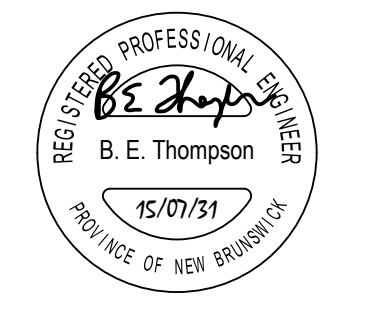


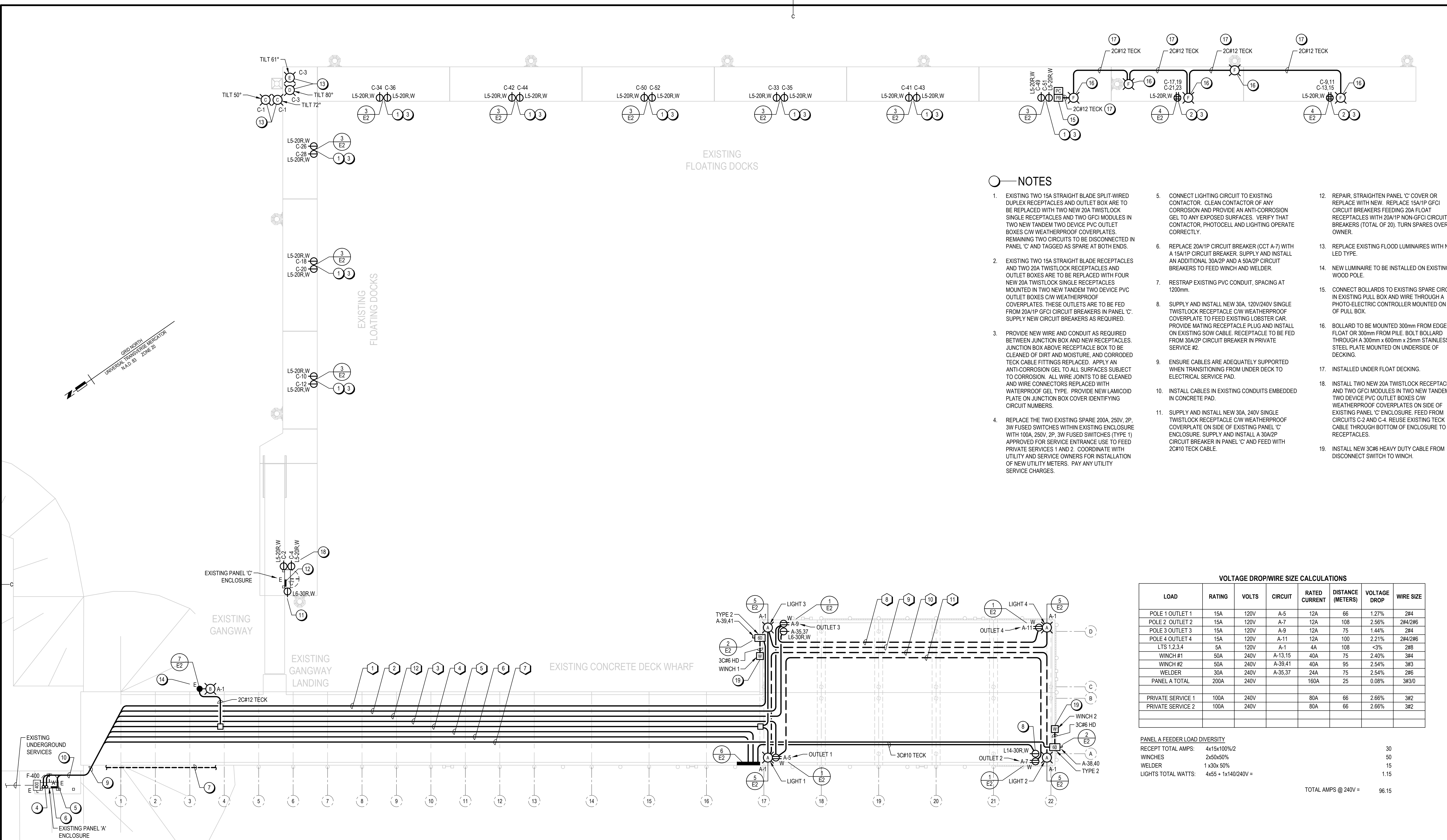
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1 WHARF PLAN - ELECTRICAL
SCALE: 1:150

NOTES

- EXISTING TWO 15A STRAIGHT BLADE SPLIT-WIRED DUPLEX RECEPTACLES AND OUTLET BOX ARE TO BE REPLACED WITH TWO NEW 20A TWISTLOCK SINGLE RECEPTACLES AND TWO GFCI MODULES IN TWO NEW TANDEM TWO DEVICE PVC OUTLET BOXES C/W WEATHERPROOF COVERPLATES. REMAINING TWO CIRCUITS TO BE DISCONNECTED IN PANEL 'C' AND TAGGED AS SPARE AT BOTH ENDS.
- EXISTING TWO 15A STRAIGHT BLADE RECEPTACLES AND OUTLET BOXES ARE TO BE REPLACED WITH FOUR NEW 20A TWISTLOCK SINGLE RECEPTACLES MOUNTED IN TWO NEW TANDEM TWO DEVICE PVC OUTLET BOXES C/W WEATHERPROOF COVERPLATES. THESE OUTLETS ARE TO BE FED FROM 20A/1P GFCI CIRCUIT BREAKERS IN PANEL 'C'. SUPPLY NEW CIRCUIT BREAKERS AS REQUIRED.
- PROVIDE NEW WIRE AND CONDUIT AS REQUIRED BETWEEN JUNCTION BOX AND NEW RECEPTACLES. JUNCTION BOX ABOVE RECEPTACLE BOX TO BE CLEANED OF DIRT AND MOISTURE, AND CORRODED TECK CABLE FITTINGS REPLACED. APPLY AN ANTI-CORROSION GEL TO ALL SURFACES SUBJECT TO CORROSION. ALL WIRE JOINTS TO BE CLEANED AND WIRE CONNECTORS REPLACED WITH WATERPROOF GEL TYPE. PROVIDE NEW LAMCROID PLATE ON JUNCTION BOX COVER IDENTIFYING CIRCUIT NUMBERS.
- REPLACE THE TWO EXISTING SPARE 200A, 250V, 2P, 3W FUSED SWITCHES WITHIN EXISTING ENCLOSURE WITH 100A, 250V, 2P, 3W FUSED SWITCHES (TYPE 1) APPROVED FOR SERVICE ENTRANCE USE TO FEED PRIVATE SERVICES 1 AND 2. COORDINATE WITH UTILITY AND SERVICE OWNERS FOR INSTALLATION OF NEW UTILITY METERS. PAY ANY UTILITY SERVICE CHARGES.
- CONNECT LIGHTING CIRCUIT TO EXISTING CONTACTOR. CLEAN CONTACTOR OF ANY CORROSION AND PROVIDE AN ANTI-CORROSION GEL TO ANY EXPOSED SURFACES. VERIFY THAT CONTACTOR, PHOTOCELL AND LIGHTING OPERATE CORRECTLY.
- REPLACE 20A/1P CIRCUIT BREAKER (CCT A-7) WITH A 15A/1P CIRCUIT BREAKER. SUPPLY AND INSTALL AN ADDITIONAL 30A/2P AND A 50A/2P CIRCUIT BREAKERS TO FEED WINCH AND WELDER.
- RESTRAP EXISTING PVC CONDUIT, SPACING AT 1200mm.
- SUPPLY AND INSTALL NEW 30A, 120V/240V SINGLE TWISTLOCK RECEPTACLE C/W WEATHERPROOF COVERPLATE TO FEED EXISTING LOBSTER CAR. PROVIDE MATING RECEPTACLE PLUG AND INSTALL ON EXISTING SOW CABLE. RECEPTACLE TO BE FED FROM 30A/2P CIRCUIT BREAKER IN PRIVATE SERVICE #2.
- ENSURE CABLES ARE ADEQUATELY SUPPORTED WHEN TRANSITIONING FROM UNDER DECK TO ELECTRICAL SERVICE PAD.
- INSTALL CABLES IN EXISTING CONDUITS EMBEDDED IN CONCRETE PAD.
- SUPPLY AND INSTALL NEW 30A, 240V SINGLE TWISTLOCK RECEPTACLE C/W WEATHERPROOF COVERPLATE ON SIDE OF EXISTING PANEL 'C' ENCLOSURE. SUPPLY AND INSTALL A 30A/2P CIRCUIT BREAKER IN PANEL 'C' AND FEED WITH 2C#10 TECK CABLE.
- REPAIR, STRAIGHTEN PANEL 'C' COVER OR REPLACE WITH NEW. REPLACE 15A/1P GFCI CIRCUIT BREAKERS FEEDING 20A FLOAT RECEPTACLES WITH 20A/1P NON-GFCI CIRCUIT BREAKERS (TOTAL OF 20). TURN SPARES OVER TO OWNER.
- REPLACE EXISTING FLOOD LUMINAIRES WITH NEW LED TYPE.
- NEW LUMINAIRE TO BE INSTALLED ON EXISTING WOOD POLE.
- CONNECT BOLLARDS TO EXISTING SPARE CIRCUIT IN EXISTING PULL BOX AND WIRE THROUGH A PHOTO-ELECTRIC CONTROLLER MOUNTED ON SIDE OF PULL BOX.
- BOLLARD TO BE MOUNTED 300mm FROM EDGE OF FLOAT OR 300mm FROM PILE. BOLT BOLLARD THROUGH A 300mm x 600mm x 25mm STAINLESS STEEL PLATE MOUNTED ON UNDERSIDE OF DECKING.
- INSTALLED UNDER FLOAT DECKING.
- INSTALL TWO NEW 20A TWISTLOCK RECEPTACLES AND TWO GFCI MODULES IN TWO NEW TANDEM TWO DEVICE PVC OUTLET BOXES C/W WEATHERPROOF COVERPLATES ON SIDE OF EXISTING PANEL 'C' ENCLOSURE. FEED FROM CIRCUITS C-2 AND C-4. REUSE EXISTING TECK CABLE THROUGH BOTTOM OF ENCLOSURE TO FEED RECEPTACLES.
- INSTALL NEW 30#6 HEAVY DUTY CABLE FROM DISCONNECT SWITCH TO WINCH.

VOLTAGE DROP/WIRE SIZE CALCULATIONS

LOAD	RATING	VOLTS	CIRCUIT	RATED CURRENT	DISTANCE (METERS)	VOLTAGE DROP	WIRE SIZE
POLE 1 OUTLET 1	15A	120V	A-5	12A	66	1.27%	2#4
POLE 2 OUTLET 2	15A	120V	A-7	12A	108	2.56%	2#4/2#6
POLE 3 OUTLET 3	15A	120V	A-9	12A	75	1.44%	2#4
POLE 4 OUTLET 4	15A	120V	A-11	12A	100	2.21%	2#4/2#6
LTS 1,2,3,4	5A	120V	A-1	4A	108	<3%	2#6
WINCH #1	50A	240V	A-13,15	40A	75	2.40%	3#4
WINCH #2	50A	240V	A-39,41	40A	95	2.54%	3#3
WELDER	30A	240V	A-35,37	24A	75	2.54%	2#6
PANEL A TOTAL	200A	240V		160A	25	0.08%	3#3/0
PRIVATE SERVICE 1	100A	240V		80A	66	2.66%	3#2
PRIVATE SERVICE 2	100A	240V		80A	66	2.66%	3#2

PANEL A FEEDER LOAD DIVERSITY
 RECEPT TOTAL AMPS: 4415x100%/2 = 30
 WINCHES: 2x50x50% = 50
 WELDER: 1x30x50% = 15
 LIGHTS TOTAL WATTS: 4x55 + 1x140/240V = 1.15
 TOTAL AMPS @ 240V = 96.15

GENERAL SUBSCRIPTS

- E - INDICATES EXISTING TO REMAIN
- R - INDICATES RELOCATE EXISTING EQUIPMENT
- W - INDICATES WEATHERPROOF
- LIGHT INDICATES EXISTING
- BOLD INDICATES NEW WORK

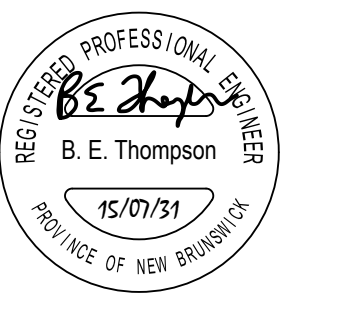
LEGEND

- EXISTING CONDUIT EMBEDDED IN CONCRETE DECK
- CONDUIT AND WIRING RUN SURFACE
- TECK CABLE RUN UNDER WHARF OR UNDER FLOAT DECKING
- AERIAL WIRING
- WOOD POLE
- ⊖ ELECTRICAL PANEL:
A - INDICATES PANEL DESIGNATION
- A-1 INDICATES CIRCUIT 1 IN PANEL 'A'
- 2#10 TWO CONDUCTORS NUMBER 10 AWG WIRING
- ⊖ FUSED DISCONNECT SWITCH:
400 - INDICATES SIZE
F-400 - INDICATES FUSE SIZE
- ⊖ UNFUSED DISCONNECT SWITCH:
60 - INDICATES SIZE
- JUNCTION BOX
- ⊖ EXISTING PULL BOX
- ⊖ COMBINATION DUPLEX 15A, 120V, 5-15R, RECEPTACLE AND GFCI MODULE
- ⊖ L5-20R QUADPLEX RECEPTACLE, FOUR SINGLE RECEPTACLES IN TWO COMMON TANDEM DEVICE OUTLET BOXES UNLESS NOTED OTHERWISE;
L5-20R - INDICATES CSA CONFIGURATION (TWISTLOCK)
- ⊖ SINGLE RECEPTACLE:
L5-20R - INDICATES CSA CONFIGURATION (TWISTLOCK)
L6-30R - INDICATES CSA CONFIGURATION (TWISTLOCK)
L14-30R - INDICATES CSA CONFIGURATION (TWISTLOCK)
- ⊖ EXISTING WINCH REFEED
- ⊖ PHOTO-ELECTRIC CONTROLLER
- ⊖ NEW SITE LIGHTING LUMINAIRE ON NEW ALUMINUM POLE:
A - INDICATES TYPE IN LUMINAIRE SCHEDULE
- ⊖ NEW SITE LIGHTING LUMINAIRE ON EXISTING WOOD POLE:
B - INDICATES TYPE IN LUMINAIRE SCHEDULE
- ⊖ EXISTING SITE LIGHTING LUMINAIRE ON EXISTING WOOD POLE

CABLE SCHEDULE

ITEM NO.	FROM	TO	NO. OF CONDUCTORS AND SIZE	CABLE TYPE	CONDUIT SIZE	REMARKS
1	PANEL 'A'	WINCH 1 DISCONNECT	2C#4	TECK	N/A	
2	PANEL 'A'	OUTLET 3	3C#4	TECK	N/A	USE #12 TAILS TO TERMINATE IN PANEL AND AT OUTLET
3	PANEL 'A'	OUTLET 1	3C#4	TECK	N/A	USE #12 TAILS TO TERMINATE IN PANEL AND AT OUTLET
4	PANEL 'A'	LIGHTS 1 AND 3	2C#6	TECK	N/A	TECK MUST GO INSIDE POLE AT BOTTOM; PROVIDE SUITABLE KNOCKOUT
5	100A DISCONNECT	PRIVATE SERVICE #1	3C#2	TECK	N/A	
6	100A DISCONNECT	PRIVATE SERVICE #2	3C#2	TECK	N/A	
7	PANEL 'A'	WINCH 2 DISCONNECT	2C#3	TECK	N/A	
8	OUTLET 3	OUTLET 4	2#6 + 1#8B	RW90	41mm PVC	EXISTING CONDUIT EMBEDDED IN CONCRETE DECK
9	LIGHT 3	LIGHT 4	2#8 + 1#10B	RW90	27mm PVC	EXISTING CONDUIT EMBEDDED IN CONCRETE DECK
10	LIGHT 1	LIGHT 2	2#8 + 1#10B	RW90	27mm PVC	EXISTING CONDUIT EMBEDDED IN CONCRETE DECK
11	OUTLET 1	OUTLET 2	2#6 + 1#8B	RW90	41mm PVC	EXISTING CONDUIT EMBEDDED IN CONCRETE DECK
12	PANEL 'A'	WELDER OUTLET ON POLE 3	2C#6	TECK	N/A	USE #10 TAILS TO TERMINATE IN PANEL AND AT OUTLET

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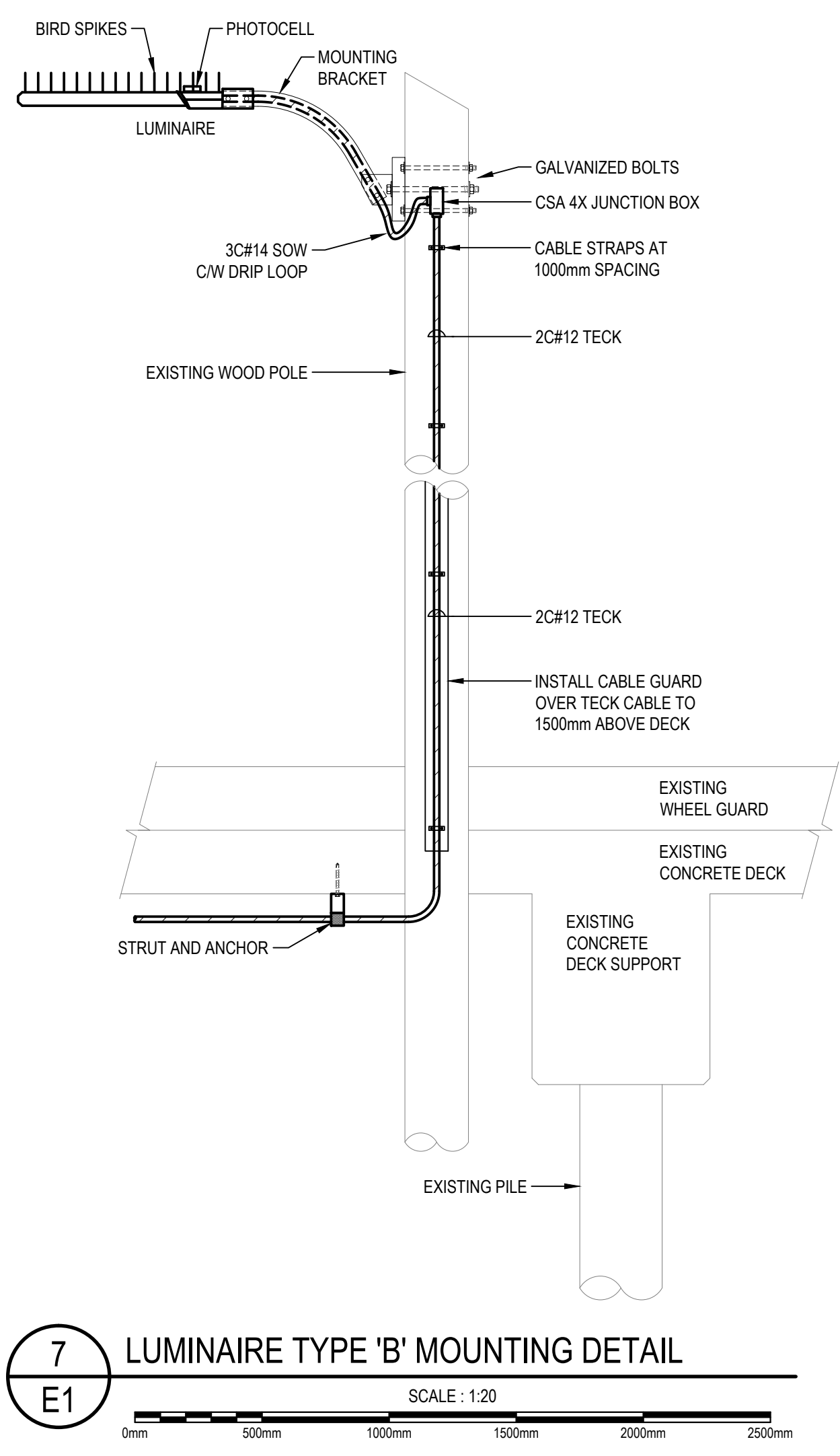
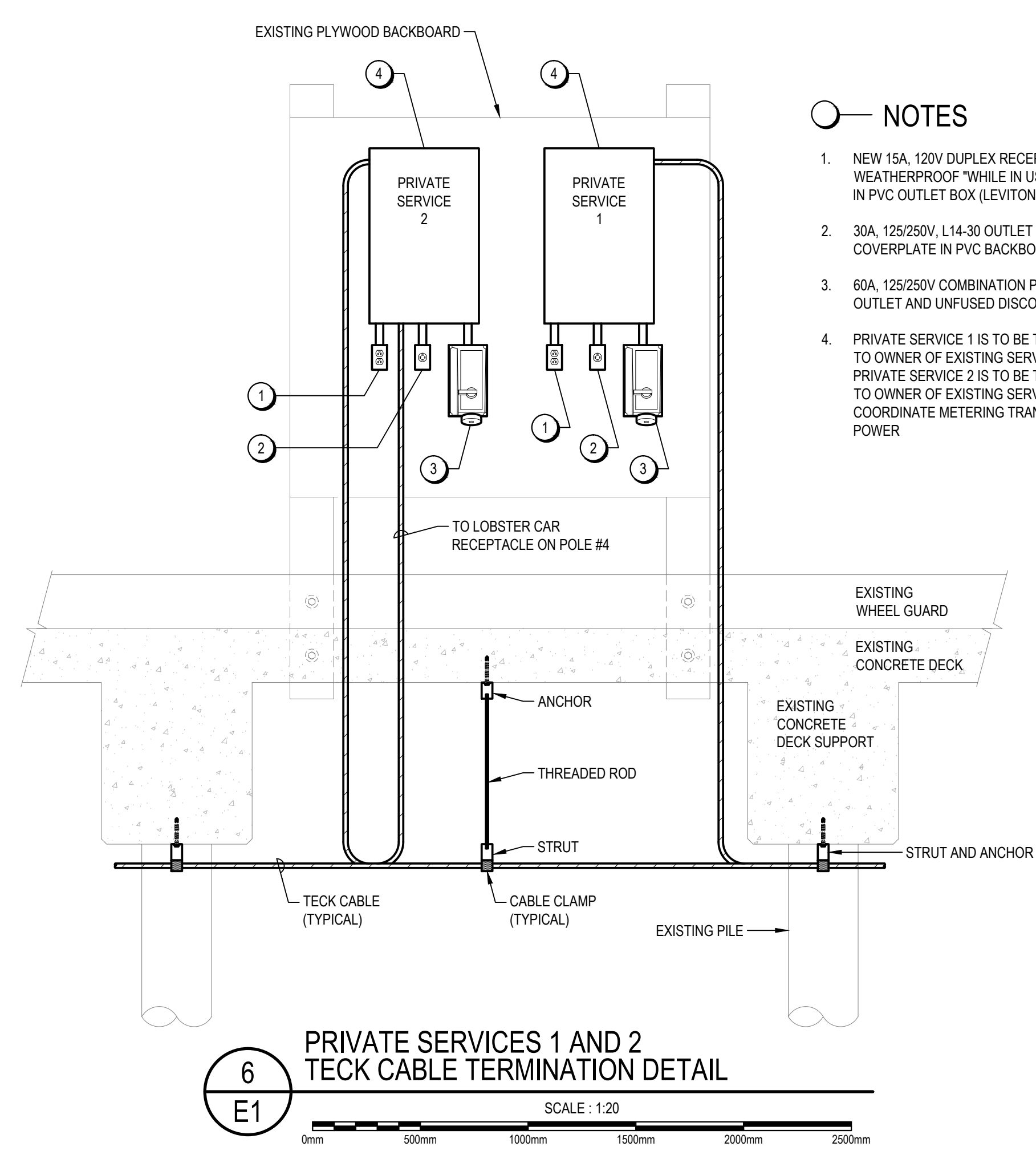
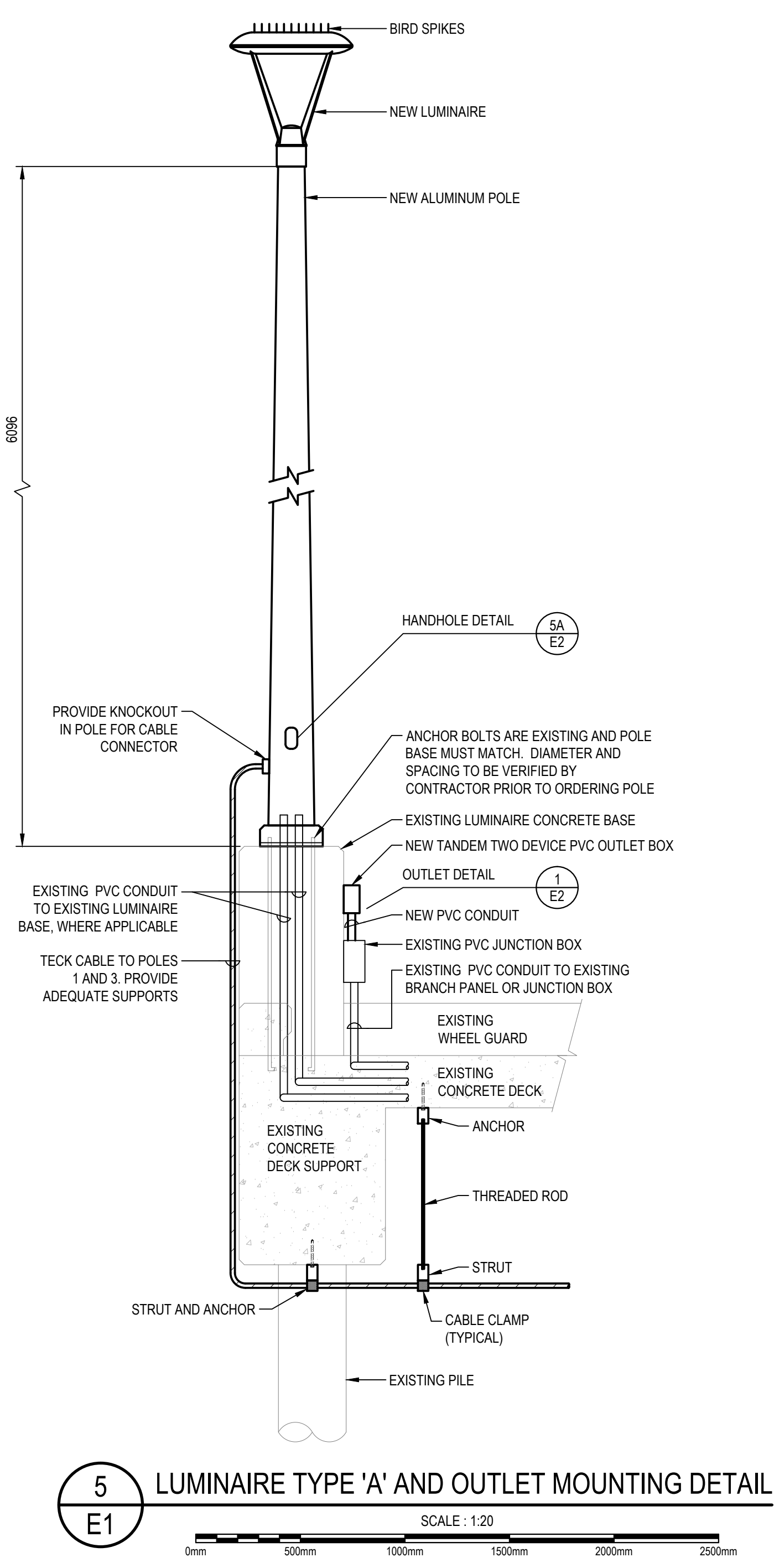
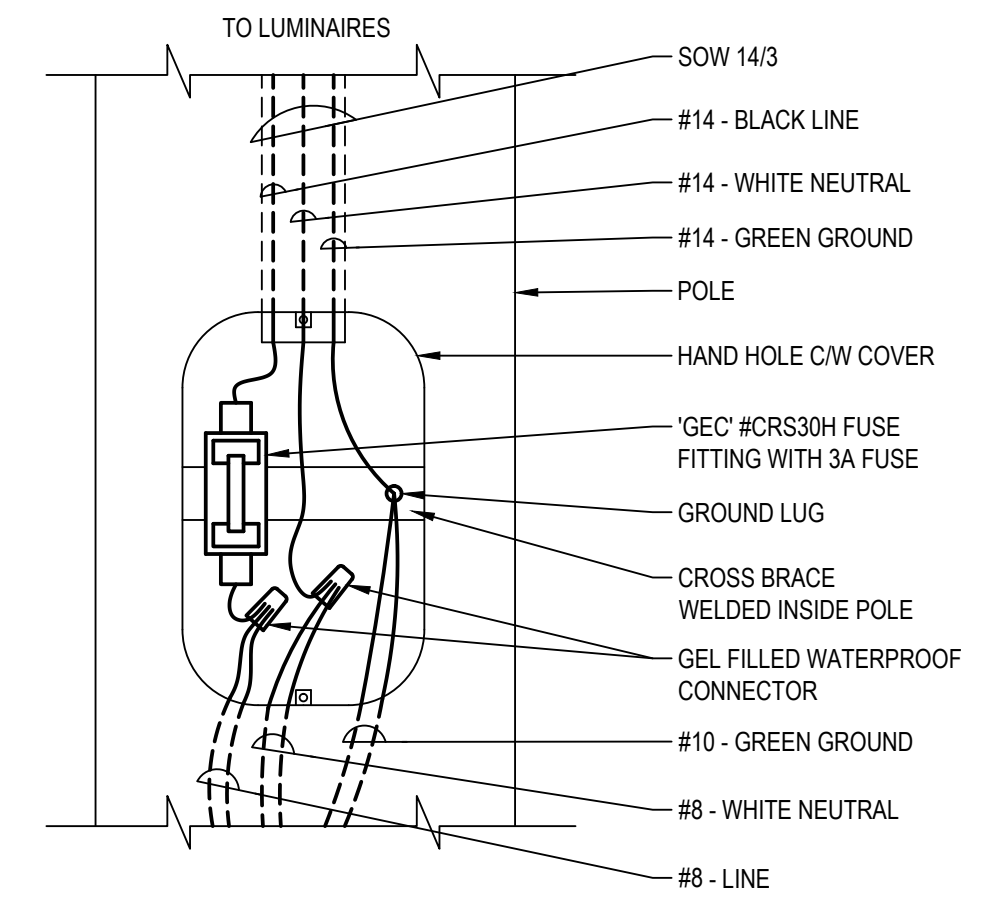
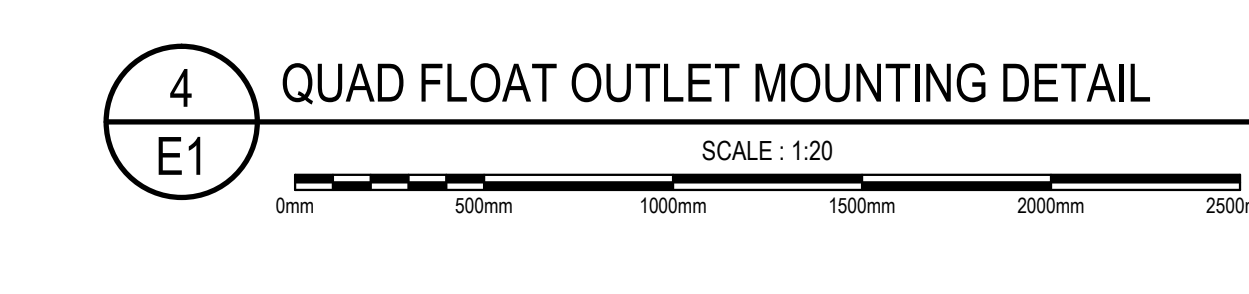
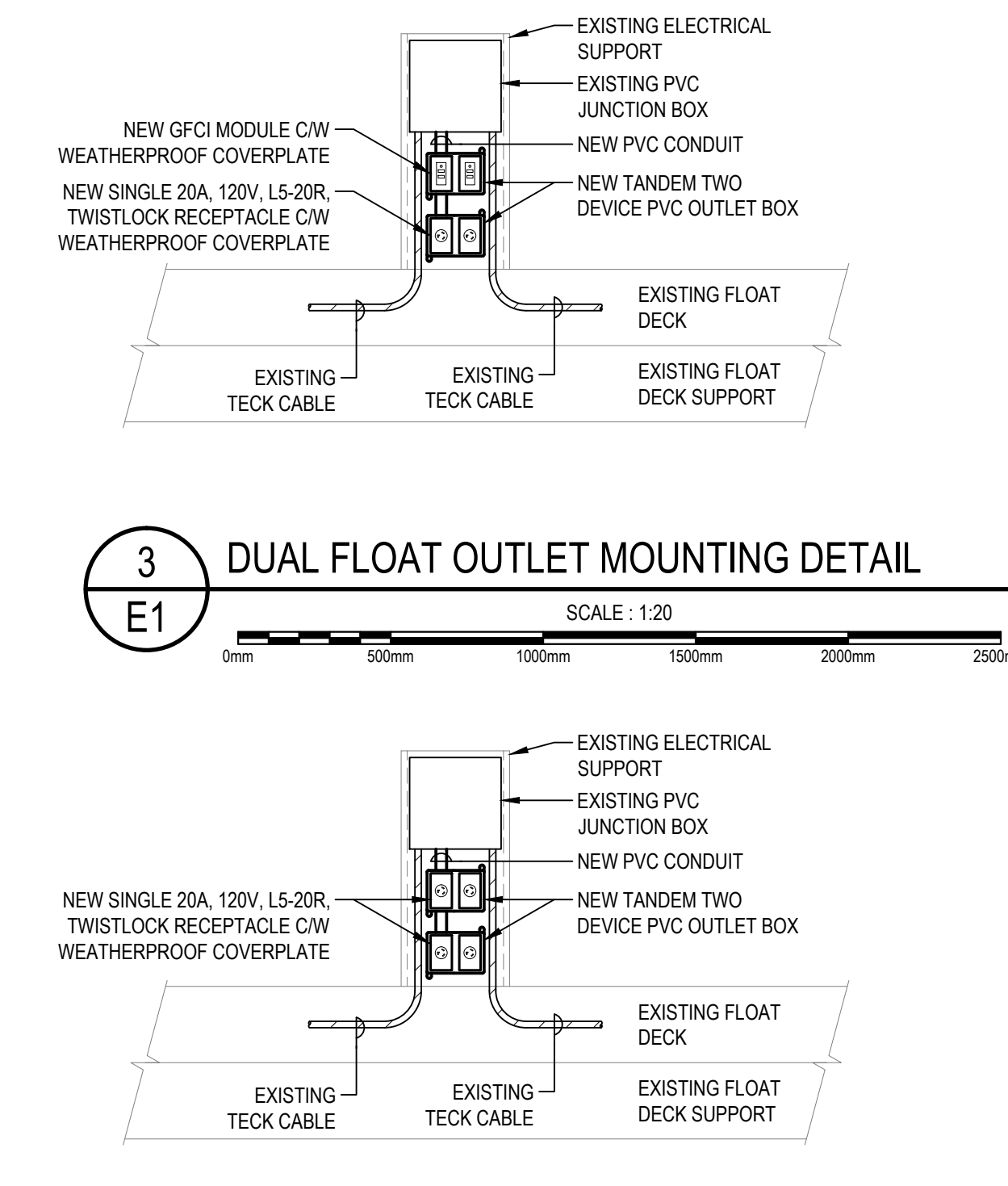
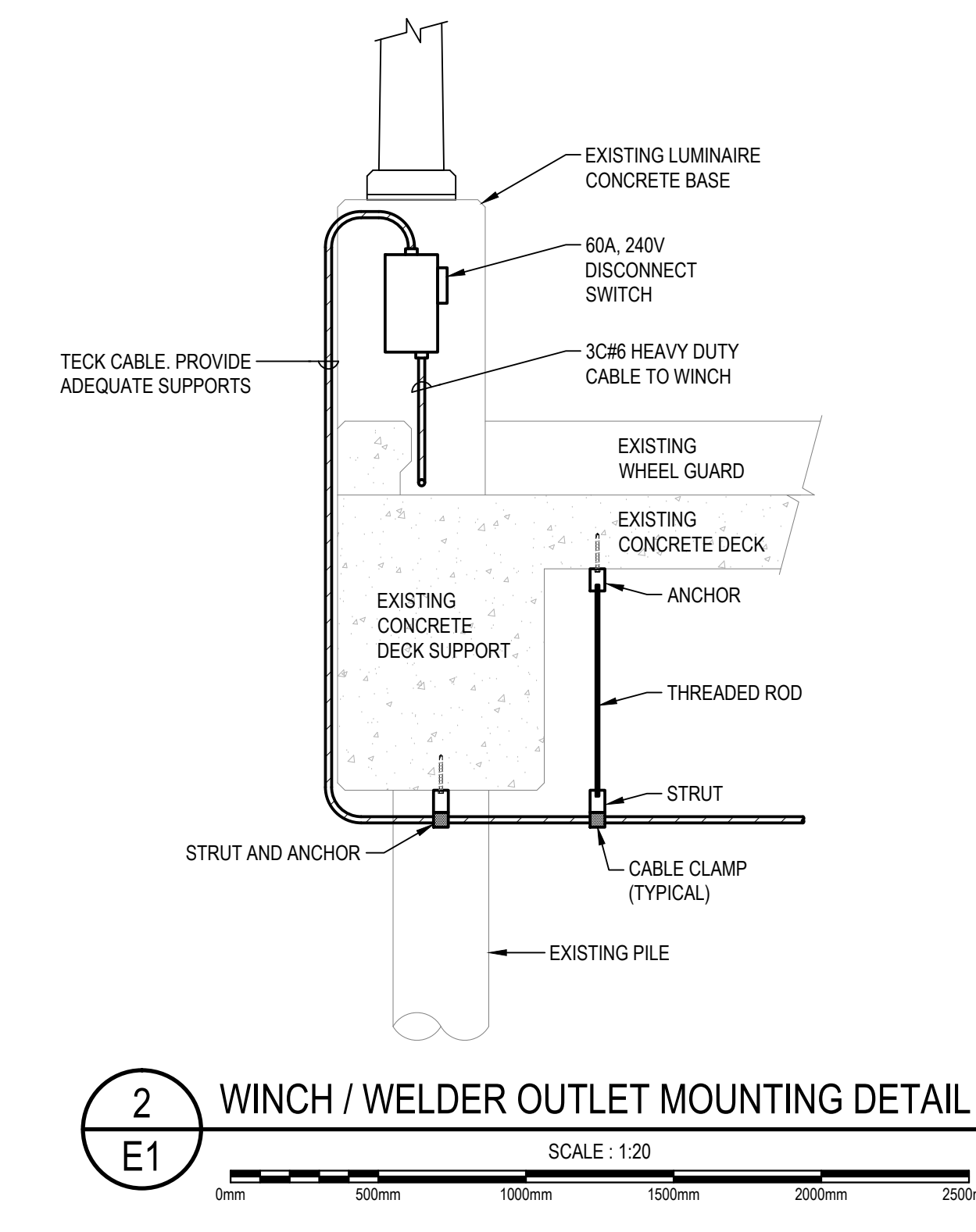
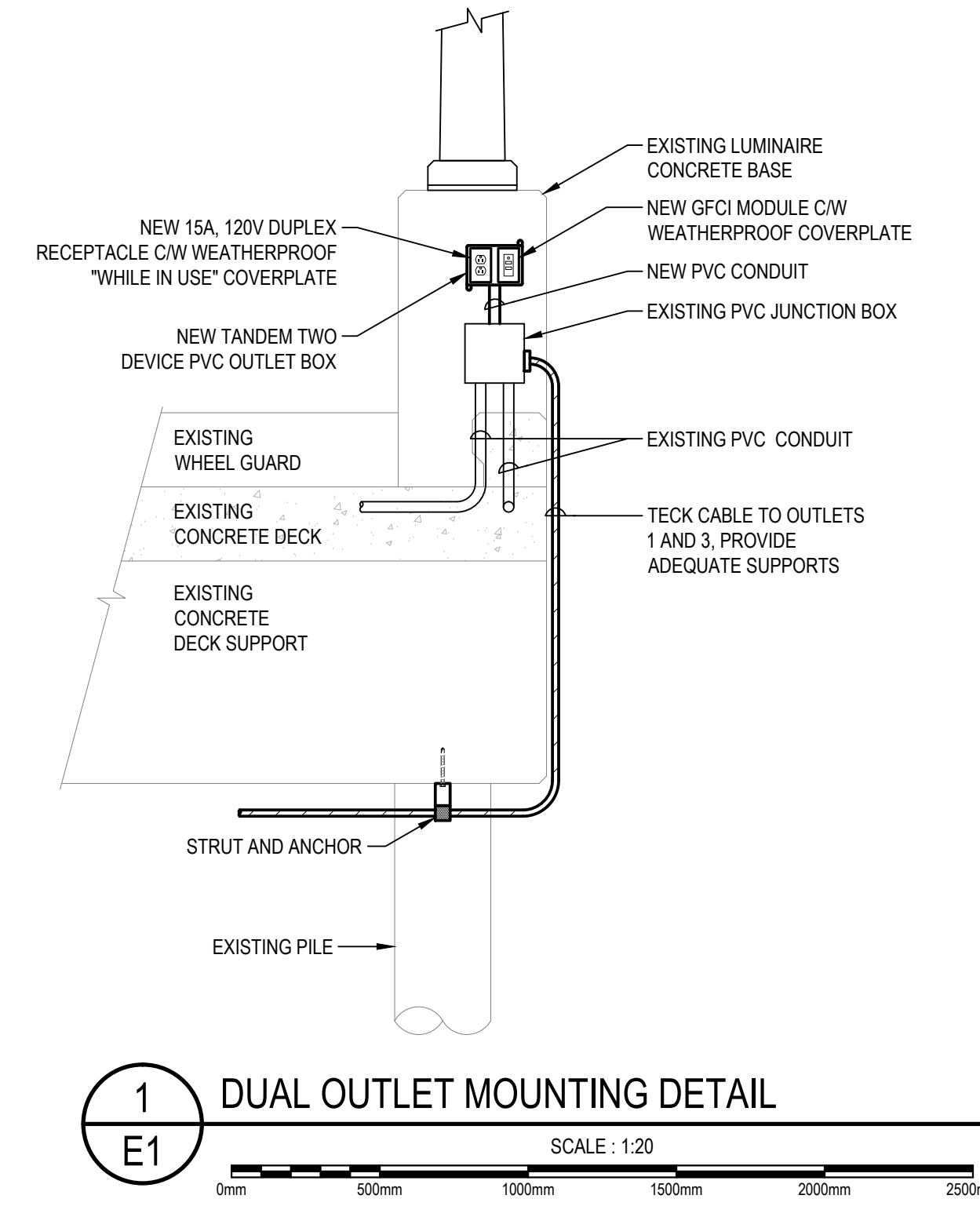
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revisions		date

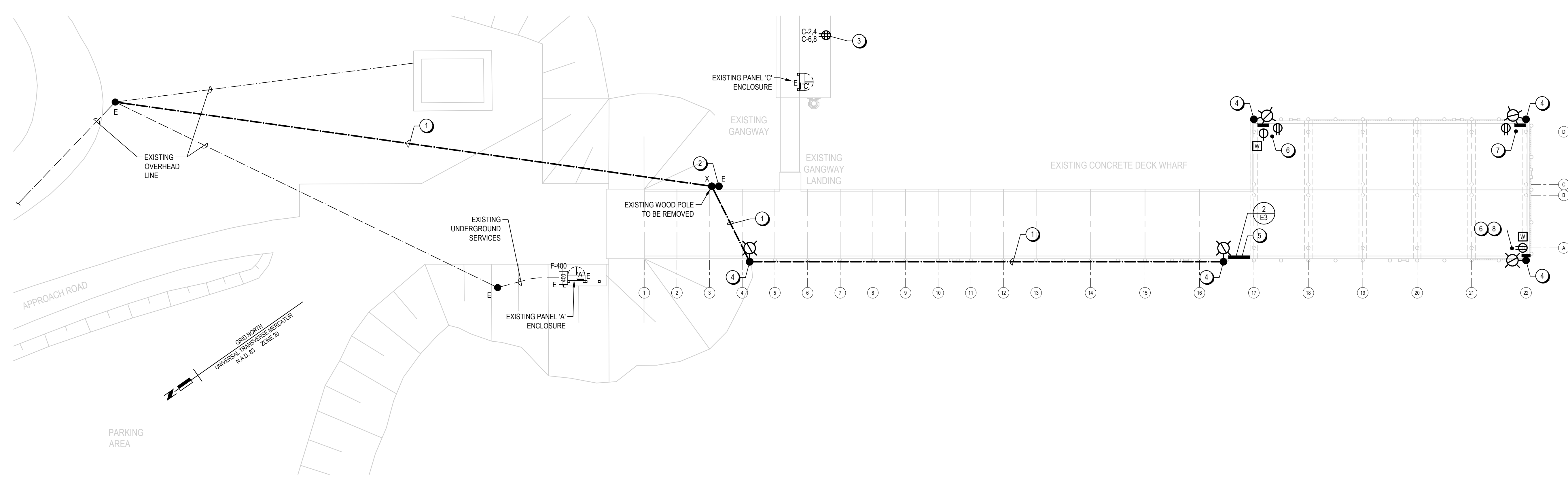
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CHARLOTTE CO., NB

drawing **ELECTRICAL DETAILS** dessin

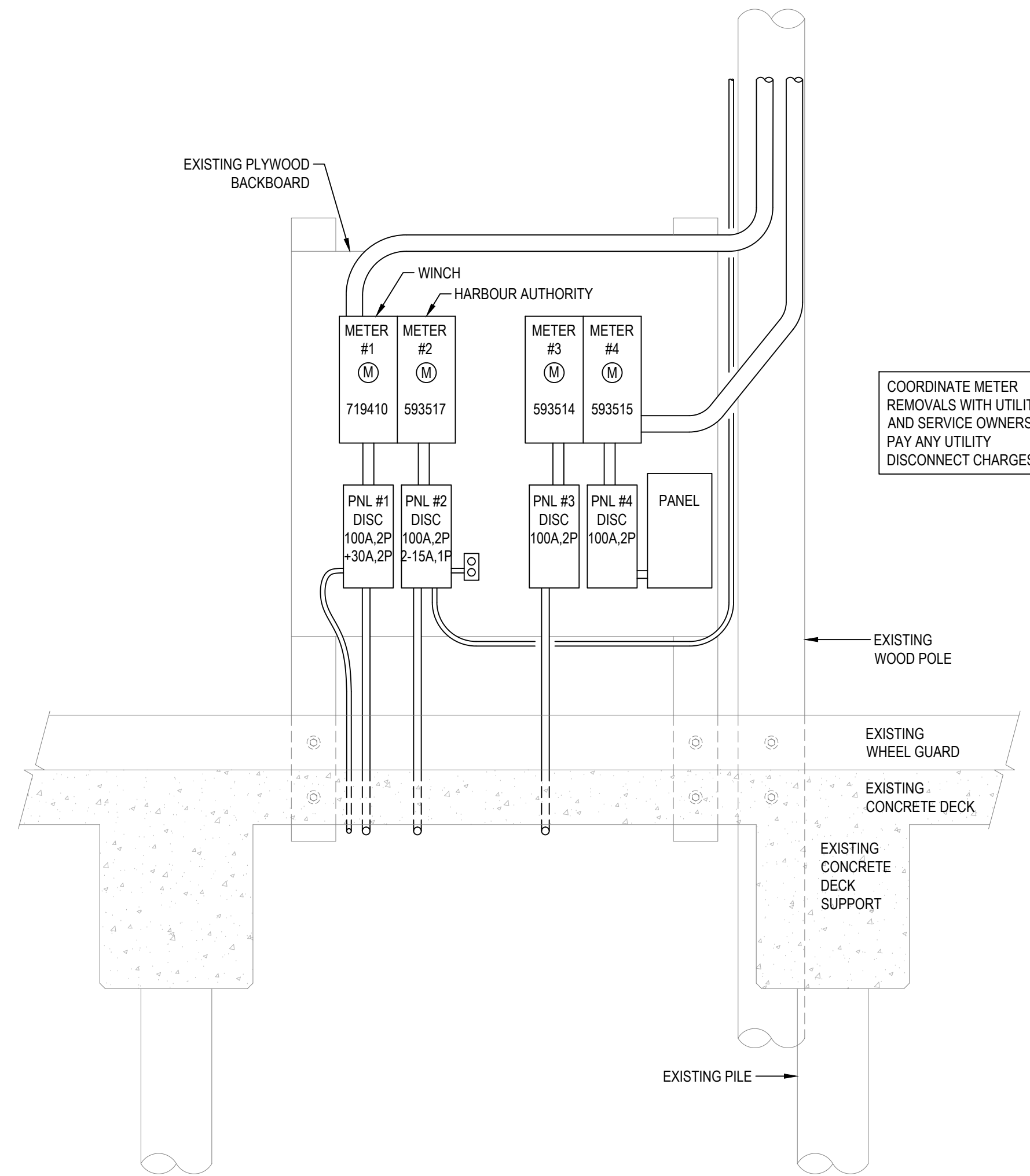
designed RMB	conçu
date JULY 2015	
drawn DD	dessiné
date JULY 2015	
approved BET	approuvé
date JULY 2015	
Tender	Soumission

Project Manager Administrateur de projets
project **IPI No. 721543** projet
drawing no. **E2 OF 3** no. du dessin





1 WHARF PLAN - EXISTING ELECTRICAL
E3
 SCALE: 1:200
 0m 5m 10m 15m 20m 25m



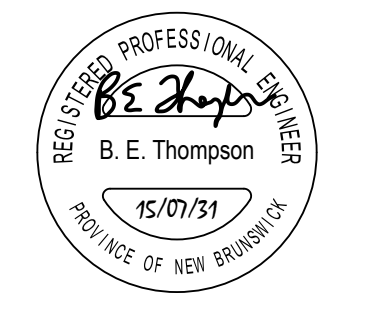
2 EXISTING UTILITY METERING AND DISTRIBUTION DETAIL
E3
 SCALE: 1:20
 0mm 50mm 100mm 150mm 200mm 250mm

NOTES

1. EXISTING AERIAL LINE TO BE REMOVED.
2. EXISTING WOOD POLE TO REMAIN AND BE REUSED FOR NEW LUMINAIRE.
3. EXISTING RECEPTACLES, JUNCTION BOX AND MOUNTING PLATE TO BE REMOVED. EXISTING TECK CABLE TO BE REUSED TO FEED NEW RECEPTACLES MOUNTED ON PANEL ENCLOSURE.
4. EXISTING POLE AND LUMINAIRE TO BE REMOVED.
5. EXISTING 4 UTILITY METERS AND ASSOCIATED ELECTRICAL EQUIPMENT, CONDUIT AND WIRE TO BE REMOVED INCLUDING TECK CABLE ATTACHED TO UNDERSIDE OF WHARF.
6. EXISTING LOADCENTRE(S), RECEPTACLES, ASSOCIATED CONDUIT AND WIRE TO BE REMOVED BACK TO SOURCES. DISCONNECT WINCH.
7. EXISTING LOADCENTRE, RECEPTACLE, ASSOCIATED CONDUIT AND WIRE TO BE REMOVED BACK TO SOURCE.
8. EXISTING LOAD PLUGGED IN TO THE PRIVATE SERVICE AT THIS LOCATION TO BE REDIRECTED TO NEW OUTLET. SEE NEW LAYOUT.

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revisions		date

project	ELECTRICAL REMEDIATION LORD'S COVE WHARF CHARLOTTE CO., NB	project
drawing	desain	

WHARF PLAN EXISTING ELECTRICAL

designed	RMB	conçu
date	JULY 2015	
drawn	DD	dessiné
date	JULY 2015	
approved	BET	approuvé
date	JULY 2015	
Tender		Soumission

Project Manager	Administrateur de projets
project	projet

IPI No. 721543

drawing no. **E3 OF 3** no. du dessin