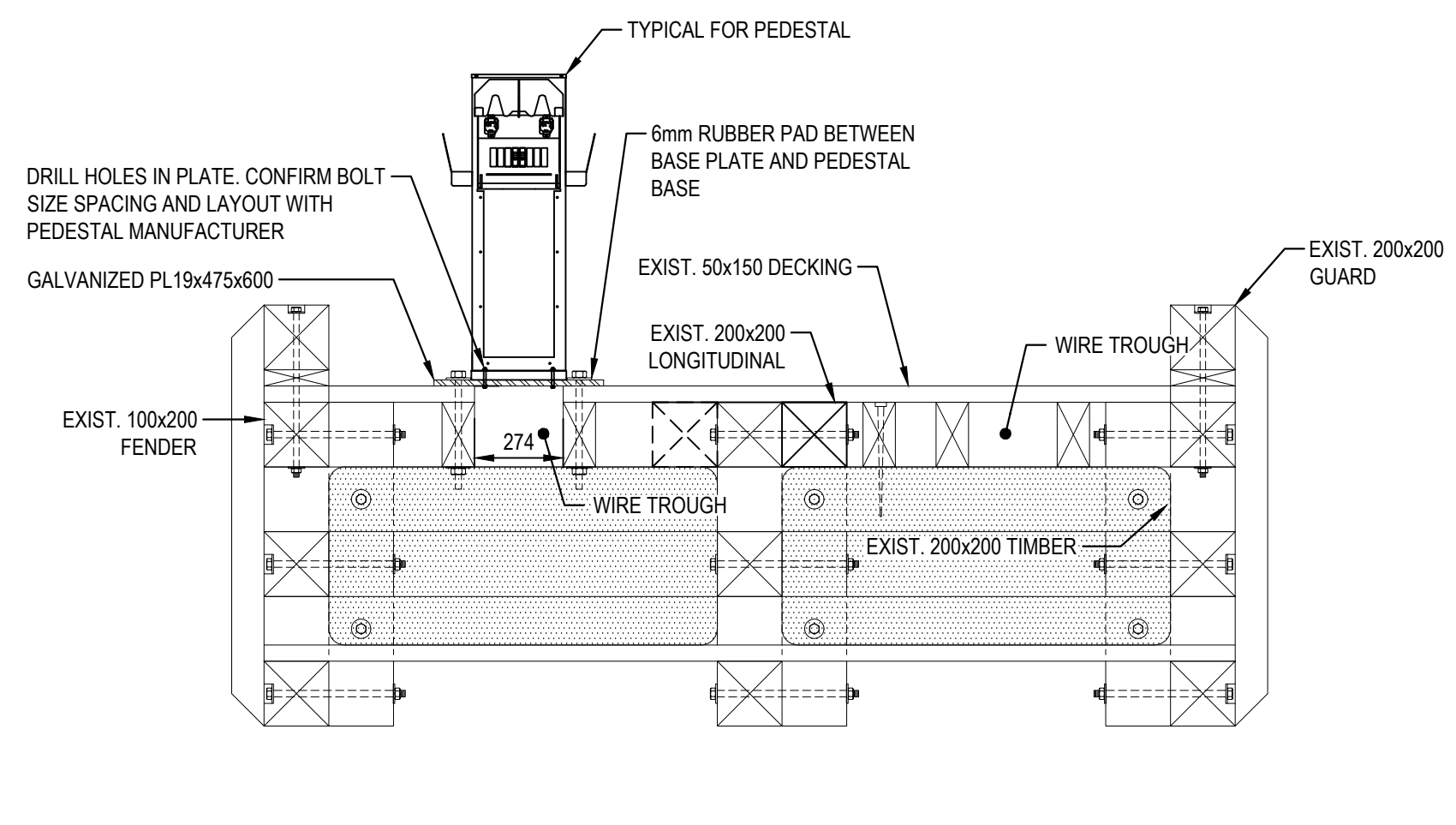
designed	R.M.B.	conçu
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender		Soumission
F&O Project Manager		Administrateur de projets P&O
project number		no. du projet
	C2-00324	
drawing no.		no. du dessin
	E7 OF 12	

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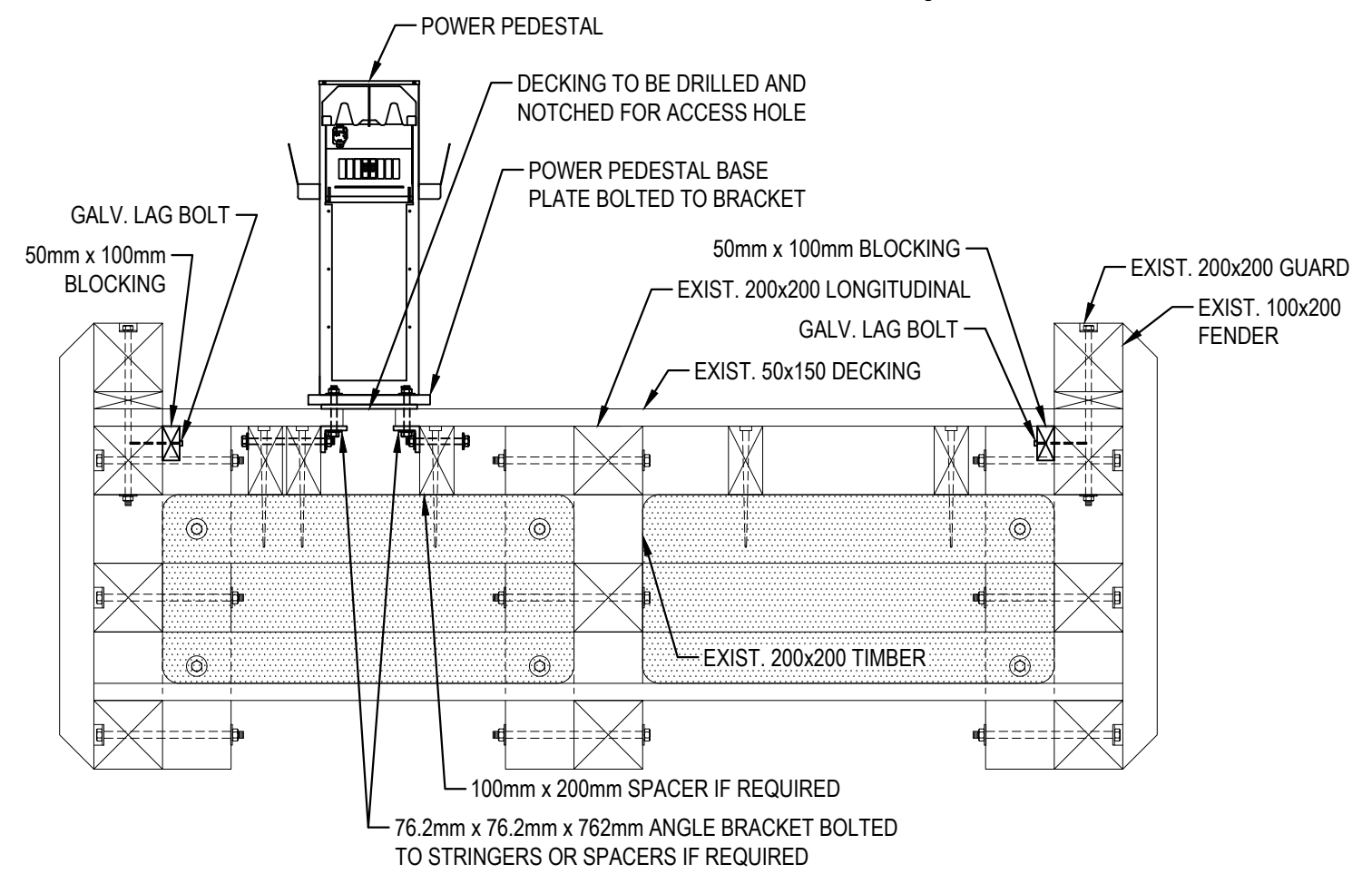


GENERAL NOTES:

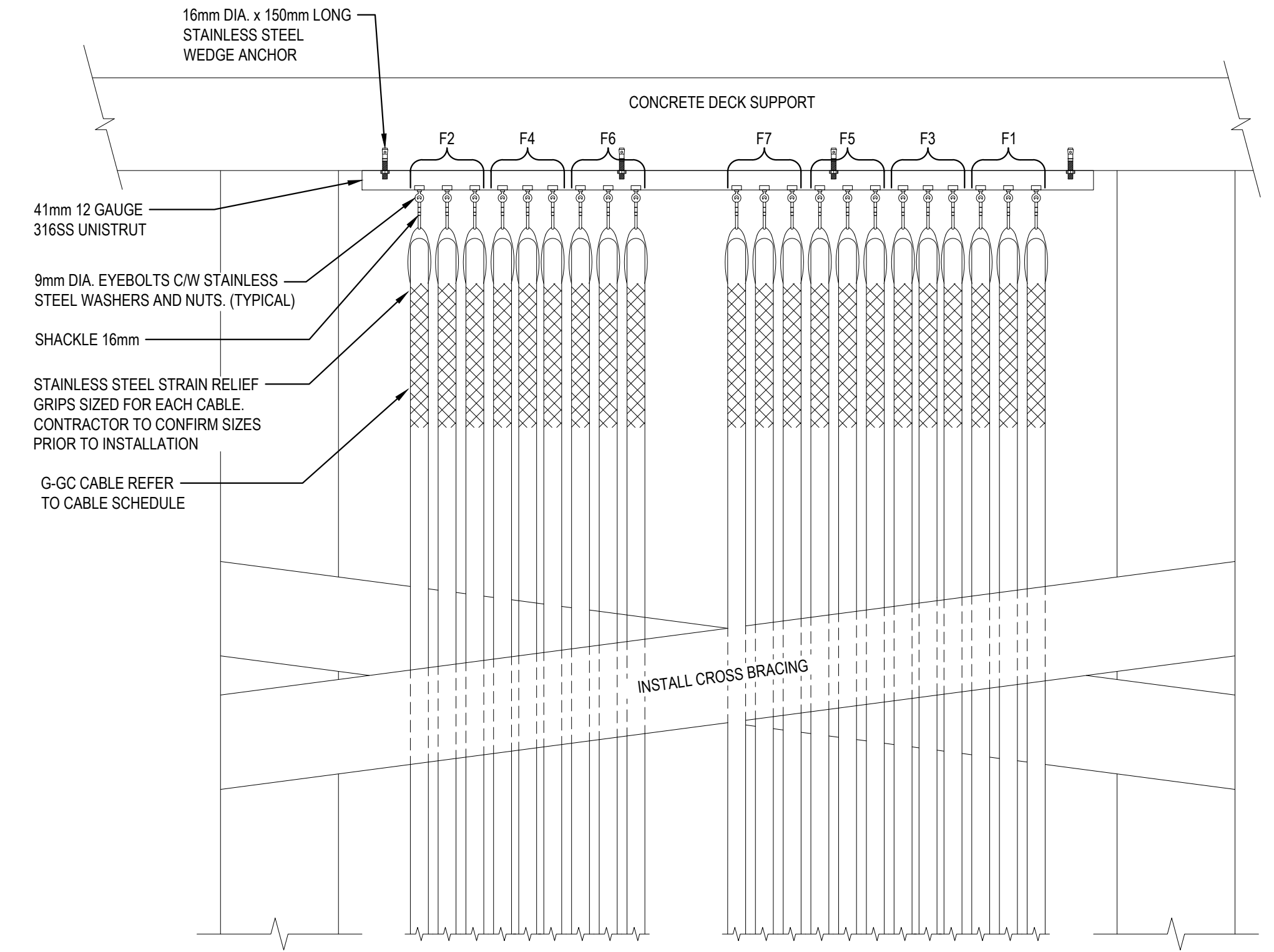
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING BURIED UTILITIES BEFORE COMMENCING WORK AND WILL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- CONTRACTOR SHALL EXAMINE ALL DRAWINGS AND VISIT THE SITE TO VERIFY EXISTING EQUIPMENT AND CONDITIONS AND SCOPE OF WORK INVOLVED PRIOR TO SUBMITTING A TENDER. EXTRAS WILL NOT BE CONSIDERED BECAUSE ACTUAL CONDITIONS DIFFER FROM DRAWINGS AND ALL COSTS RELATING TO EXISTING SITE CONDITIONS MUST BE INCLUDED IN TOTAL TENDERED PRICE.
- FLOAT DETAILS AND DIMENSIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED. MAKE ADJUSTMENTS AS REQUIRED TO MATCH ACTUAL FLOAT CONSTRUCTION.



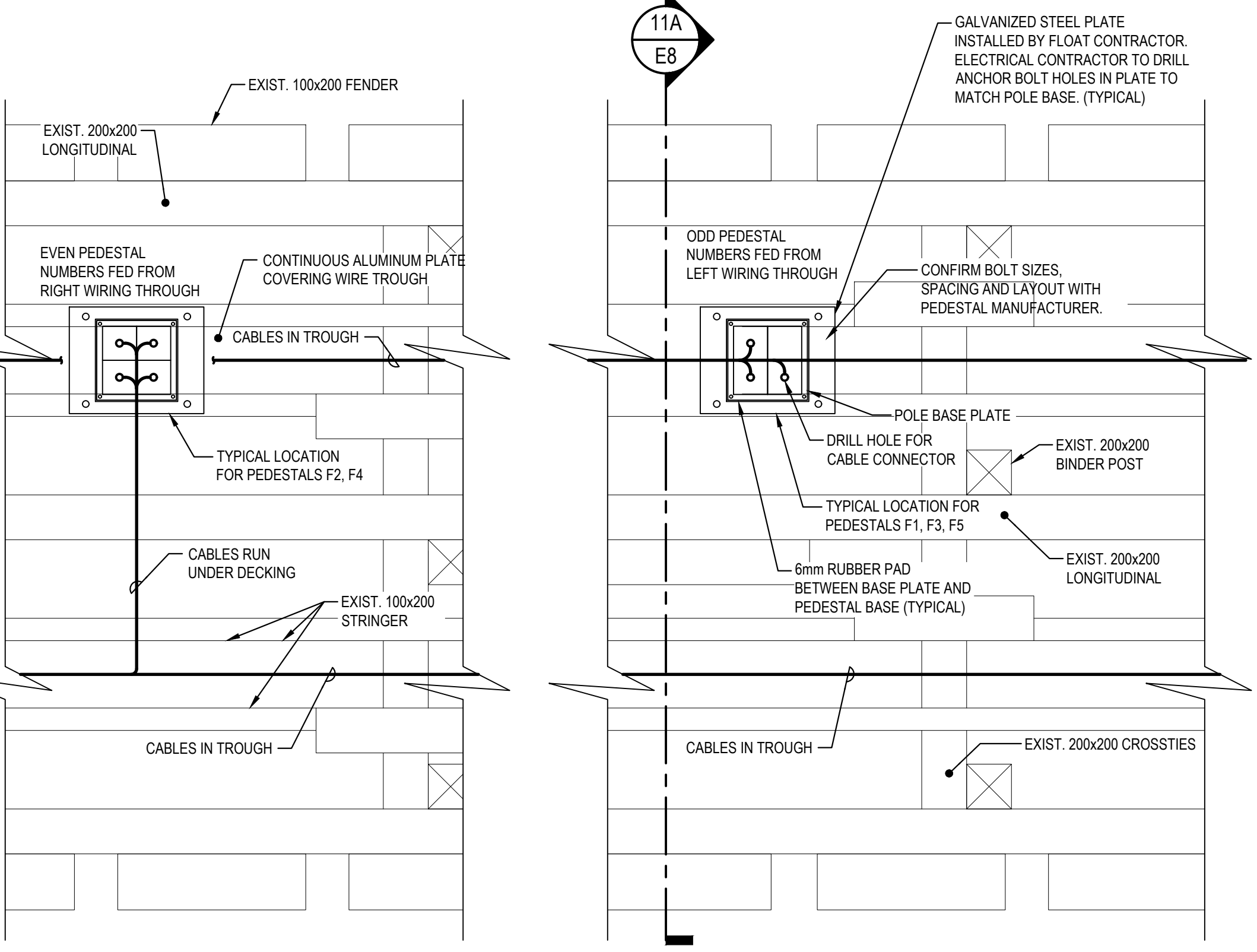
11A TYPICAL FLOAT POWER PEDESTAL SECTION #1
 E8



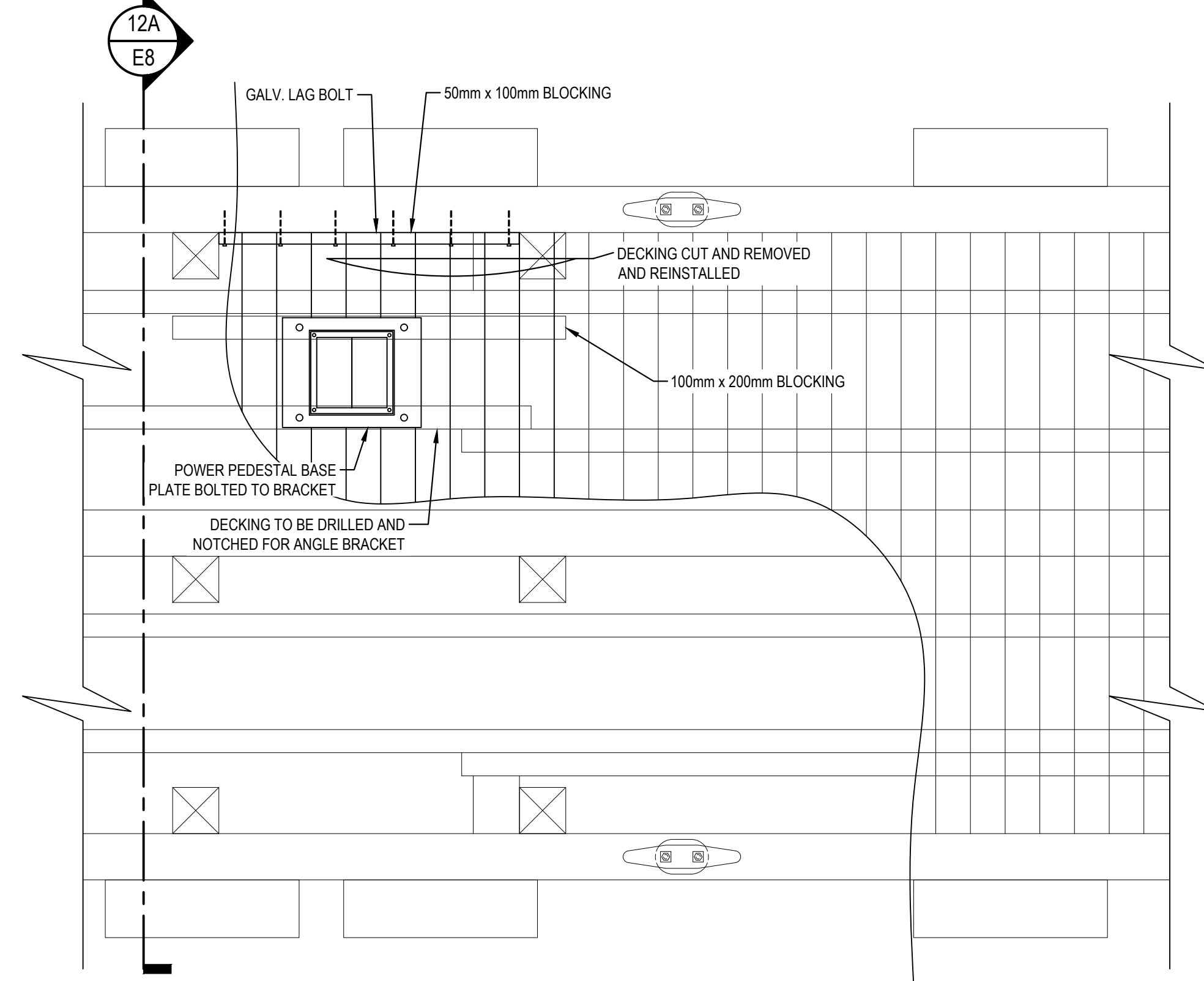
12A TYPICAL FLOAT POWER PEDESTAL SECTION #2
 E8



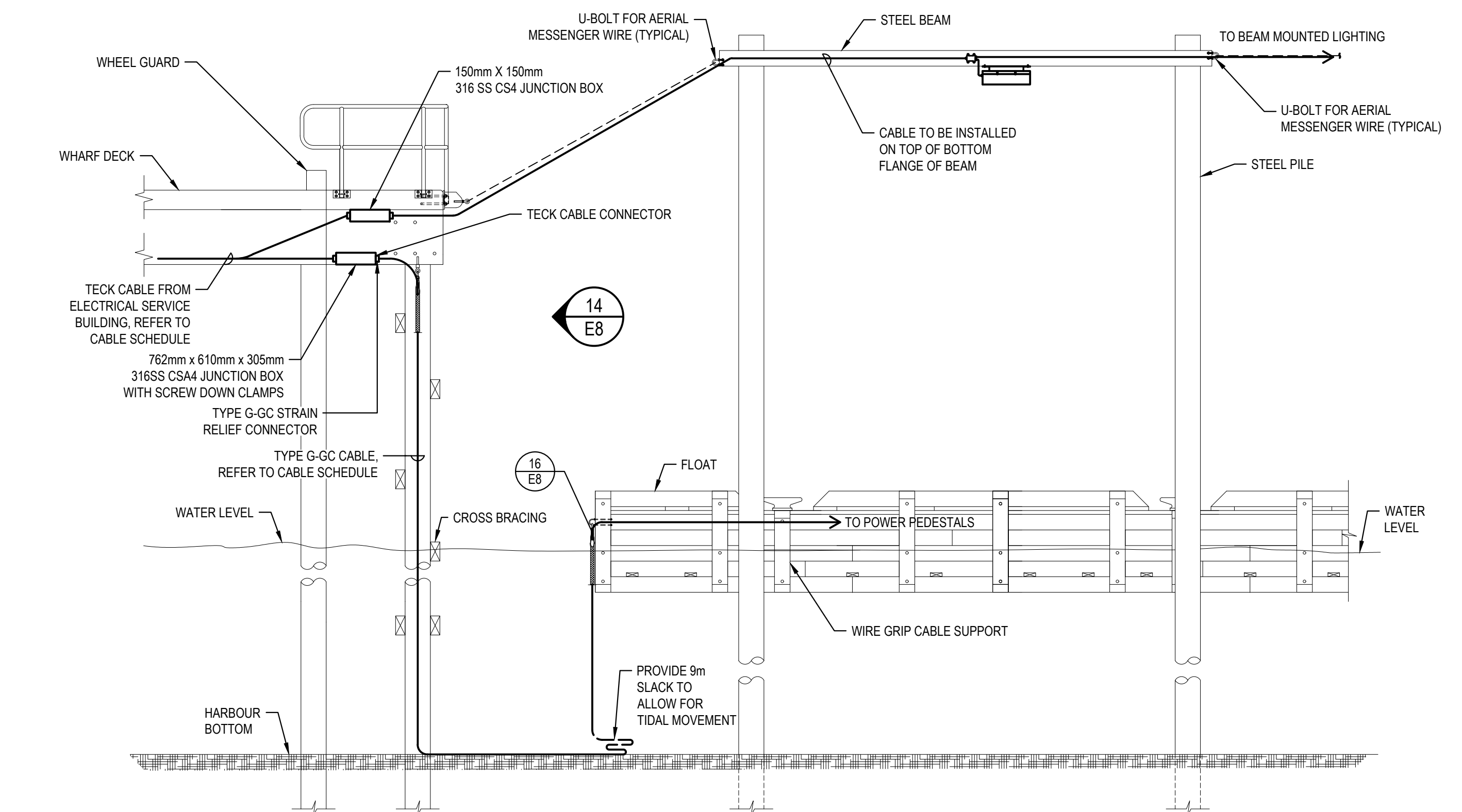
14 14 FLOATING DOCK POWER CABLE ROUTING DETAIL - FRONT VIEW
 E1 E2 SCALE: 1:10



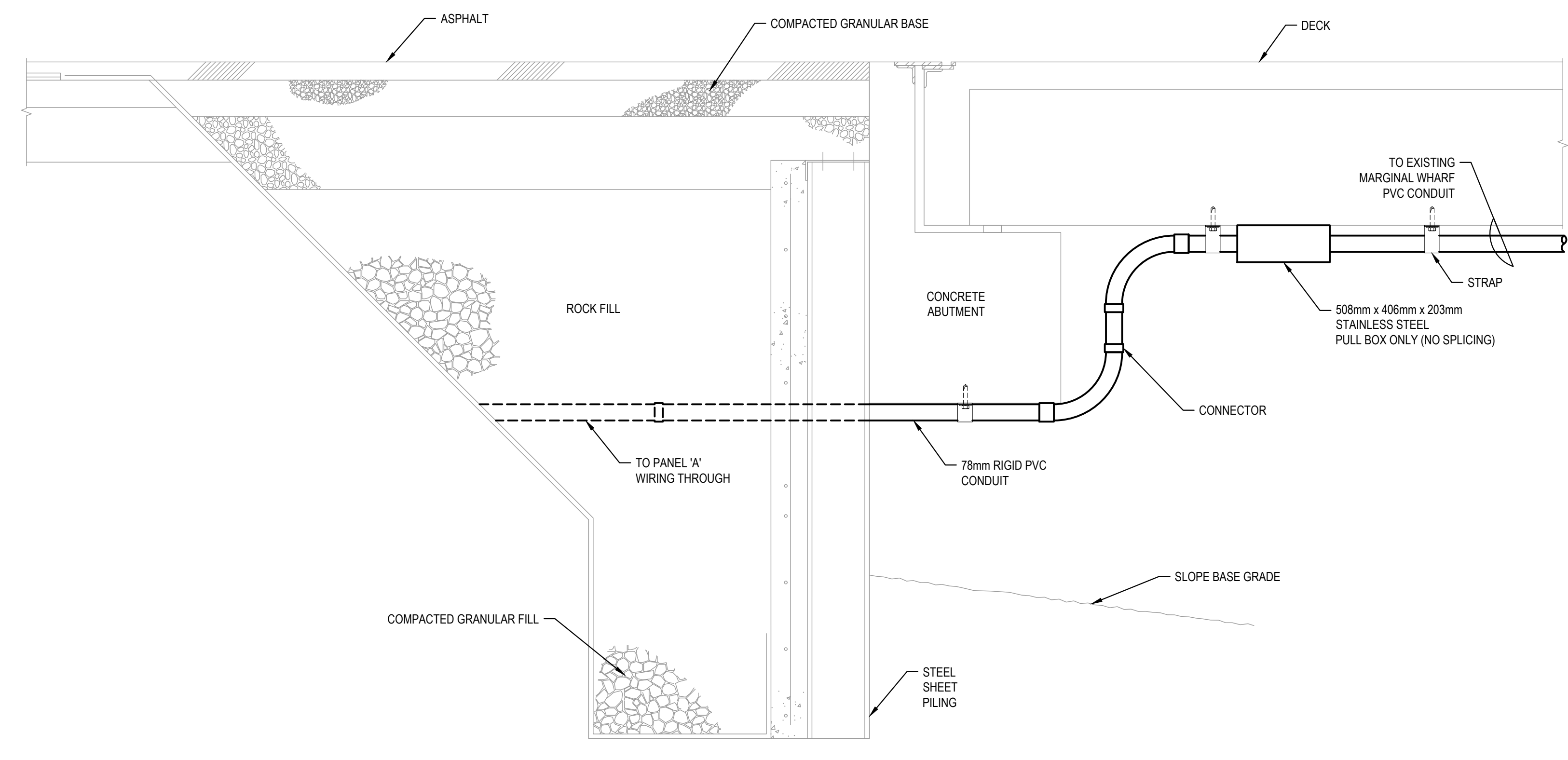
11 TYPICAL FLOAT POWER PEDESTAL MOUNTING DETAIL #1
 E1 SCALE: 1:20



12 TYPICAL FLOAT POWER PEDESTAL MOUNTING DETAIL #2
 E1 SCALE: 1:20



15 15 TYPICAL GANGWAY SIDE VIEW FLOATING DOCK POWER CABLE ROUTING DETAIL
 E1 E2 SCALE / ÉCHELLE: 1:50



13 MARGINAL WHARF SERVICES FEEDER
 E2 SCALE: 1:20

0	ISSUED FOR TENDER	04/05/2022
revisions		date
project		project

ELECTRICAL UPGRADE
 DIPPER HARBOUR WHARF
 SAINT JOHN CO., NB

FLOAT WIRING AND PEDESTAL MOUNTING DETAILS

designed	R.M.B.	conçu
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender		Submission
F&O Project Manager		Administrateur de projets P&O
project number		no. du projet
	C2-00324	
drawing no.		no. du dessin
	E8 OF 12	

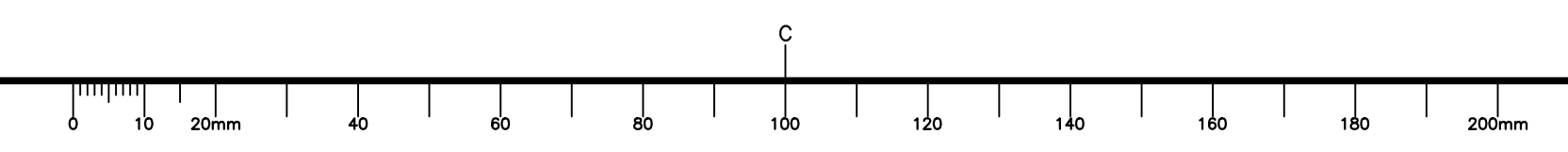
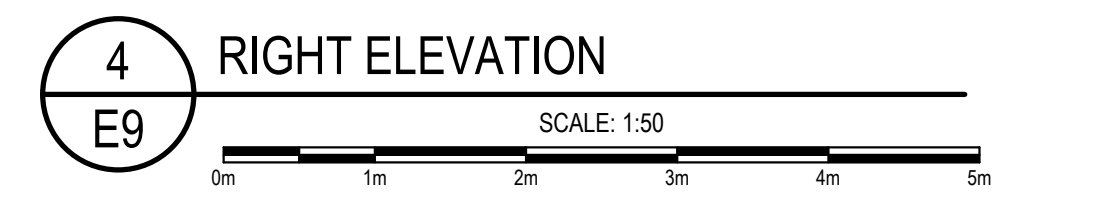
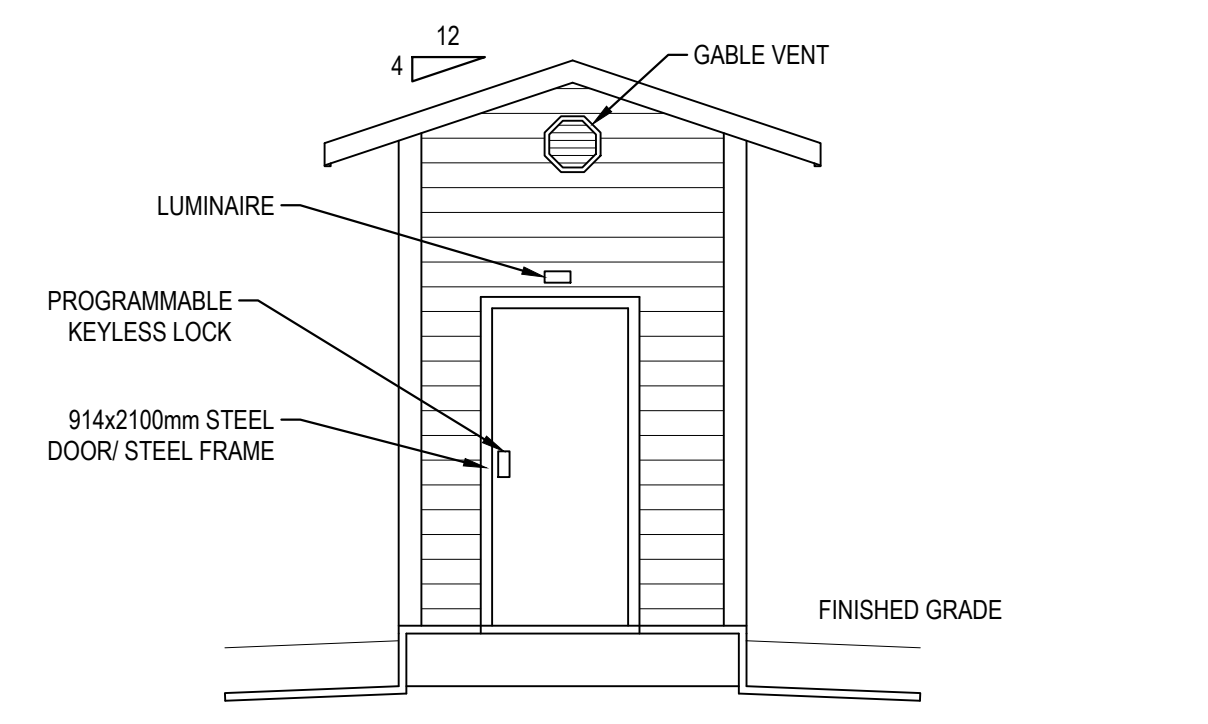
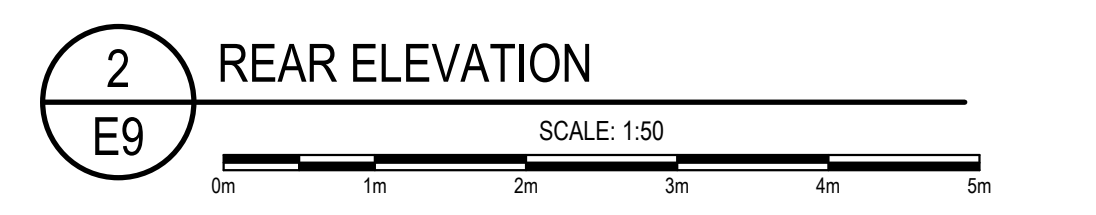
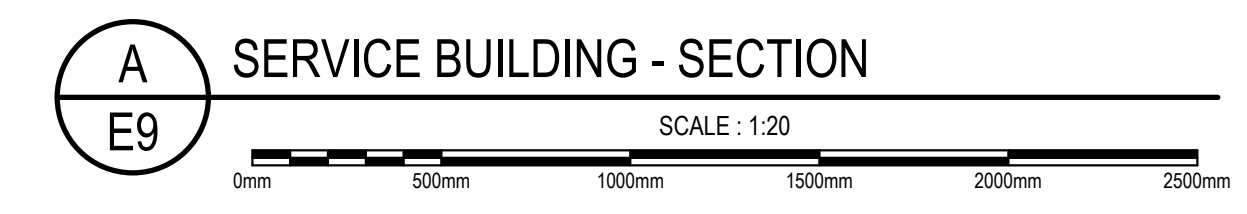
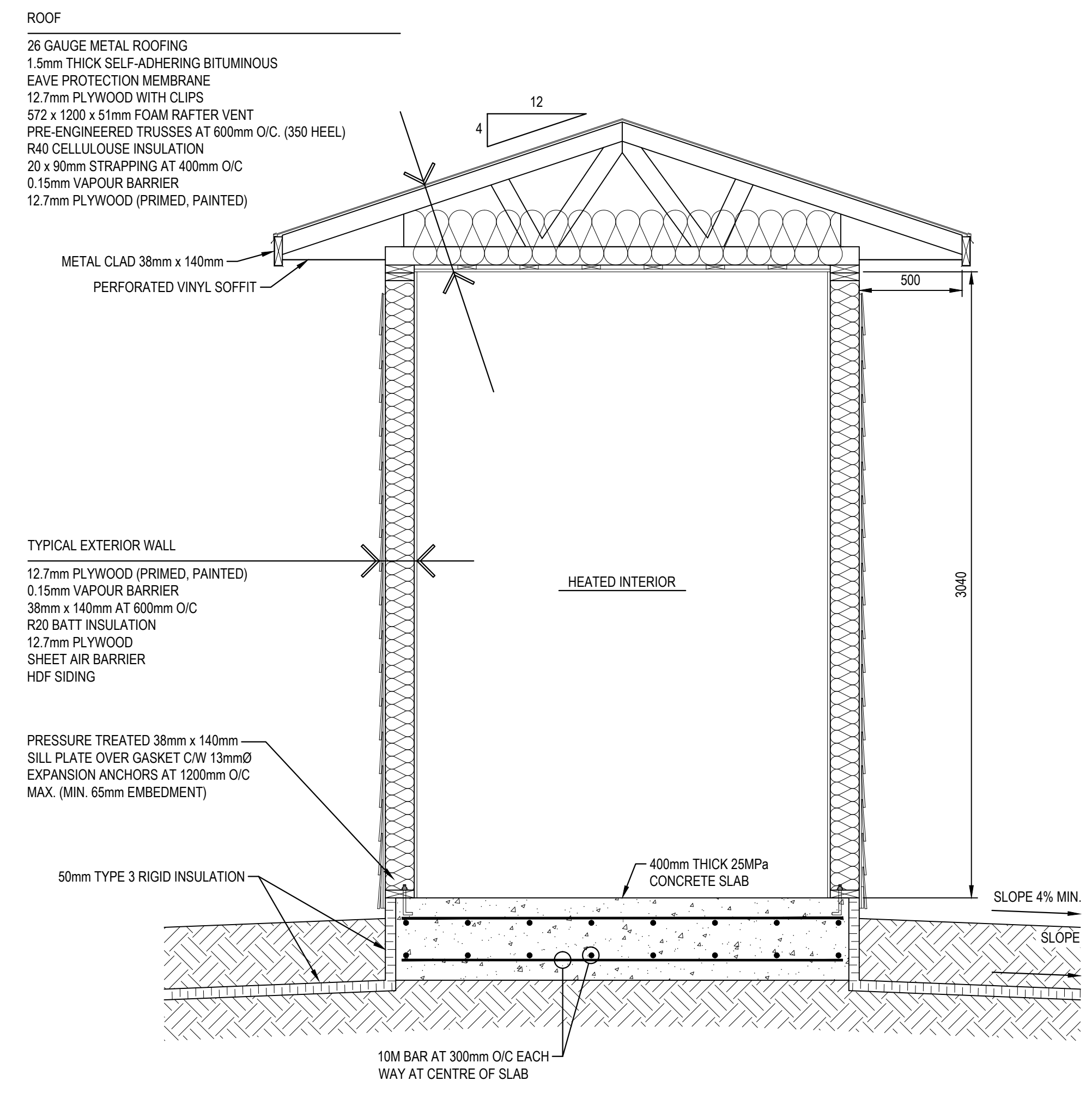
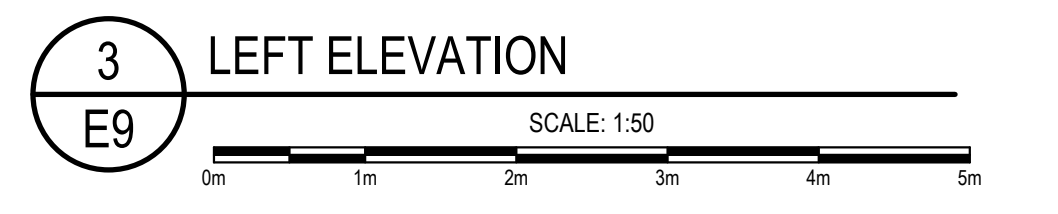
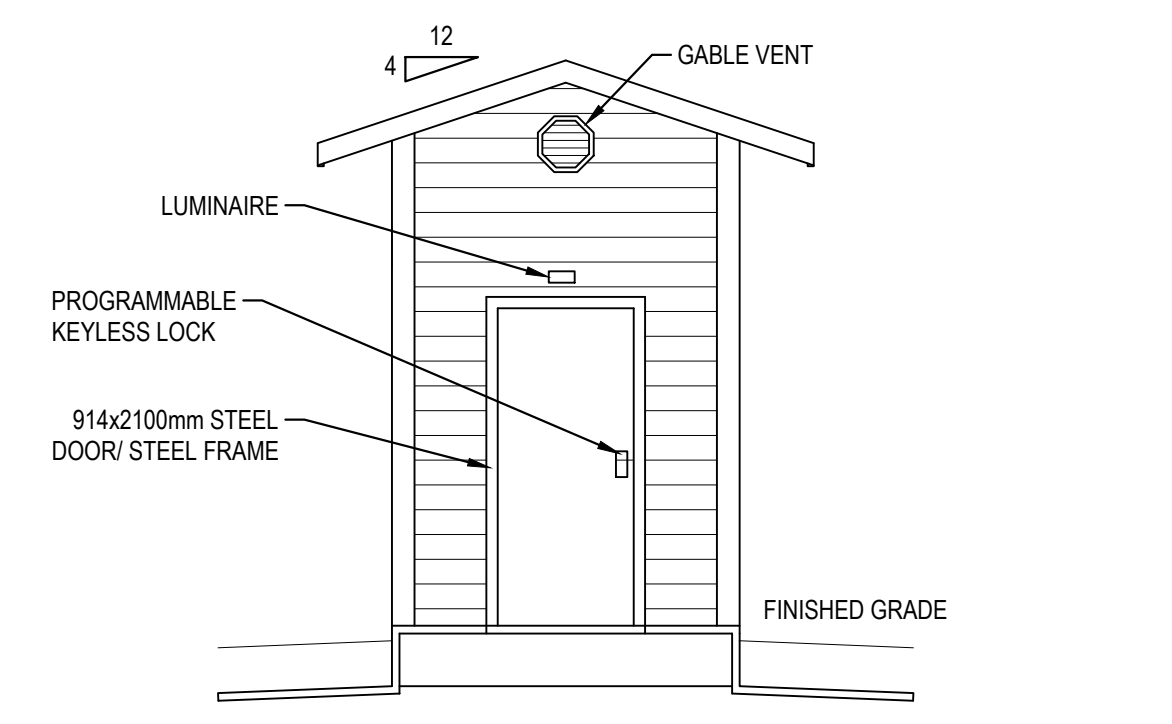
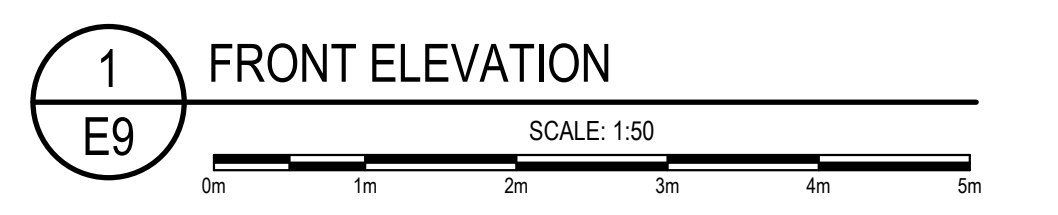
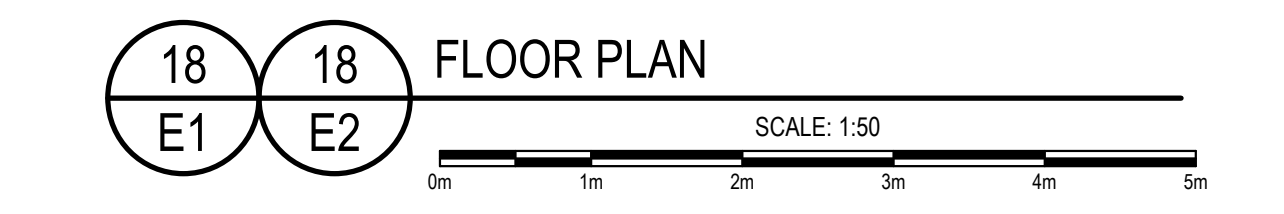
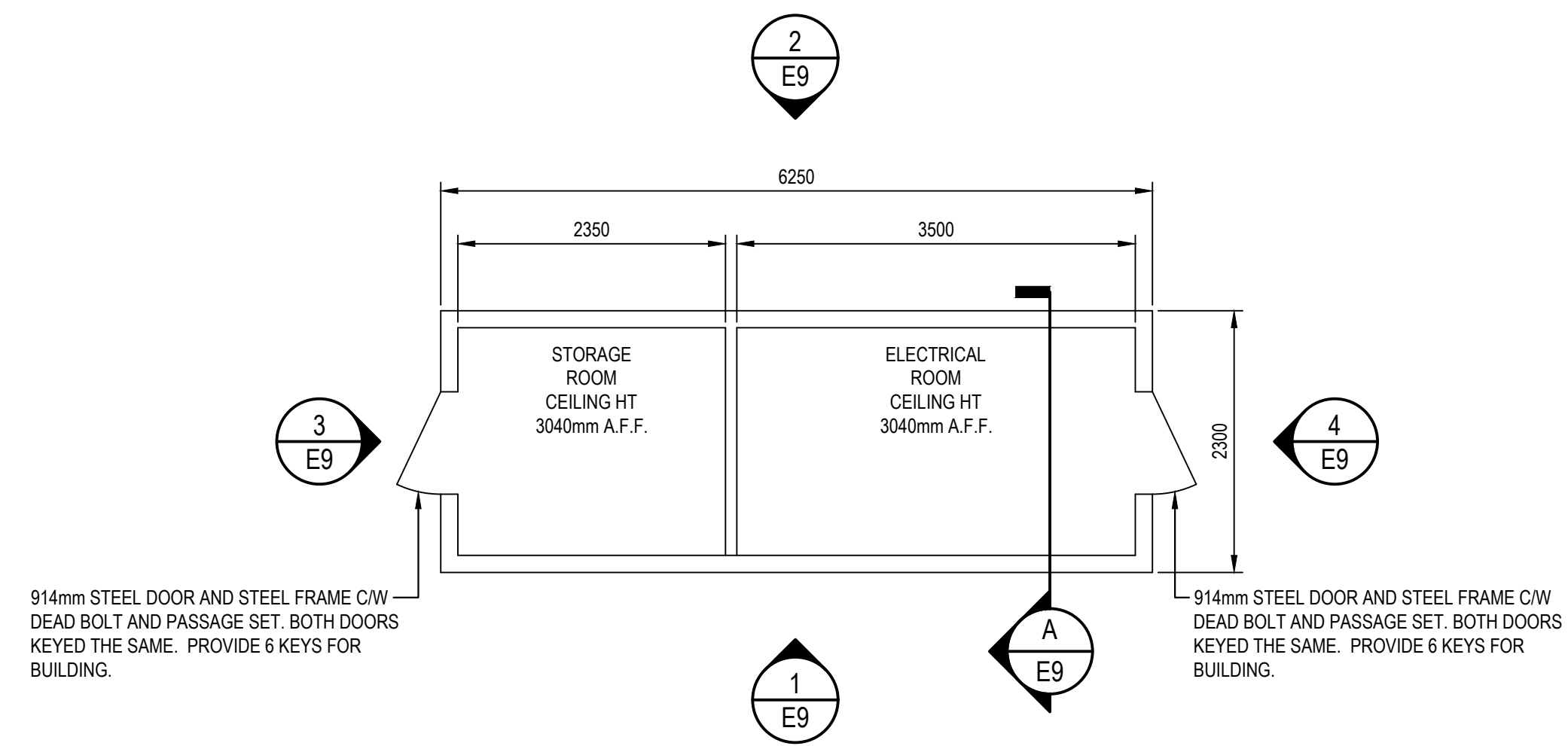
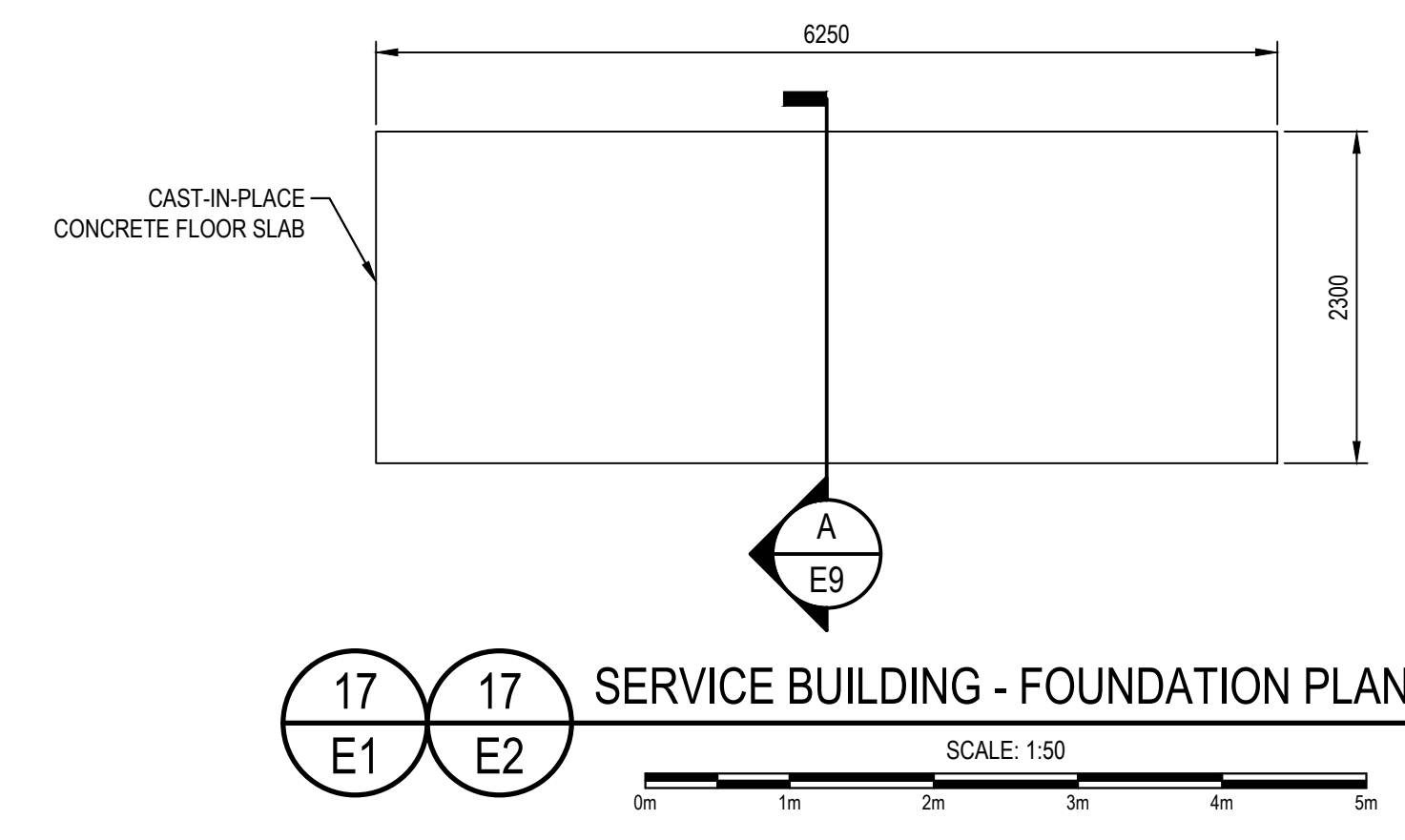
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GENERAL NOTES:

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- GENERAL**
- ALL WORK TO CONFORM TO 2015 NATIONAL BUILDING CODE.
- GEOTECHNICAL**
- PERIMETER THICKENED FOOTING TO BE ON ORIGINAL GROUND OR ENGINEERED FILL WITH A MINIMUM BEARING CAPACITY OF 150kPa. RIGID INSULATION TO BE TYPE 3, CELL FORT 300, OR EQUAL. PLACE IN 25mm LAYERS TO STAGGER JOINTS. ALL JOINTS TO BE TAPED.
- CONCRETE**
- ALL WORK TO CSA-A23.1:19 / CSA A23.2:19
- CONCRETE TO BE 25MPa, F-2 EXPOSURE
- CONCRETE TO BE CONTINUOUSLY CURED WITH MOIST CURE OR CHEMICAL MEMBRANE.
- STEEL REINFORCING TO BE FY = 400MPa MINIMUM.
- MINIMUM COVER FOR REBAR: 75mm.
- GENERAL - WOOD**
- REFERENCE STANDARDS:
 - CSA-086:19, ENGINEERING DESIGN IN WOOD.
 - CSA O141-05 (R2014), SOFTWOOD LUMBER.
 - NLGA-2017, STANDARD GRADING RULES FOR CANADIAN LUMBER.
- DESIGN PREFABRICATED WOOD TRUSSES IN ACCORDANCE WITH CSA 086:19 TO SAFELY CARRY ALL LIVE AND DEAD LOADS, SNOW AND DRIFT LOADS IN ACCORDANCE WITH THE NATIONAL BUILDING CODE.
- SUBMIT SHOP DRAWINGS INDICATING SPECIES, SIZES AND STRESS GRADES OF LUMBER USED AS TRUSS MEMBERS. SHOW FITCH, SPAN, CAMBER, CONFIGURATION AND SPACING OF TRUSSES. INDICATE CONNECTOR TYPES, THICKNESSES, SIZES, LOCATIONS AND DESIGN VALUE. SHOW BEARING DETAILS. SHOP DRAWINGS SHALL BEAR THE STAMP OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF NEW BRUNSWICK, WHO SHALL BE RESPONSIBLE FOR THE TRUSS DESIGN.
- WOOD TRUSS LUMBER: SOFTWOOD, SPF SPECIES MINIMUM NO. 1 & NO. 2 S4S, WITH MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF FABRICATION.
- WOOD TRUSS FASTENINGS: TO CSA 086:19.
- TRUSS TIES: 1.27mm THICK GALVANIZED STEEL.
- WOOD FRAMING: NO. 2 EASTERN SPRUCE, TO A MAX. MOISTURE CONTENT OF 19%.
- PLYWOOD FOR ROOF SHEATHING AND EXTERIOR WALLS: SHEATHING GRADE DOUGLAS FIR PLYWOOD TO CSA O121-17.
- PLYWOOD FOR INTERIOR CEILING AND WALLS: SELECT FIR PLYWOOD TO CSA O121-M, THICKNESS AS SHOWN ON DRAWINGS. APPLY TWO COATS OF EDGE SEALER ALL AROUND.
- FASTENERS: GALVANIZED FASTENERS TO CSA G164-18.
- THERMAL AND MOISTURE PROTECTION**
- VAPOUR/AIR BARRIER ACCESSORIES:
 - JOINT SEALING TAPE: AIR-RESISTANT PRESSURE-SENSITIVE ADHESIVE TAPE. TYPE RECOMMENDED BY VAPOUR BARRIER AND AIR BARRIER MANUFACTURER. 50mm WIDE FOR LAP JOINTS AND PERIMETER SEALS, 25mm WIDE ELSEWHERE.
 - SEALANTS: TYPE RECOMMENDED BY VAPOUR BARRIER MANUFACTURER.
 - STAPLES: MINIMUM 6mm LEG.
- INSULATION:
 - BATT INSULATION: TO CANULIC-S702-14 OR CELLULOSE FIBRE LOOSE FILL THERMAL INSULATION, TO CANULIC-S703-09 (R2020).
 - RIGID INSULATION: SEMI RIGID FIBREGLASS PANELS MECHANICALLY FASTENED WITH SUITABLE ADHESIVE AS RECOMMENDED BY MANUFACTURER.
- ROOFING: 26 GAUGE SCREW DOWN METAL ROOFING C/W ALL NECESSARY FLASHING/ACCESSORIES.
- CLADDING: TEXTURED WOOD GRAIN APPEARANCE CLADDING WITH FACTORY STAINED FINISH BY LP CANEXCEL CED'R VUE. THICKNESS: 9.5mm. EXPOSURE: 228.6mm. FINISH: MIST GRAY.
 - NAILS: STAINLESS-STEEL RINGED NAILS.
 - WOOD TRIM: FASCIA, EAVES, DOOR CORNERS, LOUVER TRIM AND SKIRT BOARDS TO MATCH CLADDING TYPE AND COLOUR.
 - SEALANT: LATEX CAULKING. COLOUR TO MATCH CLADDING, WHERE RECOMMENDED BY THE MANUFACTURER.
- CAULK INTERIOR JOINTS, SUCH AS INTERIOR PERIMETER OF INTAKE LOUVRE, EXHAUST FAN AND DOOR FRAME. COLOUR TO MATCH SURFACE BEING SEALED.
- CAULK PERIMETER OF ALL EXTERIOR OPENINGS, SUCH AS FAN, LOUVRE, AND DOOR OPENINGS.
- DOORS**
- REFERENCE STANDARD: CANADIAN STEEL DOOR AND FRAME MANUFACTURERS ASSOCIATION (CSDFMA), SPECIFICATIONS FOR COMMERCIAL STEEL DOORS AND FRAMES, LATEST EDITION.
- STANDARD HARDWARE: LOCATION DIMENSIONS IN ACCORDANCE WITH CANADIAN METRIC GUIDE FOR STEEL DOORS AND FRAMES (MODULAR CONSTRUCTION) PREPARED BY CANADIAN STEEL DOOR AND FRAME MANUFACTURERS ASSOCIATION.
- DOOR STEEL: COMMERCIAL GRADE STEEL TO ASTM A568 / A568M-19a, CLASS 1, HOT-DIP GALVANIZED TO ASTM A653 / A653M-20, COATING DESIGNATION TO ASTM A653 / A653M-20, ZF75(A25), KNOWN COMMERCIALLY AS "COLOURBOND", "SATINCOAT" OR "GALVANNEAL", 1.2mm (18 GA.) STEEL SHEET FACES, FLUSH TYPE, WITH NO FACE SEAMS.
- DOOR: 914 x 2134 x 44mm THICK INSULATED HOLLOW STEEL CONSTRUCTION, C/W VINYL TOP CAP. SOLID POLYSTYRENE INSULATION CORE SLAB COMPLETELY FILLING INSIDE OF DOOR AND BONDED TO FACE SHEETS.
- FRAMES: PRESSED STEEL, 1.6mm (16 GA.) WELDED CONSTRUCTION. GALVANIZED ("COLOURBOND", "SATINCOAT" OR "GALVANNEAL"), C/W SLIDING MASONRY ANCHORS TO SECURE TO ADJACENT CONSTRUCTION. 51mm FACE x 146mm THROAT.
- HARDWARE**:
 - 3 HINGES.
 - LOCKSET - PROGRAMMABLE KEYLESS LOCK SCHLAGEKO-100 (PROVIDE 6 KEYS).
 - DEADBOLT.
 - LATCH PROTECTOR.
 - WEATHERSTRIP SET.
 - THRESHOLD.
 - DOOR SWEEP.
 - ASTRAGAL.
 - FLUSH BOLTS.
 - ALL FASTENERS TO BE STAINLESS STEEL.
- DOOR AND FRAME PAINTING: ONE COAT VINYL WASH PRIMER, ONE COAT STEEL PRIMER, TWO COATS EXTERIOR ENAMEL. SUBMIT COLOUR SAMPLE TO DEPARTMENTAL REPRESENTATIVE.
- FINISHES**
- DOOR METAL FLASHING AND TRIM AROUND MECHANICAL INTAKE AND EXHAUST LOUVRES TO BE PAINTED WITH ONE COAT VINYL WASH PRIMER, ONE COAT STEEL PRIMER AND TWO COATS EXTERIOR ENAMEL. PROVIDE COLOUR SAMPLE.
- SUBMIT COLOUR SAMPLES TO DEPARTMENTAL REPRESENTATIVE PRIOR TO PAINTING.

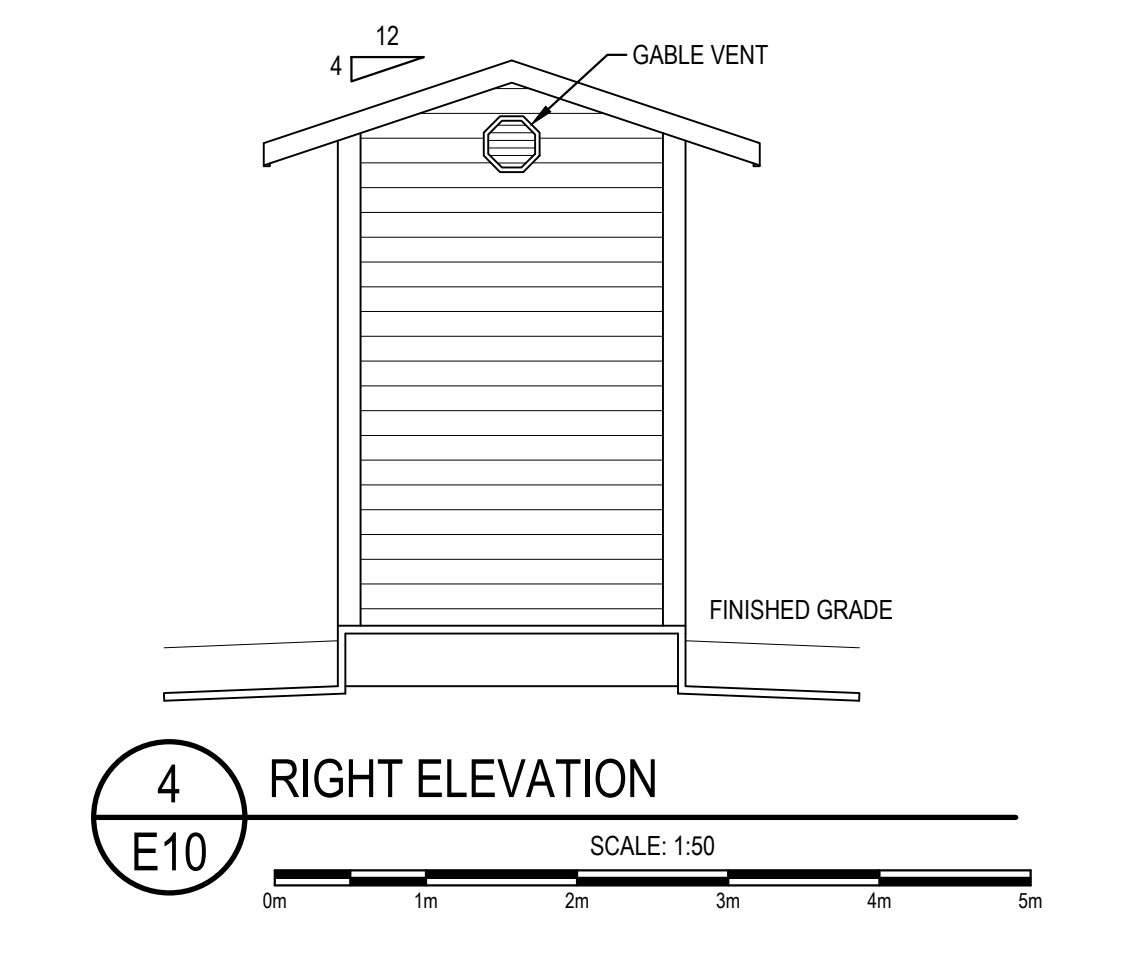
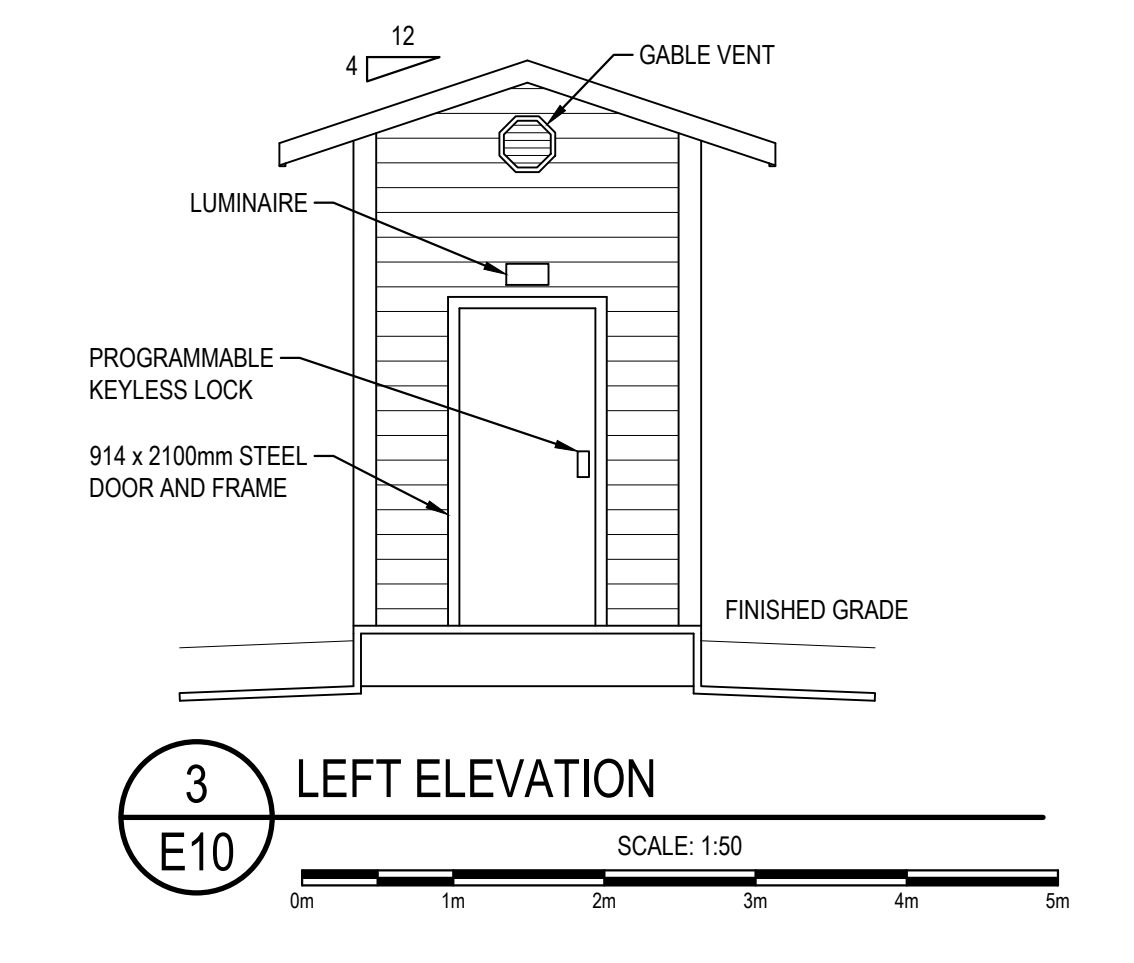
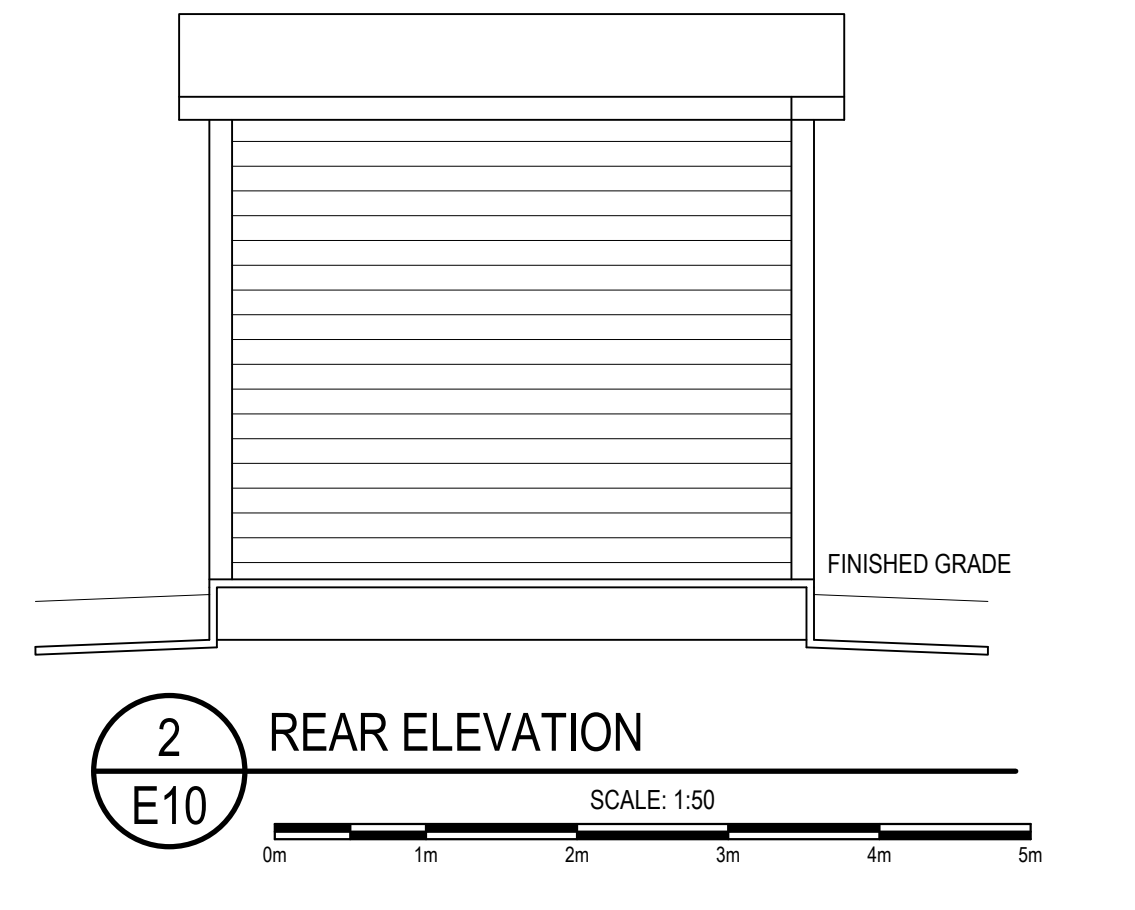
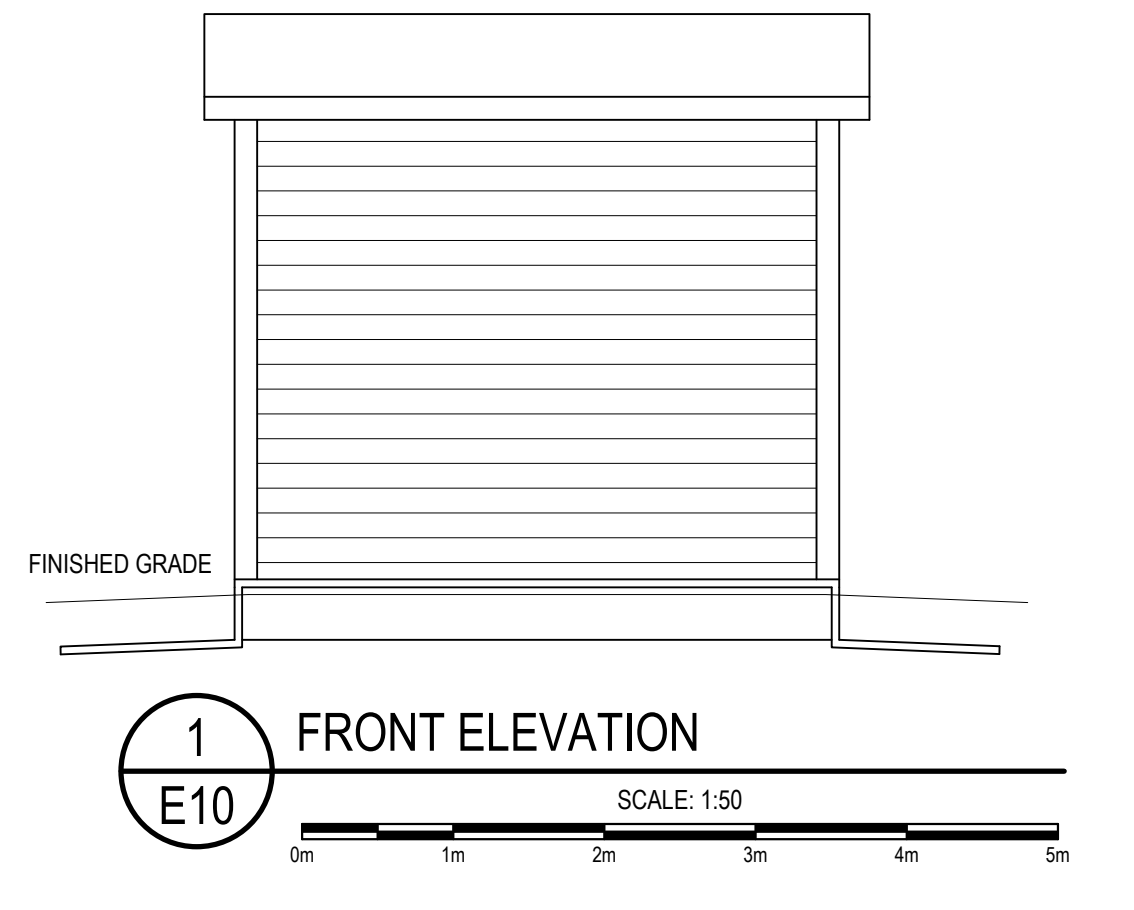
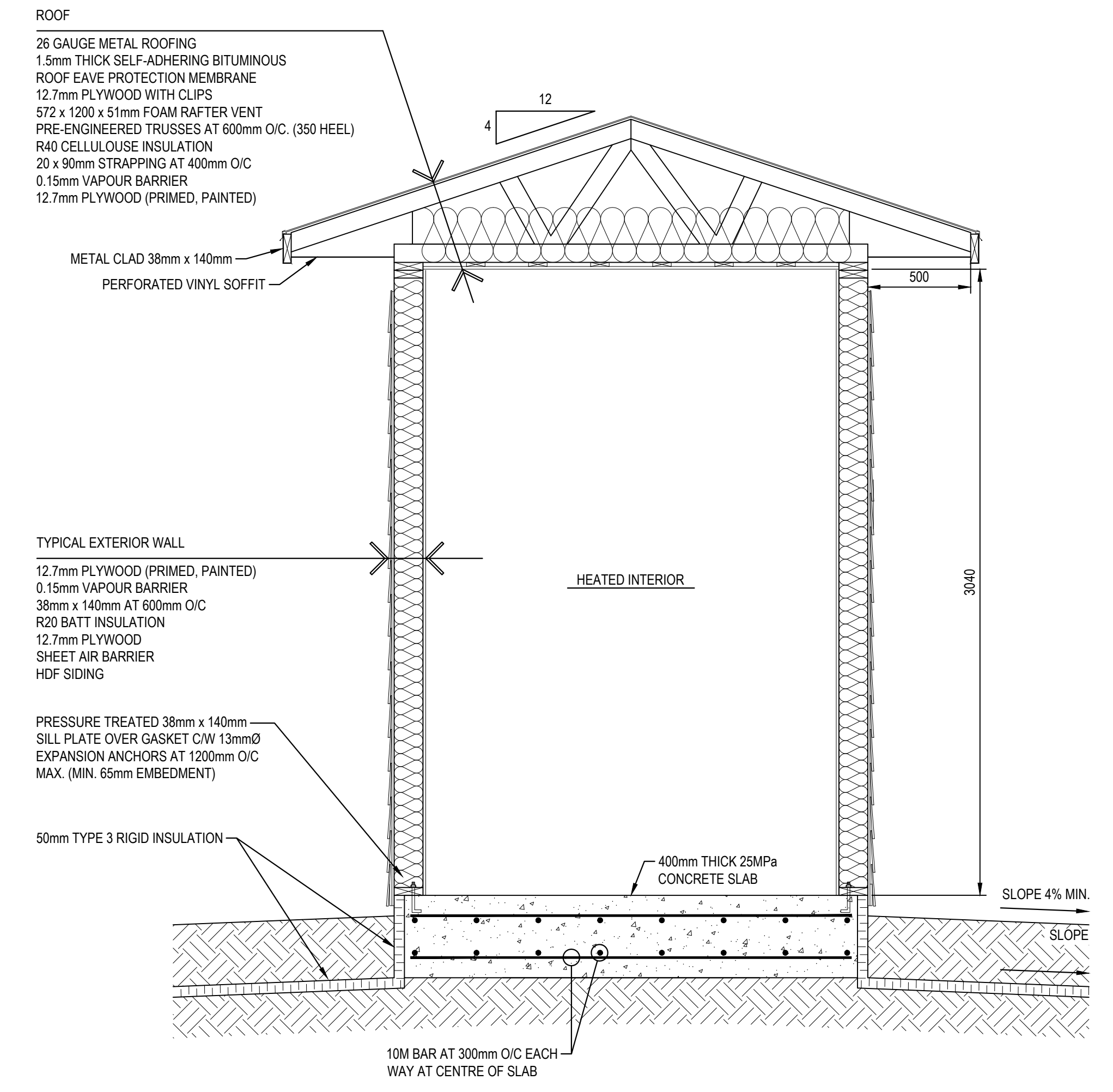
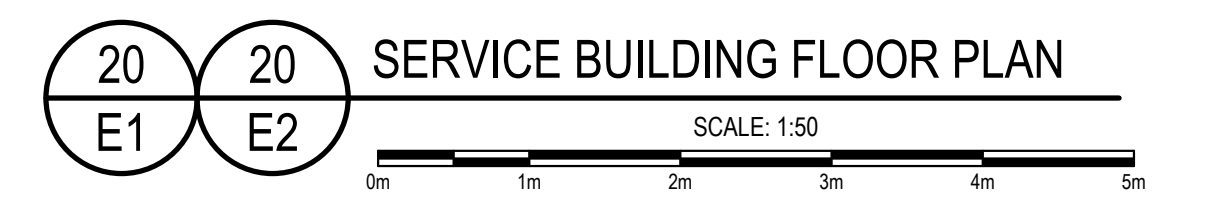
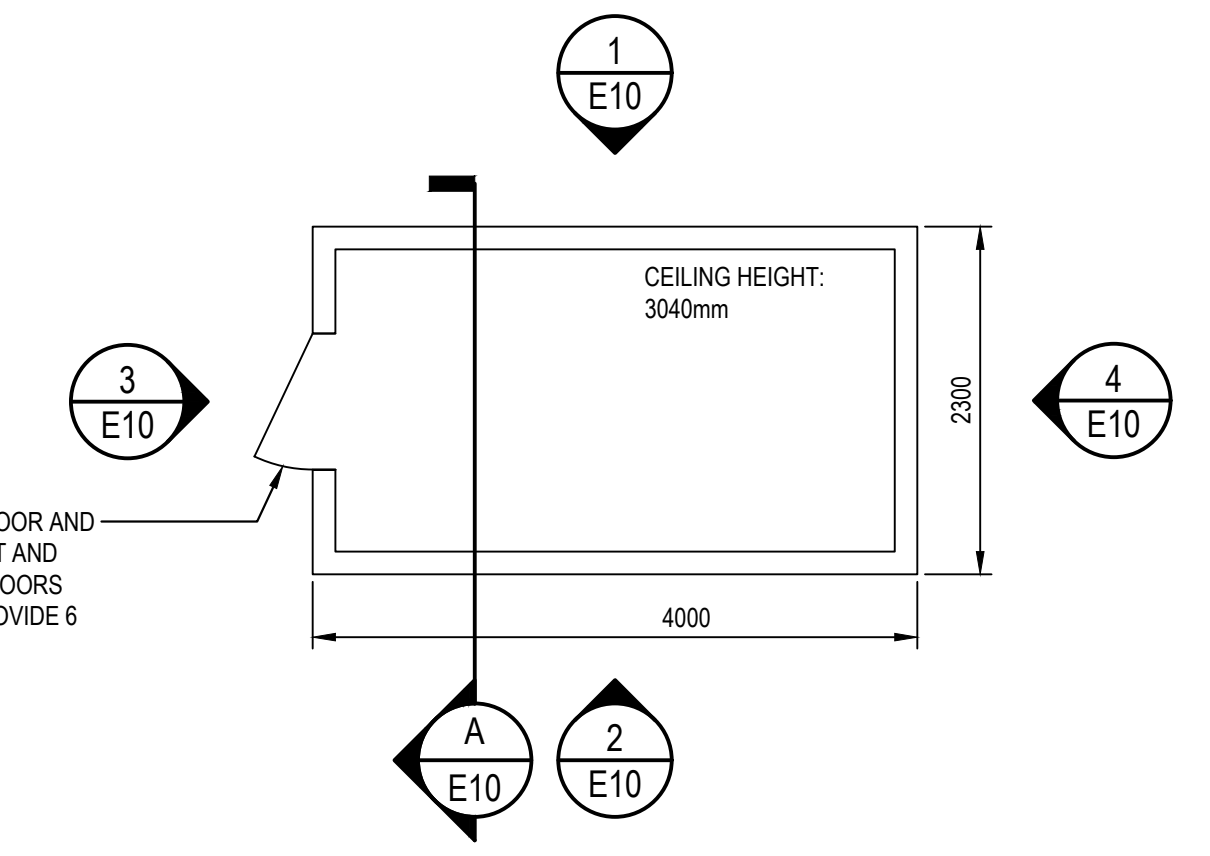
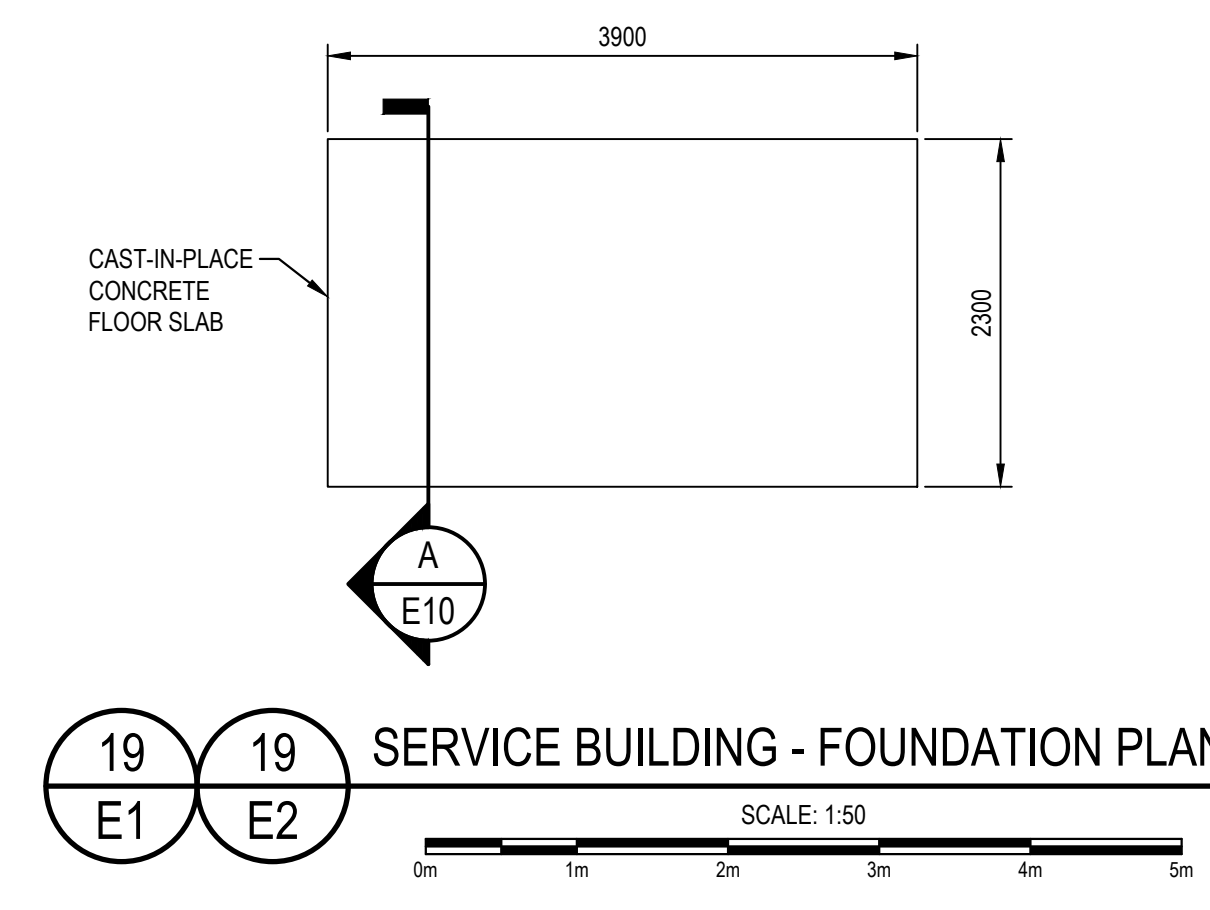


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1. **GENERAL**
- 1.1. ALL WORK TO CONFORM TO 2015 NATIONAL BUILDING CODE.
2. **GEOTECHNICAL**
- 2.1. PERIMETER THICKENED FOOTING TO BE ON ORIGINAL GROUND OR ENGINEERED FILL WITH A MINIMUM BEARING CAPACITY OF 150kPa. RIGID INSULATION TO BE TYPE 3, CELL FORT 300, OR EQUAL. PLACE IN 25mm LAYERS TO STAGGER JOINTS. ALL JOINTS TO BE TAPED.
3. **CONCRETE**
- 3.1. ALL WORK TO CSA-A23.1:19 / CSA A23.2:19.
- 3.2. CONCRETE TO BE 25MPa, F-2 EXPOSURE.
- 3.3. CONCRETE TO BE CONTINUOUSLY CURED WITH MOIST CURE OR CHEMICAL MEMBRANE.
- 3.4. STEEL REINFORCING TO BE FY = 400MPa MINIMUM.
- 3.5. MINIMUM COVER FOR REBAR: 75mm.
4. **GENERAL - WOOD**
- 4.1. REFERENCE STANDARDS:
A. CSA-086:19, ENGINEERING DESIGN IN WOOD.
B. CSA O141-05 (R2014), SOFTWOOD LUMBER.
C. NLGA-2017, STANDARD GRADING RULES FOR CANADIAN LUMBER.
- 4.2. DESIGN PREFABRICATED WOOD TRUSSES IN ACCORDANCE WITH CSA 086:19 TO SAFELY CARRY ALL LIVE AND DEAD LOADS, SNOW AND DRIFT LOADS IN ACCORDANCE WITH THE NATIONAL BUILDING CODE.
- 4.3. SUBMIT SHOP DRAWINGS INDICATING SPECIES, SIZES AND STRESS GRADES OF LUMBER USED AS TRUSS MEMBERS. SHOW PITCH, SPAN, CAMBER, CONFIGURATION AND SPACING OF TRUSSES. INDICATE CONNECTOR TYPES, THICKNESSES, SIZES, LOCATIONS AND DESIGN VALUE. SHOW BEARING DETAILS. SHOP DRAWINGS SHALL BEAR THE STAMP OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF NEW BRUNSWICK, WHO SHALL BE RESPONSIBLE FOR THE TRUSS DESIGN.
- 4.4. WOOD TRUSS LUMBER: SOFTWOOD, SPF SPECIES MINIMUM NO. 1 & NO. 2 S4S, WITH MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF FABRICATION.
- 4.5. WOOD TRUSS FASTENINGS: TO CSA 086:19.
- 4.6. TRUSS TIES: 1.27mm THICK GALVANIZED STEEL.
- 4.7. WOOD FRAMING: NO. 2 EASTERN SPRUCE, TO A MAX. MOISTURE CONTENT OF 19%.
- 4.8. PLYWOOD FOR ROOF SHEATHING AND EXTERIOR WALLS: SHEATHING GRADE DOUGLAS FIR PLYWOOD TO CSA O121-17.
- 4.9. PLYWOOD FOR INTERIOR CEILING AND WALLS: SELECT FIR PLYWOOD TO CSA O121-M. THICKNESS AS SHOWN ON DRAWINGS. APPLY TWO COATS OF EDGE SEALER ALL AROUND.
- 4.10. FASTENERS: GALVANIZED FASTENERS TO CSA G164-18.
5. **THERMAL AND MOISTURE PROTECTION**
- 5.1. VAPOUR/AIR BARRIER ACCESSORIES:
A. JOINT SEALING TAPE: AIR-RESISTANT PRESSURE-SENSITIVE ADHESIVE TAPE. TYPE RECOMMENDED BY VAPOUR BARRIER AND AIR BARRIER MANUFACTURER. 50mm WIDE FOR LAP JOINTS AND PERIMETER SEALS, 25mm WIDE ELSEWHERE.
B. SEALANTS: TYPE RECOMMENDED BY VAPOUR BARRIER MANUFACTURER.
C. STAPLES: MINIMUM 6mm LEG.
- 5.2. INSULATION:
A. BATT INSULATION: TO CANULC-S702-14 OR CELLULOSE FIBRE LOOSE FILL.
THERMAL INSULATION: TO CANULC-S703-09 (R2020).
B. RIGID INSULATION: SEMI RIGID FIBREGLASS PANELS MECHANICALLY FASTENED WITH SUITABLE ADHESIVE AS RECOMMENDED BY MANUFACTURER.
- 5.3. ROOFING: 26 GAUGE SCREW DOWN METAL ROOFING C/W ALL NECESSARY FLASHING / ACCESSORIES.
- 5.4. CLADDING: HIGH DENSITY WOOD FIBER (HDF) TEXTURED WOOD GRAIN APPEARANCE CLADDING WITH FACTORY STAINED FINISH BY LP CANEXCEL CEDR VUE. THICKNESS: 9.5mm. EXPOSURE: 228 0mm. FINISH: MIST GRAY.
A. NAILS: STAINLESS-STEEL RINGED NAILS.
B. WOOD TRIM: FASCIA, EAVES, DOOR CORNERS, LOUVER TRIM AND SKIRT BOARDS TO MATCH CLADDING TYPE AND COLOUR.
C. SEALANT: LATEX CAULKING. COLOUR TO MATCH CLADDING. WHERE RECOMMENDED BY THE MANUFACTURER.
- 5.5. CAULK INTERIOR JOINTS, SUCH AS INTERIOR PERIMETER OF INTAKE LOUVER, EXHAUST FAN AND DOOR FRAME. COLOUR TO MATCH SURFACE BEING SEALED.
- 5.6. CAULK PERIMETER OF ALL EXTERIOR OPENINGS, SUCH AS FAN, LOUVER, AND DOOR OPENINGS.
6. **DOORS:**
- 6.1. REFERENCE STANDARD: CANADIAN STEEL DOOR AND FRAME MANUFACTURERS ASSOCIATION (CSDFMA), SPECIFICATIONS FOR COMMERCIAL STEEL DOORS AND FRAMES, LATEST EDITION.
- 6.2. STANDARD HARDWARE: LOCATION DIMENSIONS IN ACCORDANCE WITH CANADIAN METRIC GUIDE FOR STEEL DOORS AND FRAMES (MODULAR CONSTRUCTION) PREPARED BY CANADIAN STEEL DOOR AND FRAME MANUFACTURERS ASSOCIATION.
- 6.3. DOOR STEEL: COMMERCIAL GRADE STEEL TO ASTM A568 / A663M-19a, CLASS 1, HOT DIP GALVANIZED TO ASTM A653 / A653M-20, COATING DESIGNATION TO ASTM A653 / A653M-20, ZF75(A25), KNOWN COMMERCIALLY AS "COLOURBOND", "SATINCOAT" OR "GALVANNEAL", 1.2mm (18 GA.) STEEL SHEET FACES, FLUSH TYPE, WITH NO FACE SEAMS.
- 6.4. DOOR: 914 x 2134 x 44mm THICK INSULATED HOLLOW STEEL CONSTRUCTION, C/W VINYL TOP CAP. SOLID POLYSTYRENE INSULATION CORE SLAB COMPLETELY FILLING INSIDE OF DOOR AND BONDED TO FACE SHEETS.
- 6.5. FRAMES: PRESSED STEEL, 1.6mm (16 GA.) WELDED CONSTRUCTION. GALVANIZED ("COLOURBOND", "SATINCOAT" OR GALVANNEAL), C/W SLIDING MASONRY ANCHORS TO SECURE TO ADJACENT CONSTRUCTION. 51mm FACE x 146mm THROAT.
- 6.6. HARDWARE:
A. 3 HINGES.
B. LOCKSET - PROGRAMMABLE KEYLESS LOCK SCHLAGE #C0-100 (PROVIDE 6 KEYS)
C. LATCH PROTECTOR.
D. WEATHERSTRIP SET.
E. THRESHOLD.
F. DOOR SWEEP.
G. ASTRAGAL.
H. FLUSH BOLTS.
I. ALL FASTENERS TO BE STAINLESS STEEL.
- 6.7. DOOR AND FRAME PAINTING: ONE COAT VINYL WASH PRIMER, ONE COAT STEEL PRIMER, TWO COATS EXTERIOR ENAMEL. SUBMIT COLOUR SAMPLE TO DEPARTMENTAL REPRESENTATIVE.
7. **FINISHES**
- 7.1. DOOR METAL FLASHING AND TRIM AROUND MECHANICAL INTAKE AND EXHAUST LOUVRES TO BE PAINTED WITH ONE COAT VINYL WASH PRIMER, ONE COAT STEEL PRIMER AND TWO COATS EXTERIOR ENAMEL. PROVIDE COLOUR SAMPLE.
- 7.2. SUBMIT COLOUR SAMPLES TO DEPARTMENTAL REPRESENTATIVE PRIOR TO PAINTING.



0	ISSUED FOR TENDER	04/05/2022
revisions		date
project		project

ELECTRICAL UPGRADE
DIPPER HARBOUR WHARF
SAINT JOHN CO., NB

designed R.M.B. conçu
date APRIL 2022
drawn R.Z. / D.J.L. dessiné
date APRIL 2022
approved B.E.T. approuvé
date APRIL 2022
Tender Soumission
F&O Project Manager Administrateur de projets P&O
project number no. du projet
drawing no. no. du dessin

C2-00324
E10 OF 12

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GENERAL NOTES:

1. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING BURIED UTILITIES BEFORE COMMENCING WORK AND WILL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL EXAMINE ALL DRAWINGS AND VISIT THE SITE TO VERIFY EXISTING EQUIPMENT AND CONDITIONS AND SCOPE OF WORK INVOLVED PRIOR TO SUBMITTING A TENDER. EXTRAS WILL NOT BE CONSIDERED BECAUSE ACTUAL CONDITIONS DIFFER FROM DRAWINGS AND ALL COSTS RELATING TO EXISTING SITE CONDITIONS MUST BE INCLUDED IN TOTAL TENDERED PRICE.

0	ISSUED FOR TENDER	04/05/2022
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**ELECTRICAL UPGRADE
 DIPPER HARBOUR WHARF
 SAINT JOHN CO., NB**

EXISTING ELECTRICAL

designed R.M.B.	conçu
date APRIL 2022	
drawn R.Z. / D.J.L.	dessiné
date APRIL 2022	
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date APRIL 2022	
Tender	Submission
F&O Project Manager	Administrateur de projets P&O
project number	no. du projet
C2-00324	
drawing no.	no. du dessin
E11 OF 12	

LEGEND

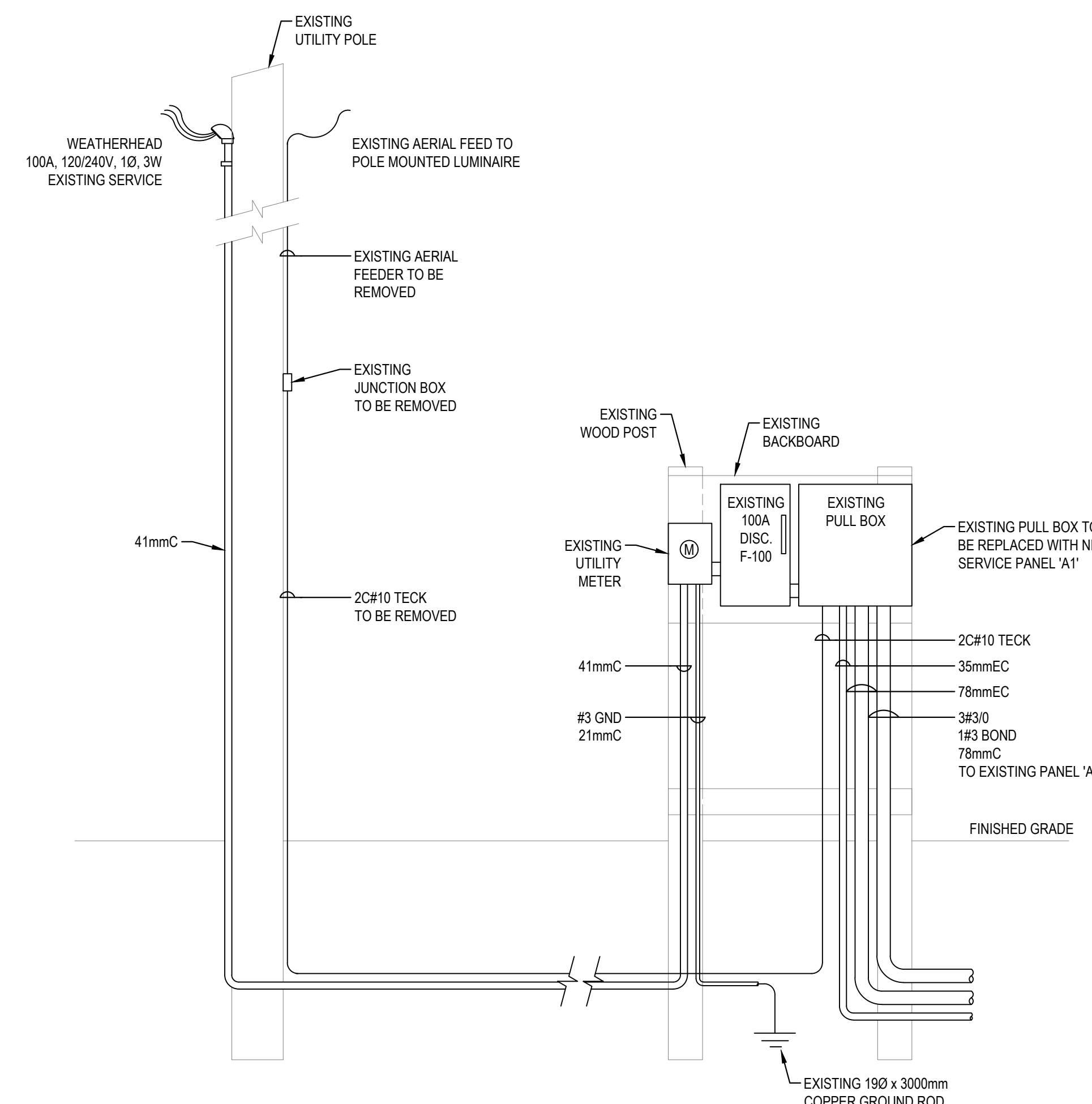
- WIRING UNDERGROUND OR EMBEDDED IN CONCRETE DECK
- TECK CABLE RUN UNDER WHARF OR UNDER FLOAT DECKING
- AERIAL WIRING
- WOODEN POST
- WOODEN UTILITY POLE
- ⊕ POLE MOUNTED TRANSFORMER
- GUY WIRE
- ELECTRICAL PANEL, SURFACE MOUNTED;
- A-5 INDICATES CIRCUIT 5 IN PANEL 'A'
- 2#10 TWO CONDUCTORS NUMBER 10 AWG WIRING
- ⊕ QUADPLEX RECEPTACLE
- ⊕ DUPLEX RECEPTACLE
- ⊕ SINGLE RECEPTACLE
- ⊕ PULL BOX
- SITE LIGHTING LUMINAIRE ON STEEL POLE:
 A - INDICATES POST TOP MOUNTED LIGHT
 B - INDICATES ARM MOUNTED FLOOD LIGHT
 C - INDICATES ARM MOUNTED FIXTURE
 P1 - INDICATES POLE NUMBER

GENERAL SUBSCRIPTS

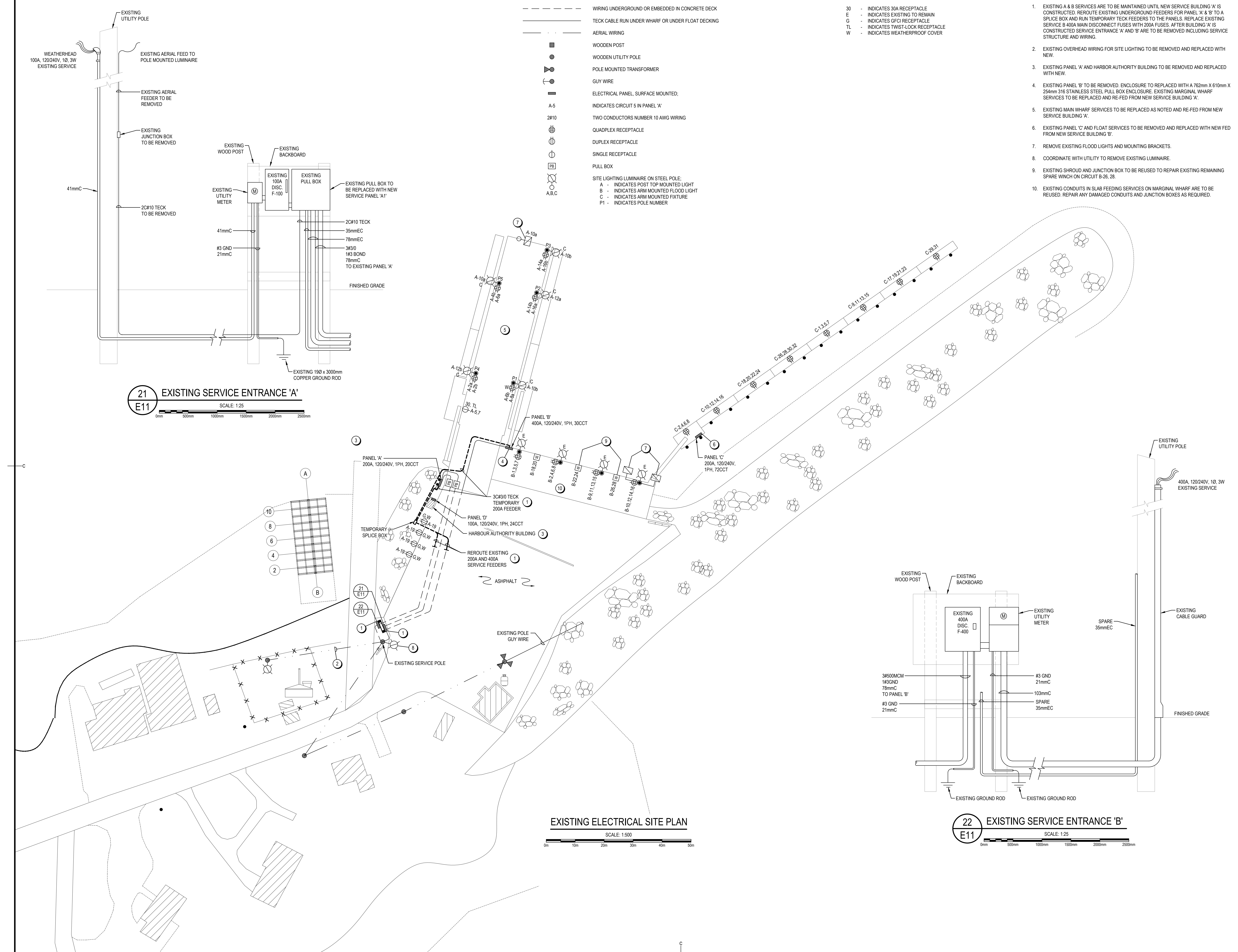
- 30 - INDICATES 30A RECEPTACLE
- E - INDICATES EXISTING TO REMAIN
- G - INDICATES GFCI RECEPTACLE
- TL - INDICATES TWIST-LOCK RECEPTACLE
- W - INDICATES WEATHERPROOF COVER

NOTES

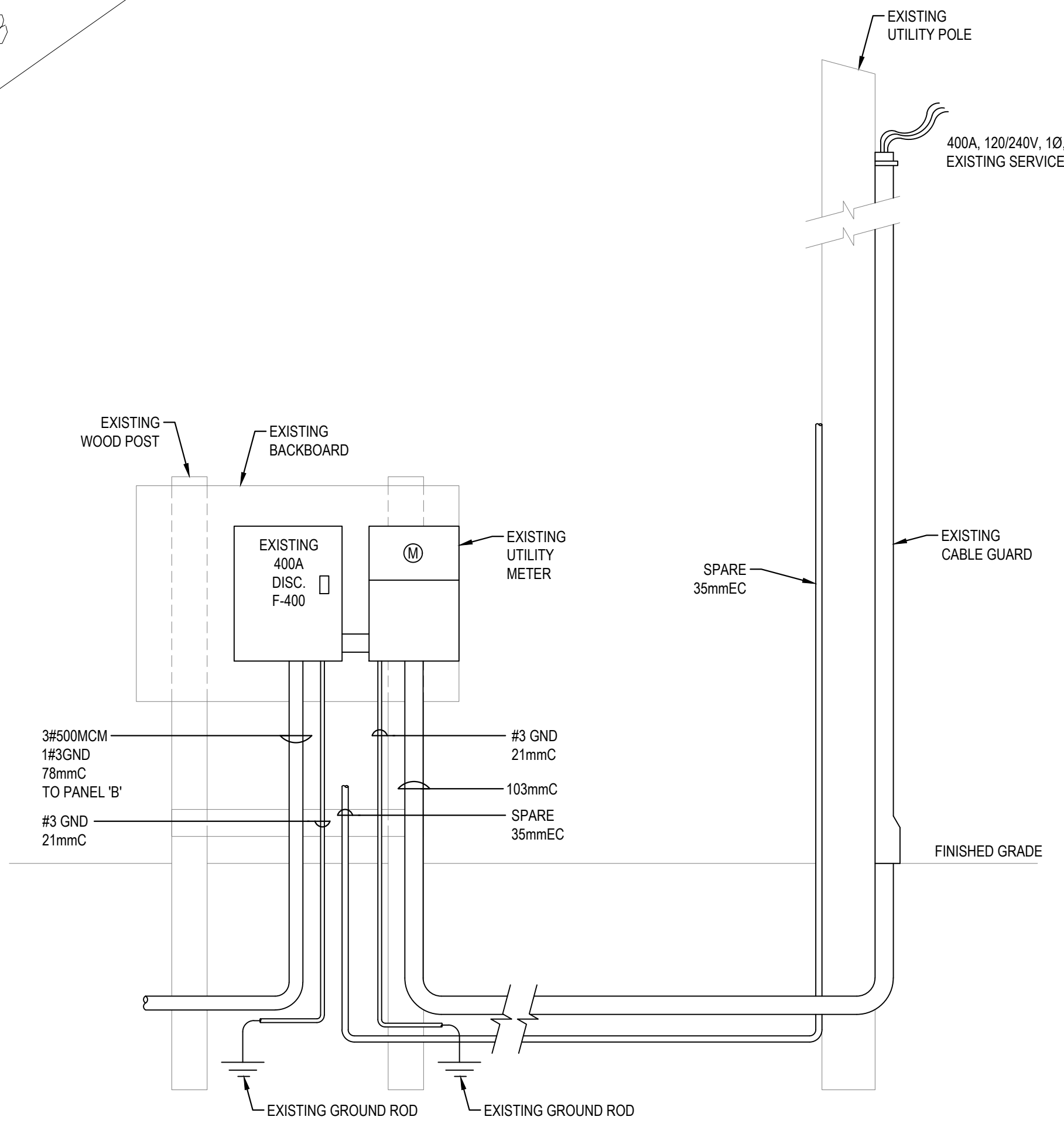
1. EXISTING A & B SERVICES ARE TO BE MAINTAINED UNTIL NEW SERVICE BUILDING 'A' IS CONSTRUCTED. REROUTE EXISTING UNDERGROUND FEEDERS FOR PANEL 'A' & 'B' TO A SPLICE BOX AND RUN TEMPORARY TECK FEEDERS TO THE PANELS. REPLACE EXISTING SERVICE B 400A MAIN DISCONNECT FUSES WITH 200A FUSES. AFTER BUILDING 'A' IS CONSTRUCTED SERVICE ENTRANCE 'A' AND 'B' ARE TO BE REMOVED INCLUDING SERVICE STRUCTURE AND WIRING.
2. EXISTING OVERHEAD WIRING FOR SITE LIGHTING TO BE REMOVED AND REPLACED WITH NEW.
3. EXISTING PANEL 'A' AND HARBOR AUTHORITY BUILDING TO BE REMOVED AND REPLACED WITH NEW.
4. EXISTING PANEL 'B' TO BE REMOVED. ENCLOSURE TO BE REPLACED WITH A 782mm X 610mm X 254mm 316 STAINLESS STEEL PULL BOX ENCLOSURE. EXISTING MARGINAL WHARF SERVICES TO BE REPLACED AND RE-FED FROM NEW SERVICE BUILDING 'A'.
5. EXISTING MAIN WHARF SERVICES TO BE REPLACED AS NOTED AND RE-FED FROM NEW SERVICE BUILDING 'A'.
6. EXISTING PANEL 'C' AND FLOAT SERVICES TO BE REMOVED AND REPLACED WITH NEW FED FROM NEW SERVICE BUILDING 'B'.
7. REMOVE EXISTING FLOOD LIGHTS AND MOUNTING BRACKETS.
8. COORDINATE WITH UTILITY TO REMOVE EXISTING LUMINAIRE.
9. EXISTING SHROUD AND JUNCTION BOX TO BE REUSED TO REPAIR EXISTING REMAINING SPARE WINCH ON CIRCUIT B-26, 28.
10. EXISTING CONDUITS IN SLAB FEEDING SERVICES ON MARGINAL WHARF ARE TO BE REUSED. REPAIR ANY DAMAGED CONDUITS AND JUNCTION BOXES AS REQUIRED.



21 EXISTING SERVICE ENTRANCE 'A'
 E11 SCALE: 1:25



EXISTING ELECTRICAL SITE PLAN
 SCALE: 1:500



22 EXISTING SERVICE ENTRANCE 'B'
 E11 SCALE: 1:25

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POWER SUPPLY: 120/240V, 1ø, 3w
MAIN BREAKER: 200A
NUMBER OF CCTS: 20

PANEL: 'A' (EXISTING) MOUNTING: SURFACE
LOCATION: MAIN WHARF
REMARKS: EXISTING

DESCRIPTION	WATTAGE		#	BKR	CIRCUIT	BKR	#	WATTAGE		DESCRIPTION
	A	B						A	B	
NOT IN USE			2	60	1 a 2	15/15	1/1			P4 RECEPT / P4 RECEPT
					3 b 4	15/15	1/1			SPARE/ P5 RECEPT
FUNDY BAY CAR			2	30	5 a 6	15/15	1/1			P5 RECEPT / P1 RECEPT
					7 b 8	15/15	1/1			P1 RECEPT / STORAGE YARD LTG
PANEL D IN BLDG			2	60	9 a 10	15/15	1/1			WHARF P5 LTG / WHARF P3 LTG
					11 b 12	15/15	1/1			WHARF P2 LTG / WHARF P4 LTG
SECURITY SYSTEM			1	20	13 a	14	15/15	1/1		P3 RECEPT / P2 RECEPT
SPARE			1	20	15 b	16	15/15	1/1		P2 RECEPT / P3 RECEPT
SPARE			1	20	17 a	18	60	2		WINCH
DUPLEX GUARD RAILS			1	20	19 b	20				
PHASE LOADS:										
TOTAL LOAD:										
TOTAL PHASE LOADS										
CURRENT (A) @ 240V:										

POWER SUPPLY: 120/240V, 1ø, 3w
MAIN BREAKER: 200A
NUMBER OF CCTS: 30

PANEL: 'B' MOUNTING: SURFACE
LOCATION: MARGINAL WHARF
REMARKS: CW 200A SUB-FEED BREAKER FOR PANEL 'C'

DESCRIPTION	WATTAGE		#	BKR	CIRCUIT	BKR	#	WATTAGE		DESCRIPTION
	A	B						A	B	
POLE 1 SPLIT RECEPT				15	1 a 2	15	2			POLE 2 SPLIT RECEPT
POLE 1 SPLIT RECEPT					3 b 4	15	2			POLE 2 SPLIT RECEPT
POLE 1 SPLIT RECEPT					5 a 6	15	2			POLE 2 SPLIT RECEPT
POLE 1 SPLIT RECEPT				15	7 b 8	15	2			POLE 2 SPLIT RECEPT
POLE 3 SPLIT RECEPT					9 a 10	15	2			POLE 4 SPLIT RECEPT
POLE 3 SPLIT RECEPT				15	11 b 12	15	2			POLE 4 SPLIT RECEPT
POLE 3 SPLIT RECEPT					13 a 14	15	2			POLE 4 SPLIT RECEPT
POLE 3 SPLIT RECEPT				15	15 b 16	15	2			POLE 4 SPLIT RECEPT
LIGHTS			1	15	17 a	18	60	2		SERVICE MODULE FOR WINCH
LIGHTS			1	15	19 b	20	60	2		SERVICE MODULE FOR FUTURE WELDER PLUG
WINCH CONTROL POWER			1	15	21 a	22	60	2		SERVICE MODULE FOR FUTURE WELDER PLUG
					23 b 24	60	2			
					25 a 26	60	2			
					27 b 28					
					29 a	30				
PHASE LOADS:										
TOTAL LOAD:										
TOTAL PHASE LOADS										
CURRENT (A) @ 240V:										

(*) - GROUND FAULT INTERRUPT

POWER SUPPLY: 120/240V, 1ø, 3w
MAINS BRAKER: 200A
NUMBER OF CCTS: 72

PANEL: 'C' MOUNTING: SURFACE
LOCATION: FLOATING DOCK
REMARKS:

DESCRIPTION	WATTAGE		#	BKR	CIRCUIT	BKR	#	WATTAGE		DESCRIPTION
	A	B						A	B	
FLOAT RECEIPT 5A			2	15	1 a 2	15	2			FLOAT RECEIPT 1A
FLOAT RECEIPT 5B					3 b 4	15	2			FLOAT RECEIPT 1B
FLOAT RECEIPT 5C			2	15	5 a 6	15	2			FLOAT RECEIPT 1C
FLOAT RECEIPT 5D					7 b 8	15	2			FLOAT RECEIPT 1D
FLOAT RECEIPT 6A			2	15	9 a 10	15	2			FLOAT RECEIPT 2A
FLOAT RECEIPT 6B					11 b 12	15	2			FLOAT RECEIPT 2B
FLOAT RECEIPT 6C			2	15	13 a 14	15	2			FLOAT RECEIPT 2C
FLOAT RECEIPT 6D					15 b 16	15	2			FLOAT RECEIPT 2D
FLOAT RECEIPT 7A			2	15	17 a 18	15	2			FLOAT RECEIPT 3A
FLOAT RECEIPT 7B					19 b 20	15	2			FLOAT RECEIPT 3B
FLOAT RECEIPT 7C			2	15	21 a 22	15	2			FLOAT RECEIPT 3C
FLOAT RECEIPT 7D					23 b 24	15	2			FLOAT RECEIPT 3D
SPARE			2	15	25 a 26	15	2			FLOAT RECEIPT 4A
SPARE					27 b 28	15	2			FLOAT RECEIPT 4B
RECEPT 8A & 8B			2	15	29 a 30	15	2			FLOAT RECEIPT 4C
RECEPT 8C & 8D					31 b 32	15	2			FLOAT RECEIPT 4D
SPARE			1	15	33 a	34	15	1		SPARE
SPARE			1	15	35 b	36	15	1		SPARE
SPARE			1	15	37 a	38	15	1		SPARE
SPARE			1	30	39 b	40	15	1		SPARE
SPARE			1	15	41 a	42	15	1		SPARE
					43 b	44				
					45 a	46				
					47 b	48				
					49 a	50				
					51 b	52				
					53 a	54				
					55 b	56				
					57 a	58				
					59 b	60				
					61 a	62				
					63 b	64				
					65 a	66				
					67 b	68				
					69 a	70				
					71 b	72				
PHASE LOADS:										
TOTAL LOAD:										
TOTAL PHASE LOADS										
CURRENT (A) @ 240V:										

(*) - GROUND FAULT INTERRUPT

GENERAL NOTES:

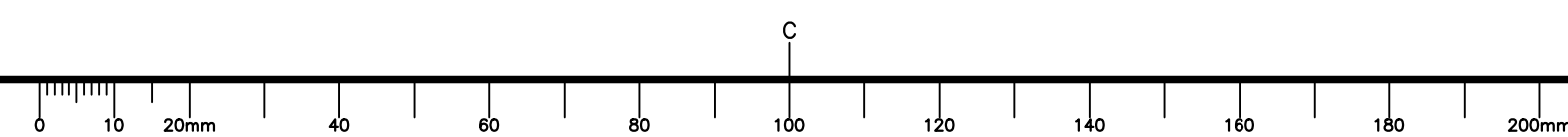
- CONTRACTOR SHALL EXAMINE ELECTRICAL DRAWINGS, VISIT THE SITE TO VERIFY EXISTING EQUIPMENT AND CONDITIONS AND SCOPE OF WORK INVOLVED IN DEMOLITION PRIOR TO SUBMITTING A TENDER. EXTRAS WILL NOT BE CONSIDERED BECAUSE ACTUAL CONDITIONS DIFFER FROM DRAWINGS AND ALL COSTS RELATING TO EXISTING SITE CONDITIONS MUST BE INCLUDED IN TOTAL TENDERED PRICE.

0	ISSUED FOR TENDER	04/05/2022
revisions		date
project		project

ELECTRICAL UPGRADE
DIPPER HARBOUR WHARF
SAINT JOHN CO., NB

EXISTING
ELECTRICAL
SCHEDULES

designed	R.M.B.	conçu
date	APRIL 2022	
drawn	R.Z. / D.J.L.	dessiné
date	APRIL 2022	
approved	B.E.T.	approuvé
date	APRIL 2022	
Tender	<i>[Signature]</i>	Soumission
F&O Project Manager	Administrateur de projets P&O	
project number	C2-00324	no. du projet
drawing no.	E12 OF 12	no. du dessin



Project No. 100051.046
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BASE PREPARATION FOR ELECTRICAL BUILDINGS:

1. EXACT LOCATION OF ELECTRICAL BUILDINGS TO BE CONFIRMED WITH DEPARTMENTAL REPRESENTATIVE.
2. EXCAVATE EXISTING IN-SITU MATERIALS TO LIMITS INDICATED. COORDINATE WITH TRENCHING REQUIREMENTS FOR ELECTRICAL CONDUIT INSTALLATIONS.
3. PROOF COMPACT BOTTOM OF EXCAVATIONS.
4. INSTALL AND COMPACT SUB-BASE AND BASE MATERIALS. COORDINATE WITH ELECTRICAL CONDUIT INSTALLATION.
5. COORDINATE BASE MATERIAL INSTALLATION WITH ELECTRICAL BUILDING BASES AND INSULATION AS DETAILED ON ELECTRICAL DRAWINGS. ENSURE FINISH GRADES PROVIDE ADEQUATE FREEBOARD FOR BUILDING AND ACCOMMODATE POSITIVE SLOPE OF MINIMUM 2% AWAY FROM BUILDING.
6. REINSTATE ASPHALT PAVEMENT TO MATCH ADJACENT SURFACES AND AS APPROVED BY DEPARTMENTAL REPRESENTATIVE.

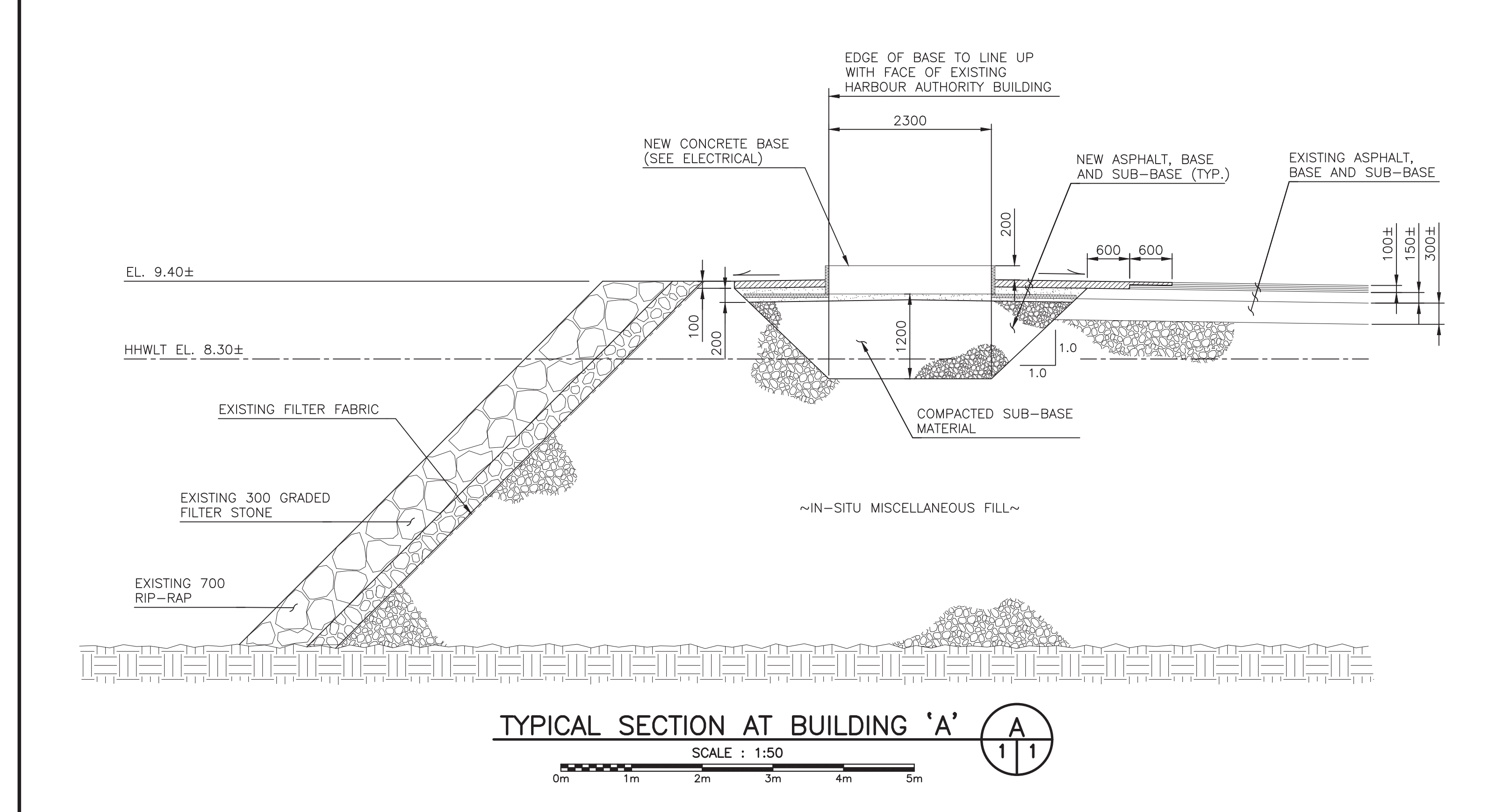
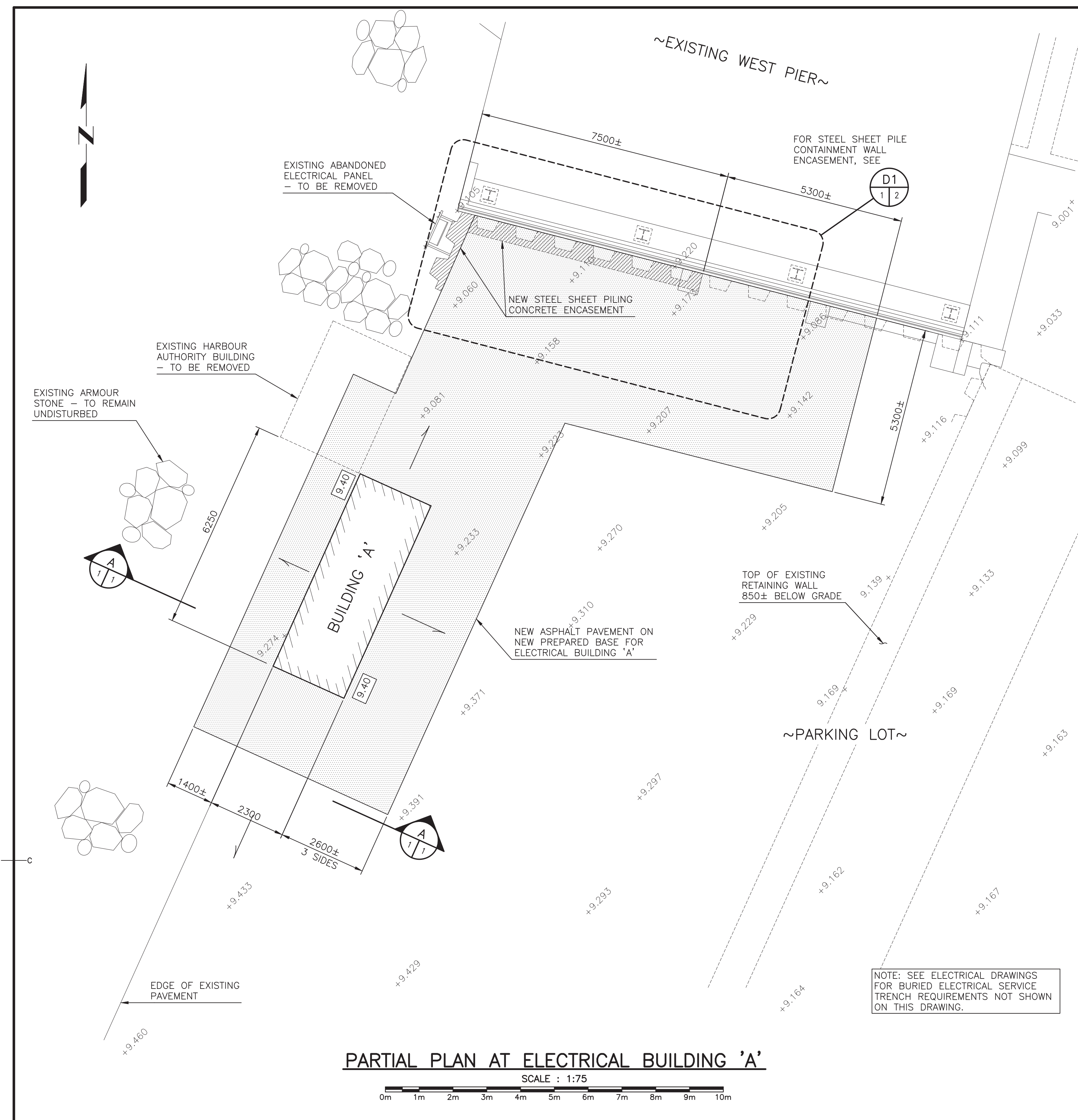
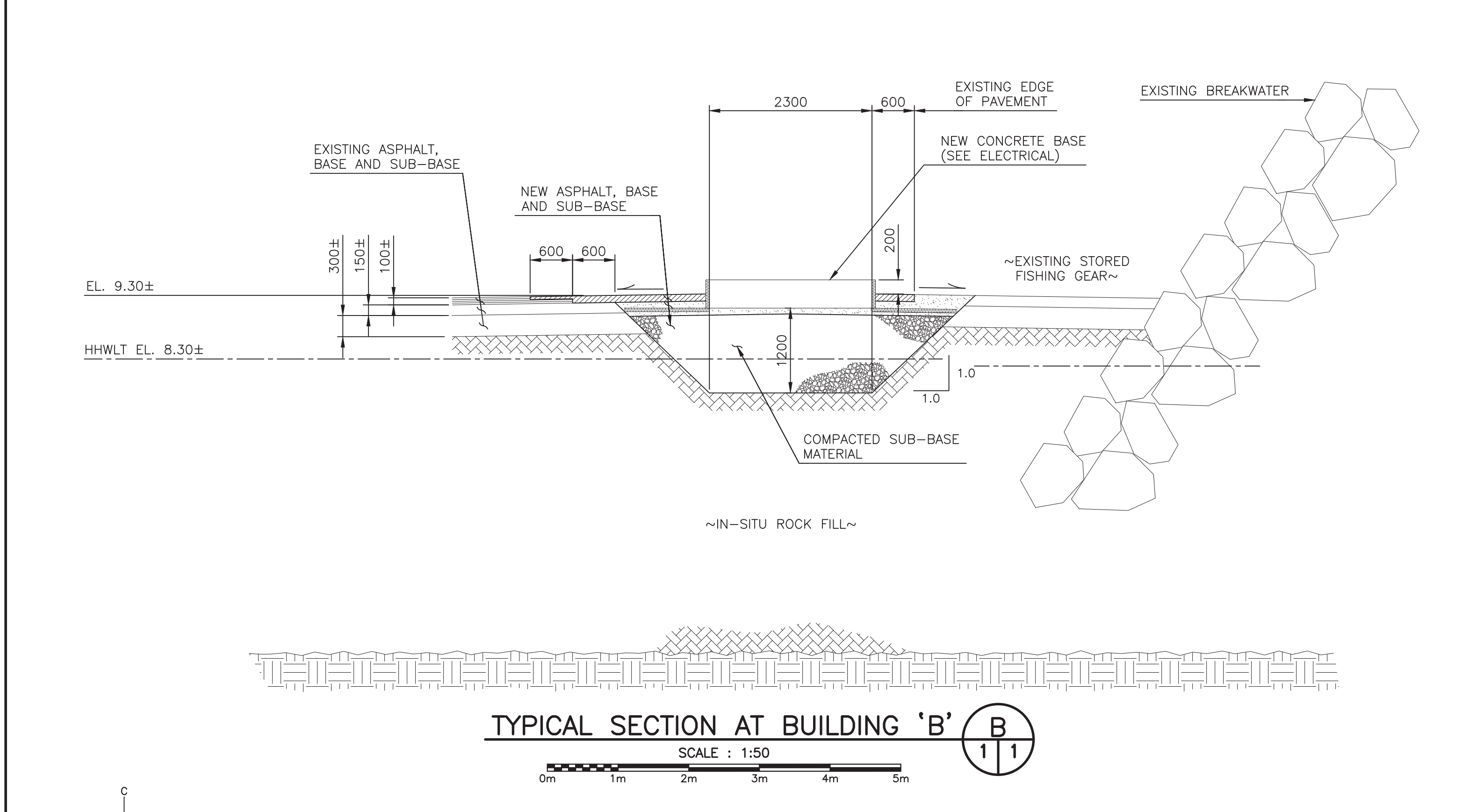
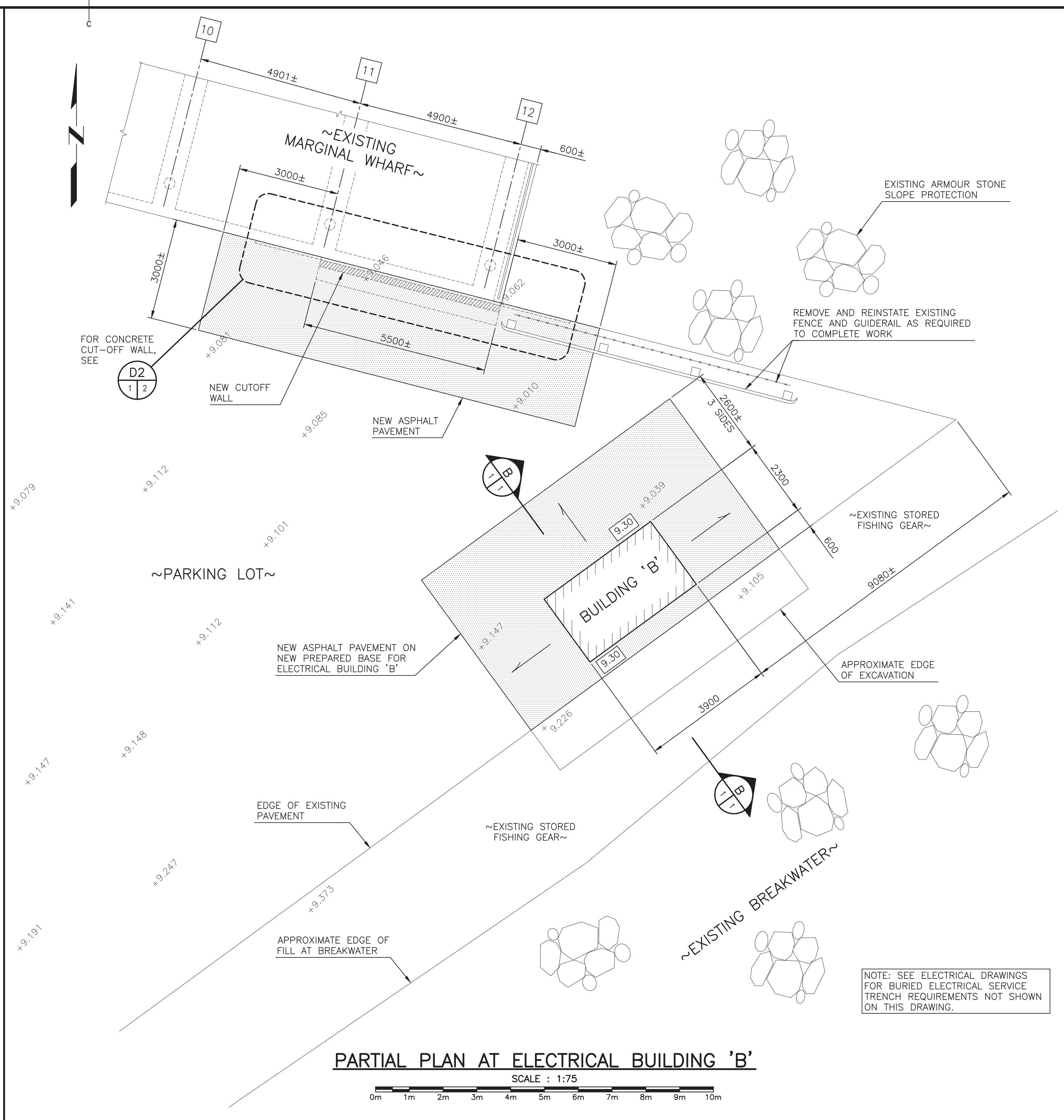


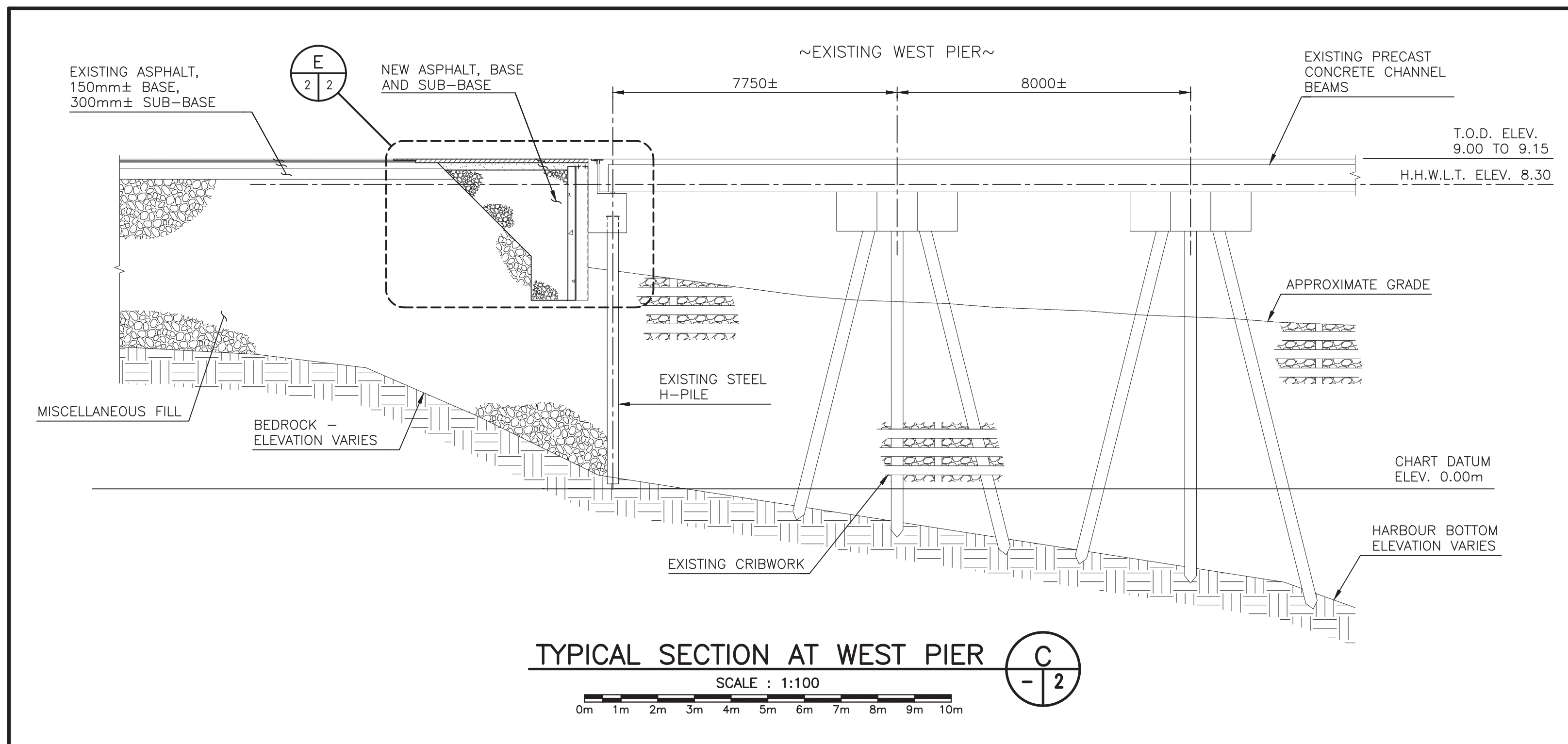
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revisions		date
project		project

**ELECTRICAL UPGRADE
DIPPER HARBOUR WHARF
SAINT JOHN CO., NB**

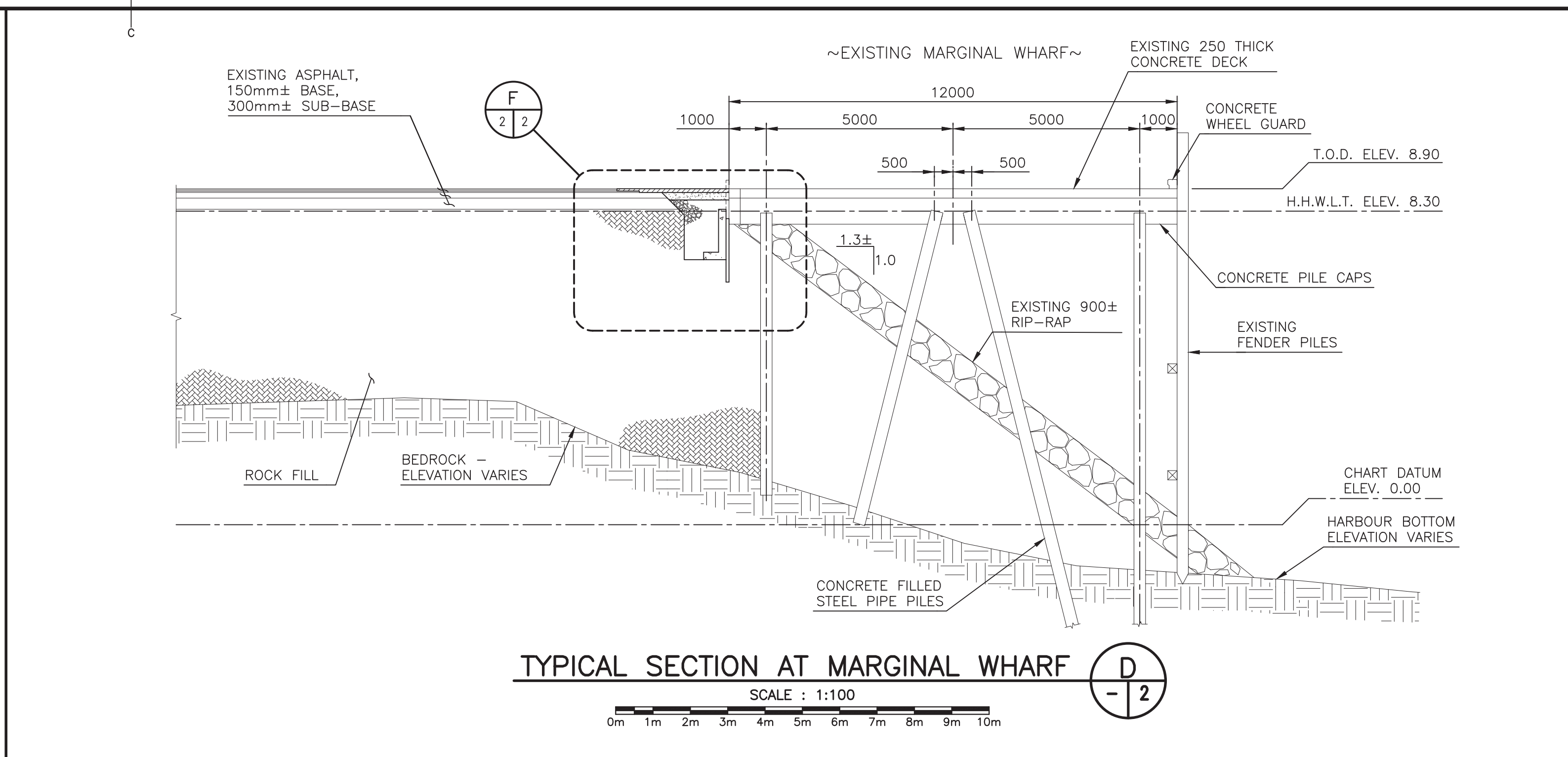
**CIVIL WORK
PLANS AND SECTIONS**

designed RBV	conçu
date MARCH 2022	
drawn MR	dessiné
date MARCH 2022	
approved RBV	approuvé
date MARCH 2022	
Tender	Soumission
Project Manager <i>W. B. Yule</i>	Administrateur de projets
project number	no. du projet
C2-00324	
drawing no.	no. du dessin
C1 OF 2	

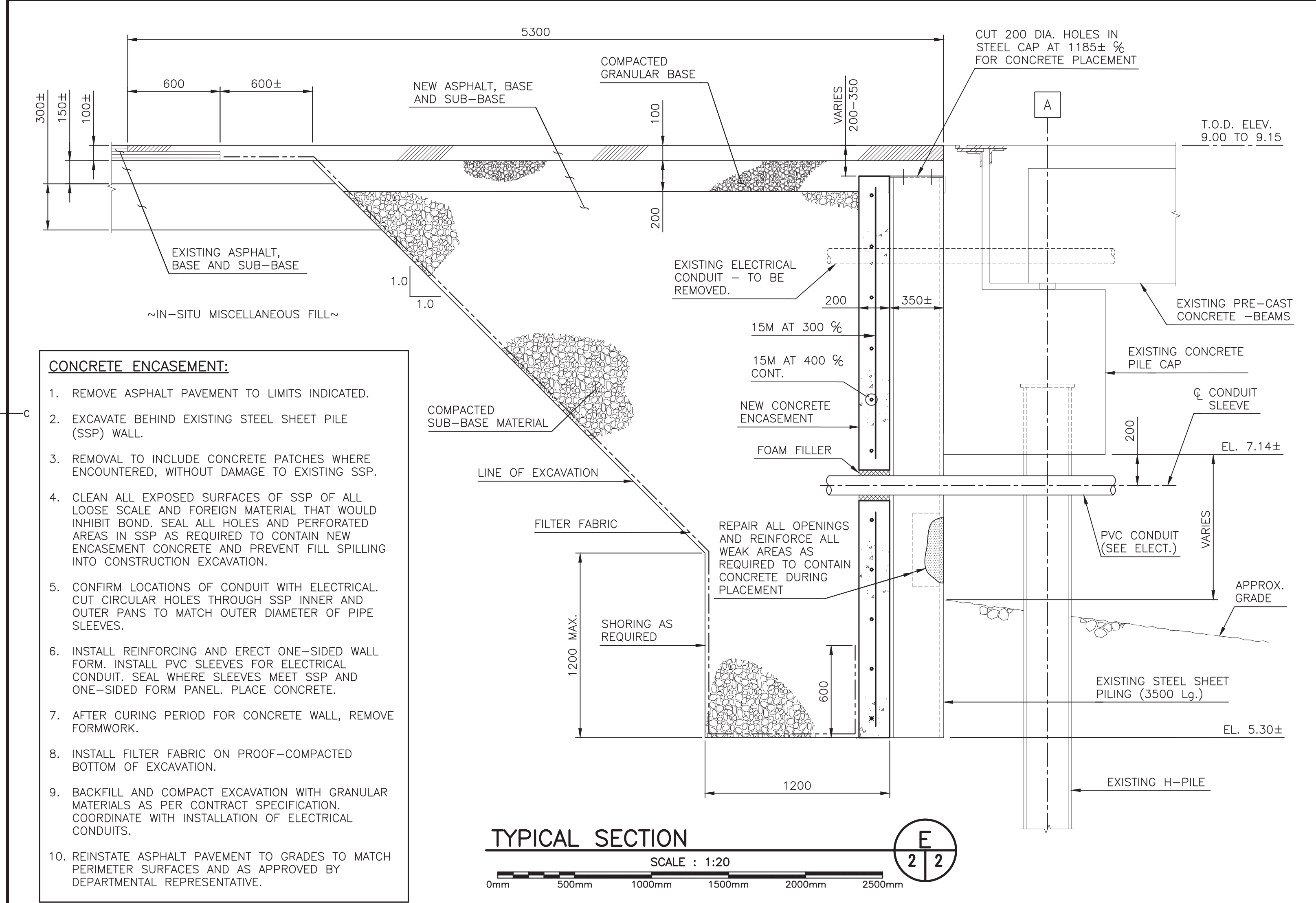




TYPICAL SECTION AT WEST PIER
SCALE: 1:100
C-2

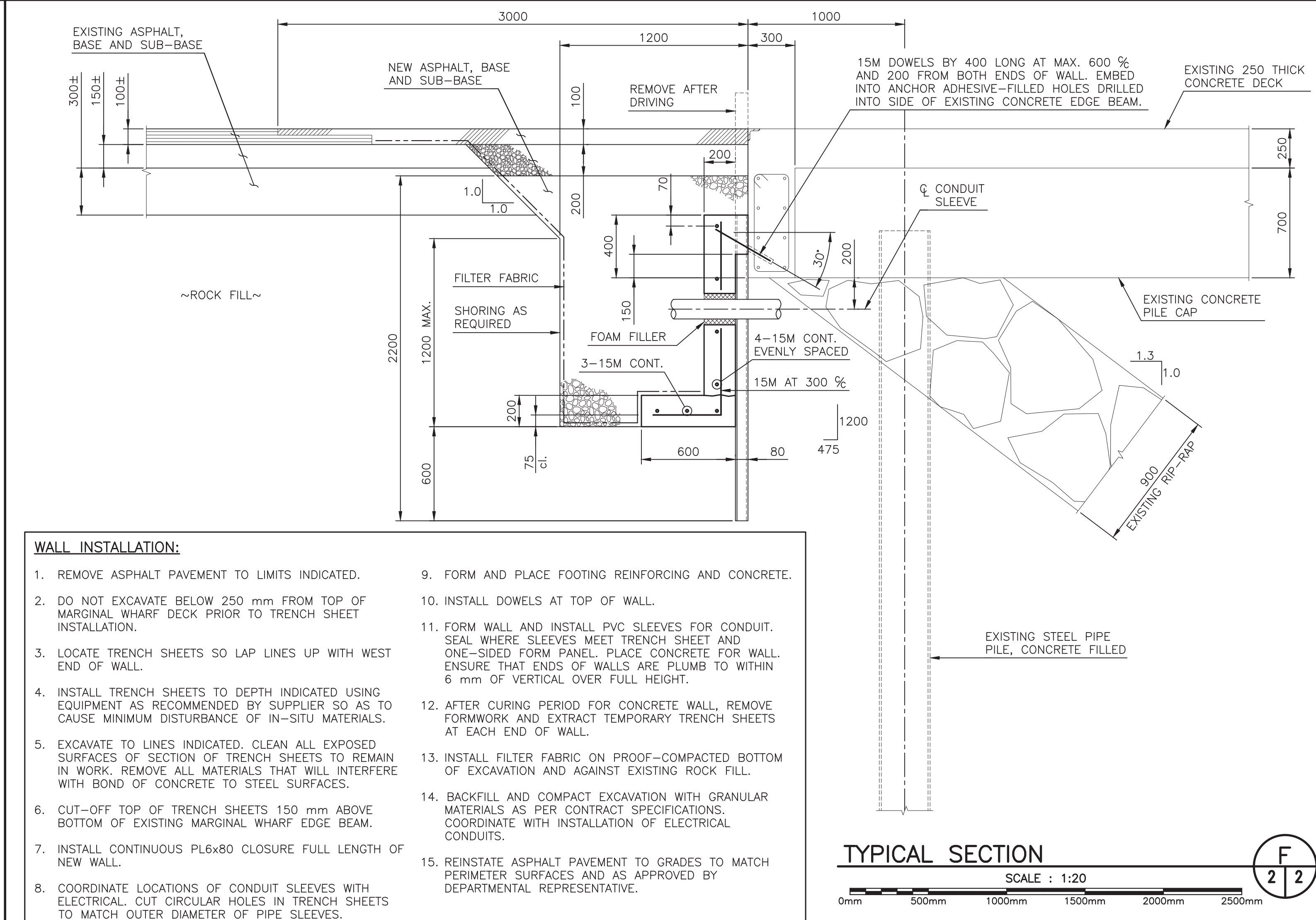


TYPICAL SECTION AT MARGINAL WHARF
SCALE: 1:100
D-2



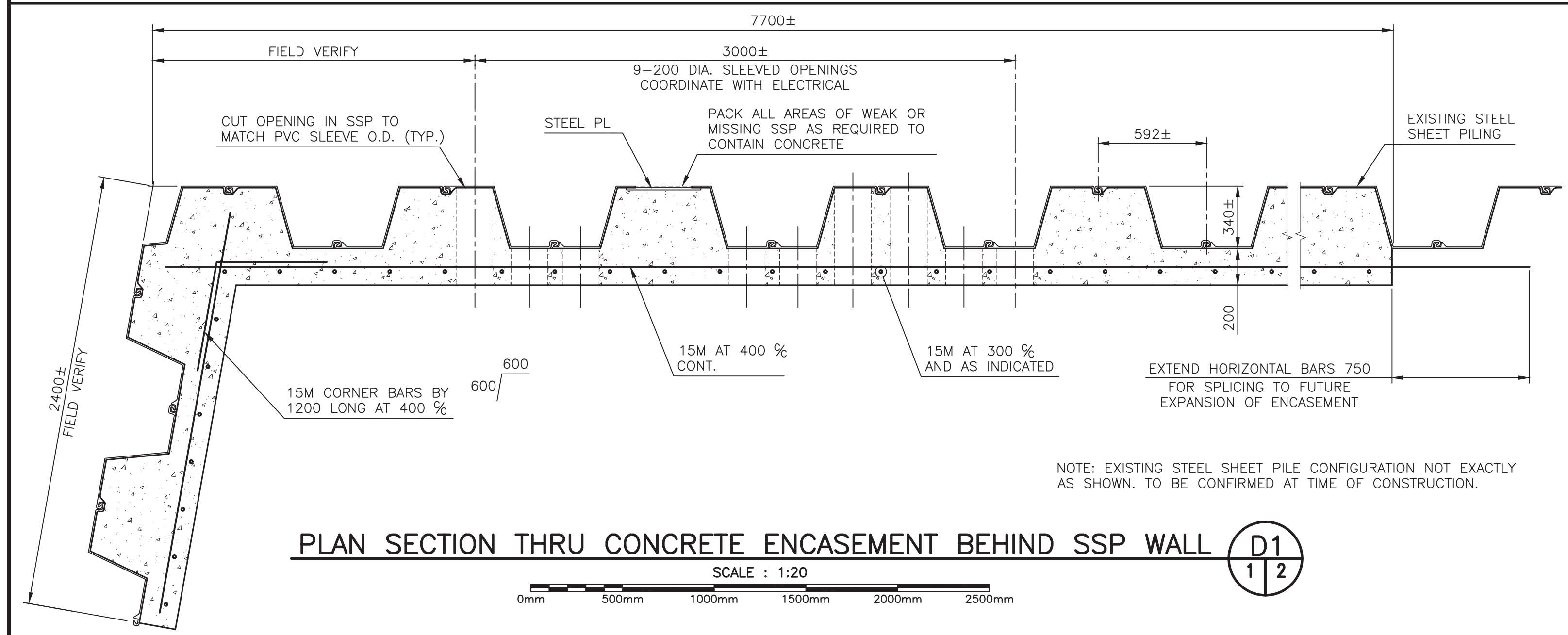
- CONCRETE ENCASEMENT:**
1. REMOVE ASPHALT PAVEMENT TO LIMITS INDICATED.
 2. EXCAVATE BEHIND EXISTING STEEL SHEET PILE (SSP) WALL.
 3. REMOVAL TO INCLUDE CONCRETE PATCHES WHERE ENCOUNTERED, WITHOUT DAMAGE TO EXISTING SSP.
 4. CLEAN ALL EXPOSED SURFACES OF SSP OF ALL LOOSE SCALE AND FOREIGN MATERIAL THAT WOULD INHIBIT BOND. SEAL ALL HOLES AND PERFORATED AREAS IN SSP AS REQUIRED TO CONTAIN NEW ENCASEMENT CONCRETE AND PREVENT FILL SPILLING INTO CONSTRUCTION EXCAVATION.
 5. CONFIRM LOCATIONS OF CONDUIT WITH ELECTRICAL. CUT CIRCULAR HOLES THROUGH SSP INNER AND OUTER PANS TO MATCH OUTER DIAMETER OF PIPE SLEEVES.
 6. INSTALL REINFORCING AND ERECT ONE-SIDED WALL FORM. INSTALL PVC SLEEVES FOR ELECTRICAL CONDUIT. SEAL WHERE SLEEVES MEET SSP AND ONE-SIDED FORM PANEL. PLACE CONCRETE.
 7. AFTER CURING PERIOD FOR CONCRETE WALL, REMOVE FORMWORK.
 8. INSTALL FILTER FABRIC ON PROOF-COMPACTED BOTTOM OF EXCAVATION.
 9. BACKFILL AND COMPACT EXCAVATION WITH GRANULAR MATERIALS AS PER CONTRACT SPECIFICATION. COORDINATE WITH INSTALLATION OF ELECTRICAL CONDUITS.
 10. REINSTATE ASPHALT PAVEMENT TO GRADES TO MATCH PERIMETER SURFACES AND AS APPROVED BY DEPARTMENTAL REPRESENTATIVE.

TYPICAL SECTION
SCALE: 1:20
E-2

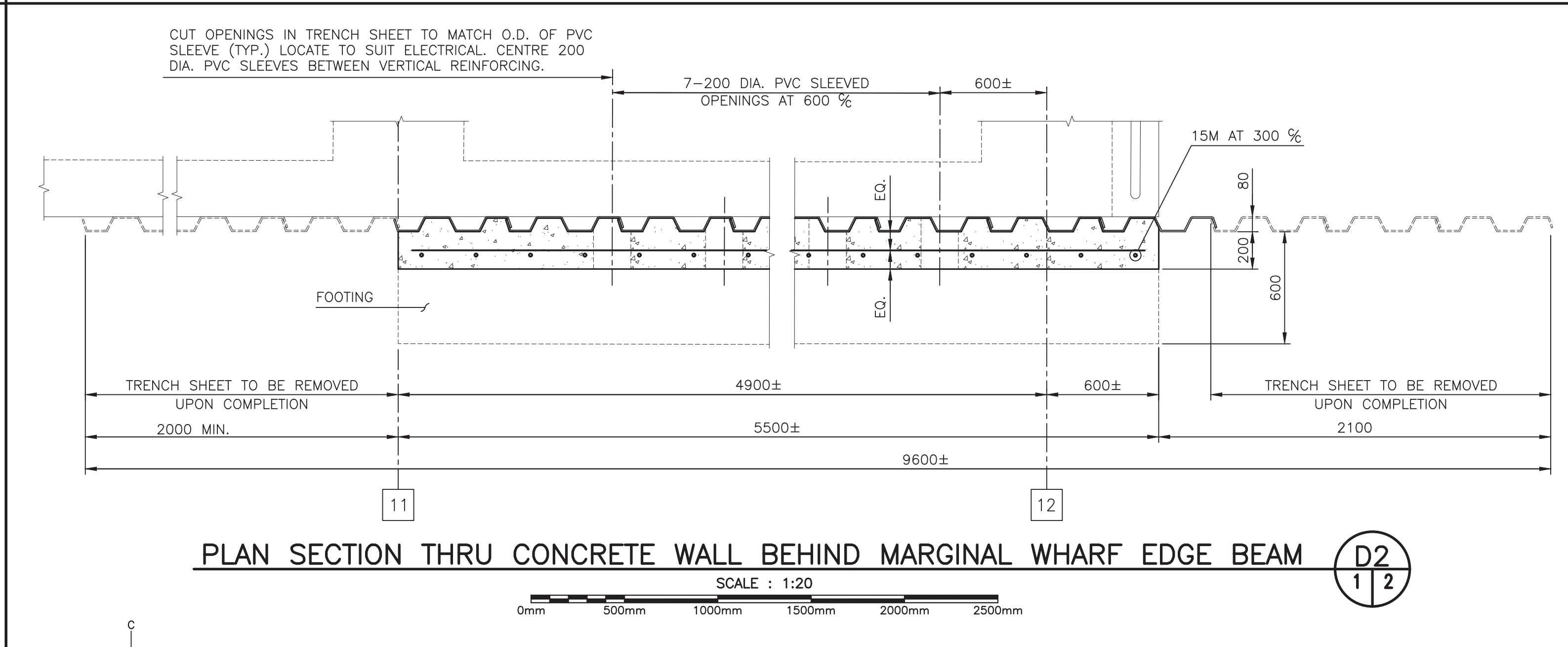


- WALL INSTALLATION:**
1. REMOVE ASPHALT PAVEMENT TO LIMITS INDICATED.
 2. DO NOT EXCAVATE BELOW 250 mm FROM TOP OF MARGINAL WHARF DECK PRIOR TO TRENCH SHEET INSTALLATION.
 3. LOCATE TRENCH SHEETS SO LAP LINES UP WITH WEST END OF WALL.
 4. INSTALL TRENCH SHEETS TO DEPTH INDICATED USING EQUIPMENT AS RECOMMENDED BY SUPPLIER SO AS TO CAUSE MINIMUM DISTURBANCE OF IN-SITU MATERIALS.
 5. EXCAVATE TO LINES INDICATED. CLEAN ALL EXPOSED SURFACES OF SECTION OF TRENCH SHEETS TO REMAIN IN WORK. REMOVE ALL MATERIALS THAT WILL INTERFERE WITH BOND OF CONCRETE TO STEEL SURFACES.
 6. CUT-OFF TOP OF TRENCH SHEETS 150 mm ABOVE BOTTOM OF EXISTING MARGINAL WHARF EDGE BEAM.
 7. INSTALL CONTINUOUS PL6x80 CLOSURE FULL LENGTH OF NEW WALL.
 8. COORDINATE LOCATIONS OF CONDUIT SLEEVES WITH ELECTRICAL. CUT CIRCULAR HOLES IN TRENCH SHEETS TO MATCH OUTER DIAMETER OF PIPE SLEEVES.
 9. FORM AND PLACE FOOTING REINFORCING AND CONCRETE.
 10. INSTALL DOWELS AT TOP OF WALL.
 11. FORM WALL AND INSTALL PVC SLEEVES FOR CONDUIT. SEAL WHERE SLEEVES MEET TRENCH SHEET AND ONE-SIDED FORM PANEL. PLACE CONCRETE FOR WALL. ENSURE THAT ENDS OF WALLS ARE PLUMB TO WITHIN 6 mm OF VERTICAL OVER FULL HEIGHT.
 12. AFTER CURING PERIOD FOR CONCRETE WALL, REMOVE FORMWORK AND EXTRACT TEMPORARY TRENCH SHEETS AT EACH END OF WALL.
 13. INSTALL FILTER FABRIC ON PROOF-COMPACTED BOTTOM OF EXCAVATION AND AGAINST EXISTING ROCK FILL.
 14. BACKFILL AND COMPACT EXCAVATION WITH GRANULAR MATERIALS AS PER CONTRACT SPECIFICATIONS. COORDINATE WITH INSTALLATION OF ELECTRICAL CONDUITS.
 15. REINSTATE ASPHALT PAVEMENT TO GRADES TO MATCH PERIMETER SURFACES AND AS APPROVED BY DEPARTMENTAL REPRESENTATIVE.

TYPICAL SECTION
SCALE: 1:20
F-2



PLAN SECTION THRU CONCRETE ENCASEMENT BEHIND SSP WALL
SCALE: 1:20
D1



PLAN SECTION THRU CONCRETE WALL BEHIND MARGINAL WHARF EDGE BEAM
SCALE: 1:20
D2



0	ISSUED FOR TENDER	APR 5 2022
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**ELECTRICAL UPGRADE
DIPPER HARBOUR WHARF
SAINT JOHN CO., NB**

**CIVIL WORK
SECTIONS AND DETAILS**

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C2 OF 2	